



## Template for Evidence(s) UI GreenMetric Questionnaire

University : Bursa Uludag University  
Country : Turkey  
Web Address : <http://www.uludag.edu.tr/english/default>  
Web Address for Sustainability Office: <https://uludag.edu.tr/sustainability>

### [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)

##### Option 2: Recommended by UI GreenMetric

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

$$\begin{aligned} &= \frac{\text{electricity usage per year (kWh)}}{1000} \times 0,84 \\ &= \frac{22871532,540 \text{ kWh}}{1000} \times 0,84 \\ &= 19212,09 \text{ metric tons} \end{aligned}$$

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

$$\begin{aligned} &= \frac{\text{number of shuttle bus in your university} \times \text{total trips for shuttle bus service each day} \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= \frac{1 \times 8 \times 5 \times 240}{100} \times 0,01 \\ &= 9,6 \text{ metric tons} \end{aligned}$$

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

$$\begin{aligned} &= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,02 \\ &= \frac{7260 \times 2 \times 1,5 \times 240}{100} \times 0,02 \\ &= 1045,44 \text{ metric tons} \end{aligned}$$

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

$$\begin{aligned} &= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0,01 \\ &= \frac{400 \times 2 \times 1,5 \times 240}{100} \times 0,01 \\ &= 28,8 \text{ metric tons} \end{aligned}$$

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

$$\begin{aligned} &= 19212,09 + 9,6 + 1045,44 + 28,8 \\ &= 20295,93 \text{ metric tons} \end{aligned}$$

**Carbon footprint in 2020 = 20295.93 metric tons**

Total Carbon Footprint based on UI GreenMetric calculation method (Bursa Uludag University, Turkey)

##### Description:

The calculation was based on the numbers for the year 2020.