



## Template for Evidence(s) UI GreenMetric Questionnaire

University : Universitas Sebelas Maret  
Country : Indonesia  
Web Address : ...

### [2] Energy and Climate Change (EC)

#### [2.11] Please Provide The Total Carbon Footprint (CO<sub>2</sub> emission in the last 12 months, in metric tons)

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

$$\begin{aligned} &= \frac{\text{electricity usage per year (kWh)}}{1000} \times 0,84 \\ &= 6360202.205 : 1000 \times 0,84 \\ &= 5342,57 \text{ metric tons} \end{aligned}$$

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

$$\begin{aligned} &= \frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= (2 \times 12 \times 5 \times 240) : 100 \times 0,01 \\ &= 2,88 \text{ metric tons} \end{aligned}$$

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

$$\begin{aligned} &= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,02 \\ &= (2541 \times 2 \times 5 \times 240) : 100 \times 0,02 \\ &= 1219,68 \text{ metric tons} \end{aligned}$$

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

$$\begin{aligned} &= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= (32415 \times 2 \times 5 \times 240) : 100 \times 0,01 \\ &= 7779,6 \text{ metric tons} \end{aligned}$$

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

$$\begin{aligned} &= 5,342.57 + 2.88 + 1,219.68 + 7,779.6 \\ &= 14,344.73 \text{ metric tons} \end{aligned}$$

**Carbon footprint** = 14,344.73 metric tons

Total carbon footprint CO<sub>2</sub> emission in the last 12 months is **0.043 metric tons**

**Description:**

**Additional evidence link:**