7.5 Low-carbon energy use

7.5.1 Low carbon energy use

Isra University is committed to sustainability and reducing its carbon footprint by actively managing and optimising energy consumption across campus facilities. Through dedicated efforts to utilize low-carbon energy sources, the university is significantly reducing its environmental impact. The data provided indicates that Isra University not only meets its energy needs but does so with an impressive reliance on low-carbon energy sources, achieving a surplus of low-carbon energy beyond its total energy consumption.

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 prioritizing 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 CO_2 emissions. If we assume that traditional fossil fuel-generated electricity produces approximately **0.233 kg of CO_2 per kWh**, Isra University's use of **29048 kWh** from low-carbon sources could reduce emissions by around **6768 kg of CO_2** annually (29048 kWh * 0.233 kg CO_2/kWh).

Through these initiatives, 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.