Carbon Footprint (CO2 emission in 2025, in metric tons)

Scope 1

CO2 (bus) =

$$\frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} X\ .01$$

$$= \frac{3 \times 25 \times 120 \times 240}{100} \text{ X } .01$$

= 216 metric tons

CO2 (cars) =

$$\frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} X\ .02$$

$$= \frac{1200 \times 2 \times 1.5 \times 240}{100} \text{ X } .02$$

= 172.8 metric tons

Scope 1 total = 388.8 metric tons

Scope 2

CO2 (electricity)

$$= \frac{\text{electricity usage per year (kWh)}}{1000} X\ 0.71$$

$$= \frac{16454508\ (\text{kWh})}{1000} X\ 0.71$$

= 11682.7 metric tonnes

Energy generated from renewable sources: 8668510 kWh

Scope 1 + Scope 2 carbon footprint in 2025 = 12071.5 metric tonnes

Baseline Data 2016

Scope 1

CO2 (bus) =

$$\frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} X\ .01$$

$$= \frac{7 \times 29 \times 125 \times 240}{100} \text{ X } .01$$

= 609 metric tons

CO2 (cars) =

$$\frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} X\ .02$$

$$= \frac{2750 \times 2 \times 2 \times 240}{100} \text{ X } .02$$

= 528 metric tons

Scope 1 total = 1137 metric tons

Scope 2

CO2 (electricity)

$$= \frac{\text{electricity usage per year (kWh)}}{1000} X\ 0.71$$

$$= \frac{34846942\ (\text{kWh})}{1000} X\ 0.71$$

= 24741.33 metric tonnes

Energy generated from renewable sources: Zero kWh

Scope 1 + Scope 2 carbon footprint in 2016 = 25878.33