Carbon Footprint Calculation
Suvarnabhumi Campus

CO_2 (electricity)

$$= \frac{electricity\ usage\ per\ year\ (kWh)}{1000} \times 0{,}84$$

$$= \frac{14{,}124{,}000}{1000} \times 0.84$$

= 11,864.16 metric tons

CO_2 (bus)

$$= \frac{number\ of\ shuttle\ bus\ in\ your\ university \times total\ trips\ for\ shuttle\ bus\ service\ each\ day \times approximate\ travel\ distance\ of\ vehicle\ each\ day\ inside\ campus\ only\ (KM) \times 240}{100} \times 0{,}01$$

$$= \frac{19 \times 2 \times 3.7 \times 240}{100} \times 0.01$$

= 0.912 metric tons

CO_2 (Tram)

$$= \frac{number\ of\ shuttle\ bus\ in\ your\ university \times total\ trips\ for\ shuttle\ bus\ service\ each\ day \times approximate\ travel\ distance\ of\ vehicle\ each\ day\ inside\ campus\ only\ (KM) \times 240}{100} \times 0{,}01$$

$$= \frac{3 \times 30 \times 1.2 \times 240}{100} \times 0.01$$

= 2.592 metric tons

CO_2 (cars)

$$= \frac{number\ of\ cars\ entering\ your\ university \times 2 \times approximate\ travel\ distance\ of\ vehicle\ each\ day\ inside\ campus\ only\ (KM) \times 240}{100} \times 0{,}02$$

$$= \frac{1{,}653 \times 2 \times 3.7 \times 240}{100} \times 0.02$$

= 587.15 metric tons

CO_2 (motorcycle)

$$= \frac{number\ of\ motorcycle\ entering\ your\ university \times 2 \times approximate\ travel\ distance\ of\ vehicle\ each\ day\ inside\ campus\ only\ (KM) \times 240}{100} \times 0{,}01$$

$$= \frac{296 \times 2 \times 3.7 \times 240}{100} \times 0.01$$

= 52.57 metric tons

CO_2 (total)

= 11,864.16 + 0.912 + 2.592 + 587.15 + 52.57

= 12,507.38 metric tons

Carbon Footprint in 2023 = 12,507.38 metric tons

Carbon Footprint Calculation
Hua Mak Campus

CO_2 (electricity)

$$= \frac{electricity\ \ usage\ \ per\ year\ \ (kWh)}{1000} \times 0{,}84$$

$$= \frac{2{,}084{,}184}{1000} \times 0.84$$

= 1,750.71 metric tons

CO_2 (cars)

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

$$= \frac{2{,}407 \times 2 \times 0.80 \times 240}{100} \times 0.02$$

= 184.86 metric tons

CO_2 (motorcycle)

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

$$= \frac{1{,}408 \times 2 \times 0.80 \times 240}{100} \times 0.01$$

= 54.07 metric tons

CO_2 (total)

= 1,750.71 + 184.86 + 54.07

= 1,989.64 metric tons

Carbon Footprint in 2023 = 1,989.64 metric tons

Total Carbon Footprint	**= 12,507.38 + 1,989.64**
	= 14,497.02 metric tons