COMMONWEALTH ACADEMIES OF SCIENCE CONSENSUS STATEMENT ON CLIMATE CHANGE

12 MARCH 2018

The world's climate is changing, and the impacts are already being observed. Changing agricultural conditions, ocean warming and acidification, rising sea levels, and increased frequency and intensity of many extreme weather events are impacting infrastructure, environmental assets and human health.

Impacts such as higher rainfall and increased plant growth will be beneficial in some cases.

However, others will be detrimental and felt more widely, changing ecosystems and weather patterns, and disrupting industries, economies, food supplies and livelihoods.

The consensus view of the global climate science community based on current evidence is that avoiding the worst impacts of climate change will require concerted global action to reduce atmospheric carbon.

A target to limit warming to below 2°C above pre-industrial levels was recognised by 160 nations that ratified the 2015 Paris Agreement on Climate Change; a bold and vital step towards addressing climate change.

Meeting this target will require achieving net-zero global greenhouse gas emissions in the second half of the Century followed by active decarbonisation of the atmosphere.

Our work towards this objective has only just begun.

Even if all countries meet their current commitments to greenhouse gas emission reductions, a global temperature rise of more than 3°C above pre-industrial levels is projected by 2100 according to current data¹.

This would lead to profound impacts affecting billions of people throughout the world.

This challenge needs to be addressed now, and the efforts required will bring enduring social, environmental and economic benefits and opportunities.

Scientific research should continue to inform policy, actions and outcomes. Opportunities for synergies should be taken to address multiple challenges.

Through concerted action, the Commonwealth has the potential, and the responsibility, to help drive meaningful global efforts and outcomes that protect ourselves, our children and our planet.

The Commonwealth academies of science call upon Commonwealth Heads of Government to use the best possible scientific evidence to guide action on their 2030 commitments under the Paris accord, and to take further action to achieve net-zero greenhouse gases emissions during the second half of the $21^{\rm st}$ Century.

To meet their Paris targets, developed member countries of the Commonwealth will need to achieve net-zero greenhouse gas emissions at or shortly after the middle of this Century. Developing country members may require a longer time frame, and additional support and capacity building.

A range of approaches including pre-emptive and responsive mitigation and adaptation will be required by Commonwealth Nations to achieve this objective.

Recognising different capacities, challenges and priorities, the approaches of each nation will not be the same. But, they must be informed by the best available scientific evidence, monitoring and evaluation.

The academies of the Commonwealth stand ready to assist by providing sound scientific advice on issues relating to climate change.

¹ United Nations Environment Programme (UNEP) Emissions Gap Report 2017.

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