

13.2 Low-carbon energy use

13.2.1 Indicator: Low-carbon energy tracking

Isra University is committed to sustainability and reducing its carbon footprint by actively managing and optimising energy consumption across campus facilities. By using low-carbon energy sources, the university significantly lowers its environmental impact and generates a surplus of low-carbon energy that exceeds its total energy needs. By prioritizing energy from renewable and low-carbon sources, Isra University has minimised its reliance on fossil fuels. This effort has contributed to lower greenhouse gas emissions and supports a cleaner, more sustainable environment. The university's approach highlights its commitment to sustainable practices, making it a model for educational institutions that aim to positively impact the environment.

Total energy used	28209kwh= 101.5 GJ
Total energy used from low carbon sources	29048 kwh= 104.6 GJ
Surplus	-839 kwh -3 GJ / year

By prioritising energy from renewable and low-carbon sources, Isra University has minimised its reliance on fossil fuels, contributing to lower greenhouse gas emissions and supporting a cleaner, more sustainable environment. The university's approach showcases its dedication to sustainable practices, serving as a model for educational institutions aiming to make a positive impact on the environment.

The data highlights that the university's total energy usage is approximately **28209 kWh** (101.5 GJ), with low-carbon sources accounting for **29048 kWh** (104.6 GJ), resulting in a **net reduction of 839 kWh** (or 3 GJ per year). This surplus indicates that Isra University is not only offsetting its own energy requirements with low-carbon sources but is also able to contribute to broader carbon reduction efforts by reducing overall demand for high-carbon energy.

By transitioning to low-carbon energy sources, Isra University is making a substantial impact on CO₂ emissions. If we assume that traditional fossil fuel-generated electricity produces approximately **0.233 kg of CO₂ per kWh**, Isra University's use of **29048 kWh** from low-carbon sources could reduce emissions by around **6768 kg of CO₂** annually (29048 kWh * 0.233 kg CO₂/kWh).

Isra University is effectively lowering its carbon footprint, aligning with global sustainability goals, and demonstrating a clear commitment to environmental responsibility. This achievement not only benefits the university community but also contributes to a sustainable future by reducing greenhouse gas emissions and promoting a cleaner, healthier planet.