



AGENDA ITEM 12.1.3:

1.5^o Degrees Report

Purpose of Paper

- 1. To update Members on the key findings and implications of the IPCC Special Report on Global Warming of 1.5°C.
- 2. To report on the reception of the report at the 24th Conference of the Parties (COP24) to the United Nations Framework Convention on Climate Change (UNFCCC).
- 3. To highlight how findings of the International Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C have been considered in the region.
- 4. To seek the support and commitment of Members and development partners to promote and use the findings of the IPCC Special Report on Global Warming of 1.5°C.

Background

5. In September 2018, the IPCC, in response to the invitation by COP23, produced a Special Report which assesses the state of scientific knowledge on impacts of climate change, both currently experienced and likely to be felt in a future of 1.5°C warming or more, and related global greenhouse gas emission pathways.

Climate Change impacts are more severe at 1.5°C

- 6. The IPCC SR on 1.5°C summarises the most recent research on the impacts of current levels of anthropogenic climate change and on expected impacts on land and ocean ecosystems and human societies of future warming. The report emphasizes that human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels and that Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate. The authors highlight significant differences between a 1.5°C and 2°C world:
 - present-day and global warming of 1.5°C, and between 1.5°C and 2°C. These differences include increases in: mean temperature in most land and ocean regions (high confidence), hot extremes in most inhabited regions (high confidence), heavy precipitation in several regions (medium confidence), and the probability of drought and precipitation deficits in some regions (medium confidence)."
 - "By 2100, global mean sea level rise is projected to be around 0.1 metre lower with global warming of 1.5°C compared to 2°C (medium confidence). Sea level will continue to rise well beyond 2100 (high confidence), and the magnitude and rate of this rise depends on future emission pathways. A slower rate of sea level rise enables greater opportunities for adaptation in the human and ecological systems of small islands, low-lying coastal areas and deltas (medium confidence)."

- "Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C."
- *"Regions at disproportionately higher risk include Arctic ecosystems, dryland regions, small-island developing states, and least developed countries (high confidence)."*
- 7. As Pacific Leaders have been emphasising for some years, if mean global temperatures pass the 1.5°C barrier it will have severe implications for the region and present an existential threat to some island nations. This report provides further evidence to reinforce the critical importance of mitigation strategies which are consistent with a 1.5°C pathway, and the need for adequate funds to adapt to climate change.
- 8. Our understanding of future climate change impacts for the region will be further enhanced by the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (SROCCC) due in September this year which will set out the latest scientific knowledge on climate change and oceans.

1.5°C is possible but the challenge is urgent

- 9. A crucial finding of the IPCC 1.5°C SR is that limiting warming to 1.5°C is technically and economically possible, however only if we take further action substantially beyond what is implied by current Nationally Determined Contributions under the Paris Agreement (PA) in aggregate.
- 10. Urgent action is vital as any delay in near-term emissions reductions will lead to an increasing risk of greater temperature overshoot (leading to more severe climate-change impacts and higher damages), a greater reliance on uncertain mitigation options and higher overall mitigation costs. IPCC SR1.5 Summary for Policy Makers focuses on 1.5°C compatible mitigation pathways that limit global warming to 1.5°C with no or limited (0.1°C) overshoot. These pathways generally lead to peak warming of 1.5°C or slightly above (less than 1.6°C) around the 2060s but then dropping back to around 1.3°C warming by 2100.
- 11. The SR indicates that to achieve this have total greenhouse gas emissions peak around 2020 and decrease rapidly to global zero around the 2060s.

How do we get there?

- 12. The report examines different mitigation strategies which can achieve the net emissions reductions that would be required to follow a pathway that limits global warming to 1.5°C with no or limited overshoot. It concludes that:
 - Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems (high confidence). These systems transitions are unprecedented in terms of scale, but not necessarily in terms of speed, and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investments in those options (medium confidence).

13. This evidence is valuable to PSIDS as it highlights not only that 1.5°C maximum temperature rise is technically and economic possible but how we can get there. It will therefore continue to be an importance source of evidence to inform negotiations and national policy approaches.

COP24 and beyond

- 14. The IPCC 1.5°C SR was a key input to the Talanoa Dialogue and COP24. While the report played an important role in providing evidence for greater ambition, discussions focused how the IPCC's Special Report on 1.5°C should be recognized. The AOSIS group (and others) pushed for the report to be welcomed however in the end the text was watered down to welcoming "the timely completion of the IPCC Special Report on Global Warming of 1.5°C in response to the invitation from parties in decision 1/CP.21 (the Paris outcome)". The COP also requested SBSTA 50 to consider the report with a view to strengthening the scientific knowledge on the 1.5°C goal. In this context, Belize (on behalf of the Alliance of Small Island States) Bhutan (on behalf of the Least Developed Countries Group) and Costa Rica (on behalf of the AlLAC group of countries) made a joint submission to SBSTA 50. This emphasies the need for further deliberations and exchange between experts and Parties in order to allow Parties to make best use of the IPCC's findings in implementing the Convention and the Paris Agreement. The application of the findings of IPCC 1.5°C SR therefore remains a live issue for COP25.
- 15. On 14th May 2019, the importance of the IPCC 1.5°C Special Report to the Pacific was reinforced in a Statement by the Leaders of Pacific Small Island Developing States entitled *Decarbonise and build resilience now ··· the call from the Pacific*. In this statement, the Leaders state:
 - *"The IPCC Special Report on Global Warming of 1.5°C highlights the urgency for accelerated global climate action. Leaders have reaffirmed the validity of this report as a basis for renewed and enhanced ambition"*

Recommendation

16. The Meeting is invited to:

- 1. **note** the key findings and implications of the IPCC Special Report on Global Warming of 1.5°C for the region;
- 2. further **encourage** the use of this evidence in the UNFCCC negotiation process, including at COP25;
- 3. **note** and continue to **support** activities which strengthen the participation of PSIDS in IPCC and UNFCCC processes; and
- 4. **note** the support of SPREP and the IMPACT project to facilitate country engagement with this report at Government Review stage and at the IPCC Plenary.