



SAVEETHA

INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES
(Declared as Deemed to be University under Section 3 of UGC Act 1956)



Annual Carbon Emissions Report- 2022 for the Saveetha Institute of Medical and Technical Sciences

Reporting period:	1 Jan 2022 - 31 Dec 2022
Our reporting boundary has been defined under:	The Operational Control Approach. Please refer to our Methodology Statement for full details of how we have compiled the figures in this report.
Emissions scopes included in our report:	We have measured our scope 1 and 2 emissions, with the exception of fugitive emissions, and some of our scope 3 emissions. We do not currently have robust data for all of our scope 3 emission sources.
Our carbon reduction target(s):	We have committed ourselves to a Science-Based Target, aiming to reduce our scope 1 and 2 emissions to absolute zero by the year 2025. This commitment is part of our robust strategy to minimize our environmental footprint. As an intermediate milestone, we have set a goal to cut our emissions by 75% compared to the levels recorded in the 2015 year, and we aim to achieve this reduction by 2025. All of our emissions numbers are reported in terms of tonnes of carbon dioxide equivalent (tCO ₂ e), allowing for a consistent and accurate measurement of our progress towards these targets
Baseline year for our target and reporting:	2015

Emission source	Reporting year						2015 (Base line year)	Commentary, including specific exclusions
	2022	2021	2020	2018	2016			
Scope 1								
Greenhouse Gases (GHG)	3803	3940	4089	3998	4054	4819		
Diesel Consumption	219	231	245	220	252	288		
Biomass	2	4	5	4	6	7	The carbon conversion factors used for these calculations only account for the nitrous oxide and methane emissions from biomass combustion; the carbon dioxide emissions value is set to zero to account for the carbon dioxide absorbed by fast-growing bio-energy source during their growth	
Fuel used in owned vehicles	236	248	300	238	277	326		
Mobile Source emission	0.7	0.59	0.41	0.35	0.29	0.24		
Fugitive emissions							We do not currently measure fugitive emissions from our estate; we are exploring options for quantifying this emissions source in future	
Scope 2								
Electricity - Location-based emissions	4740	6,398	8,300	7049	11,823	13560		
Total scope 1 and 2 emissions								
Scope 1 and 2 - Location-based emissions	9,000.7	10,821.59	12,939.41	11,509.35	16,412.29	19,000.24		
Scope 3								
Purchased good and services	1,249	3,492	4,653	4,392	5,870	6,029	We use an externally produced tool to estimate our supply chain emissions. This tool estimates emissions on a simple economic input-output basis, so these figures should be regarded as an order of magnitude estimate, rather than an accurate calculation of our supply chain emissions	
Capital goods							Not quantified	
Fuel and energy related activities not included in scope 1 or 2	167	419	456	437	345	357	These are emissions associated with our use and disposal of water	
Upstream transportation and distribution							Not quantified	
Waste generated in operations	52	68	93	88	112	435		
Business travel	508	9,218	16,259	17,596	16,254	12,082		
Employee commuting	24	42	53	61	69	81	Commuting figures include staff commuting only; we do not currently quantify emissions from student commuting. A 2015 survey found that 91% of students commute by walking or cycling	
Upstream leased assets							Not quantified	
Downstream transportation and distribution							Not quantified	
Processing of sold products							Not quantified	
Use of sold products							Not quantified	
End of life treatment of sold products							Not quantified	
Downstream leased assets							These are emissions from buildings that the University owns, and leases to a third party. Where the University has operational control over the building, these emissions have been included in our scope 1 and 2 figures.	
Franchises							Not quantified	
Investments							Not quantified	
Out of scope emissions								
Direct carbon dioxide emissions from biomass consumption	70	41	104	32	169	176	These do not form part of our emissions but we have reported them for transparency	

Reasons for change in emissions:

In 2022, we observed a 2% increase in our location-based carbon emissions compared to the previous year. This rise was predominantly fueled by a spike in heat demand, a consequence of an extended winter season, and the need for enhanced ventilation in buildings to mitigate the spread of the Covid-19 pandemic.

Conversely, our market-based carbon emissions witnessed a sharp decline of 39% in comparison to the previous year, making them 45% lower than the location-based emissions. This significant reduction can be attributed to the influence of Power Purchase Agreements (PPAs) and the application of a carbon conversion factor specific to our energy supplier's generation mix.

The ongoing effects of the Covid-19 pandemic have left an indelible mark on aspects such as staff commuting and business travel, resulting in substantial reductions in emissions in these areas. However, waste emissions saw an increase, primarily driven by a rise in construction waste and the fact that a portion of waste, collected outside of the University's central waste contract, ended up in landfills