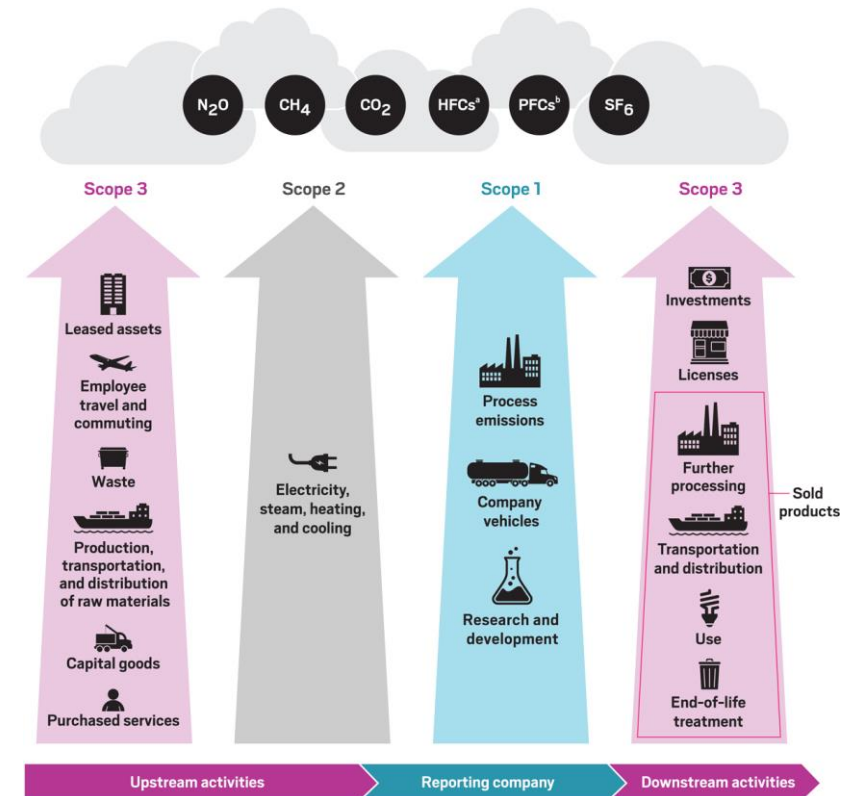
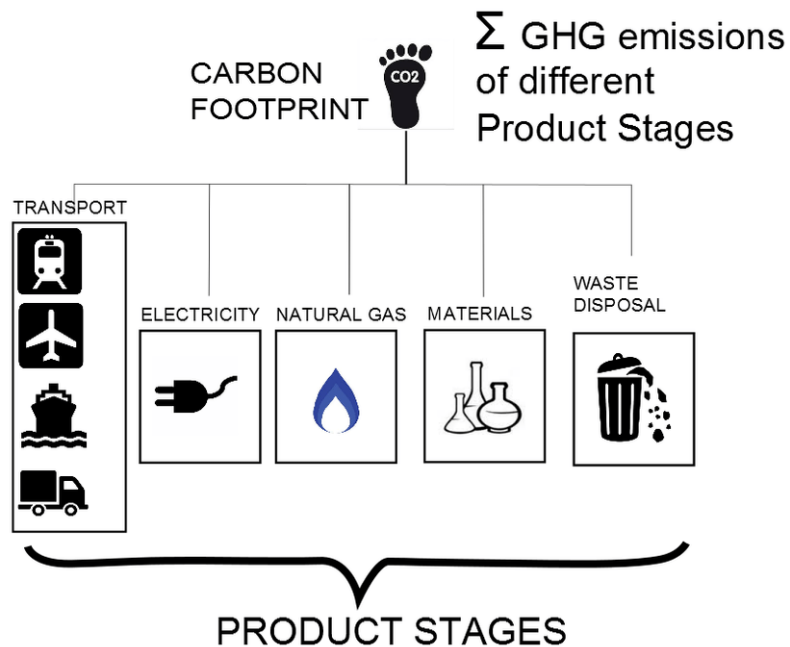




## Carbon Footprint Of Sarna Chemical Pvt Ltd - 2023-2024

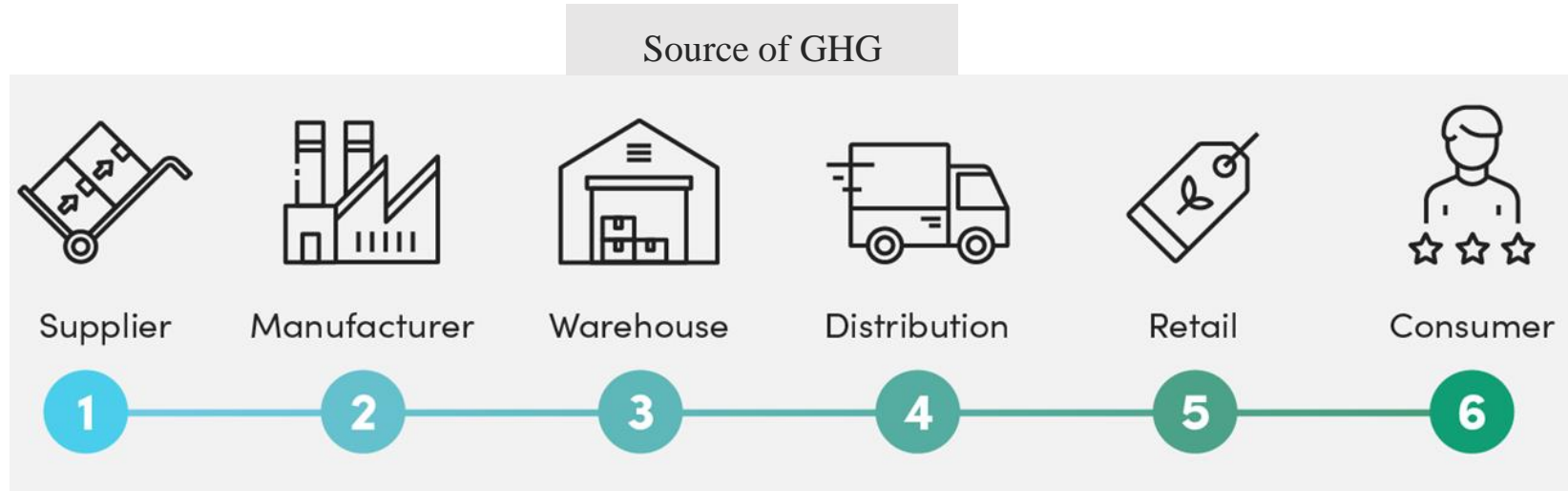
Carbon Footprint is a measure of amount of carbon dioxide released into atmosphere as a result of company activities like processing, employee commuting, transport etc. Carbon footprint is summation of amount of CO<sub>2</sub>e from Scope-1, Scope-2 and Scope-3 activities.



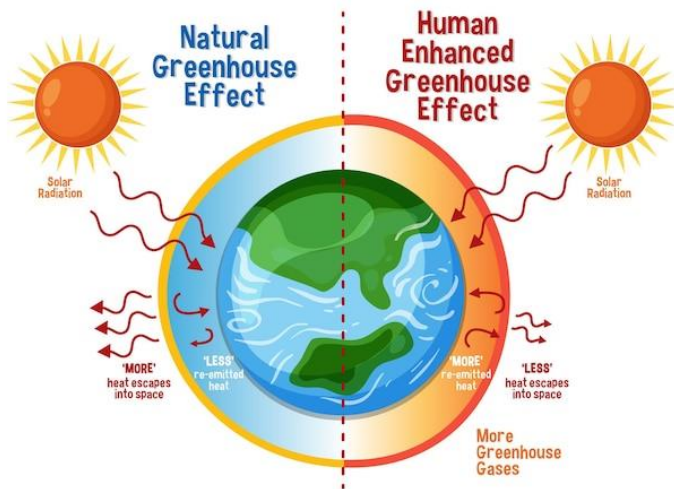


# Carbon Footprint

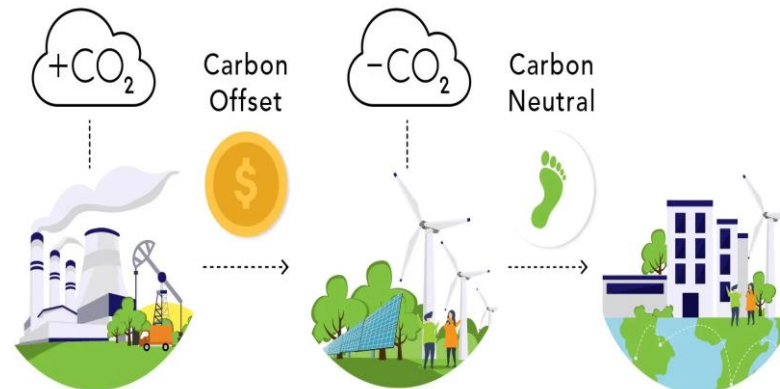
## Source... Effect...Offsetting...Scaling for NET ZERO



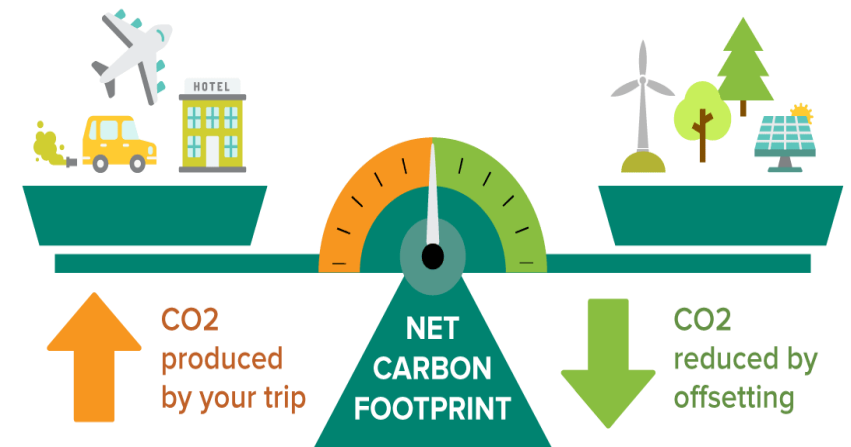
### Global Impact



### Action for NET ZERO



### Carbon Scaling & Offset for NET ZERO





# Director Statement & Guidelines for GHG reduction



Director - Dr. Mohit .M. Rajani  
Sarna Chemicals Pvt Ltd

## Director Message

“We all live at the same planet. We all breathe the same air. We all take responsibility to reduce carbon dioxide and preserve the earth from global warming “

The most prime and urgent challenges facing our society today is climate change, so reducing greenhouse gas (GHG) emissions throughout specialty chemical the value chain is crucial. Sarna Chemical Pvt Ltd reduces upstream and downstream emissions: we offer products and services to agrochemicals, dyes, pharmaceutical polymers and allied fields to achieve significant emissions reductions, and our GHG strategy outlines our commitment to improving the carbon footprint of our own operations, to ultimately reach a net-zero future.

## Carbon Reduction Policy Statement

As a responsible corporate entity, we are committed to taking significant steps towards reducing our carbon footprint and mitigating the impact of our operations on the environment. Our Carbon Reduction Policy Statement outlines our commitment and the actions we will take to contribute to a sustainable future.

## Energy Efficiency and Renewable Energy

We will prioritize energy efficiency measures across our facilities, including office spaces, data centers, and manufacturing units. This includes implementing energy-saving technologies, optimizing heating, ventilation, and cooling systems, and promoting responsible energy consumption among our employees. We will actively explore and invest in renewable energy sources to power our operations. This may involve installing solar panels, procuring renewable energy from reliable sources, and participating in local or regional renewable energy programs.

## Carbon Footprint Measurement and Reduction

We will conduct a comprehensive assessment of our carbon footprint across all aspects of our operations, including energy consumption, transportation, waste management, and supply chain. Based on the assessment, we will set clear and measurable targets to reduce our greenhouse gas emissions. These targets will align with scientifically recognized goals, such as those set by the Paris Agreement, to limit global warming to well below 2 degrees Celsius.

## Waste Management and Recycling

We will implement a comprehensive waste management program that prioritizes waste reduction, reuse, and recycling. This includes providing adequate recycling facilities, promoting responsible waste disposal practices, and minimizing single-use items within our premises. We will collaborate with our suppliers and partners to reduce packaging waste, promote sustainable packaging alternatives, and encourage recycling initiatives throughout our supply chain.

## Sustainable Transportation

We will encourage and incentivize the use of public transportation, carpooling, and cycling among our employees to reduce carbon emissions from commuting. Where feasible, we will transition our fleet of vehicles to low-emission or electric alternatives. We will also explore partnerships with service providers that prioritize sustainable transportation options.

## Employee Engagement and Awareness

We will raise awareness and provide education to our employees regarding the importance of carbon reduction and sustainable practices. This will include training programs, internal communications, and regular updates on our progress. We will encourage employee participation and engagement in carbon reduction initiatives through recognition, rewards, and internal competitions.

## Continuous Improvement and Reporting

We will regularly monitor, measure, and report our progress towards achieving our carbon reduction targets. This will include transparently sharing our performance data, accomplishments, and challenges. We will actively seek opportunities for innovation and improvement, staying informed about emerging technologies, practices, and policy developments that can further enhance our carbon reduction efforts.

We are committed to being at the forefront of sustainable business practices. By implementing this Carbon Reduction Policy Statement, we aim to contribute to the global efforts to combat climate change and ensure a cleaner, greener, and more sustainable future for generations to come



## Carbon Foot print: Public Report Green House Gases Emission 2023-2024

Year: 2021-2022

Emission from Scope 1, Scope 2 & Scope 3

Green House Gases MT Emissions 2021-2022		
Type of Scope	Type of Scope	Metric Ton
CO2 e from scope 1	CO2 e from scope 1	6356.21064
CO2 e from scope 2	CO2 e from scope 2	2748
CO2 e from scope 3	CO2 e from scope 3	4.4988
Total emission from scope 1 + 2 + 3	Total emission from scope 1 + 2 + 3	9108.70944

Year: 2023-2024

Emission from Scope 1, Scope 2 & Scope 3

Green House Gases MT Emissions 2023-2024		
Type of Scope	Type of Scope	Metric Ton
CO2 e from scope 1	CO2 e from scope 1	5296.8422
CO2 e from scope 2	CO2 e from scope 2	2290
CO2 e from scope 3	CO2 e from scope 3	3.749
Total emission from scope 1 + 2 + 3	Total emission from scope 1 + 2 + 3	7590.5912

Green House Gases MT Emissions Year 2022-2023

Type of Scope	Type of Scope	Metric Ton
CO2 e from scope 1	CO2 e from scope 1	5826.52642
CO2 e from scope 2	CO2 e from scope 2	2519
CO2 e from scope 3	CO2 e from scope 3	4.1239
Total emission from scope 1 + 2 + 3	Total emission from scope 1 + 2 + 3	8349.65032

Green House Gases MT Emissions 2024-2050 (NET Zero)

Type of Scope	Type of Scope	Metric Ton
CO2 e from scope 1	CO2 e from scope 1	00 MT
CO2 e from scope 2	CO2 e from scope 2	1145 MT
CO2 e from scope 3	CO2 e from scope 3	00 MT
Total emission from scope 1 + 2 + 3	Total emission from scope 1 + 2 + 3	1145 MT

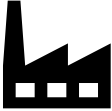










### Green House Gases Inventory & Internal Audit Of Sarna Chemical Pvt Ltd -2023-2024

Scope -1	Activity	Fuel Type/Distance	Unit in Kg or L or Km	CO2e factor/L or Kg	GWP	CO2e MT
Carbon dioxide (CO2) Emission						
Stationary Emissions [CO2emmission]	Production/Boiler	Naptha/gasoline	2223450 L/587373.3498 Gallon	8.50 kg CO2e/gallon	1	4992.67
	Production/Boiler	Naptha/gasoline		0.38g CH4/gallon	25	5.58
	Production/Boiler	Naptha/gasoline		0.008 g N2O/gallon	298	1.4002
<b>Total CO2e from neptha/gasoline</b>						<b>4992.68</b>
Stationary Emissions [CO2emmission]	Production/Boiler	Diesel	6500	2.6553kg CO2e/L OR 10.108gm/gallon		<b>65.701</b>
Coal	NA	NA	NA	NA		0
Biomass	NA	NA	NA	NA		0
Natural Gas	NA	NA	NA	NA		0
Light Diesel Oil	NA	NA	NA	NA		0
Mobile Emissions [CO2 emmission]	Mobile Emissions (Med & Heavy Truck owned/Leased)	Diesel	10000 (2641.721 Gallon)	10.21 kg/Gallon	1	<b>102.1</b>
Mobile Emissions [N2O emmission]	Mobile Emissions (Med & Heavy Truck owned/Leased)	Diesel	10000 (35 L per 100 km or 62.13 miles) 77751.4 miles/10000L	0.0048g/miles		0.373
Mobile Emissions [N2O emmission] eqv CO2e	Mobile Emissions (Med & Heavy Truck owned/Leased)	Diesel	10000 (35 L per 100 km or 62.13 miles) 77751.4 miles/10000L	0.0048g/miles x298		<b>111.154</b>
Mobile Emissions [CH4 emmission]	Mobile Emissions (Med & Heavy Truck owned/Leased)	Diesel	10000 (35 L per 100 km or 62.13 miles) 77751.4 miles/10000L	0.0051g/miles		0.3965
Mobile Emissions [CH4 emmission] eqv CO2e	Mobile Emissions (Med & Heavy Truck owned/Leased)	Diesel	10000 (35 L per 100 km or 62.13 miles) 77751.4 miles/10000L	0.0051g/milesx25		<b>9.9125</b>
<b>Total CO2 emissions from Stationary and Mobile activity (Fuel Diesel)</b>					<b>1</b>	<b>288.8675</b>
Carbon dioxide (CO2e) emission from mobile emissions						
Mobile Emissions [CO2 emmission] Third Party	Light Duty Trucks	Km	5000km/3106.856 miles (100km per 35L; 142.85L=37.73 gallon)	10.21 kg CO2e/gallon	1	0.385
	Heavy Duty Trucks	Km	10000 km/6213.712 miles (100km =35L; 285.7 l = 75.46 gallon)	10.21 kg CO2e/gallon	1	0.7704
CO2e in MT						<b>1.1554</b>
Nitrogen oxide (N2O) emission from mobile emissions						
Mobile Emissions [N2O emmission] Third Party	Light Duty Trucks	Km	5000km/3106.856 miles	0.0015g/miles	298	4.721
	Heavy Duty Trucks	Km	10000 km/6213.712 miles	0.0048g/miles	298	8.888
Equivalent to total CO2e emissions from Nitrogen monoxide emissions from Mobile emissions						<b>13.609</b>
Methane (CH4) emissions from Mobile emissions						
Mobile Emissions [CH4 emmission] Third Party	Light Duty Trucks	Km	5000km/3106.856 miles	0.0051g/miles	25	0.375
	Heavy Duty Trucks	Km	10000 km/6213.712 miles	0.0010g/miles	25	0.1553
Total Methane emissions from Mobile emissions						<b>0.5303</b>
<b>Overall Total CO2e from Scope 1</b>						<b>5296.8422</b>
Scope 2						
(Other party provider) Jan 2023-Dec 2024		Electricity	3231969.5	0.5/kg		2290 MT (EPA calculator)
		Steam				
		a) CO2 e	0	66.33/mmbtu	1	0
		b) CH4e	0	1.250/mmbtu	25	0
		c) N2Oe	0	0.125/mmbtu	298	0
<b>Total CO2e from scope2</b>						<b>2290</b>
Scope 3						
Transport Employee commute	Cars CNG ( Light Vehicle)	Passenger Cars	2000 Kg CNG			
			CO2e kg	144g/km	1	288 Kg
			CO2e metric ton			0.288
			30000 Mile (15 miles/Kg)			
			N2Oe in kg	0.0550g/mile		1.65 Kg
			N2Oe in metric ton			0.00165
			N2Oe eqv to CO2e		298	0.4917
			CH4e in kg	0.7370g/miles		22.11 KG
			CH4e in metric ton			0.02211 MT
			CH4e eqv to CO2e		25	0.5527
<b>Total CO2e Transport Employee Commute</b>						<b>2.5407</b>
Procurement of goods and services						
		Storage Emission	CO2e kg			300
			CO2e metric ton			0.3
Recycle waste						
		Recycle waste	CO2e Kg			0
			CO2e metric ton			0
Waste water treatment (Given to Third party)						
		Wastewater disposal				
		Plant -1= 528.17 KL	CO2e kg	0.5 Kg CO2e/Kg	1	908.32 Kg
		Plant-2 =1288.47 KL	CO2e metric ton			0.9083
		Total = 1816.64				
Business Travel						
Purchased goods and services			CO2e			0
Downstream Leases Assets			CO2e			0
Use of sold product			CO2e			0
Upstream process (Leased sites)			CO2e in kg			0
<b>Total CO2e from scope3</b>						<b>3.749</b>
<b>Total from Scope 1 +2+3</b>						<b>7590.5912</b>



## Sarna Chemical Pvt Ltd Green House Gases from Company Activity -2023-2024

Activity	Mton CO2e			
Gasoline	4992.68	Gasoline MT 4992.68	Diesel MT 288.86	Light duty trucks MT 5.498
Diesel	288.86			
Electricity	2290			
Light duty trucks	5.481	Heavy duty trucks MT 9.8137	Employee commuted MT 2.5407	Electricity MT 2290
Heavy duty trucks	9.8137			
Employee commuted	2.5407			
Procurement of goods	0.3	Procurement of goods MT 0.3	Recycle Waste MT 0	Waste water treatment MT 0.9083
Recycle Waste	0			
Waste water treatment	0.9083			
<b>Total</b>	<b>7590.5837</b>			

