

COP26 Policy Statement

Commonwealth Chemistry Climate Change Position Statement

Summary

Climate change presents a fundamental risk to the well-being of the citizens of the Commonwealth and threatens to undermine progress towards the Sustainable Development Goals. Thirty-one of the fifty-three Commonwealth countries are classified as small states. Many of us from small island states, low-lying coastal states and least developed countries face the greatest challenges. For some Commonwealth nations climate change represents an existential threat.

Commonwealth Chemistry calls on national governments to show full commitment to achieving the goals of the UNFCCC Paris Agreement, to avoid dangerous interference with the climate system and deliver financial, technical and capacity building support to those who need it. Our member organisations are committed to action on climate change and supporting the chemical sciences community in their contributions to understanding and addressing climate change.

Vision of Commonwealth Chemistry

One community, one voice, catalysing equality for all. Equal and inclusive representation from all Commonwealth nations with the recognition that those with greater resources will contribute more in order to support those with fewer resources.

Causes and consequences

The scientific community can say with high confidence that human activity has caused the Earth's surface to warm by approximately 1°C since the pre-industrial era.¹ This warming is due to the accumulation of greenhouse gases in the atmosphere, with carbon dioxide from fossil fuel combustion being the leading cause. The chemical sciences have been at the forefront of understanding the origin and fate of greenhouse gases and their biological, geological and oceanographical interactions. If we continue emitting at the current rate, global warming is likely to reach 1.5°C between 2030 and 2050 and could go much further. Until global anthropogenic emissions of carbon dioxide and other long-lived greenhouse gases reach a balance of sources and sinks, "net zero", this rise will continue. Nature and societies around the world will struggle to adapt to extreme weather, sea level rise and ocean acidification if we do not change course.

Urgent action is required

The decisions we make now will have far-reaching consequences for generations to come. 40% of the carbon dioxide we release today may still be in the atmosphere 1000 years from now, depending upon a number of factors, not least the chemistry of the world's oceans.² How much we cut emissions in the next decades determines the level of additional climate risk that people and nature are exposed to. Governments around the world should deliver their highest possible ambition to achieve the objectives of the UNFCCC Paris Agreement and the Sustainable Development Goals. National commitments to bring greenhouse gas emissions to net zero by the middle of the century are important, but they must be backed up by policies and actions to cut emissions in the short term and initiate a green revolution in the way we use energy and materials. Just as scientists and engineers drove the first industrial revolution, they will play a central role in the green revolution.

¹ Summary for Policymakers — Global Warming of 1.5 °C (ipcc.ch)

² WG1AR5 Chapter06 FINAL.pdf (ipcc.ch) Box 6.1



We call on our governments to act urgently on climate change, in particular to:

- 1. Ensure scientific evidence sits at the heart of strategies to tackle climate change and achieve net zero greenhouse gas emissions.
- 2. Support international science, from discovery to applications, to share knowledge and build capacity particularly in deep decarbonisation of energy and materials.
- 3. Participate fully in the UNFCCC process and establish a fair path towards stabilising the climate at 1.5°C above pre-industrial temperatures, and well below 2°C, and securing finance for a global energy transition.
- 4. Engage with Commonwealth Chemistry and its member societies in their programme of activity during the year of COP26.

We will support this by:

- 1. Speaking with a unified voice to promote the role of the chemical sciences in tackling climate change to society and policy makers.
- 2. Supporting the professional development of all practitioners to facilitate a global transition to net zero.
- 3. Strengthening scientific capacity, driving innovation and enabling joint research and education activities in areas relevant to climate change and sustainable development.
- 4. Sharing resources and experiences in taking action towards net zero emissions from our activities, including through digital events to reduce the impact of travel and enable greater and fairer participation.
- 5. Inspiring the next generation of chemical scientists to deliver solutions to climate change.

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