Energy and Climate Change (EC)

Please Provide The Total Carbon Footprint (CO_2 emission in the last 12 months, in metric tons)

Option 2: Recommended by UI GreenMetric

CO_2 (electricity)

$$= \frac{electricity\ usage\ per\ year\ (kWh)}{1000} \times 0.84$$
$$= \frac{2431720\ kWh}{1000} \times 0.84$$
$$= 2{,}042.64 \text{ metric tons}$$

CO_2 (bus)

$$= \frac{number\ of\ shuttle\ bus\ in\ your\ university \times total\ trips\ for\ shuttle\ bus\ service\ each\ day \times approximate\ travel\ distance\ of\ vehicle\ each\ day\ inside\ campus\ only\ (KM) \times 240}{100} \times 0.01$$
$$= \frac{45 \times 45 \times 4 \times 240}{100} \times 0.01$$
$$= 194 \text{ metric tons}$$

CO_2 (cars)

$$= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0.02$$
$$= \frac{1000 \times 2 \times 4 \times 240}{100} \times 0.02$$
$$= 384 \text{ metric tons}$$

CO_2 (motorcycle)

$$= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0.01$$
$$= \frac{300 \times 2 \times 4 \times 240}{100} \times 0.01$$
$$= 57.6 \text{ metric tons}$$

CO_2 (total)

$$= 2{,}042.64 + 194 + 384 + 57.6$$
$$= 2{,}659.4 \text{ metric tons}$$

Carbon footprint in 2022 = 2,678.24 metric tons

Total Carbon Footprint at Tanta University in year 2022 (Tanta University, Egypt)