

IIM INDORE GREENHOUSE GAS INVENTORY

Indian Institute of Management Indore (IIM Indore) is one of the India's premier management institutions, spread over 193 acres. It is among the 100 business schools across globe to achieve the 'Triple Crown Accreditation', with recognition from three prominent international accreditation bodies: the Association of MBAs (AMBA, UK), The Association to Advance Collegiate Schools of Business (AACSB, USA), and EQUIS (EFMD Quality Improvement System). IIM Indore is also committed to green initiatives, implementing projects that enhance sustainability and biodiversity across its campus.

SUSTAINABILITY INITIATIVES:

IIM Indore is undertaking significant sustainability initiatives to promote a cleaner and greener environment, aiming for a zero-waste and net-zero-energy campus.

To cultivate a culture of environmental consciousness among its stakeholders, IIM Indore has installed a 1 kW solar tree, demonstrating its commitment to a greener planet.

The institute is a no-single-use-plastic-zone and composts approximately 10,000 kg of organic waste annually.



One of IIM Indore's flagship initiatives is its tree plantation drive, where 2,500 trees are planted annually on campus. The biodiversity is enriched with over 355 plant species, including medicinal and rare plants. Additionally, natural farming yields 10-12 tons of fruits and vegetables and 1 ton of herbs each year, which are distributed among the IIM Indore community.

The campus features water taps with special faucets designed to reduce water consumption. The institute has also implemented a well-structured rainwater harvesting system and utilizes solar panels contributing to energy conservation.

GHG INVENTORY METHODOLOGY

Carbon inventorization involves identifying the emission sources and quantifying the associated emissions using standardized methods. The emissions are collectively referred to as total greenhouse gas (GHG) emissions.

EcoMorphosys Consultants are engaged to carryout Greenhouse Gas Inventory. Their studies align



with the guidelines set by the Greenhouse Gas Protocol – Corporate Accounting & Reporting Standard; ISO 14064 1:2018 - Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals; and are complemented by the Global Reporting Initiative (GRI) & the World Business Council for Sustainable Development (WBCSD).

GHG EMISSION SOURCES:

Based on a comprehensive analysis of IIM Indore’s organizational structure, operational boundaries and operational context, the GHG Inventory boundary and categories of emissions were determined.

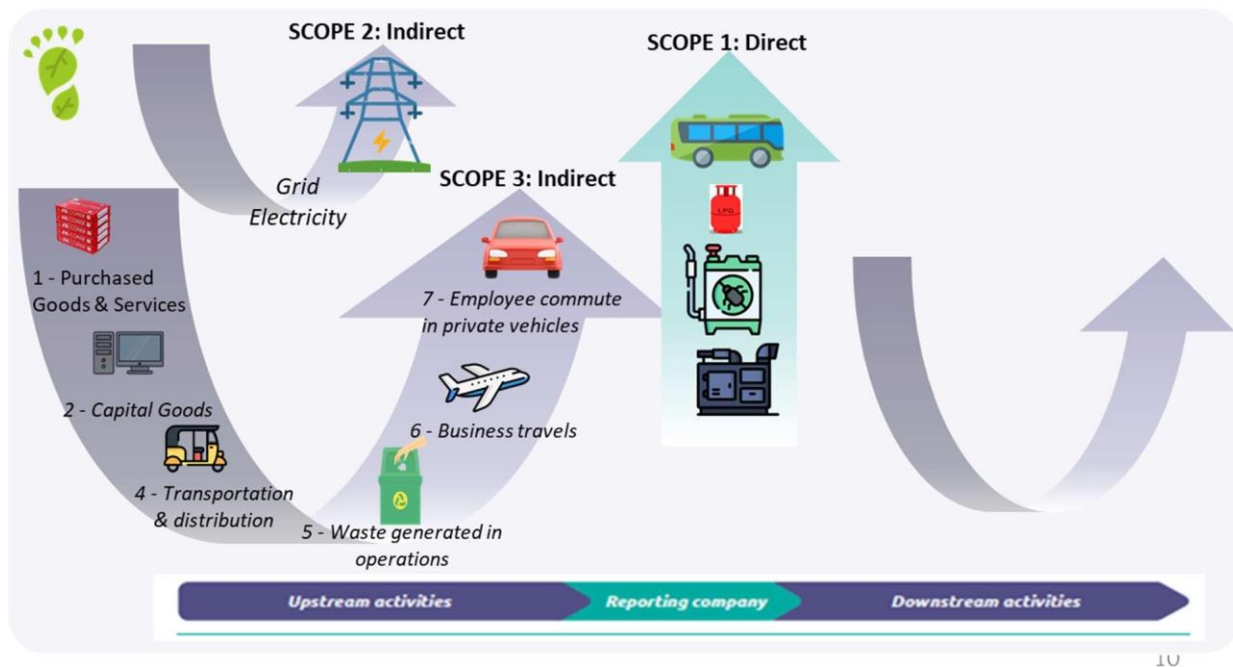
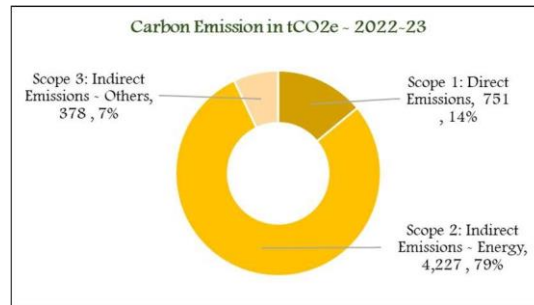


Fig: IIM Indore’s Emission Sources Categorized as per GHG Protocol

RESULTS

The carbon inventory assessment at IIM Indore revealed that total carbon emissions for the reporting period 2022-23 amounted to 5,356 tonnes of CO₂eq. With the campus population including students, faculty, residents and staff, the carbon dioxide equivalent emissions per capita are approximately 2.29 tons.



Direct emissions, categorized under Scope 1, include stationary combustion, fugitive emissions, and campus-owned vehicles, totaling up to 751 tons of CO_{2eq}, which represents 14% of the total emissions.

Indirect emissions from owned sources, known as Scope 2, primarily result from purchased electricity, and account for 79% of the total emissions, totaling 4,227 tons of CO_{2eq}. Solar energy contributes 13.3% to the campus's energy consumption. Scope 3 emissions, originating from sources not owned by the campus, such as purchased goods, employee commuting, and business travel, amount to 7% of the total emission, or 378 tons of CO_{2eq}.

CONCLUSION

IIM Indore Carbon Footprint Assessment highlights the institute's significant progress towards sustainability. With initiatives such as the ban on single-use plastics, extensive composting, annual tree plantation drives, and substantial solar energy adoption, IIM Indore demonstrates a strong commitment to mitigating its environmental impact.



As IIM Indore advances toward its zero-waste and net-zero-energy goals, it sets a powerful example for other institutions, reinforcing the importance of sustainable practices and collective action.

Assessment & Report crafted by

ANNEXURE 1

INDIAN INSTITUTE OF MANAGEMENT INDORE		GREENHOUSE GAS INVENTORY - SUMMARY	
Energy Consumption	Electricity	MWh	5,187
	Solar generation	MWh	688
	Gas for cooking - LPG	Tonnes	58.7
	Diesel for DG	KL	44
SCOPE WISE		Unit	2022-23
	Scope 1: Direct Emissions	tCO _{2e}	751
	Scope 2: Indirect Emissions - Owned	tCO _{2e}	4,227
	Scope 3: Indirect Emissions - Not owned	tCO _{2e}	378
	Total	tCO_{2e}	5,356
Inventory Emissions	SOURCE WISE		
	Energy - electricity, gas	tCO _{2e}	4,521
	Fugitive emissions	tCO _{2e}	352
	Mobility	tCO _{2e}	296
	Purchased & Capital Goods	tCO _{2e}	186
	Waste generated	tCO _{2e}	1
	Total	tCO_{2e}	5,356

Campus Information	Total area under green spaces	Hectares	46.54
	Population - Students, Faculty, Residents, Employees including contract	Nos	2,091



SUMMARY OF GHG INVENTORY			
Without Offset	Population	Nos	2,091
	Absolute Carbon Emissions	tCO_{2e}/yr	5,356
	Net Carbon Emission without offset per capita	tCO_{2e}/capita	2.56
With offset	Emissions Offset by solar	tC/yr	-561
	Net Campus Emissions with emissions offset (Rooftop solar)	tCO_{2e}/yr	4,795
	Net Carbon Emission with offset per capita	tCO_{2e}/capita	2.29

Data Source: Respective process owners through meter readings, standard log books & invoices

Reporting Period: Academic year coincides with Financial year thus FY is considered for all cases

IIM Indore GHG Inventory is carried out by EcoMorphosys

ANNEXURE 2

 भारतीय प्रबंध संस्थान इंदौर Indian Institute of Management Indore		INDIAN INSTITUTE OF MANAGEMENT INDORE GREENHOUSE GAS INVENTORY - EMISSION SOURCE LIST		 ECO MORPHOSYS Evolve Sustainably
Scope	SN	Sources		
SCOPE 1 EMISSIONS	1	Stationary Combustion		
		Diesel fuel for DG back-up		
		Cooking gas (LPG)		
		Petrol consumption by machineries		
	2	Mobile Combustion		
		Fuel consumption of IIM Indore owned vehicles - cars, buses, ambulances, tanker & tractors		
	3	Fugitive Emissions		
		Refrigerants & coolants		
		Oils for transformer, DG & STP		
		Chemical for water & wastewater treatment		
	Garden maintenance related manure & fertilisers			
SCOPE 2	1	Electricity consumption		
		Grid based electricity		
SCOPE 3 EMISSIONS	1	Category 1 - Purchased Goods & Services		
		Paper		
		Food raw material - 3 food staples		
	2	Category 2 - Capital Goods		
		Electrical & electronic appliances		
	3	Category 4 & 7 - Transportation & distribution; & Employee commutation in private vehicles		
		All vehicles entering from Main gate		
	4	Category 5 - Waste generated in operations - (dept/building wise)		
		Compostable waste, biomedical & e-waste		
5	Category 6 - Business travels			
	Business travels of Faculty members & staff			