

New Zealand Statement

Agenda Item 11: Space and Climate Change

Sixty-Sixth Session of the

Committee on the Peaceful Uses of Outer Space

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Check against Delivery

Tēnā koutou, tēnā koutou, tēnā koutou katoa.

Chair and distinguished delegates

Aotearoa New Zealand is grateful for the opportunity to discuss the important link between space and climate change. We are committed to becoming a world leader on climate action and recognise the importance of space technology in meeting the challenges presented by our changing climate.

New Zealand has set ambitious goals, including reaching net-zero carbon emissions by 2050, 100% reliance on renewable energy by 2035 and reduce methane emissions as part of collective effort under the Global Methane Pledge towards a global 30% reduction in methane emissions by 2030.

Our Pacific region is particularly vulnerable to the impacts of climate change. The Pacific Ocean's more than 25,000 islands, nearly half of which are populated, are at risk of sea level rise and severe coastal erosion. New Zealand is focused on working with our Pacific neighbours on building resilience to the impacts of climate change.

The effects of rising temperatures and sea levels, and extreme weather events are being felt across the world. In February this year a severe tropical cyclone devastated large areas of New Zealand. Satellite remote sensing data was vital for understanding the extent of the damage caused by the cyclone, while space-based communications technology was vital for connecting communities

with badly damaged telecommunications infrastructure to the rest of the country.

The importance of space technology and space-enabled data for understanding and mitigating climate change

Chair,

Space technologies play a significant role in helping us better understand complex Earth systems. They provide valuable data on changes to our atmosphere, cryosphere, land and water bodies. Satellites can measure greenhouse gas concentrations, monitor deforestation, track sea-level rise, and obtain data on weather patterns and other climate-related phenomena.

These technologies can help save lives and property by establishing early warning systems for natural disasters such as cyclones, droughts and floods as well as by enabling resilient communications to support the response to any disaster.

Partnering on space technology for climate research

Chair,

New Zealand has established international partnerships with space agencies and non-governmental organisations with an emphasis on the use of Earth observation data for climate change forecasting and adaptation.

Our partnership with the Environmental Defence Fund on the MethaneSAT mission will provide unprecedented public access to data on anthropogenic methane emissions. The mission's science will focus on the oil and gas sector where there is the greatest potential for rapidly slowing greenhouse gas emissions. New Zealand will be responsible for mission operations as well as leading a science programme focused on agricultural methane emissions.

New Zealand researchers are also involved in the Surface Water and Ocean Topography (SWOT) mission, for which Te Waihora (Lake Ellesmere) in New Zealand will be the only freshwater location observed outside the US. SWOT will make the first global survey of Earth's surface water, observe the fine details of the ocean's surface topography, and measure how water bodies change over time. This knowledge will assist in understanding how the ocean affects climate change, how warming waters affect lakes, rivers, and reservoirs, and how to better prepare communities for disasters like floods.

New Zealand has partnered with NASA on the Rongowai project to advance global understanding of the impacts of climate change as part of NASA's Cyclone Global Navigation Satellite System mission. New Zealand's national air carrier, Air New Zealand, has a receiver on one of its domestic aircraft that will receive reflected GPS signals from Earth's surface to gather data for better understanding of phenomena such as flooding and droughts.

Close

Chair,

Changes in technology and lower mission costs enable emerging space nations such as New Zealand to play a meaningful role in this area.

Through international collaboration and cooperation, we call on all States to make the most of the opportunities presented by space technology for not only understanding climate change but for informing decisions on mitigating and adapting to its impacts.

Thank you Chair.