

Climate change and the sustainable development agenda

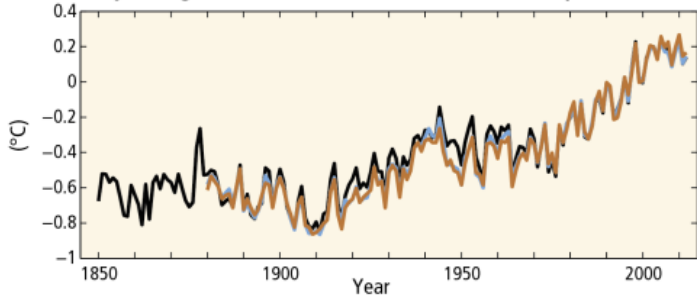
UN Headquarters, 23 March 2017

Hoesung Lee

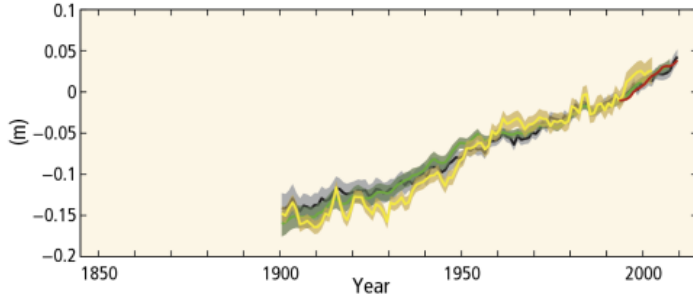
IPCC Chair

Lines of evidence

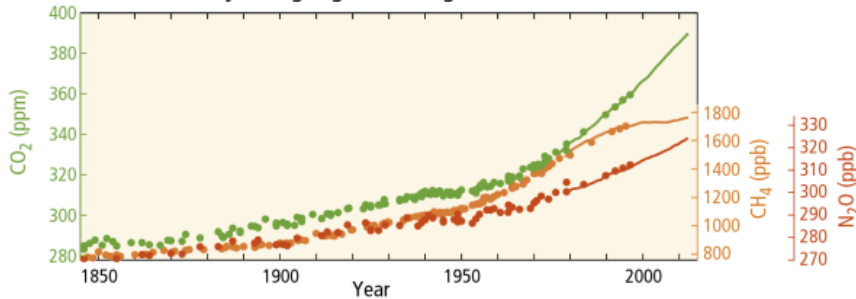
(a) Globally averaged combined land and ocean surface temperature anomaly



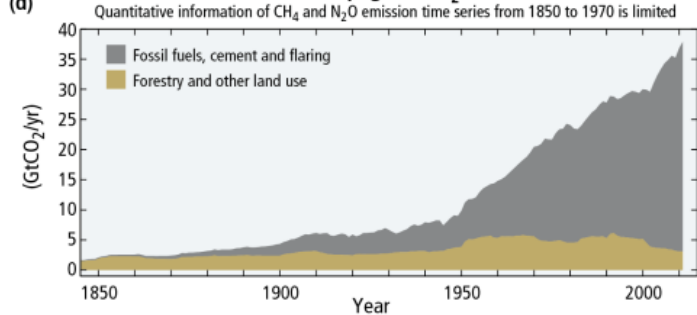
(b) Globally averaged sea level change



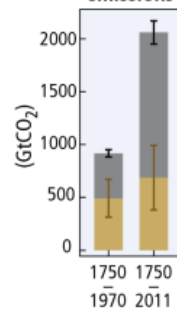
(c) Globally averaged greenhouse gas concentrations



(d) Global anthropogenic CO₂ emissions



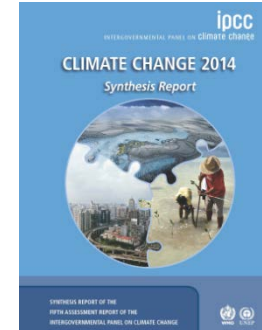
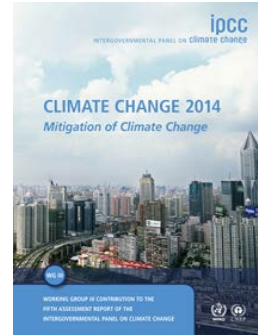
Cumulative CO₂ emissions



Complex relationship between observations (panels a, b, c) and emissions (panel d)

Figure SPM.1, Synthesis Report of the Fifth Assessment Report

Fifth Assessment Report 2013/2014



Key messages

Human influence on the climate system is clear

The more we disrupt our climate, the more we risk severe, pervasive and irreversible impacts

We have the means to limit climate change and build a more prosperous, sustainable future

Temperature rise and cumulative emissions

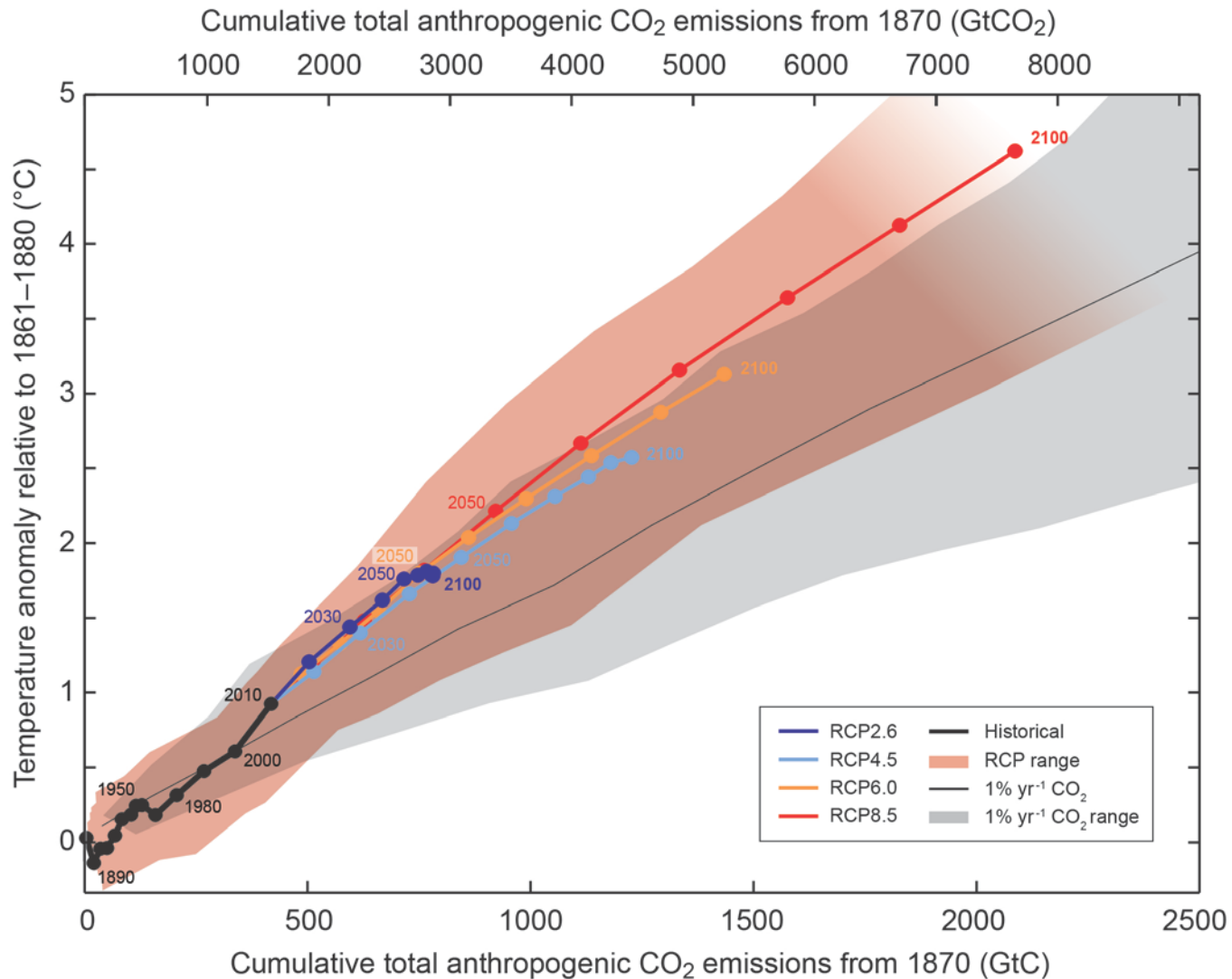
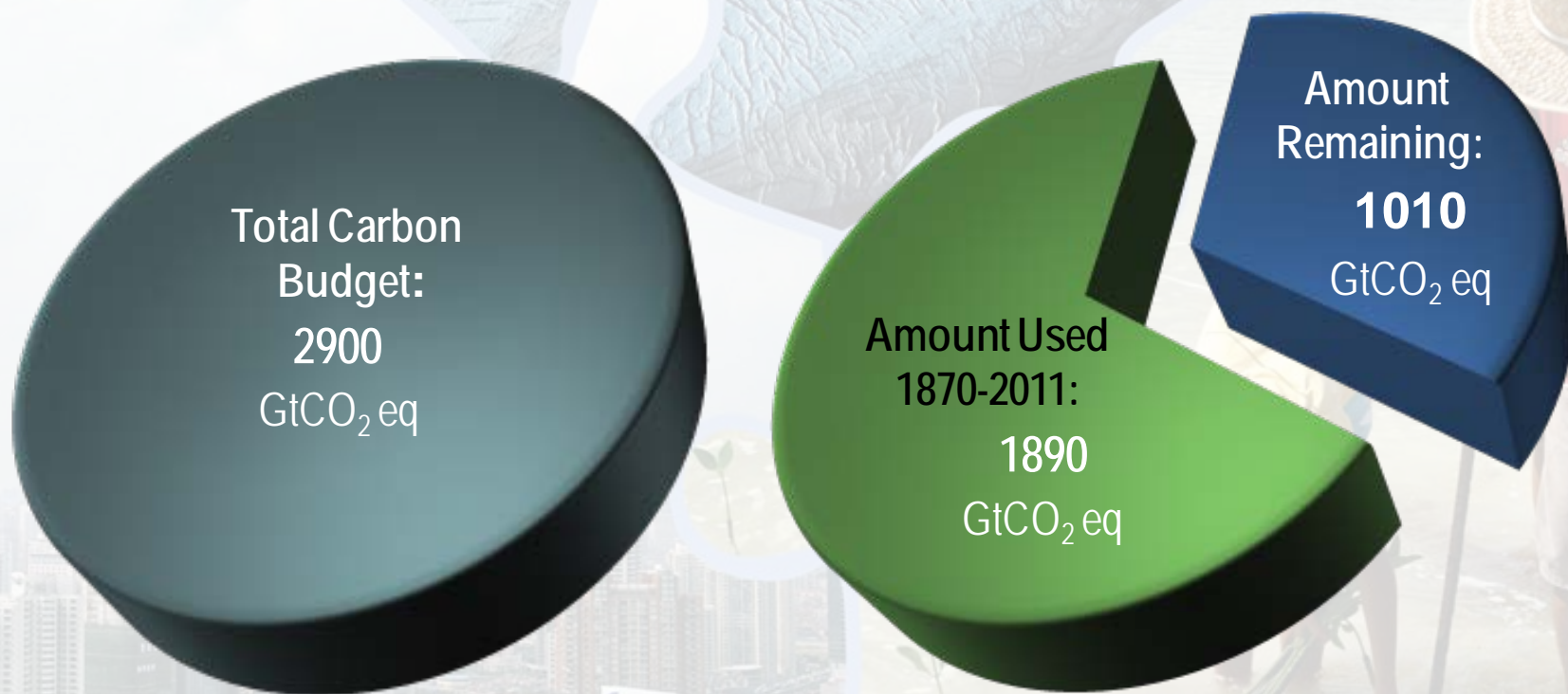


Figure SPM.10, Working Group I contribution to the Fifth Assessment Report

The window for action is rapidly closing

65% of our carbon budget compatible with a 2°C goal already used



AR5 WGI SPM

Sixth assessment cycle

Special Reports



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
September 2018

UNFCCC CoP 23

Facilitative dialogue



Special Report on climate change and oceans and the cryosphere
(provisional title)
September 2019



Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (provisional title)
September 2019

ipcc

INTERGOVERNMENTAL PANEL ON climate change



Sixth assessment cycle

Special Reports



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
September 2018

UNFCCC CoP 23

Facilitative dialogue



Special Report on climate change and oceans and the cryosphere
(provisional title)
September 2019



Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (provisional title)
September 2019

ipcc

INTERGOVERNMENTAL PANEL ON climate change



Sixth assessment cycle

Special Reports



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
September 2018

UNFCCC CoP 23

Facilitative dialogue



Special Report on climate change and oceans and the cryosphere
(provisional title)
September 2019



Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (provisional title)
September 2019

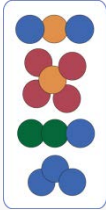
ipcc

INTERGOVERNMENTAL PANEL ON climate change



Sixth assessment cycle (cont)

Methodology Report update



2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories
May 2019

AR6 Main Report



Working Group I, II, and III contributions to the Sixth Assessment Report in 2021
Synthesis Report to the Sixth Assessment Report April 2022

UNFCCC global stocktake 2023

Cities



Attention on **cities** in AR6 including a conference and special report on cities in AR7

Climate change and the sustainable development agenda

UN Headquarters, 23 March 2017

Hoesung Lee

IPCC Chair