



U.N. Report on Reducing Greenhouse Gas Emissions: Multiple, Feasible, and Effective Options

Released on March 20, 2023, the [Climate Change 2023: Synthesis Report](#) was prepared by 93 authors and is based on the work of hundreds of scientists in the sixth assessment cycle of the United Nations' Intergovernmental Panel on Climate Change (IPCC). The IPCC publishes comprehensive scientific assessments every six to seven years. The previous Fifth Assessment Report was completed in 2014 and provided the main scientific input in 2015 to [The Paris Agreement](#).

Record Carbon Emissions in 2022. Nevertheless, the Limit of 1.5 Degrees Celsius is Still Achievable

In 2015, 196 countries adopted the Paris Agreement to reduce global warming and build resilience to climate change setting an overall goal to limit warming to no more than 1.5 degrees Celsius over pre-industrial levels.

In 2020, the parties to the [26th Conference of the Parties](#) (COP26) in Glasgow, Scotland theoretically agreed, that in order to meet the Paris Agreement's goal to keep warming to no more than 1.5 degrees Celsius, emissions would need to be reduced by 45% by 2030 and to reach [Net Zero](#) by 2050.

Concluding that the current "pace and scale of climate action are insufficient to tackle climate change," and that the current recorded temperature rise of 1.1 degrees Celsius above pre-industrial levels is causing more frequent and hazardous weather events affecting the planet, the scientists sixth assessment concludes that the goal of keeping warming of the atmosphere to 1.5 degrees Celsius (2.7 degrees Fahrenheit) is "achievable."

This conclusion was reached in spite of the fact that global fossil fuel emissions [set records in 2022](#). Specifically, global energy-related CO2 emissions grew by 0.9% (or 321 million tons (Mt)) in 2022, reaching a new high of over 36.8 gigatons (Gt). For reference, one Gt is one billion tons. Emissions from energy combustion increased by 432Mt, and emissions from industrial processes decreased by 102Mt.

Risks for Human Health and Ecosystems

The report focuses on increased risks of climate change that include more intense heatwaves, heavier rainfall and other weather extremes that increase risks for human health and ecosystems. When the risks combine with other adverse events, such as pandemics or conflicts, “they become even more difficult to manage.”

The Path Forward – Climate Resilient Development to Cut Emissions in Half by 2030

The report addresses the need for the collective sharing of best practices, technology, effective policy measures, and the mobilization of sufficient financing to decrease the use of carbon-intensive consumption. The report emphasizes that the biggest gains in well-being can be achieved by focusing on climate risk reduction in low-income and marginalized communities.

If the temperature rise is to be kept to no more than 1.5 degrees Celsius over pre-industrial levels, it will only occur as a result of “deep, rapid, and sustained greenhouse gas emissions reductions” with a target of cutting emissions in half within the next seven years – by 2030. The report’s “Climate Resilient Development” recommendations include increased access to clean energy and technologies, low-carbon electrification, the promotion of zero and low carbon transport (walking, cycling, and public transport), and improved air quality.

Call on the U.S. to Reach Net Zero by 2040

The top seven carbon emitters (China, U.S., India, the European Union, Indonesia, the Russian Federation, and Brazil) accounted for approximately half of global greenhouse gas emissions in 2020. The so-called Group of 20 (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, the Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, UK, U.S., and the EU) accounted for about 75% of GHG emissions that year.

Thus, U.N. Secretary General António Guterres called on developed countries such as the United States to eliminate carbon emissions by 2040 – a decade earlier than the rest of the world.

Secretary General Guterres called the report a “how-to guide to defuse the climate time-bomb,” outlining an “acceleration agenda” that would speed up global actions on climate. He called on emerging economies including China and India (which plan to reach net zero in 2060 and 2070, respectively) to hasten their emissions-cutting efforts alongside developed nations.

Losses and Damages

The report brings into focus the losses and damages the inhabitants of the planet are already experiencing. Ice-sheet melt, sea level rise, and the rise in extreme weather events hit the most vulnerable people and ecosystems especially hard.

The report stresses that the 1.5 degree Celsius goal will require “deep, rapid and sustained greenhouse gas emissions reductions in all sectors.” Emissions will need to be cut by almost half by 2030.

Follow The Money: Enabling Sustainable Development

Stating that there is sufficient global capital to rapidly reduce greenhouse gas emissions, the report admonishes governments to use public funding with clear signals to investors, central banks and financial regulators to play their part. These policy measures can work to achieve deep emissions reductions and climate resilience “if they are scaled up and applied more widely.”

Stay Tuned for COP 28 in the United Arab Emirates

This sixth assessment sets the stage for 28th Conference of the Parties ([COP 28](#)) to be held in Dubai in November and December 2023.

This post was drafted by [John Watson](#), an attorney in the Denver, Colorado office of Spencer Fane LLP. For more information, visit www.spencerfane.com.