

## Carbon Footprint due to Transportation at SVV Campus

A carbon footprint is the total amount of greenhouse gases (GHGs) emitted directly or indirectly by human activities, typically expressed in equivalent tons of carbon dioxide (CO<sub>2</sub>e). It includes emissions from the production and consumption of goods and services, transportation, heating, electricity use, and other daily activities. Understanding and measuring carbon footprints is crucial for identifying opportunities to reduce GHG emissions and mitigate climate change. Below Figure shows the details of Carbon Footprint due to Transportation at Somaiya Vidyavihar (SVV) Campus of Somaiya Vidyavihar University, Mumbai, Maharashtra state, India.

- **Two-Wheeler (2W):** With a carbon footprint of 6.533 tons/year, two-wheelers typically have moderate emissions compared to larger vehicles. In dense urban areas like educational complexes, where two-wheelers are prevalent, this value might be considered reasonable but still impactful due to their large numbers.
- **Three-Wheeler (3W):** The carbon footprint of 8.734 tons/year for three-wheelers is relatively high, indicating higher emissions per vehicle. This could be a concern if three-wheelers are extensively used within educational complexes or nearby areas.

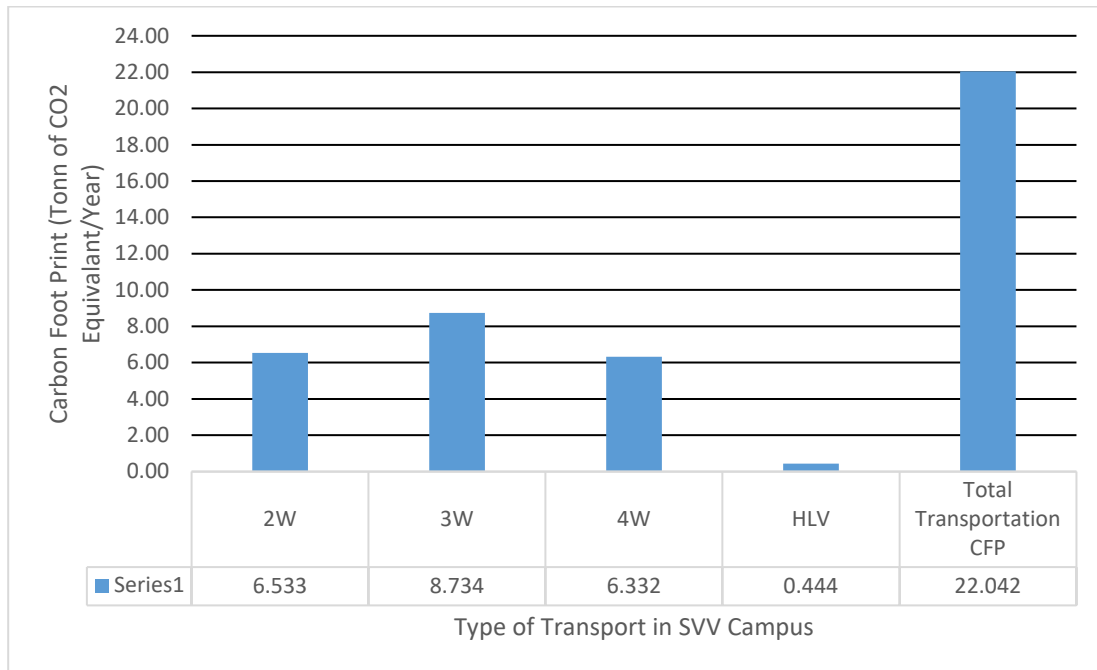


Figure 1. Summary of the Carbon Footprint due to Transportation at SVV Campus of Somaiya Vidyavihar University, Mumbai

- **Four-Wheeler (4W):** At 6.332 tons/year, four-wheelers also have moderate emissions. They are commonly used for personal transportation and might contribute to congestion and emissions within educational campuses.
- **Heavy Load Vehicle (HLV):** With a carbon footprint of 0.444 tons/year, heavy load vehicles have the lowest emissions per vehicle. This is advantageous if their usage is minimized to essential services rather than regular transport within educational complexes.

- **Total Transportation CFP:** The total carbon footprint of 22.042 tons/year reflects the cumulative impact of all these vehicle types. Whether this total is "good" or "bad" depends on the context of emission reduction goals and environmental sustainability targets.

In summary, while individual vehicle types may have varying carbon footprints, the overall impact on the Indian transportation system within educational complexes should be evaluated based on local and national environmental goals. Lowering these carbon footprints through policy interventions, technological advancements, and promoting cleaner transportation options could contribute to a more sustainable and environmentally friendly transportation system in such contexts.