



University : Al –Nahrain University
Country : Iraq
Web Address : <https://nahrainuniv.edu.iq/>

[2] Energy & Climate Change (EC)

[2.11] Please provide the total carbon footprint (CO₂ emission in the last 12 months, in metric tons)

CO₂ (electricity)

$$\begin{aligned} &= \frac{\text{electricity usage per year (kWh)}}{1000} \times 0.84 \\ &= (7559973 \text{ kWh}/1000) \times 0.84 \\ &= 6,350.43 \text{ metric tons} \end{aligned}$$

CO₂ (bus)

$$\begin{aligned} &= \frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0.01 \\ &= ((17 \times 2 \times 2 \text{ km} \times 240) / 100) \times 0.01 \\ &= (16320 / 100) \times 0.01 \\ &= 1,63 \text{ metric tons} \end{aligned}$$

CO₂ (cars)

$$\begin{aligned} &= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0.02 \\ &= ((485 \times 2 \times 2 \text{ km} \times 240) / 100) \times 0.02 \\ &= (465600 / 100) \times 0.02 \\ &= 93 \text{ metric tons} \end{aligned}$$

CO₂ (motorcycle)

$$\begin{aligned} &= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0.01 \\ &= ((1 \times 2 \times 2 \text{ km} \times 240) / 100) \times 0.01 \\ &= (960 / 100) \times 0.01 \\ &= 0,096 \text{ metric tons} \end{aligned}$$

CO₂ (total)

$$\begin{aligned} &= 6,350.43 + 1,63 + 93 + 0,096 \\ &= 6,445.156 \text{ metric tons} \end{aligned}$$

Carbon footprint in 2025 = 6,445.156 metric tons