Duhok Polytechnic University

Affordable and Clean Energy Policy

Policy information	
Policy number	DPU-POL-EN-08
Policy category	Environment and Campus Operations
Version	1.1
Policy owner	DPU Energy Committee
Responsible office	Directorate of Engineering and Maintenance, with the Directorate of Finance and Procurement
Approving authority	University Council
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Next review date	30/06/2027
Related policies	Clean Water and Sanitation Policy (DPU-POL-EN-07)
SDG alignment	SDG 7 (Affordable and Clean Energy), SDG 13 (Climate Action), SDG 9 (Industry, Innovation and Infrastructure)

1. Policy statement

Duhok Polytechnic University (DPU), in the mountainous north of Iraq, faces frequent power outages, reliance on fuel-based generators and rising electricity costs, while the region enjoys high levels of solar radiation. DPU commits to using energy efficiently, moving towards renewable energy, especially solar power, reducing its carbon emissions and its investment in fossil fuels, and sharing its technical expertise in clean energy with the local community, industry and government.

2. Purpose

This policy aims to:

- move DPU towards renewable energy sources, especially solar power
- improve energy efficiency in all new buildings, renovations and existing buildings
- measure energy use and reduce overall consumption and carbon emissions
- reduce investment in fossil-fuel-based energy, especially crude oil, and shift gradually to sustainable alternatives
- build a culture of energy responsibility among students and staff
- support the community, industry, start-ups and government with clean-energy knowledge and research

3. Scope

This policy applies to all DPU campuses, buildings, laboratories, workshops, dormitories and vehicles in the Duhok, Zirka, Zakho, Shekhan, Amedi and Shingal areas; to energy purchasing, procurement and investment decisions; and to all students, staff and contractors.

4. Definitions

Term	Meaning
Energy efficiency	Using less energy to provide the same service, such as lighting, heating or cooling
Renewable / low-carbon energy	Energy from sources such as solar, wind and hydropower that produce little or no carbon dioxide
Energy audit	A review of a building or facility to find where energy is used and wasted, and how to reduce it
Carbon management	Measuring, reporting and reducing the greenhouse gas emissions caused by the university's activities
Divestment	Reducing and avoiding investment in, and procurement linked to, carbon-intensive energy industries such as coal and oil

5. Policy provisions

5.1 Energy-efficient new buildings and renovations

- All new buildings and renovations comply with ASHRAE Standard 90.1 (Energy Standard for Buildings), or an equivalent Iraqi or regional energy code when adopted; LEED principles are applied where feasible.
- Designs include insulation, efficient glazing, LED lighting, efficient air-conditioning and heating, and provision for rooftop solar.

5.2 Upgrading existing buildings

- Buildings more than 10 years old undergo energy audits and are upgraded to higher energy efficiency, prioritising the buildings with the highest energy use.
- Upgrades include replacing lighting with LEDs, replacing old air-conditioning units with efficient inverter units, improving insulation and installing solar systems.

5.3 Energy measurement and reviews

- Electricity from the grid, generator fuel and other energy use are recorded monthly for every campus, and the annual total energy use is calculated in gigajoules (GJ), together with the energy from low-carbon sources.
- Regular energy reviews identify the buildings, facilities and times where energy wastage is highest.

5.4 Energy-efficiency plan

- The Energy Committee maintains an energy-efficiency plan with actions to reduce overall energy consumption, based on the energy reviews.
- Measures include switching off lighting and equipment when not in use, temperature set-points for air-conditioning, timers and sensors, and efficient generator scheduling.

5.5 Renewable energy

- DPU installs rooftop and ground-mounted solar systems on its campuses, starting with the buildings that depend most on generators.
- The share of energy from renewable and low-carbon sources is increased year by year, with the long-term aim of 100% clean energy.

5.6 Carbon management

- DPU estimates its carbon dioxide emissions each year from grid electricity, generator fuel and vehicle fuel.
- Emissions are reduced through energy efficiency, solar energy, reduced generator use and efficient vehicles and travel.

5.7 Responsible energy investment and divestment

- DPU does not invest in carbon-intensive energy industries, notably coal and oil, and gradually reduces procurement linked to crude-oil-dependent systems.
- Any use of natural gas is transitional and must meet environmental standards.
- Procurement gives priority to energy-efficient and renewable-powered equipment and services.
- The Energy Committee reviews energy spending each year.

5.8 Community, industry, start-ups and government

- DPU runs programmes, workshops and awareness campaigns for the local community on energy efficiency and clean energy.
- DPU publicly supports the goal of 100% renewable energy and encourages the community to commit to it.
- DPU offers technical advice and services on energy efficiency and solar energy to local industry and businesses.
- DPU shares its expertise with local, regional and national government to inform clean-energy policy.
- DPU supports students, graduates and start-ups developing low-carbon and clean-energy businesses through its Entrepreneurship Center and incubation activities.
- Faculty and students are encouraged to carry out applied research on solar, hybrid and efficient energy systems, with local and international partners.

6. Roles and responsibilities

Role	Responsibility
University Council	Approves the policy and reviews the annual energy report
DPU Energy Committee	Owns the policy; maintains the energy-efficiency plan; reviews energy use, emissions and spending; reports annually
Directorate of Engineering and Maintenance	Records energy use; carries out energy audits and upgrades; applies building standards; installs solar systems
Directorate of Finance and Procurement	Applies energy-efficiency and divestment criteria in purchasing and investment
Deans of colleges and institutes	Apply energy-saving measures on their campuses; support community and industry activities
All students and staff	Use energy responsibly and report waste

7. Monitoring and reporting

1. The Energy Committee compiles, each year, total energy use (GJ), energy from low-carbon sources (GJ), floor space (m^2), energy use per m^2 and estimated carbon emissions.
2. Progress on the energy-efficiency plan, audits, upgrades and solar installations is reviewed annually.

3. The Energy Committee presents an annual energy report to the University Council.
4. A summary of the energy report is published on the DPU website.

8. Related documents

- United Nations Sustainable Development Goal 7: Affordable and Clean Energy
- ASHRAE Standard 90.1: Energy Standard for Buildings Except Low-Rise Residential Buildings
- LEED (Leadership in Energy and Environmental Design) green building rating system
- Clean Water and Sanitation Policy (DPU-POL-EN-07)
- DPU Institutional Strategic Plan for University Reform 2024–2027

9. Policy review

The policy is reviewed every two years, or earlier if national regulations or energy codes change.

10. Version history

Version	Date	Description	Approved by
1.0	30/06/2024	First approval	University Council
1.1	30/06/2025	Revised	University Council

11. Approval

Approved by the University Council of Duhok Polytechnic University, created on 30/06/2024, and revised on 30/06/2025.

