Symposium on IPCC AR5/WG3 Report

Comments by moderator
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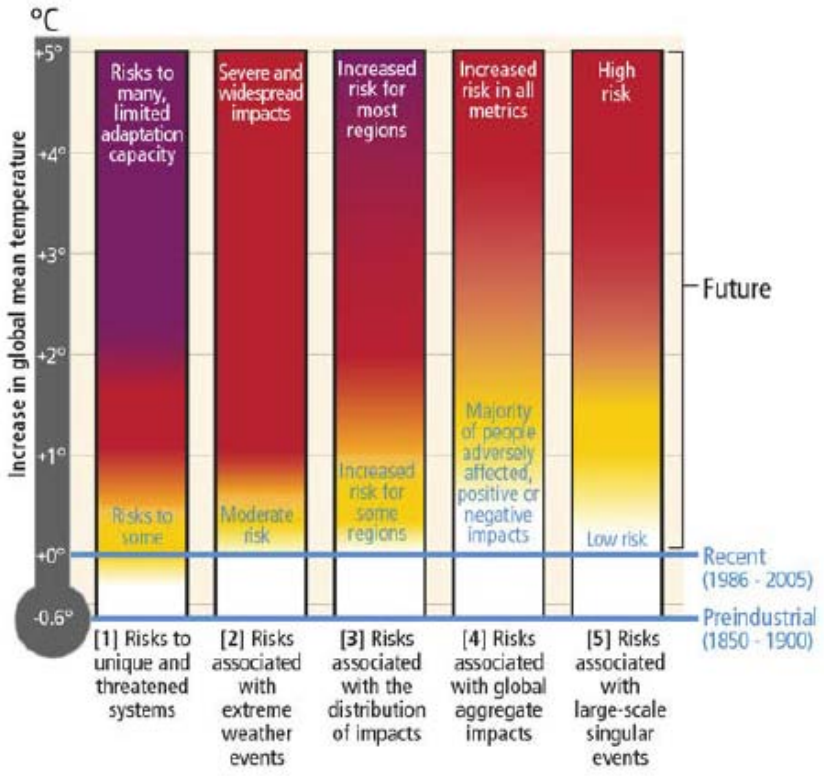
Importance of Synthesis Report

Strategies should be based upon all reports by WG1, 2 and 3

Common base year (WG2/WG3)



SPM (WG2)

Benefit yet to be shown

- The incomplete estimates of global annual economic losses for additional temperature increases of ~2℃ are between 0.2 and 2.0% of income (WG2/SPM)
- Avoided damages are unknown as BAU loss is unknown
- Cost of likely to stay below 2 ℃ will be 4.8 (2.9~11.4) % in 2100 of consumption relative to baseline (WG3/SPM)

Main difference between AR4 and 5

Can policymaker understand SPM?

- AR4

  Equilibrium concentration and temperature

  Climate sensitivity 2~4.5℃ (best estimate 3℃)

- AR5

  Concentration and temperature in 2100

  Climate sensitivity 1.5~4.5 (no best estimate is shown)

  Emergence of overshoot scenario (what does 2℃ target mean?)

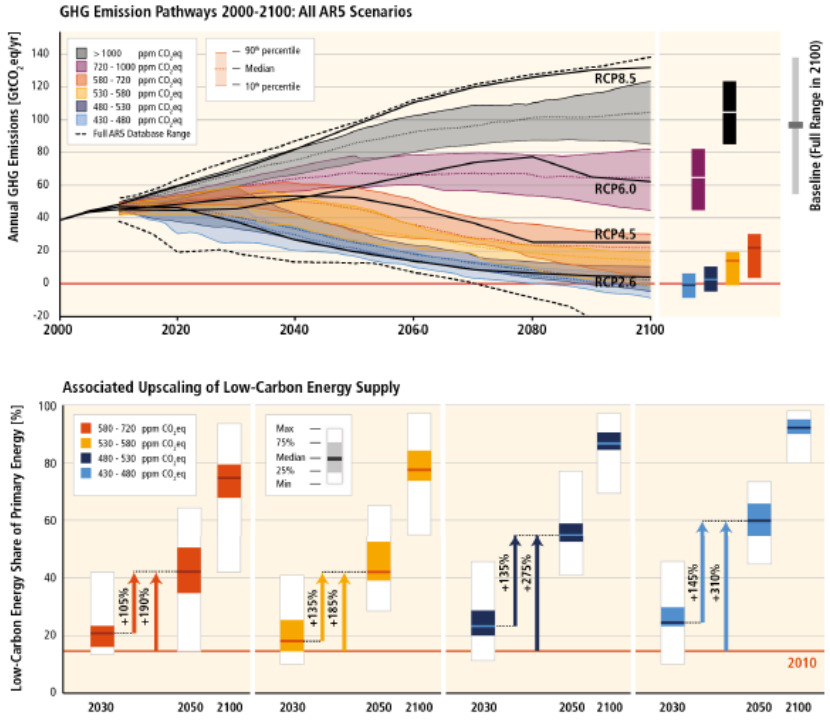
- Article 2 of UNFCCC

  Stabilize at the level not dangerous

Technology is the key

Scale of challenge

WG3/SPM



All technologies must be available (WG3/SPM)

- Mitigation scenarios reaching about 450 ppm CO2eq in 2100 typically involve temporary overshoot of atmospheric concentrations and overshoot scenarios typically rely on the availability and widespread deployment of BECCS and afforestation in the second half of the century.
- Combining bioenergy with CCS (BECCS) entails challenges and risks
- Trade off between food security, bio-diversity and climate change mitigation

Balance among globally urgent issues

Toward feasible and effective mitigation policies

- UN 17 Sustainable Development Goals

  Poverty eradication is the greatest global challenge

  Combating climate change is one of 17 goals

  How to allocate scarce resources efficiently

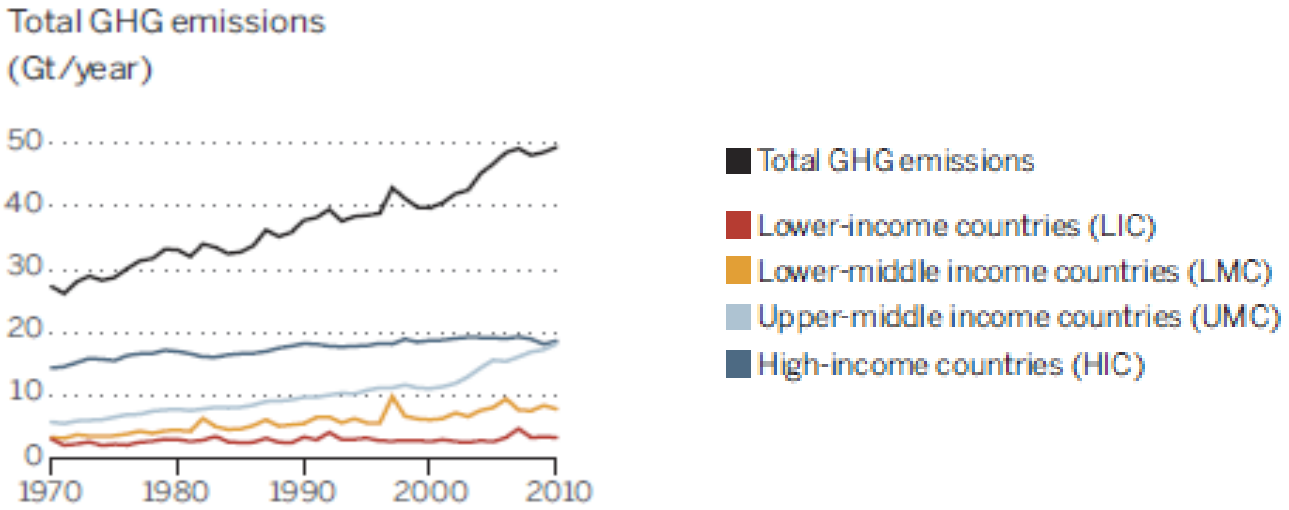
- Article 2 (Ultimate Objective) of UNFCCC

  Such a level should be achieved within a time-frame sufficient ---- to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

- May be one of future IPCC role

IPCC and Government Review

- How can IPCC (science) provide policy relevant information under political pressures (Government Review at Berlin in April, 2014)
- Important figures were removed (see below)
- Summary for (or by) Policymakers
- Essential question for future of IPCC



David Victor et al. *Science,* July 4, 2014

Future IPCC and climate strategies

Providing policy relevant information

- Risk management under inevitable global warming

  Global Warming is inevitable

  Many aspects including tipping point are uncertain

  It may take several hundred years for catastrophe to occur

  (last interglacial period continues for 13000 years)

  (How to cope with the situation)

- Balanced Approach, efficient allocation of scarce resourced (toward a feasible solution)
- Option value of Geo-engineering under uncertainty

Better a strong weak agreement than a weak strong agreement that may collapse