



Energy and Climate Change

Total Carbon Footprint Report 2023-2024

(CO₂ emission in the last 12 months , Scope 1 and Scope 2, in metric tons)

Scope 1:

CO₂ (electricity)

$$\begin{aligned} &= \frac{\text{electricity usage per year (kWh)}}{1000} \times 0,84 \\ &= \frac{1100000 \text{ kWh}}{1000} \times 0,84 \\ &= 924 \text{ metric tons} \end{aligned}$$

CO₂ (bus)

$$\begin{aligned} &= \frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= \frac{0 \times 0 \times 1.4 \times 240}{100} \times 0,01 \\ &= 0 \text{ metric tons} \end{aligned}$$

CO₂ (cars)

$$\begin{aligned} &= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,02 \\ &= \frac{300 \times 2 \times 1.4 \times 240}{100} \times 0,02 \\ &= 40.32 \text{ metric tons} \end{aligned}$$

CO₂ (motorcycle)

$$\begin{aligned} &= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= \frac{0 \times 0 \times 1.4 \times 240}{100} \times 0,01 \\ &= 0 \text{ metric tons} \end{aligned}$$

Scope 2

CO₂ (electricity)

$$\begin{aligned} &= \frac{\text{electricity usage per year (kWh)}}{1000} \times 0,84 \\ &= \frac{1100000 \text{ kWh}}{1000} \times 0,84 \\ &= 924 \text{ metric tons} \end{aligned}$$

Total Scope1 +Scope 2: CO₂ (total)

$$\begin{aligned} \text{Carbon footprint in 2023-2024} &= 924+0+40.32+0 \\ &= 964.32 \text{ metric tons} \end{aligned}$$

Total Carbon Footprint at(Jadara University, Jordan)2023-2024

Carbon footprint in2023-2024 = 964.32metric tons

The total carbon footprint divided by total campus population (metric tons per person).
Formula: 964.32/4680 (Population) = **0.206 metric tons per person**

Remarks: -No shuttle buses inside campus (not applicable) and no motorcycles available
-Number of Cars entering campus: (100 car + 4 service cars owned by Jadara University = 104 cars only
-Minimizing Parking cars inside campus and reducing CO₂ emission programs is applied restrictly.