



### Emissions Report of Shoolini University

Shoolini University monitors its GHG emissions and electricity consumption according to GHG emissions protocol. The calculations are made for direct emissions of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O emissions from the combustion of fuel in boilers, furnaces and other stationary combustion equipment (Scope-1 emissions) and indirect emissions through electricity consumption (Scope-2 emissions). The emission factors used are according to the IPCC Guidelines for National Greenhouse Gas Inventories as well as issued by Central Electricity Authority Guidelines.

**(A) Scope-1 Emissions Calculation for the Academic Year 2024 (Aug 2024-July 2025):**



Source ID	Sector	Fuel type (e.g., solid fossil)	Fuel	Total Fuel Consumption	Total Anthropogenic GHG Emissions (metric tonnes CO <sub>2</sub> e)
1	Institutional	Liquid fossil	Gas/Diesel oil	5,600	16.96
2	Institutional	Liquid fossil	Gas/Diesel oil	3,000	9.08
3	Institutional	Liquid fossil	Gas/Diesel oil	400	1.21
4	Institutional	Liquid fossil	Gas/Diesel oil	2,800	8.48
5	Institutional	Liquid fossil	Gas/Diesel oil	1,600	4.85
6	Institutional	Liquid fossil	Gas/Diesel oil	600	1.82
7	Institutional	Liquid fossil	Gas/Diesel oil	2,600	7.87
8	Institutional	Liquid fossil	Gas/Diesel oil	1,600	4.85
9	Institutional	Liquid fossil	Gas/Diesel oil	3,000	9.08
10	Institutional	Liquid fossil	Gas/Diesel oil	2,200	6.66
11	Institutional	Liquid fossil	Gas/Diesel oil	2,400	7.27
12	Institutional	Liquid fossil	Gas/Diesel oil	2,000	6.06
Total (mt CO <sub>2</sub> e)					84.18

Scope-1 Total Emissions for the Baseline Year 2021 = 36.62 mt CO<sub>2</sub>e

**(B) Scope-2 Emissions Calculation for the Year 2021 (Baseline) and 2024:**

Year	Energy Consumption (kWh)	Energy Consumption (GJ)	Solar Generation (kWh)	Solar Fraction (%)	Total CO <sub>2</sub> Offset (kg)	Total CO <sub>2</sub> Emissions (kg)	Total CO <sub>2</sub> Emissions after Offset (kg)
2021 (Baseline)	12,34,852	4,445	4,08,942	33%	3,33,288	10,06,404	6,73,116
2024 (AY)	19,61,582	7,264	3,74,703	19%	3,09,879	16,22,228	13,12,349

**(C) Summary:**

Summary of Results			
Year	Scope-1 Emissions (kg CO <sub>2</sub> e)	Scope-2 Emissions (kg CO <sub>2</sub> e)	Total Scope-1 and Scope-2 (kg CO <sub>2</sub> e)
2021 (Baseline)	36,616	6,73,116	7,09,732
2024 (AY)	84,183	13,12,349	13,96,532