

# 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.

## Climate Change Adaptation

Joy Jacqueline Pereira  
Vice Chair, IPCC Working Group II

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

Limiting global warming to 1.5°C is **not impossible**, but would require unprecedented transitions in all aspects of society

**There are clear benefits** to keeping warming to 1.5°C rather than 2°C or higher

Limiting warming to 1.5°C **can contribute** to achieving other world goals

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# Where are we now?

Robert van Waarden / Aurora Photos

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A person wearing a light-colored long-sleeved shirt, a wide-brimmed hat, and sunglasses is standing outdoors, looking at a whiteboard. The background is a clear blue sky. The whiteboard has some faint markings on it. The person is positioned on the left side of the frame, and the whiteboard is in the center. The overall scene suggests a field or outdoor work environment.

## Where are we now?

Since pre-industrial times, human activities have caused approximately 1.0°C of global warming.

- At current rate, would reach 1.5°C between 2030 and 2050
- Past emissions alone do not commit the world to 1.5°C
- Already seeing consequences for people, nature and livelihoods



Where are we now?

WIDESPREAD  
OBSERVED IMPACTS

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**A CHANGING WORLD**

# Where are we now?

INCREASING MAGNITUDES  
OF WARMING INCREASE  
THE LIKELIHOOD OF

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**SEVERE AND  
PERVASIVE IMPACTS**

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Where are we now?

RISKS OF  
CLIMATE CHANGE  

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**INCREASE**

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WITH CONTINUED  
HIGH EMISSIONS



Where are we now?

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**VULNERABILITY  
AND EXPOSURE**

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AROUND THE WORLD

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Where do we want to go?

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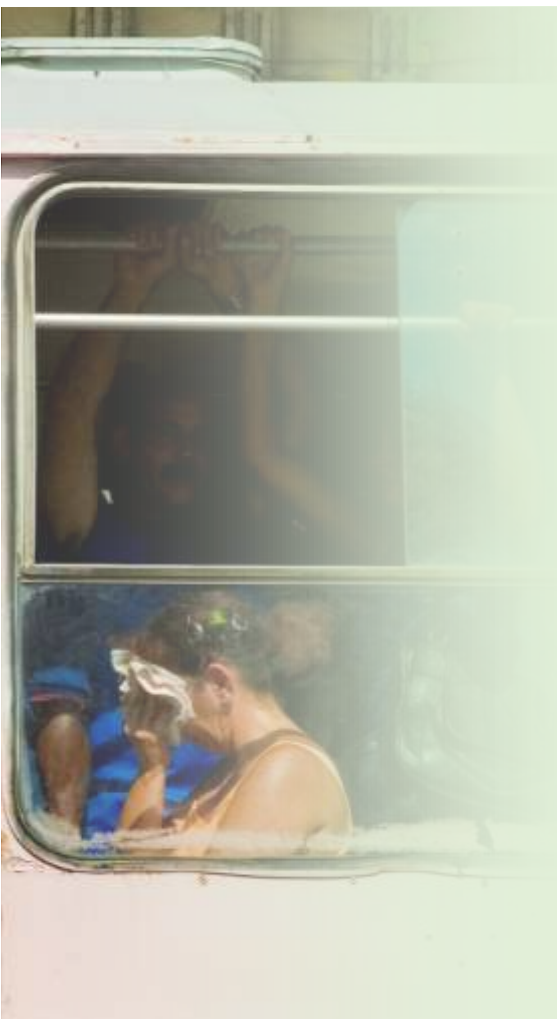




## Where do we want to go?

At 1.5°C compared to 2°C:

- There are clear differences in climate and extremes between today, a 1.5°C and a 2°C warmer world
- Less impacts from extreme weather where people live
- By 2100, global mean sea level rise will be around 10 cm lower but will continue to rise for centuries
- 10 million fewer people exposed to risk of rising seas and less coastal ecosystems exposed



Jason Florio / Aurora Photos



## Where do we want to go?

At 1.5°C compared to 2°C:

- Smaller reductions in yields of maize, rice, wheat and sorghum
- Global population exposed to water stress is up to 50% less, also less water stress for ecosystems
- Up to several hundred million fewer people exposed to climate-related risk and susceptible to poverty by 2050
- Lower impact on biodiversity and species
  - High risk of losing 70-90% of warm water coral reefs and their services to humankind, even higher at 2°C

**Tropical Southeast Asia: projected to experience the largest impacts on economic growth**

Andre Seale / Aurora Photos

## Where do we want to go?

- At 1.5 and even more so at 2°C, there is disproportionately high risk for Arctic, dryland regions, small island developing states and least developed countries

At 1.5°C compared to 2°C:

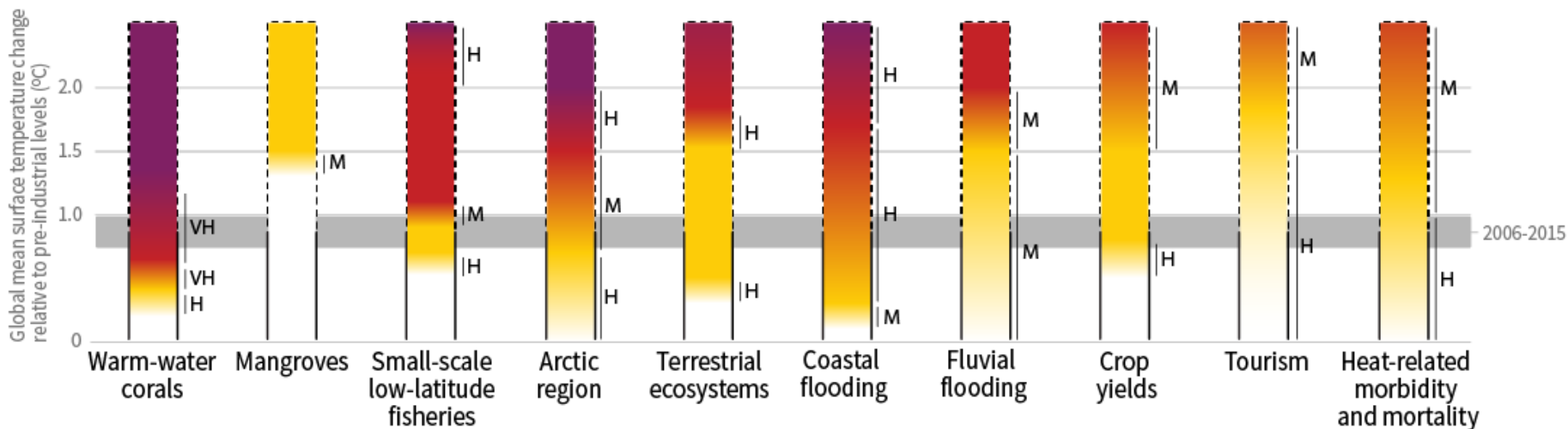
- Lower risks for health, livelihoods, food security, water supply, human security and economic growth
- A wide range of adaptation options can reduce climate risks; less adaptation needs at 1.5°C

Jason Florio / Aurora Photos

# SPM2

How the level of global warming affects impacts and/or risks associated with the Reasons for Concern (RFCs) and selected natural, managed and human systems

## Impacts and risks for selected natural, managed and human systems



Confidence level for transition: L=Low, M=Medium, H=High and VH=Very high

• **Every bit of warming matters** •

• **Every year matters** •

• **Every choice matters** •

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# THANK YOU FOR YOUR ATTENTION!

## For more information:

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