

## Common Acronyms in Climate Change Science

Acronym	Full Name	Description
<b>AAR</b>	Assessment and Review Report	Periodic IPCC evaluations of climate science
<b>ACC</b>	Anthropogenic Climate Change	Climate change caused by human activities
<b>AR6</b>	Sixth Assessment Report	Most recent IPCC comprehensive climate assessment (2021–2022)
<b>BAU</b>	Business as Usual	Projected scenario with no new climate policies
<b>BECCS</b>	Bioenergy with Carbon Capture and Storage	Negative emissions technology using biomass
<b>CAT</b>	Climate Action Tracker	Independent science-based tracking of national climate pledges
<b>CDR</b>	Carbon Dioxide Removal	Technologies/methods that extract CO <sub>2</sub> from the atmosphere
<b>CH<sub>4</sub></b>	Methane	Potent greenhouse gas from livestock, landfills, and fossil fuels
<b>CMIP</b>	Coupled Model Intercomparison Project	International effort where climate modeling groups run standardized climate simulations to compare results and improve climate projections used in IPCC reports
<b>COP</b>	Conference of the Parties	Annual UN climate negotiations summit
<b>CO<sub>2</sub></b>	Carbon Dioxide	Primary long-lived greenhouse gas from fossil fuel combustion
<b>CO<sub>2</sub>e</b>	Carbon Dioxide Equivalent	Standardized unit comparing all GHG warming potentials
<b>ECS</b>	Equilibrium Climate Sensitivity	Warming expected from a doubling of atmospheric CO <sub>2</sub>
<b>ENSO</b>	El Niño–Southern Oscillation	Pacific Ocean climate pattern affecting global weather
<b>ESM</b>	Earth System Model	Comprehensive computer model of climate and Earth processes
<b>GCM</b>	General Circulation Model	Mathematical model simulating atmosphere and ocean dynamics
<b>GHG</b>	Greenhouse Gas	Gases that trap heat in the atmosphere (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, etc.)
<b>GWP</b>	Global Warming Potential	Measure of a gas's heat-trapping ability relative to CO <sub>2</sub>
<b>IAM</b>	Integrated Assessment Model	Model linking economic, social, and physical climate systems
<b>IPCC</b>	Intergovernmental Panel on Climate Change	UN body synthesizing global climate science
<b>LCA</b>	Life Cycle Assessment	Analysis of environmental impacts across a product's full life
<b>LUC</b>	Land Use Change	Shifts in land cover (e.g., deforestation) affecting carbon stocks
<b>LULUCF</b>	Land Use, Land-Use Change, and Forestry	GHG accounting category for land-based emissions and sinks
<b>MRV</b>	Monitoring, Reporting, and Verification	System for tracking emissions reduction commitments
<b>N<sub>2</sub>O</b>	Nitrous Oxide	Long-lived GHG from agriculture and industrial processes
<b>NAP</b>	National Adaptation Plan	Country-level strategy for adapting to climate impacts
<b>NDC</b>	Nationally Determined Contribution	Country emissions pledges under the Paris Agreement
<b>NZE</b>	Net Zero Emissions	State where GHG emissions equal removals
<b>OHC</b>	Ocean Heat Content	Amount of heat stored in the ocean; key indicator of warming

Acronym	Full Name	Description
<b>OSM</b>	Ocean Surface Model	Model of sea-surface temperature and circulation patterns
<b>PPM</b>	Parts Per Million	Concentration unit for CO <sub>2</sub> and other trace gases in air
<b>RCP</b>	Representative Concentration Pathway	Greenhouse gas concentration scenarios used in IPCC modeling
<b>RF</b>	Radiative Forcing	Change in energy flux driving warming or cooling
<b>SAF</b>	Sustainable Aviation Fuel	Low-carbon fuel alternative for aviation
<b>SAI</b>	Stratospheric Aerosol Injection	Proposed solar geoengineering technique
<b>SAR</b>	Second Assessment Report	1995 IPCC report establishing human influence on climate
<b>SCC</b>	Social Cost of Carbon	Estimated economic damage from one ton of CO <sub>2</sub> emitted
<b>SLR</b>	Sea Level Rise	Increase in global mean sea level due to warming
<b>SPM</b>	Summary for Policymakers	Condensed IPCC findings written for government use
<b>SRM</b>	Solar Radiation Management	Geoengineering approaches to reflect sunlight
<b>SSP</b>	Shared Socioeconomic Pathway	Scenarios of future societal development used in climate modeling
<b>TCR</b>	Transient Climate Response	Short-term warming from a gradual doubling of CO <sub>2</sub>
<b>UNFCCC</b>	UN Framework Convention on Climate Change	1992 international treaty that is the parent of the Paris Agreement
<b>WG</b>	Working Group	IPCC sub-bodies covering science, impacts, and mitigation
<b>WMO</b>	World Meteorological Organization	UN agency co-founding the IPCC and coordinating weather data