



University : Alnoor University
Country : Mosul / Iraq
Web Address: <https://alnoor.edu.iq/>

The reduction of carbon emissions at Al-Noor University is an important initiative aimed at contributing to global efforts to combat climate change. By implementing sustainable practices, the university seeks to minimize its carbon footprint and promote environmental responsibility.

Key actions may include adopting energy-efficient technologies, utilizing renewable energy sources, reducing waste, and encouraging sustainable transportation options. Furthermore, the university may engage in carbon offset projects, such as planting trees or investing in renewable energy initiatives, to counterbalance emissions. This effort aligns with global standards such as the **GHG Protocol** for measuring and reporting carbon emissions. By prioritizing sustainability, Al-Noor University can contribute to environmental preservation while also setting an example for other institutions in Iraq and beyond.

1. Scope 1 - Generators (Diesel Consumption):

- **Diesel Consumption** = 547 m³
- **Emission Factor for Diesel** = 10.2 kg CO₂ per m³
- **Emissions** = 547 × 10.2 = **5,579.4 kg CO₂**

2. Scope 2 - Electricity Consumption:

- **Electricity Consumption** = 857,472 kWh
- **Emission Factor for Electricity** = 0.5 kg CO₂ per kWh
- **Emissions** = 857,472 × 0.5 = **428,736 kg CO₂**

3. Total Emissions:

- **Total Emissions** = 5,579.4 + 428,736 = **434,315.4 kg CO₂**



Scope 3 Data:

1. Waste Production:

- 350 tonnes of solid waste.

2. Purchased Goods & Materials:

- 94 tonnes of various materials (paper, electronics, etc.).

3. Water Consumption:

- 7,200 m³ of water.

Emission Factors (Typical values):

1. Solid Waste: 0.09 tonnes CO₂ per tonne of waste (landfill).

Emissions = $350 \times 0.09 = 31.5$ tonnes CO₂

2. Purchased Goods & Materials: (Assuming mixed material consumption)

Approximate factor: 1.5 tonnes CO₂ per tonne.

Emissions = $94 \times 1.5 = 141$ tonnes CO₂

3. Water Consumption: 0.344 kg CO₂ per m³ of water (average energy used in water supply).

Emissions = $7,200 \times 0.344 = 2.48$ tonnes CO₂

Total Scope 3 Emissions:

$31.5 + 141 + 2.48 = 174.98$ tonnes CO₂

Al-Noor University is actively working to reduce the use of carbon-producing materials through various initiatives focused on sustainability. These efforts are designed to promote environmental responsibility and reduce the university's carbon footprint.

Key initiatives include:

1. **Solar Panels for Energy Production:** The university has invested in solar panels to generate clean and renewable energy. By harnessing solar power, Al-Noor



University aims to reduce its reliance on fossil fuels and lower its carbon emissions.

2. **Solar-Powered Lighting:** The university has installed solar-powered lights across its campuses, reducing electricity consumption from conventional sources. This not only minimizes carbon emissions but also lowers energy costs.
3. **Use of Sustainable Materials:** Al-Noor University is committed to using sustainable materials in construction and daily operations. This includes eco-friendly building materials, recycling initiatives, and promoting the use of biodegradable or reusable items on campus.

These efforts are part of the university's broader strategy to contribute to a greener future and to set an example for other institutions in Iraq and globally in terms of reducing environmental impact and fostering sustainability.