

SANTHIGIRI COLLEGE, THODUPUZHA

Vazhithala PO, 685 583, Idukki, Kerala

Carbon Footprint Analysis and Evaluation for 2021-'22

The actual per capita carbon footprint for Santhigiri College, Vazhithala, Thodupuzha, Kerala is 107 kg (0.107 Ton) of CO₂ equivalent [162.3 Ton/(1506 + 14 visitors)] during the current COVID year. With an offset of 80.9 TCO₂ obtained through remedial actions, the net carbon footprint during 2021-'22 is thus [162.3 – 80.9 = 81.4 T CO₂ eq.].

The effective CF is 81.4/1520 or 0.054 T or 54 kg CO₂ per capita [2021-22]

According to the Economic Survey of Govt. of India, the per capita emission for an Indian is 1.84 Ton CO₂ eq. per annum in 2021. It is projected to increase by 1% in 2022. India's effort for greening is gaining ground with visible low carbon footprints.

For the year 2021-'22, for Santhigiri College, Thodupuzha, Kerala, the Carbon Footprint per capita at 0.054 T CO₂ equivalent, is very modest. This is achieved due to the minimal use of resource, maximal recycling, and moderate dependence on remedial measures like the use of solar energy.

The campus is a 'very low carbon footprint' institution, with potential for attaining Net Zero or Net Negative with minimal efforts during the next two years.

The remediation gap between the assessed footprint and the available remediation is 81.4 Ton CO₂ eq. On a closer look, the major contributors are:

- 1.! Transportation (91.9 T of CO₂)
- 2.! Use of Purchased Electricity (24.4 T of CO₂), and
- 3.! Wastes (16.7 T of CO₂)

The College may seriously consider more remediation options, in spite of its very low CF status. Being a college with moderate use of personal vehicles like the use of scooters/bikes, and cars, the present 57% share of carbon footprint of Transportation is largely due to large number of students daily commuting by bus, as it is situated distant from Thodupuzha.

The College maintains greenery through its bird park, herbal gardens, fruits and vegetable gardens, as well as tree plantations with commendable biodiversity within the hilly terrain of the campus in the outskirts of Thodupuzha town. CF due to electricity use is more than fully offset by the Solar PV (30 gained against 24.4). It is planning to expand the solar PV power station of 25 kW to 50 kW. Waste recycling and use as energy and manure is near total. Electronic wastes are stored properly and disposed of responsibly. For water, there is no dependence on any outside sources.

Extensive arrangements for Divyangjans' mobility, toilets, accessibility, accommodation, cooking, games and sports, and employment (software, printing press and bindery) are in place as inclusive and adjunct facilities.