





Forum: The Group of 20 (G20)

Issue: Coordinated Climate Action: Policy Alignment Across G20

Student Officer: Eva Lolou

Position: Deputy President

Introduction

As Barack Obama cleverly stated, “We are the first generation to feel the impact of climate change and the last generation that can do something about it.”¹ It is well known that the current climate emergency is the biggest threat to human survival, as well as animals’ survival, that we have collectively faced so far. Glaciers melting, droughts taking over forestry, and lively ecosystems in destruction while fires slowly extinguish rainforests, are phenomena reversible for only so long.

While global awareness has grown, acknowledging the current agenda and the efforts already made, it is evident that the adoption of meaningful climate measures remains particularly low. Time is running out, and the pace of implementation falls short of what science demands and what justice requires. In this context, the role of the world’s largest economies is more critical than ever. The need for the G20 to accelerate its climate action efforts through stronger implementation measures and deeper cooperation is not just urgent, it is essential for the survival of ecosystems, vulnerable communities, and future generations.

Definition of key terms

Greenhouse Gases

‘any gas that has the property of absorbing infrared radiation (net heat energy) emitted from Earth’s surface and reradiating it back to Earth’s surface, thus contributing to the greenhouse effect.’²

Climate Action

‘Climate action refers to efforts taken to combat climate change and its impacts.’³

¹ Harvey, Branden. “49 Best Earth Day Quotes for Inspiration & Action (2023).” *Good Good Good*, 21 Apr. 2022, www.goodgoodgood.co/articles/earth-day-quotes. Accessed 2 Sept. 2025.

² Mann, Michael E. “Greenhouse Gas | Definition, Emissions, & Greenhouse Effect.” *Encyclopædia Britannica*, 19 Mar. 2019, www.britannica.com/science/greenhouse-gas.

³ “EUR-Lex - Climate_action - EN - EUR-Lex.” *Eur-Lex.europa.eu*, eur-lex.europa.eu/EN/legal-content/glossary/climate-action.html. Accessed 2 Sept. 2025.



Net zero Emissions

‘Net zero refers to the balance between the amount of greenhouse gas (GHG) that's produced and the amount that's removed from the atmosphere.’⁴

Sustainability

‘Meeting the needs of the present without compromising the ability of future generations to meet their own needs.’⁵

Fossil fuels

‘Fossil fuels, is a generic term for non-renewable energy sources such as coal, coal products, natural gas, derived gas, crude oil, petroleum products, and non-renewable wastes.’⁶

Industrial revolution

‘A rapid major change in an economy (as in England in the late 18th century) marked by the general introduction of power-driven machinery.’⁷

Fossil Fuel Subsidies

‘Any government action that lowers the cost of fossil fuel energy production, raises the price received by energy producers, or lowers the price paid by energy consumers.’⁸

Timeline of events

<u>Date</u>	<u>Description of event</u>
1750-1900	Industrial revolution
1999	The founding of the G20
2008	G20 Leader’s Summit in Washington

⁴ National Grid. “What Is Net Zero?” *Www.nationalgrid.com*, National Grid, 23 Feb. 2023, www.nationalgrid.com/stories/energy-explained/what-is-net-zero.

⁵ United Nations. “Sustainability.” *United Nations*, 2025, www.un.org/en/academic-impact/sustainability. Accessed 2 Sept. 2025.

⁶ Eurostat. “Glossary: Fossil Fuel.” *Ec.europa.eu*, 9 Sept. 2019, ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Fossil_fuel. Accessed 2 Sept. 2025.

⁷ “Redirect Notice.” *Google.com*, 2025, www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=www.merriam-webster.com/dictionary/industrial%2520revolution%23%3A~:text=3DKids%2520Definition-. Accessed 2 Sept. 2025.

⁸ IMF. “Fossil Fuel Subsidies.” *International Monetary Fund*, 2022, www.imf.org/en/Topics/climate-change/energy-subsidies. Accessed 2 Sept. 2025.

2009	London Summit
2015	Paris Agreement- G20 contribution to coordinated climate action

Background information

Historical Background

The historical background of climate change and action can be divided into four main categories. The time before the industrial revolution, the time of the industrial revolution and the use of fossil fuels, the scientific developments of the 20th century, and the period following the recognition of climate change. Initially, the impact of each household, and by that we define its greenhouse gas / carbon dioxide emissions were, if not non-existent, minimal. However, as depicted in the graph below, we notice an extensive rise after the beginning of the 19th century which coincides with the rise of fossil fuels, and, of course, the industrial revolution. Around that time there was a faint, as well as vague, recognition of a potential climate damage that was evidently set aside.

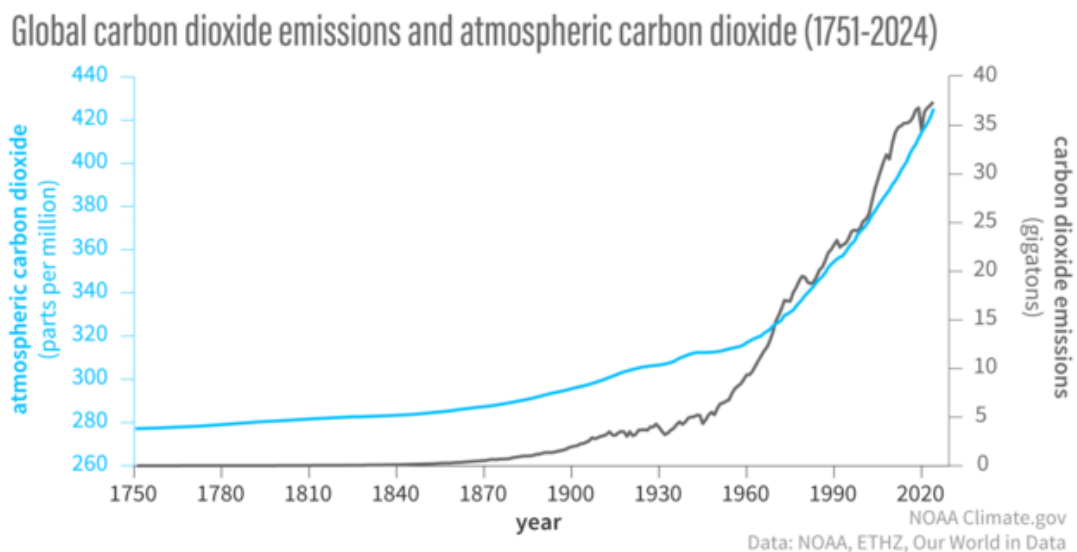


Figure 2: Carbon dioxide emissions- Atmospheric carbon dioxide⁹

Later on came the discoveries of the 20th century. Even though the discoveries made highlighted the existential nature of the gasses mentioned above, as well as their harmful

⁹ Lindsey, Rebecca. "Climate Change: Atmospheric Carbon Dioxide." *Climate.gov*, National Oceanic and Atmospheric Administration, 21 May 2025, www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide. Accessed 2 Sept. 2025.



role, this was all overshadowed by gas and oil industries that developed unexpectedly and rapidly. About a century later, there was an immense recognition of climate change where, eventually, the G20, along with other organizations, was founded in 1999, as a means to promote economic stability through its member nations. Since then, 50 key policy options have been identified that constitute a comprehensive sectoral climate policy package. Approximately half of these policy options however, are not widely adopted.

During 2023, the member states were collectively responsible for 76% of the global Emissions of Greenhouse Gas (GHG). Amongst the largest emitters in the group, it is estimated that the United States is responsible for 25% of the global emissions, followed by the European Union (22%), China (13%), Russia (6%), Japan (4%), and India (3%). Brazil, is the world's 7th largest emitter (3.09%) according to recent calculations.¹⁰ Evidently, all of the main submitters are 7 G20 countries.

In response to the 2008 global financial crisis, the G20 held its first Leaders Summit in Washington, where climate change was acknowledged for the first time as a “critical challenge.” Although no immediate action followed, the link between climate risks and economic stability was recognized. Over the next few years, the G20 gradually incorporated climate issues into its agenda. By 2009, climate change was described as an “irreversible threat,” with growing support for coordinated global action under the United Nations Framework Convention on Climate Change (UNFCCC). Later declarations emphasized the importance of clean energy, cutting inefficient fossil fuel subsidies, and improving energy market stability. Key developments included the launch of the Green Climate Fund and the formation of the Climate Finance Study Group. Declarations from 2010 to 2014 showed stronger alignment between economic growth and climate goals, encouraging investment in renewable energy, technology sharing, and financial support for climate action, while repeatedly pushing for a global agreement by 2015.

Cultural background

Culture and specifically religion is a very important factor in climate action and environmental protection. Many religions endorse climate protection as a form of respect towards all forms of life. Buddhism, Christianity, Judaism and Islam as well as indigenous religions and cultures favor environmental sustainability and protection.

More specifically in Christianity as Matthew:33-46 points out, it is God that trusted mankind to care for His creations including the Earth. The Christianic church, both Orthodox and Catholic, urge believers to respect and protect all species as they value life's complexity. Similarly, this approach is also taken by Jews. Many sacred concepts highlight this approach. Core principles include bal tashchit (the prohibition against unnecessary destruction), the concept of koshering our impact on the earth, the agricultural cycles of Shmita (the sabbatical year), and the ethical obligation to work and keep God's creation. These principles

¹⁰ Laguzzi, Victoria. *The Evolution of Climate Change as an Agenda Issue of the G20*. 2024.

encourage conservation, sustainable practices, and respect for all living things as part of God's creation.¹¹ As for Buddhism, the law of karma poses one of the biggest motives for environmental protection. “The law of karma states that all our actions, words and thoughts form the conditions of our existence in the future: each of us experiences the consequences of what he thought, said and did in the past.”¹² Thus promoting the responsibility of a person’s actions both for his life and his future one (reincarnation).

To conclude, religion shapes environmental ethics by framing nature as sacred, life as interconnected, and stewardship as a moral duty. Harnessing these values strengthens global climate action, inspiring respect, sustainability, and shared responsibility.

The manifestations of climate change

Glaciers and ice melting is one of the most life-threatening and deteriorating outcomes of climate change for animals and organisms, but most importantly the ecosystem of which they are a part of. Melting glaciers add freshwater to oceans, increasing volume and causing sea levels to rise, threatening coastal areas and ecosystems. This ultimately leads to the extinction of species.



¹¹ “Jewish Views on the Environment | Reform Judaism.” Reformjudaism.org, reformjudaism.org/beliefs-practices/social-justice-reform-judaism/jewish-views-environment Accessed 2 Sept. 2025.

¹² Dorzhigushaeva, Oyuna V., and Aryana V. Kiplyuks. “Environmental Ethics of Buddhism.” *International Journal of Environmental Science and Development*, vol. 11, no. 3, 2020, pp. 154–158, www.ijesd.org/vol11/1243-A078.pdf, <https://doi.org/10.18178/ijesd.2020.11.3.1243>. Accessed 2 Sept. 2025.

*Figure 2: Polar bear on glacier*¹³

Rising sea levels are one of the most destructive and far-reaching consequences of climate change, threatening not only human settlements along coastlines but also disrupting delicate marine and coastal ecosystems, ultimately leading to habitat loss and biodiversity decline. As mentioned before, the glaciers increase the volume of water leading to rising sea levels.

Increased temperatures and prolonged dry seasons contribute to more frequent and intense wildfires, devastating forests that serve as carbon sinks, endangering wildlife, and releasing massive amounts of carbon dioxide back into the atmosphere.

The increasing frequency and intensity of extreme weather events such as hurricanes, floods, and heatwaves represent one of the most immediate and visible impacts of climate change, endangering human lives, destroying infrastructure, and pushing ecosystems beyond their capacity to recover.

The causes of the climate issue

One of the greatest challenges in addressing the climate crisis is the ongoing emissions of greenhouse gases due to industrial processes. Despite their well-established harmful impact, industries still rely on carbon-emitting processes. Efforts to shift towards cleaner fuel are frequently stalled due to economic constraints and infrastructural deficits. At the same time, direct carbon dioxide removal technologies are underdeveloped and unequally distributed. The world's deep dependence on fossil fuels remains the obstacle to substantial change, especially where they are still the foundations of a nation's energy framework.

Political and institutional impediments make progress even tougher. The majority of climate agreements are non-binding, allowing countries to avoid culpability for unmet targets. Ineffective bureaucracies delay the passage of major policies, while political instability across much of the world hinders leadership continuity on climate. Regular changes in governments and domestic strife often make climate policies disjointed or deprioritized altogether.

There exists economic diversity between nations, further contributing to the stumbling blocks towards harmonious action. Wealthier countries and emerging markets differ widely in priorities and capabilities, leading to sporadic policymaking. There are fossil fuel subsidies, particularly where cost is a priority, and there are few plans for retrofitting buildings and the application of renewable energy in everyday life. These shortages mean that climate change

¹³ Adkins, Frankie. "Why Polar Bears Are No Longer the Poster Image of Climate Change." *Www.bbc.com*, 14 Nov. 2023, www.bbc.com/future/article/20231113-climate-change-why-photos-of-polar-bears-dont-work. Accessed 2 Sept. 2025.



is not just an environmental problem, it is a very political and economic problem requiring global cooperation that has not yet adequately materialized.

Stakeholders

China

China, one of the largest emitters among G20 countries, plays a crucial role in the global climate crisis. Urgent political action is essential to steer the nation toward a low-carbon future. The quicker China implements low-carbon policies, the more effectively it can reduce cascading climate impacts and ensure a more stable and manageable environmental future for all.

Saudi Arabia

Saudi Arabia is a significant contributor to climate action to make sure that the climate solutions needed in the Middle East and North Africa are considered on a global scale. In 2022, Saudi Arabia had the G20's highest share of fossil fuel subsidies per capita. Fossil fuel subsidies, both direct and indirect.¹⁴ Moreover, Saudi Arabia is the 13th biggest emitter among the G20 countries. Similarly to China, urgent political action is necessary in Saudi Arabia to secure a low carbon future.¹⁵

United States Of America (USA)

The United States, one of the largest historical and current emitters of greenhouse gases, holds a critical position in the global climate effort. Political shifts have heavily influenced its role, most notably when former President Donald Trump withdrew the U.S. from the Paris Agreement in 2017, weakening international momentum. Although the U.S. later rejoined under President Biden, these reversals reflect the country's inconsistent climate leadership. Delayed or weakened federal policies, coupled with strong fossil fuel industry influence, continue to hinder progress. For meaningful global climate action, the U.S. must commit to sustained low-carbon policies, regardless of political changes, and lead by consistent example.

International Energy Agency (IEA)

The International Energy Agency (IEA) also works together with G20 initiatives by supplying essential data, policy guidance, and monitoring progress towards net-zero emissions. In working together with the IEA, G20 countries aim to boost investment in clean energy and increase energy security. In carrying out these collaborative initiatives, sustainable development is stimulated, technological innovation is allowed, and inclusive

¹⁴ "Policies & Action." *Climateactiontracker.org*, 3 Dec. 2024, climateactiontracker.org/countries/saudi-arabia/policies-action/. Accessed 21 Aug. 2025.

¹⁵ G20 Climate Risk Atlas. "Saudi Arabia." *G20 Climate Risk Atlas*, 19 Oct. 2021, www.g20climaterisks.org/saudi-arabia/. Accessed 21 Aug. 2025.



climate action is supported to ensure that all member economies contribute to a stronger and greener world.

Relevant resolutions, treaties, and events (Previous attempts)

G20 Climate and Energy Action Plan for Growth (2017)

Taking place in Hamburg, Germany 2017 it was adopted by G20 member countries, involving the world's largest economies with the purpose of aligning climate action with economic growth, promoting clean energy investments, and enhancing energy efficiency. Even though the plan set a collaborative tone, it lacked binding commitments, resulting in varied national implementation and limited measurable progress on emissions reduction.

G20 Osaka Summit (2019)

Held in Osaka, Japan, the 2019 G20 Summit brought together leaders of the world's largest economies to address global economic and environmental challenges. Climate and energy were key topics, particularly the need to support the Paris Agreement. However, political divisions, especially from the United States under the Trump administration, hindered unified climate action. While the summit reaffirmed prior commitments, it failed to introduce significant new climate initiatives or strengthen enforcement mechanisms.

G20 Rome Leaders' Declaration (2021)

The G20 Rome Leaders' Declaration was signed during Italy's presidency of the G20 in 2021. It reflected a renewed collective commitment to achieving net-zero emissions, advancing sustainable energy transitions, and promoting green recovery in the aftermath of the COVID-19 pandemic. The declaration showed improved political alignment on climate issues compared to previous years. However, despite stronger language, actual implementation across member states remains inconsistent and largely dependent on domestic politics.

Green Climate Fund

The Green Climate Fund (GCF) is a key international effort established under the UNFCCC to support developing countries in responding to climate change. Launched in 2010, the GCF aims to mobilize funding for mitigation and adaptation projects, particularly in vulnerable regions. It plays a crucial role in channeling public and private finance toward sustainable development. The fund improves efficiency by providing direct access to resources and streamlining funding processes. Through partnerships and capacity-building, the GCF has helped countries develop climate-resilient infrastructure and reduce emissions. Its work supports the broader goals of the Paris Agreement and global climate finance targets.

Climate Finance Study Group



One significant previous effort to address climate finance challenges was coordinated G20 action, particularly through the Climate Finance Study Group (CFSG). The CFSG was established to enhance dialogue among G20 members on mobilizing climate finance and improving policy alignment. It aimed to integrate climate considerations into financial decision-making and promote investment in low-carbon technologies. The group's work improved efficiency by reducing policy fragmentation and encouraging shared best practices. By fostering cooperation among major economies, the CFSG played a vital role in supporting the goals of the Paris Agreement and strengthening global efforts to finance climate action.

Possible solutions

Support to Less Economically Developed Countries

Support to Less Economically Developed Countries (LEDs) is essential in ensuring a fair and effective global response to climate change. These nations often lack the financial and technical resources needed to adapt to and mitigate climate impacts. Assistance should go beyond general aid and include clearly defined guidelines, transparent monitoring systems, and sufficient funding tailored to each country's specific needs. To maintain fairness, fund allocation should be determined by impartial, third-party representatives who assess needs objectively.

Fossil Fuel subsidies and renewable energy sources

Fossil fuel subsidies remain a significant impediment to global action on climate change, holding coal, oil, and gas prices artificially low and propping up dependence on carbon-based energy. Subsidies skew the energy market and reduce the competitiveness of renewable energy technologies, the drivers of a clean and sustainable future. Diverting subsidies to clean energy technologies would accelerate the transition to renewable energy such as solar, wind, and hydro. This shift not only reduces greenhouse gas emission costs but also promotes energy security and innovation. Phasing out fossil fuel subsidies is a step in creating a level playing field for the development of renewable energy to find its place.

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