



University : Al –Nahrain University  
Country : Iraq

The total carbon footprint (CO<sub>2</sub> emission in the last 12 months, in metric tons)

**CO<sub>2</sub> (electricity)**

$$\begin{aligned} &= \frac{\text{electricity usage per year (kWh)}}{1000} \times 0,84 \\ &= (7559973 \text{ kW}/1000) \times 0.84 \\ &= 6,350.43 \text{ metric tons} \end{aligned}$$

**CO<sub>2</sub> (bus)**

$$\begin{aligned} &= \frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= ((20 \times 2 \times 2 \text{ km} \times 240)/100) \times 0.01 \\ &= (19200/100) \times 0.01 \\ &= 1,92 \text{ metric tons} \end{aligned}$$

**CO<sub>2</sub> (cars)**

$$\begin{aligned} &= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,02 \\ &= ((250 \times 2 \times 2 \text{ km} \times 240)/100) \times 0.02 \\ &= (240000/100) \times 0.02 \\ &= 48 \text{ metric tons} \end{aligned}$$

**CO<sub>2</sub> (motorcycle)**

$$\begin{aligned} &= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= ((10 \times 2 \times 2 \text{ km} \times 240)/100) \times 0.01 \\ &= (9600/100) \times 0.01 \\ &= 0,96 \text{ metric tons} \end{aligned}$$

**CO<sub>2</sub> (total)**

$$\begin{aligned} &= 6,350.43 + 1,92 + 48 + 0,96 \\ &= 6,398.43 \text{ metric tons} \end{aligned}$$

**Carbon footprint in 2022 = 6,398.43 metric tons**