



[2] Energy and Climate Change (EC)

[2.1.1] Please Provide The Total Carbon Footprint (CO₂ emission in the last 12 months, in metric tons)

CO₂ (electricity)

$$\begin{aligned} &= \frac{\text{electricity usage per year (kWh)}}{1000} \times 0,84 \\ &= \frac{1208431 \text{ kWh}}{1000} \times 0,84 \\ &= 1015 \text{ metric tons} \end{aligned}$$

CO₂ (bus)

$$\begin{aligned} &= \frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= \frac{6 \times 12 \times 2 \times 240}{100} \times 0,01 \\ &= 3.456 \text{ metric tons} \end{aligned}$$

CO₂ (cars)

$$\begin{aligned} &= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,02 \\ &= \frac{60 \times 2 \times 2 \times 240}{100} \times 0,02 \\ &= 11.52 \text{ metric tons} \end{aligned}$$

CO₂ (motorcycle)

$$\begin{aligned} &= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= \frac{150 \times 2 \times 2 \times 240}{100} \times 0,01 \\ &= 14.4 \text{ metric tons} \end{aligned}$$

CO₂ (total)

$$= 1015 + 3.456 + 11.52 + 14.4$$

Carbon footprint in 2021-22 = 1044.376 metric tons

Total Carbon Footprint in 2021-22

Description:

Muhammad Nawaz Shareef, University of Agriculture Multan was established in 2012. University has small population and it will take some time to expand their student strength, so as per population of University, there is a small number of Carbon footprints.