

Centre for  
Climate Change  
Economics and Policy



Grantham Research Institute on  
Climate Change and  
the Environment

# The Global Development Of Policy Regimes To Combat Climate Change

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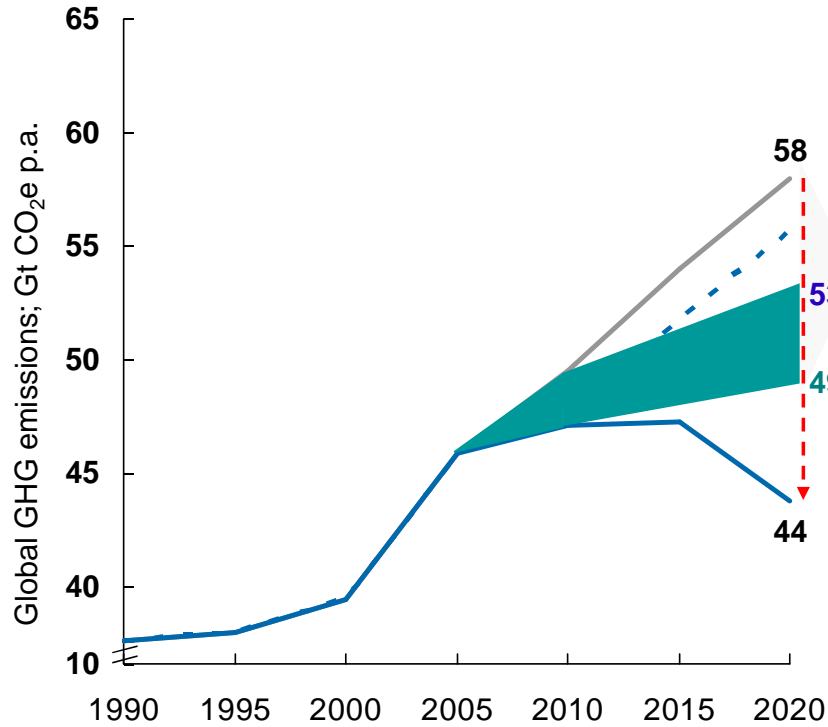
## History of international negotiations

- 1988** Intergovernmental Panel on Climate Change (IPCC). Has produced four major assessments, in 1990, 1995, 2001 and 2007.
- 1992** United Nations Framework Convention on Climate Change (UNFCCC).
- 1997** Kyoto Protocol adopted. Entered into force in 2005 following Russian ratification (Russia ratified as EU considered relaxing demands on Russia's accession to the WTO, and Russian emissions based on Soviet era production. So called 'hot air').
- 2007** Bali (UNFCCC Conference of the Parties 13, 'COP13'). 'Roadmap'
- 2009** Copenhagen (COP15). 'Accord'
- 2010** Cancun (COP16). 'Agreements'
- 2011** Durban (COP17). 'Platform'
- 2012** **Qatar** (COP18).

## Durban (COP 17) – key outcomes

- Kyoto Protocol extended for second commitment period (2013-2017); mainly Europe.
- The ‘Durban Platform for Enhanced Action’:
  - Delegates agreed to “launch a process to develop a protocol, another legal instrument or an agreed outcome with legal force...applicable to **all parties**” by 2015 which would enter into force by 2020;
  - Recognised “**gap**” between Copenhagen-Cancun pledges/commitments and 2°C target, but no agreement to enhance Copenhagen-Cancun pledges.
- Design of the Green Climate Fund (GCF):
  - Progress toward agreement on the design of the GCF, but not funding.
- Transparency:
  - New arrangements for transparency will increase the accountability of both developed and developing countries on actions to reduce emissions.
- Forests:
  - Finance from private and public sources, possibility of a formal REDD+ market mechanism under the COP; countries to report their forest reference levels.

# Cancun-Durban outcome not consistent with 2°C



Reference path-way  
"Business-as-Usual"

**Low scenario**

**Medium scenario** – in line  
with low-case Cancun  
country proposals<sup>1</sup>

**High scenario** – in line  
with high-case Cancun  
country proposals<sup>1</sup>

2°C pathway<sup>2</sup>  
(450 ppm with  
overshoot)

Resulting average global warming Degrees Celsius	Distribution - Chance of ≥:		
	4°C	5°C	6°C
4.8°C	82%	47%	22%
3.9°C	58%	24%	9%
2.9°C	24%	7%	2%
2.0°C	3%	1%	0%

<sup>1</sup> For example: 20% v 30% cuts in emissions 1990-2020 in the EU.

<sup>2</sup> Pathway that is expected to limit warming to 2°C with about a 50% probability.

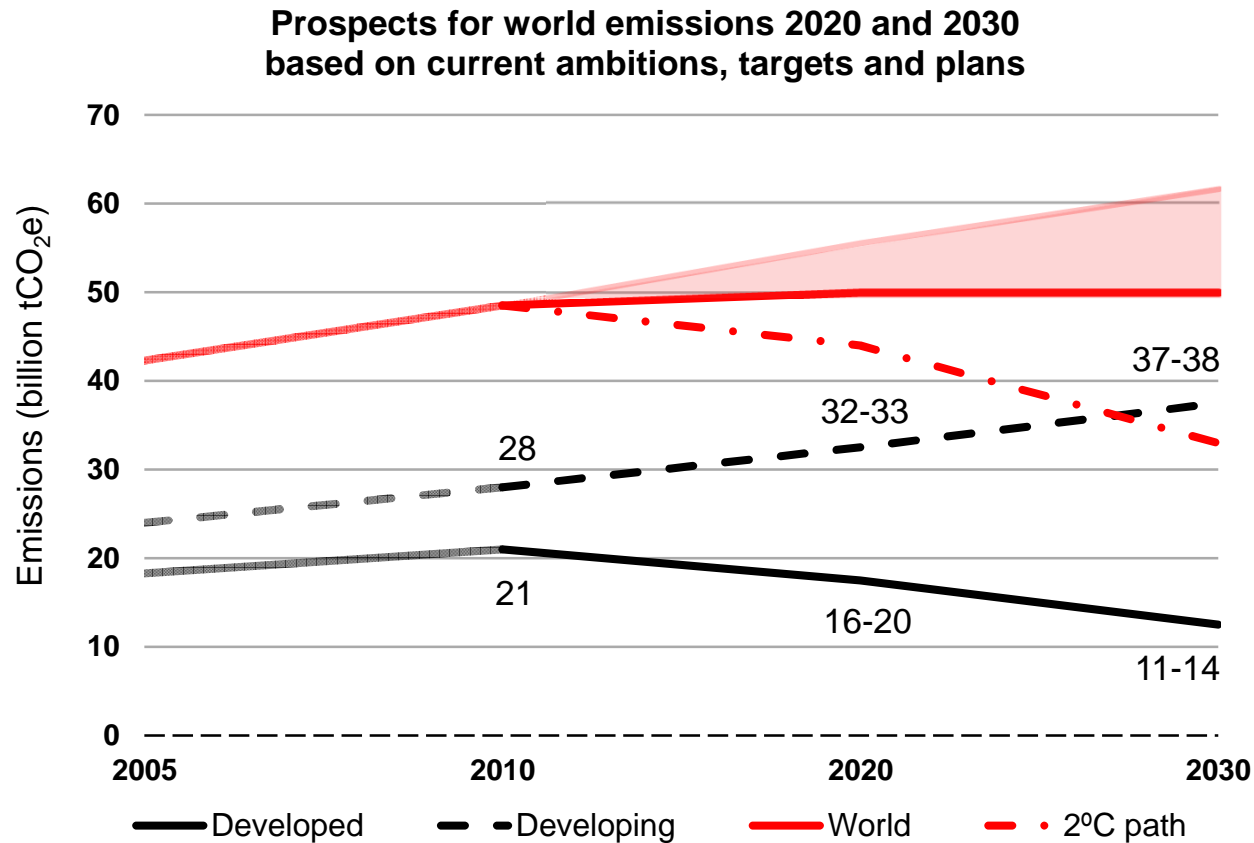
SOURCE: Project Catalyst



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## Where are we heading? (II)

- Patterns of emissions strongly influenced by a changing world economy. Copenhagen-Cancun plans.



Current plans look like shaded area; plateauing at 50 at best.

## Action from developing world is key

- On current plans (Cancún) emissions in the developing world could rise from around 28 billion tonnes of CO<sub>2</sub>e today, to around 32-33 billion tonnes in 2020 (possibly higher), to 37-38 in 2030 (note 'budget' is around 32 for a 2°C path in 2030). The increase reflects the changing structure of the world economy.
- 2°C (50-50) path simply not possible without strong action in developing world from now on.
- Developing countries are starting to move towards lower carbon intensity, e.g. China, Ethiopia, Rwanda, Korea.
- They not only see the dangers and recognise responsible behaviour but also see the attractiveness of the new low-carbon growth path and the potential of the new markets.
- “It is not equity or justice to foul the planet because others have done so in the past” Prime Minister Meles Zenawi of Ethiopia, UNFCCC Durban, December 2011.
- Strong moral and self-interest arguments for support from developed countries.

## Action from the developed world (I)

- Events of recent years have encouraged some to say we should delay, should go back and further question the science, and should try to restore high-carbon growth. Some reasons:
  - Obama elected (2008) and subsequent weakness on climate change;
  - Continued shift in the structure of the world economy, e.g. China's rise;
  - Weakness of Copenhagen COP meeting;
  - Attacks on the science (climate-gate), widespread failure to understand scale of risk;
  - Ideological attacks on regulation of GHGs (alleging “distortion of markets”, “red planners return in green hats”);
  - Failure to understand Pigou/Meade on market failure and Hayek/Schumpeter on innovation and discovery;
  - Deep financial and economic crises in some developed countries.

## Action from the developed world (II)

- There is nevertheless much action across developed countries at all levels.
- **Nations/states:** e.g. California cap-and-trade legislation, US EPA Mercury ruling, Australia carbon tax/trading scheme, UK 4<sup>th</sup> carbon budget, growth in renewable energy investment (despite the slow-down).
- **Cities:** e.g. “Covenant of Mayors” commits signatories of EU cities and towns to reduce CO<sub>2</sub> emissions by more than 20% 1990-2020 - close to 3,500 signatories to date. NYC has reduced GHG emissions by 13% below 2005 levels (US around 8% reduction) with a target for a 30% reduction by 2020.
- **Firms:** e.g. Dupont, The co-operative, Waste Management and Maersk.
- Public policy to foster transformation; bad policy raises costs.
- ***The power of example is key to change.***



## “Top down” and “Bottom up”

- Some argue international cooperation, “top down”, is impossible and that “bottom up” will be enough.
- To argue for “bottom-up” without “top-down” is a misunderstanding of the economics (investment hampered by lack of confidence), the science (dangers of delay) and the politics (domestic action enhanced by progress in international). Bottom-up encouraged by top-down.
- Top-down encouraged by progress at firm, city and country levels.
- ‘Top down’ and ‘bottom up’ support each. There is no artificial horse race between the two.
- Mutual confidence is a key ingredient for national and international action. Requires understanding of economics, history and culture of other countries. Not same thing as fully fledged formal agreement.