

**WORKSHOP & DIALOGUE:  
Key Findings of the IPCC & Bridging  
the Science & Technology Divide in the Pacific Islands  
14 & 15 November 2019, Suva, Fiji**

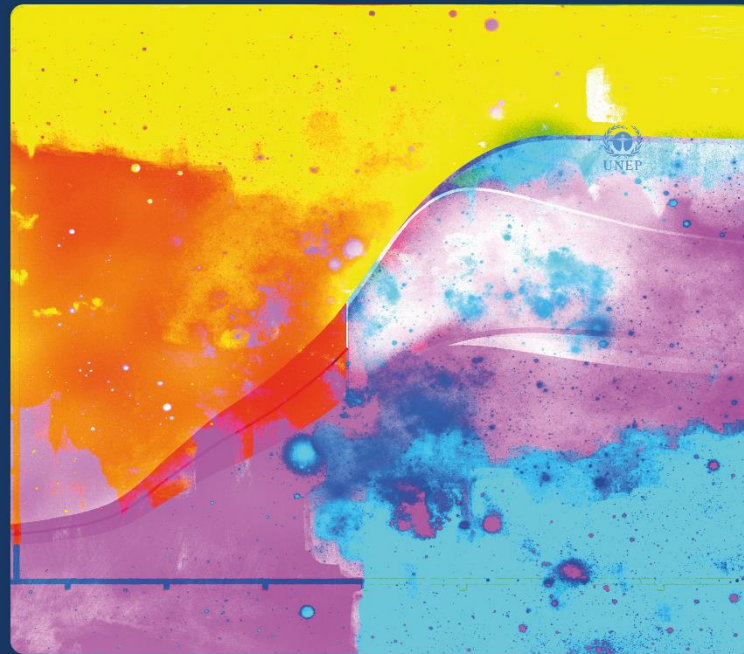


# Global Warming of 1.5°C

**An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.**

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# The report in numbers

**91 Authors from 40 Countries**

**133 Contributing authors**

**6000 Studies**

**1 113 Reviewers**

**42 001 Comments**

# Understanding Global Warming of 1.5°C

## Where are we now?

Since preindustrial times, human activities have caused approximately 1.0°C of global warming.

- Already seeing consequences for people, nature and livelihoods
- At current rate, would reach 1.5°C between 2030 and 2052
- Past emissions alone do not commit the world to 1.5°C

# Projected Climate Change, Potential Impacts and Associated Risks

# Impacts & associated risks

Climate change is already affecting people, ecosystems and livelihoods all around the world

- coral reef decline, sea level rise, Arctic sea ice loss, biodiversity loss, declining crop yields, heatwaves, heavy rainfall & cyclones

Climate change is hitting world's most vulnerable people, especially the PICs hardest but all countries are affected.





# Projected Impacts (coral reefs)



- 70–90% of the warmer water coral reefs that exist today will disappear when global warming exceeds 1.5°C (very high confidence)

# Impacts of global warming 1.5°C

At 1.5°C compared to 2°C:

- Less extreme weather where people live, including extreme heat and rainfall
- By 2100, global mean sea level rise will be around 10 cm lower
- 10 million fewer people exposed to risk of rising seas
- Global population exposed to water shortages up to 50% less

# Impacts of global warming 1.5°C

At 1.5°C compared to 2°C:

- Lower risk to fisheries & the livelihoods that depend on them
- Less extreme weather where people live, including extreme heat and rainfall
- Lower impact on biodiversity and species
- Smaller reductions in yields of maize, rice, wheat

# Emission Pathways and System Transitions Consistent with 1.5°C Global Warming

# Greenhouse gas emissions pathways

- To limit warming to 1.5°C, CO<sub>2</sub> emissions fall by about 45% by 2030 (from 2010 levels)
  - Compared to 20% for 2°C
- To limit warming to 1.5°C, CO<sub>2</sub> emissions would need to reach 'net zero' around 2050
  - Compared to around 2075 for 2°C
- Reducing non-CO<sub>2</sub> emissions would have direct and immediate health benefits

# Greenhouse gas emissions pathways

- National pledges are not enough to limit warming to 1.5°C
- Limiting warming to 1.5°C would require changes on an unprecedented scale
  - Deep emissions cuts in all sectors
  - A range of technologies
  - Behavioural changes
  - Increase investment in low carbon options
- Implications for food security, ecosystems and biodiversity

# Strengthening the Global Response in the Context of Sustainable Development and Efforts to Eradicate Poverty

# Climate change and people

- Close links to United Nations Sustainable Development Goals (SDGs)
- Mix of measures to adapt to climate change and reduce emissions can have benefits for SDGs
- National and sub-national authorities, civil society, the private sector, indigenous peoples and local communities can support ambitious action
- International cooperation is a critical part of limiting warming to 1.5°C