TERM	DEFINITION	NOTES
Adaptation	Adaptation is the process of altering existing human responses to the impending effects of climate change. It is the process of collectively redefining human behavior, our educational and social systems to adapt to the climate crisis.	Citizens of Delhi had long adapted to the air pollution crisis wearing N95.
Carbon **• Footprint** **• Sequestration**	Carbon (Dioxide) is one of the building block of all organisms on Earth, such that it allows Earth to hold it's energy. Without Carbon dioxide, Earth's oceans would be frozen solid. Footprint: The total amount of greenhouse gases that are emitted into the atmosphere each year by an individual, organization, community, etc. Sequestration: The process of capturing and storing atmospheric carbon dioxide. It is one method of reducing the amount of carbon dioxide with the goal of reducing global climate change.	• The average carbon footprint of every person in India was estimated at 0.56 tonnes per year – with 0.19 tonnes per capita among the poor and 1.32 tonnes among the rich. • Deforestation is a source of carbon emission into the atmosphere, but forest regrowth is a form of carbon sequestration, with the forests themselves serving as carbon sinks.
Fossil Fuels	Fossil Fuels are made from decomposing plants and animals. No, they are not made of dinosaurs (We checked). These fuels are found in the Earth's crust and contain carbon and hydrogen, which can be burned for energy.	Coal, oil, and natural gas are examples of fossil fuels.
Greenhouse Gases (GHG)	Greenhouse gases, or GHGs, are compound gases that trap heat or longwave radiation in the atmosphere. Their presence in the atmosphere makes the Earth's surface warmer. Sunlight or shortwave radiation easily passes through these gases and the atmosphere.	GHGs include: carbon dioxide, methane,nitrous oxide, ozone, chlorofluorocarbons, hydrochloro-fluorocarbons, and others.
Methane	Methane is produced through anaerobic (without oxygen) decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.	Methane is 80x more potent at warming than Carbon Dioxide. It has accounted for approximately 30% of global warming since Pre-Industrial era (1750+).
Mitigation	Mitigation is defined as human intervention to reduce the human impact on the climate system; it includes strategies to reduce greenhouse gas sources and emissions, and enhancing greenhouse gas sinks.	Examples: • Replacing fossil fuel consumption with renewable energy sources like solar, wind, geothermal, etc • Replacing ICE vehicles with electric options • Reforestation
Net Zero	Net Zero refers to a state in which true balance of GHG emissions are achieved. Such that, excess carbon dioxide in the atmosphere ceases to exist. Net Zero is an important milestone to achieve, given that at that state, global warming stops.	The Paris Agreement sets the context for all nations to reduce emissions by 45% by 2030 and reach net zero by 2050.
Particulate Matter (PM)	Particulate Matter consists of small pieces of solid or liquid matter such as particles of soot, dust, fumes, mists or aerosols. The physical characteristics of particles, and how they combine with other particles, are part of the feedback mechanisms of the atmosphere	• PM 2.5: Inhalable particles with diameters that are generally 2.5 micrometers and smaller. • PM 10: inhalable particles with diameters that are generally 10 micrometers and smaller. • As a point of reference, a single strand of hair (from the head) is approximately 70 micrometers.