

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY ROAD MAP TO CARBON NEUTRALITY

CO₂ Emission – Balance Sheet

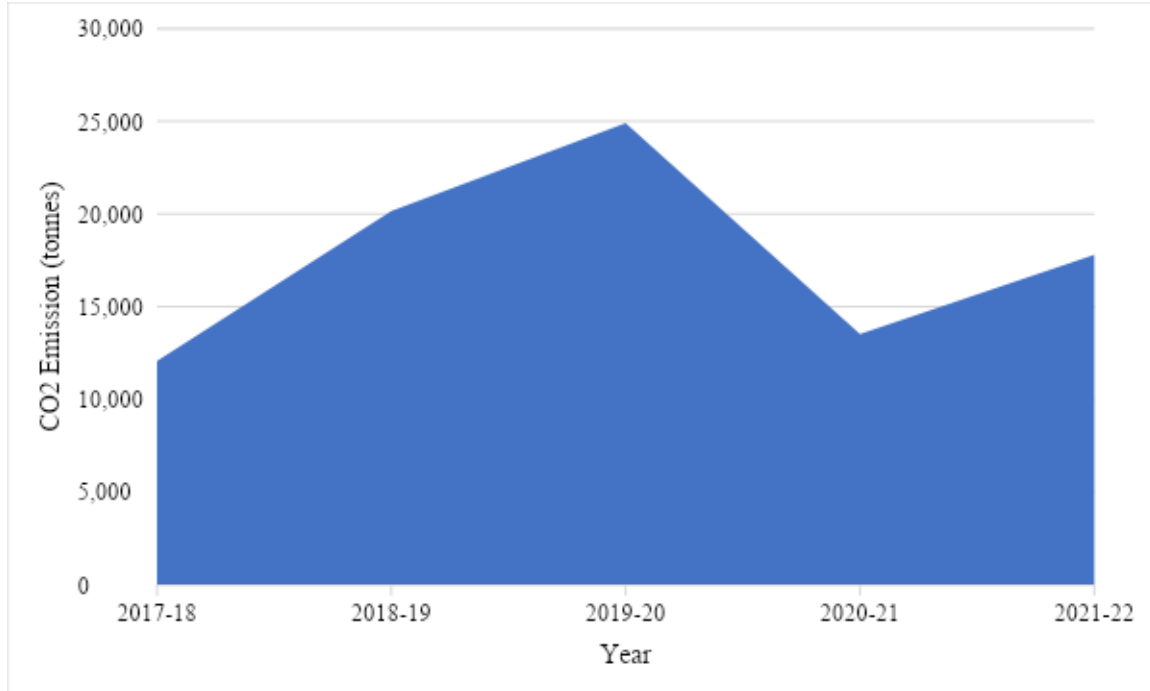


Fig. 1 CO₂ to be neutralized

Carbon reduction plan

Scope 1 – Direct emission (Campus fleet)

Table 1 – Action plan to reduce direct emission

Description	2023	2030	2040	2050	2060	2070	Total
BS VI Buses*	0%	20%	20%	20%	20%	20%	100%
Electric - Cars	0%	20%	20%	20%	20%	20%	100%
Other vehicles BS VI / E / Battery	5%	15%	20%	20%	20%	20%	100%

*BS VI – Bharat Stage VI vehicles emission levels are highly controlled in the engine design as per the CPCB norms.

Scope 2 – Indirect emission (Use of electricity)

Plan for net-zero

- Upto 35% of the conventional electricity (13 MW) shall be compensated using the roof top solar panels in the campus.

- Remaining electricity demand is to be purchased from private solar plants.
- Similarly, 28% of the conventional electricity shall be purchased from private wind mills.

Table 2 – Action plan to reduce indirect emission

Description	2023	2030	2040	2050	2060	2070	Total
Solar	7%	10%	10%	15%	15%	15%	72%
Wind	3%	5%	5%	5%	5%	5%	28%

Scope 3 – Reducing the use of fossil fuels

The usage of fossil fuels shall be reduced by

- Environmentally safe disposal of solid waste, e-waste, plastic waste, batteries waste, hazardous waste, chemicals waste, food waste, and bio-medical waste.
- Purchase of energy/green certified products.
- Optimal utilization of natural resources for the built environment.
- Implementation of IoT enabled measuring and monitoring system for the built environment.
- Utilization of low-pressure water fixtures.
- Utilization of treated waste water for flushing and chiller plants.
- Increase area of rain water harvesting.
- Development of rain water harvesting ponds.

Steps for CO₂ Neutralization

- Increase the number of trees annually by 5%.
- Increase the production of bio-gas annually by 10% for compensating LPG consumption.
- Utilization of solar thermal energy for compensating LPG consumption.
- Generation of manure by composting wet waste.

Monitoring the carbon reduction plan

The following audits shall be conducted annually by certified agencies

1. Energy and Carbon Audit
2. Air Audit
3. Water Audit
4. Environmental Management System Audit

Review meetings will be conducted after every audit to implement the areas of concerns and to evaluate continuous improvement.