



Climate Change: Bali- Poznan-Copenhagen- Cancun-Durban and now Doha

A curtain-raiser

Centre for Science and Environment



Facts

Climate change: Real



- Climate change is **real**; it is already dangerous; heading towards catastrophe
- Emission reductions needed urgently and **drastically**
- **South Asia is most vulnerable**

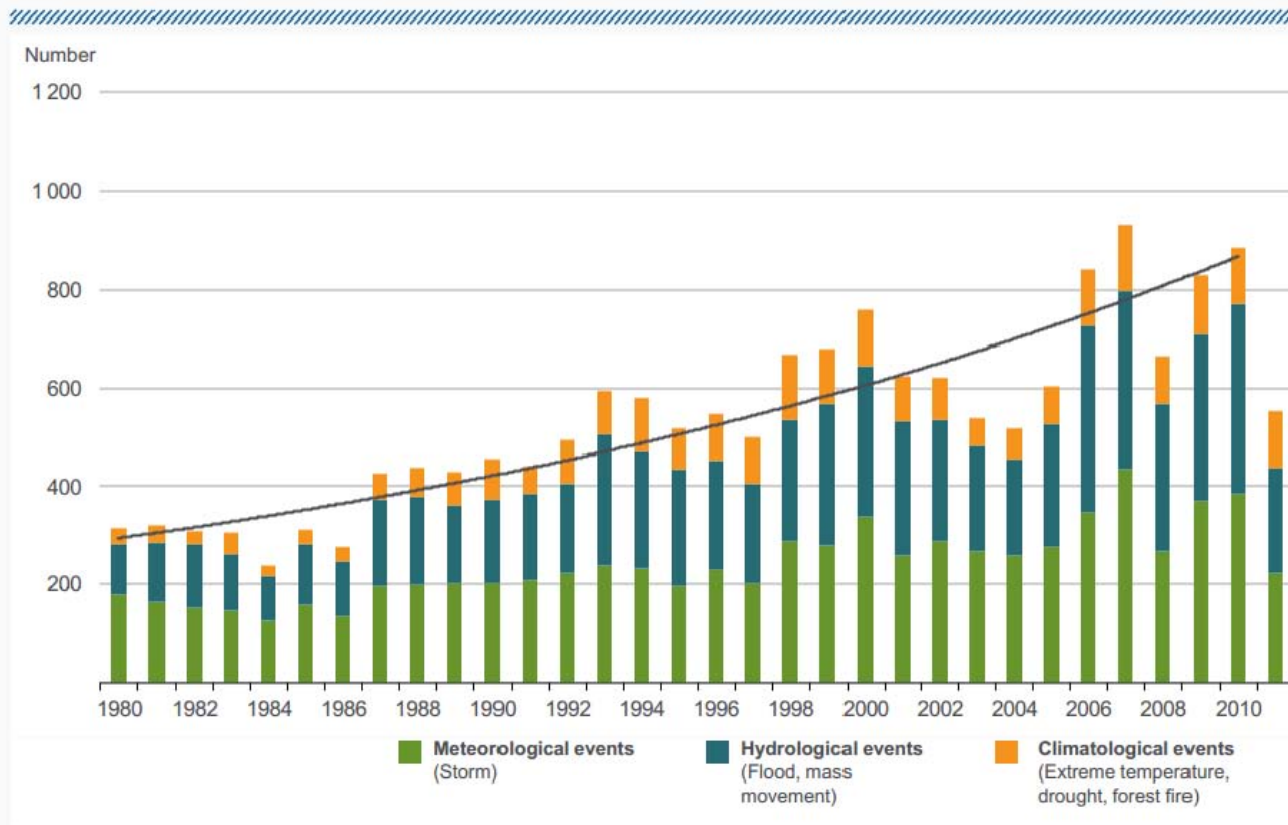
Extreme weather events – becoming the norm



Extreme weather events

Number of weather catastrophes worldwide 1980–2011 (2011 Jan. to Sept.)

Munich RE



- Hurricane Sandy, only the most recent of a trend that shows an increase in extreme weather events

- Long list of such events for 2012 – Floods in northern Thailand, Cold snap in EU, drought and fires in USA, worst drought in Brazil in 50 years

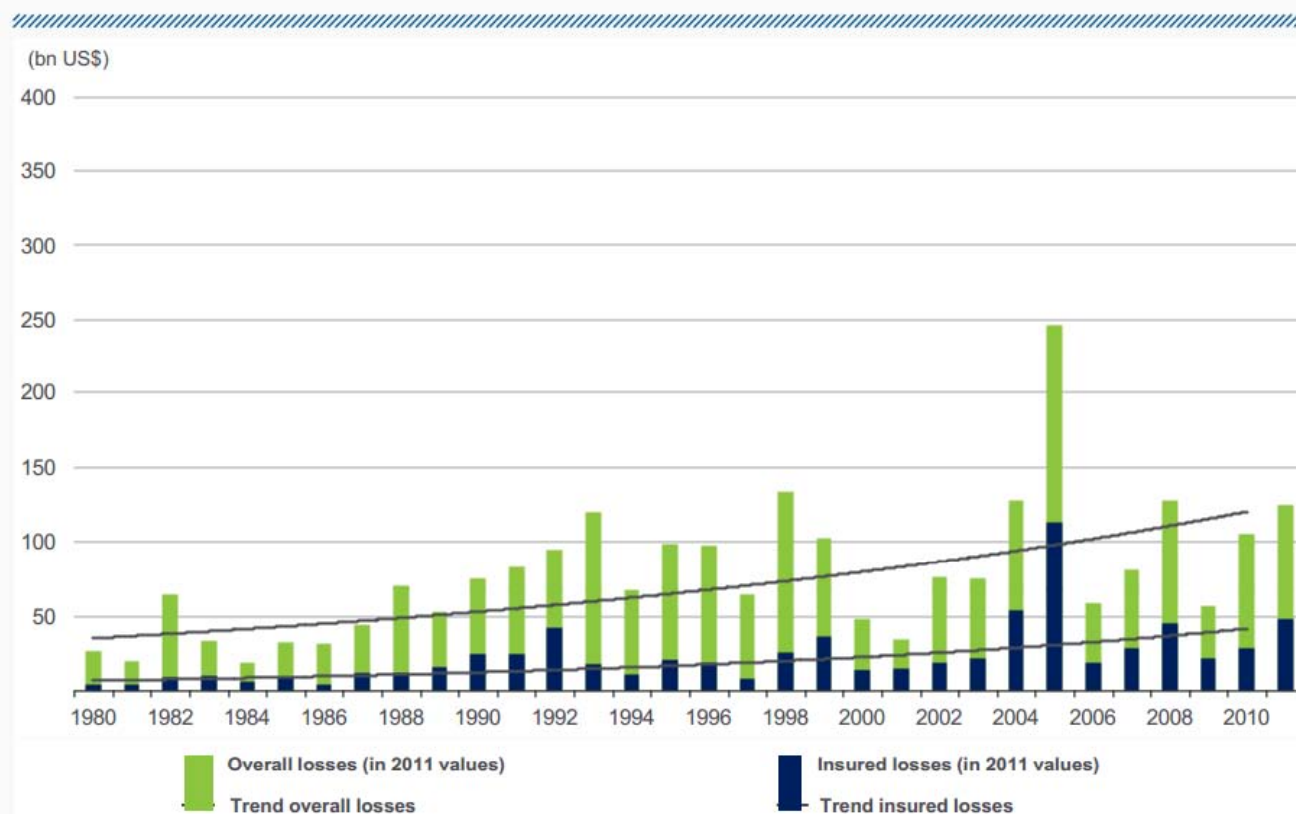
Money speak



Extreme weather events

Losses from weather catastrophes worldwide 1980–2011 (2011 Jan. to Sept.)

Munich RE



- Increasing trend in losses due to extreme weather events

- Increasing trend in insured losses

Impacts: latest reports



⑩ Climate change in India: 4x4 assessment

- ☞ Temperature: higher annual mean by 2030 – between 1.7° -2° C. Maximum increase in coastal areas
- ☞ Rainfall: more rains but less rainy days; high intensity rainfall. Risk of floods. Storm surges
- ☞ Agriculture: higher temperature, CO₂ concentration and precipitation will impact production
- ☞ Sea level rise: predicted to continue at rate of 1.3 mm/year



Impacts: uncertain but clear

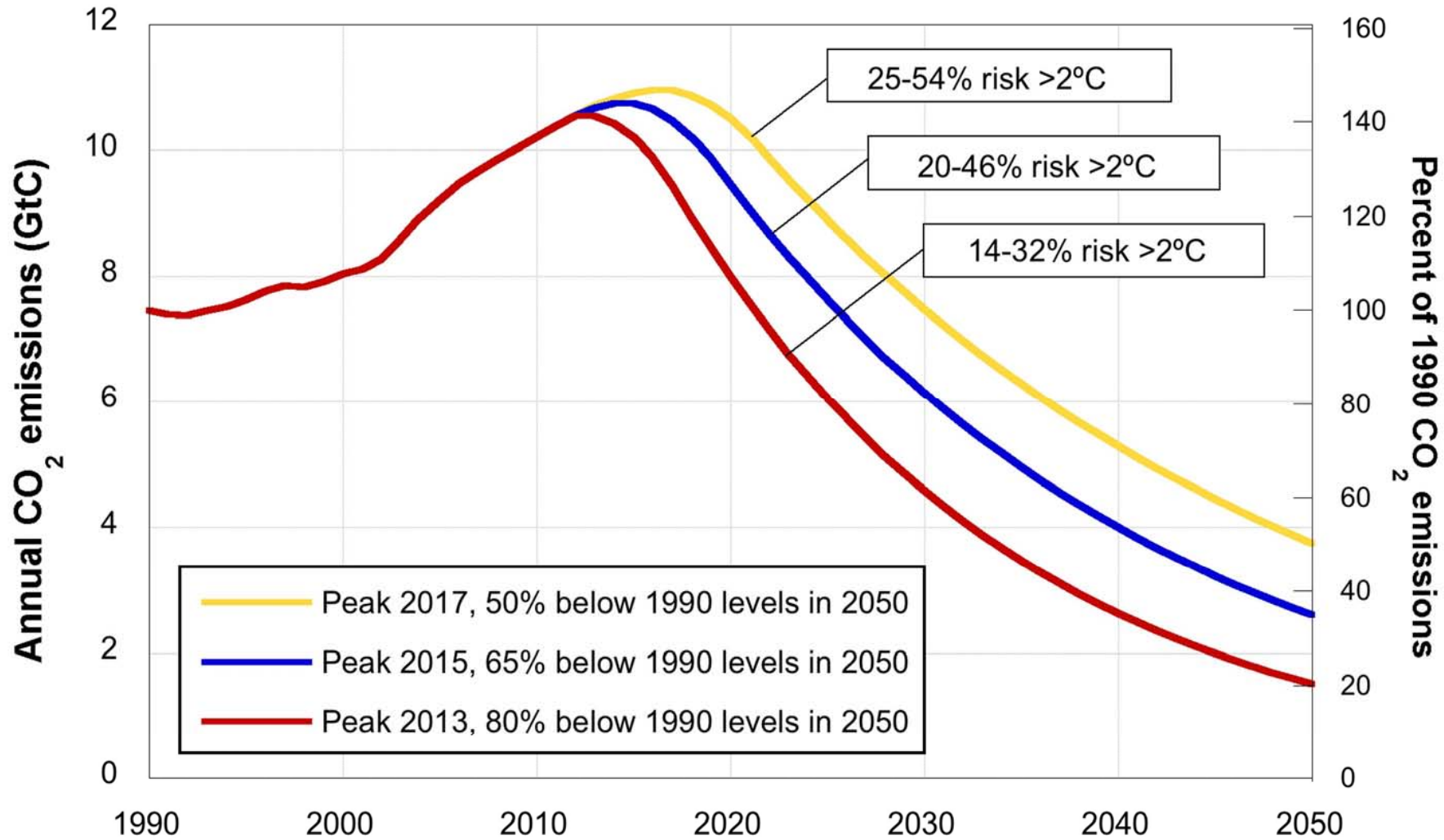
- ⑩ Beginning to see **extreme rainfall events**: more rain, less rainy days, cloud bursts, unseasonal, variable extreme rain (Mumbai, 2005; Jaipur 2012)
- ⑩ Beginning to see trend in increase **mean temperatures**, impacting crops (wheat)
- ⑩ Beginning to see some **intensification of tropical cyclones/sea surges** (Nargis, 2008; Aila 2010) because of warmer temperatures
- ⑩ **All in all: not so good news ahead**



The challenge: 2° C

- ⌘ At business as usual: greenhouse gas levels 550 ppm by 2050 = temperature increase of 3-5° C
- ⌘ Deadly for world
- ⌘ Target is to keep below 2° C
- ⌘ Emissions need to be capped **450 ppm** (already above 350 ppm)
- ⌘ **Have to cut drastically to meet objective**

Global 2°C pathways and their risks





Politics and Facts

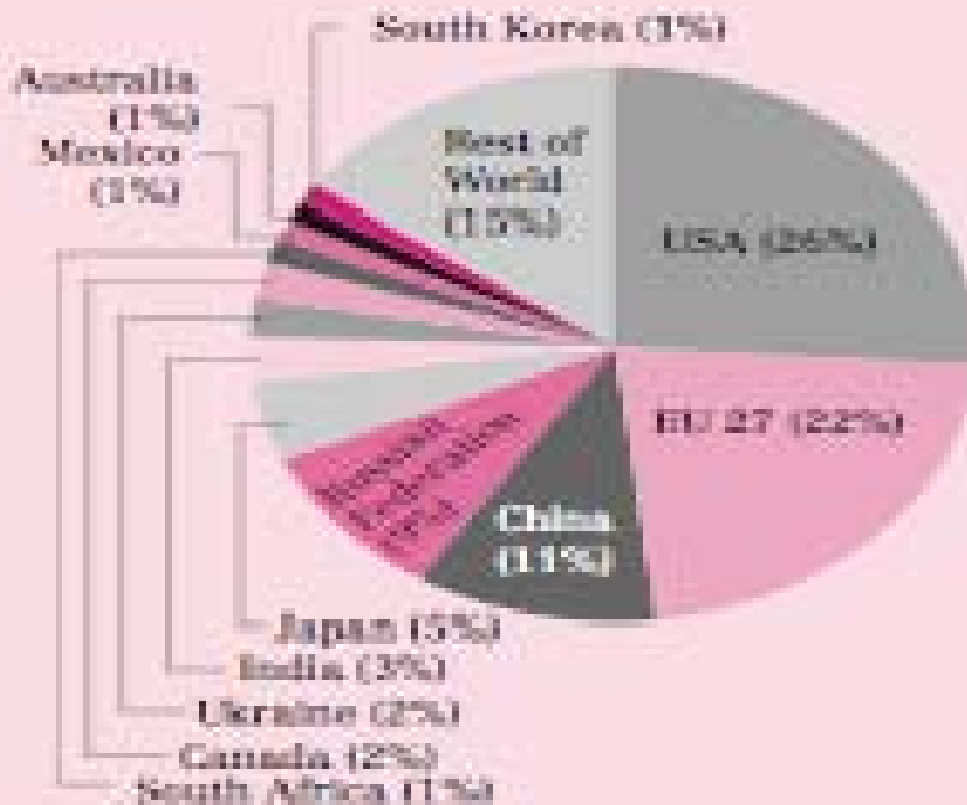
POLITICS IS TOXIC



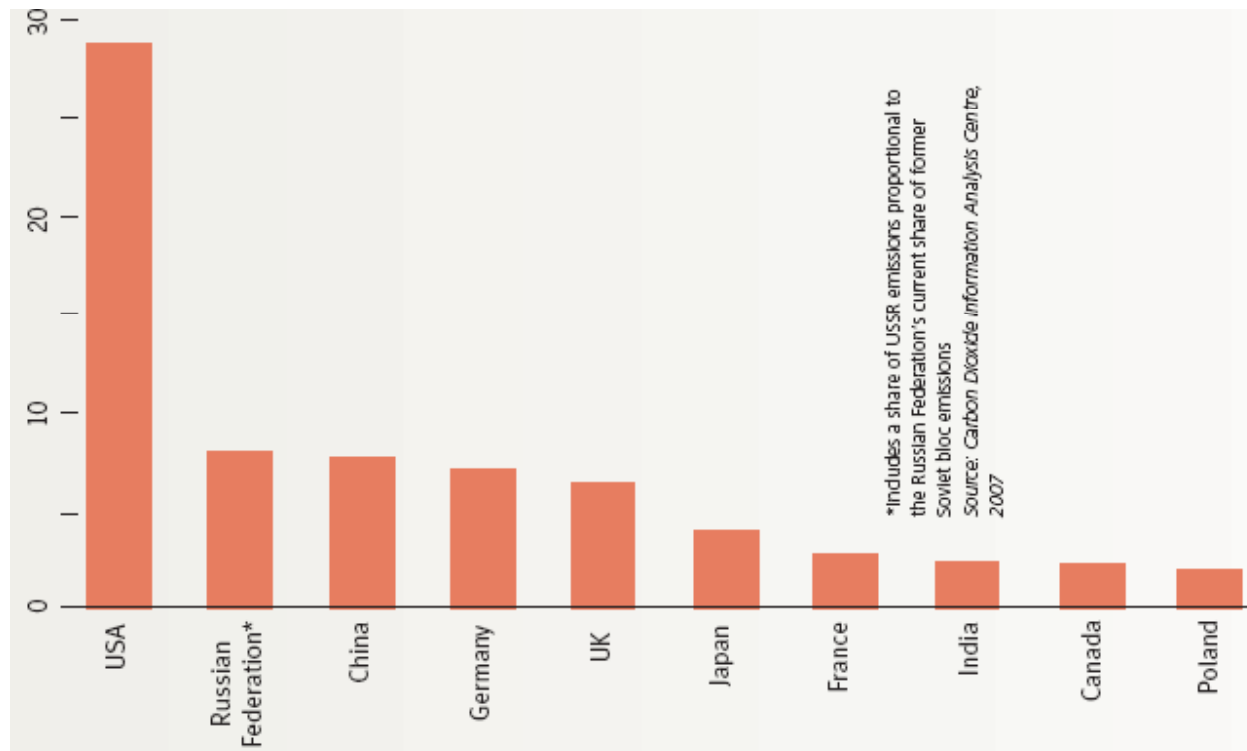
- ⑩ Developed world wants do little domestically – **low emission reduction targets and meet it through cheap CDM**
- ⑩ Pressure is to get developing countries -- India, China, Brazil etc. -- to take on more commitments
- ⑩ Politics is to break the **firewall** – remove distinction between countries that have contributed to the problem and those who are suffering

But all not equal contributors: differentiation important

Graph 2: Cumulative CO2 emissions, 1950-2007, without land use



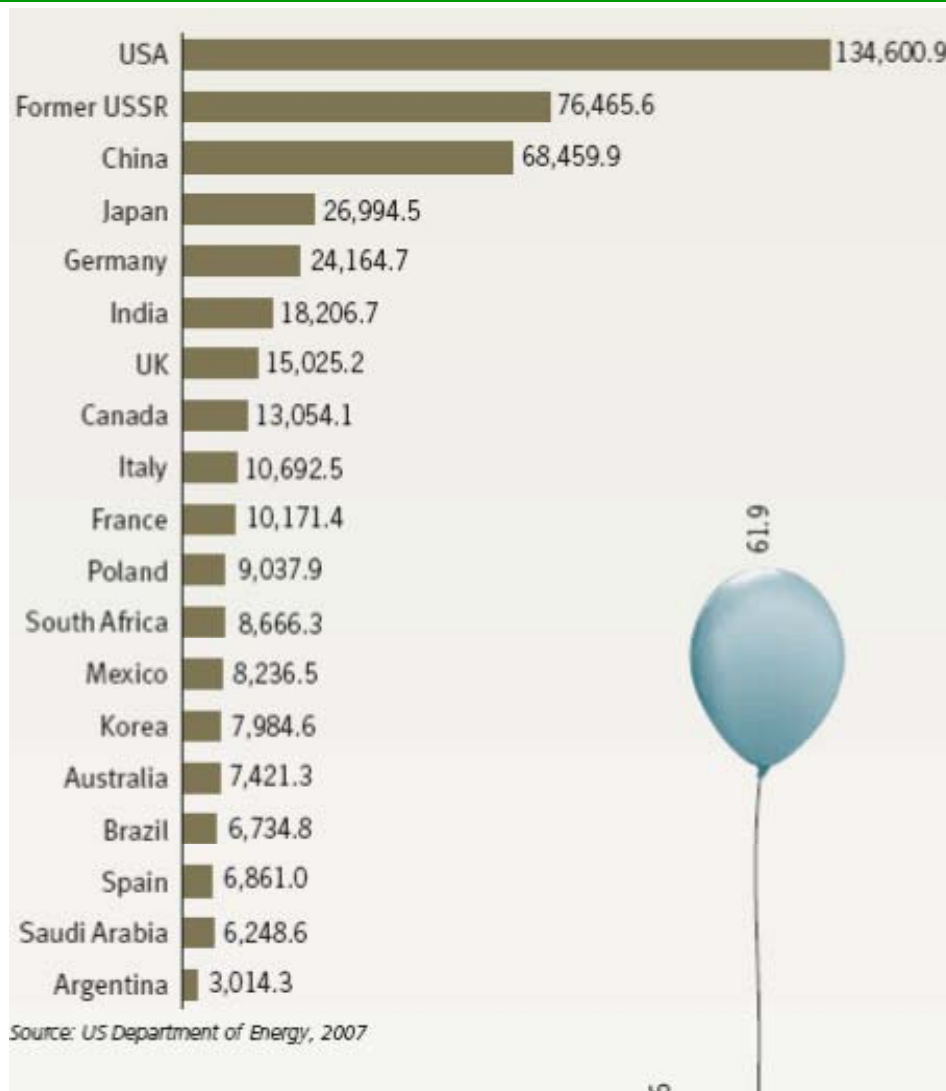
Historical emissions - 1840-2006:
A tonne of CO₂ emitted in 1840 same value as tonne of CO₂ emitted in 2008



Since 1840,
7 out of every
10 tonnes of
CO₂ have
been emitted
by the rich
countries

Historical emissions amount to about 1100 tonnes of CO₂ per capita for the UK and the US, compared with 66 tonnes for China and 23 tonnes for India

Is India and China the new villain?



- Between 1980-2005, the total emissions of the US were almost double that of China and more than seven times that of India.

- With just 15 per cent of the world population, rich countries account for 45 per cent of CO₂ emissions

Is India and China the new villain? Per Capita Emissions: 2011



Differentiation is law



- ⑩ Enacted into international law
- ⑩ UN Framework Convention on Climate Change (UNFCCC) 1992 based on the principle that a group of countries (developed or Annex 1) created problem; have to reduce emissions first; create space for the rest to grow
- ⑩ Common but differentiated Responsibilities (CBDR)

Kyoto Protocol, 1997: based on principle of differentiation



- ⑩ Kyoto Protocol accepts that developed countries have to cut emissions
- ⑩ Sets legally binding emission reduction targets for Developed countries: roughly 5.8% over 1990 levels by 2008-2012
- ⑩ Developing world will take steps to avoid growth of emissions. For this money and technology will be provided by Annex 1

Firewall is the principle and the politics



- ⑩ Principle of rights to the global common enshrined;
- ⑩ Principle of historical responsibility enshrined;
- ⑩ Principle of right to development and responsibilities of rest accepted

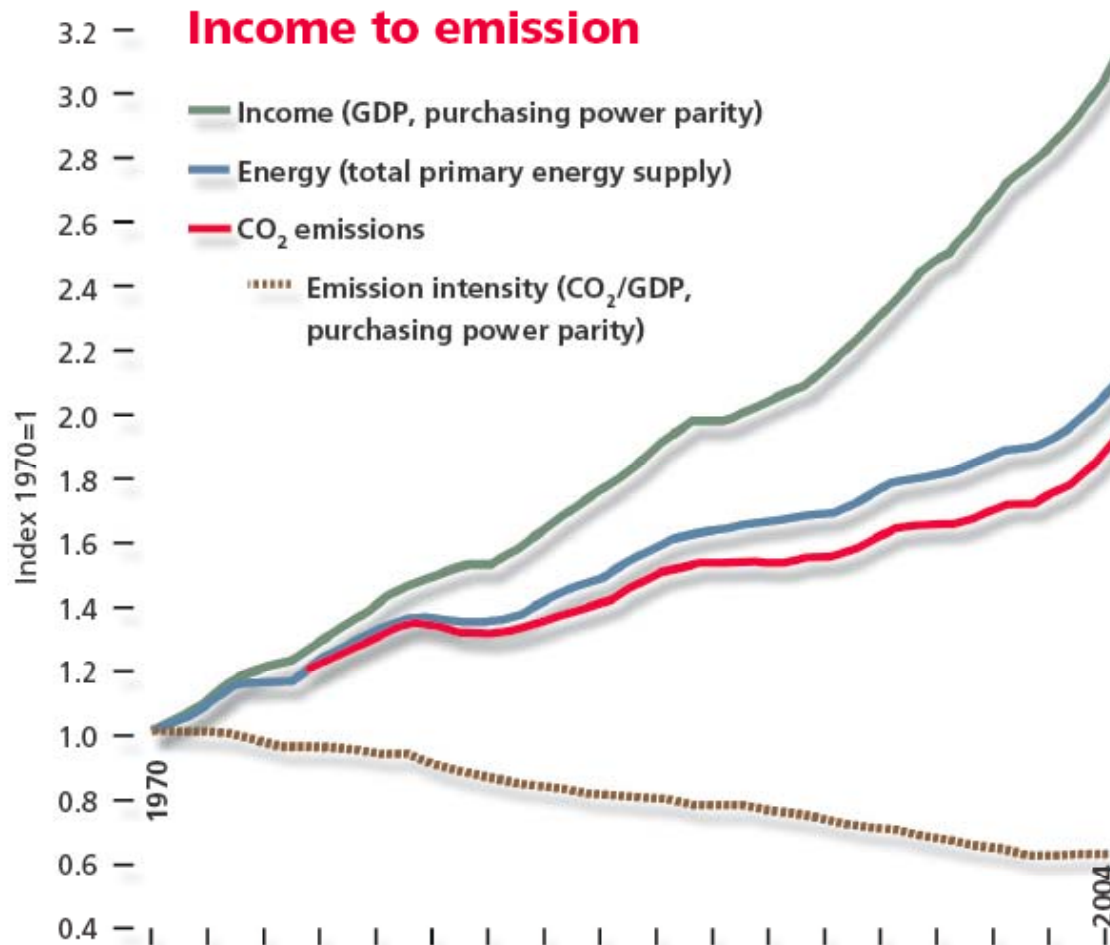
**The removal of this firewall –
differentiation – is driving negotiations
and making politics toxic**

Why important for rich countries?



- ⑩ CO₂ emissions and hence climate change is related to economic growth as the world knows it today
- ⑩ Most countries (Europe, Japan) have reached technology-emission barrier
- ⑩ Will need to invest substantially to reduce emissions
- ⑩ **Want a 'cheap' way out**

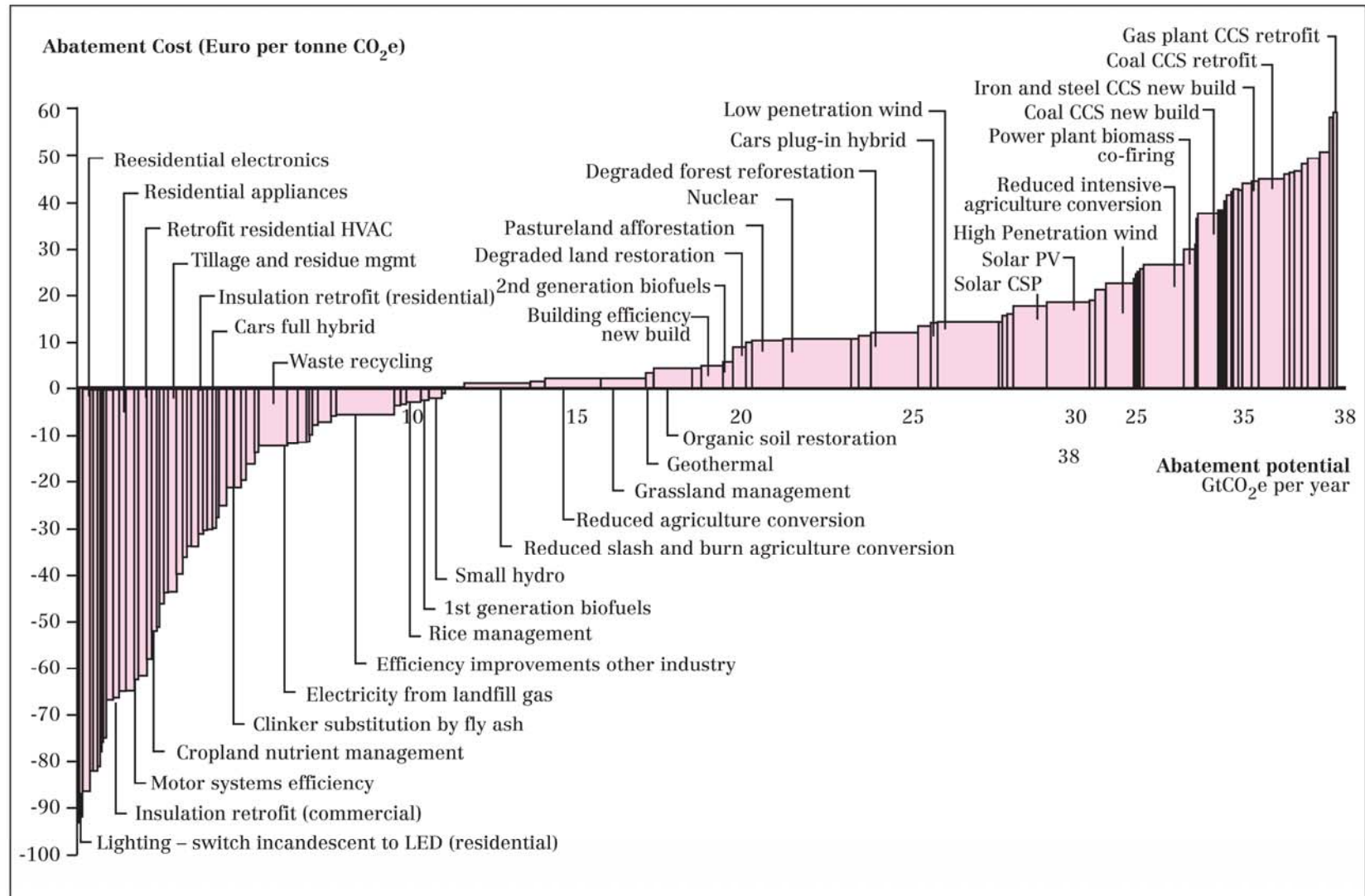
Economic growth vs. CO₂ emissions



Source: Fourth Assessment Report 2007, Intergovernmental Panel on Climate Change

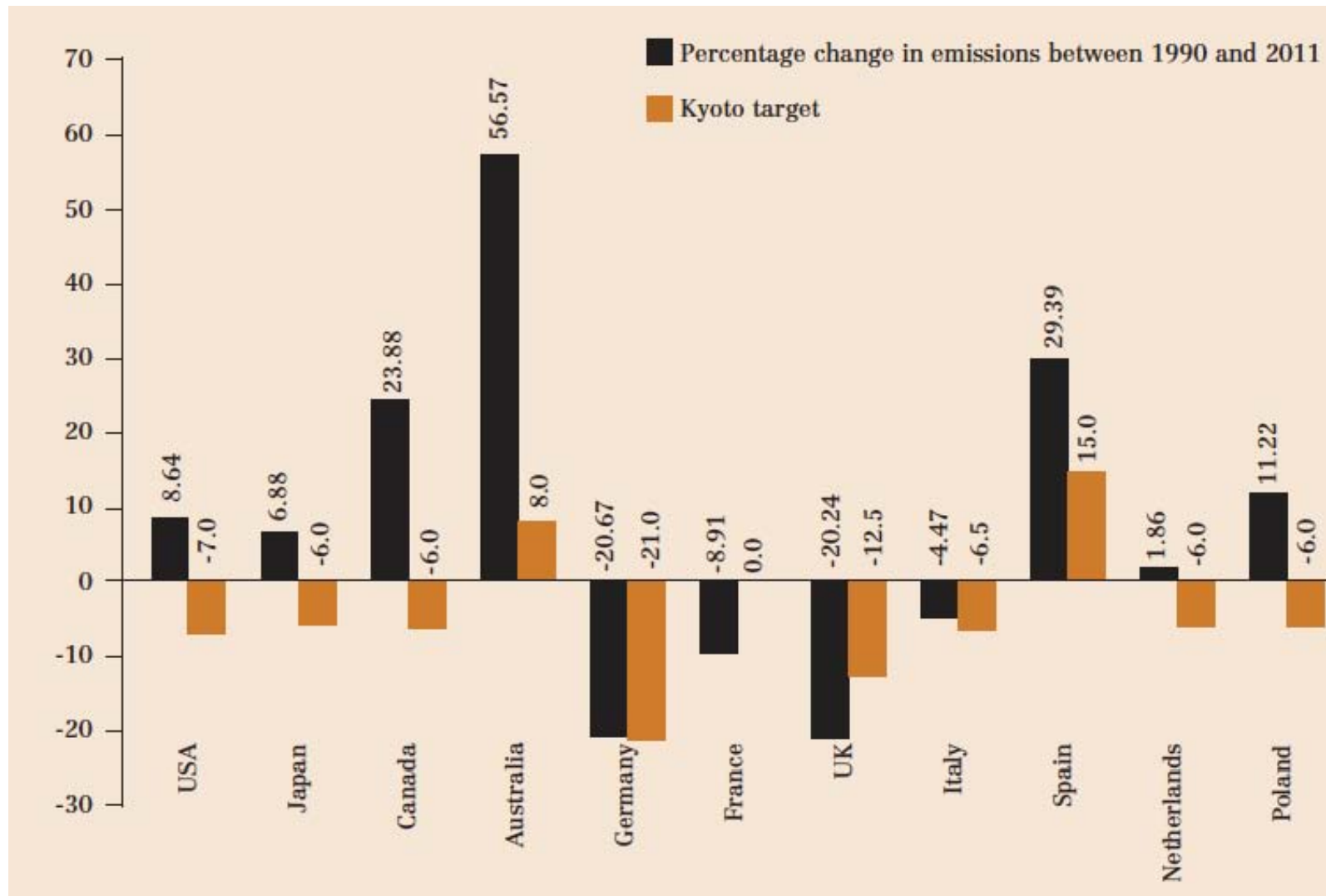
Transition to clean economies: not so easy options

Figure 1: McKinsey's global GHG abatement cost curve



Source: Pathway to a low carbon economy, version 2 of the GHG abatement cost curve, McKinsey & Company

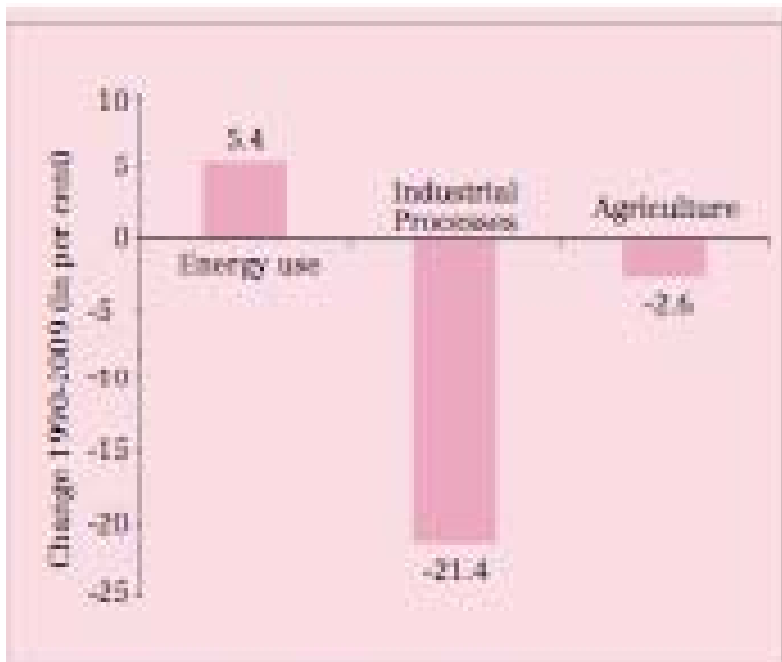
Rich countries not meeting Kyoto targets: 1990-2011



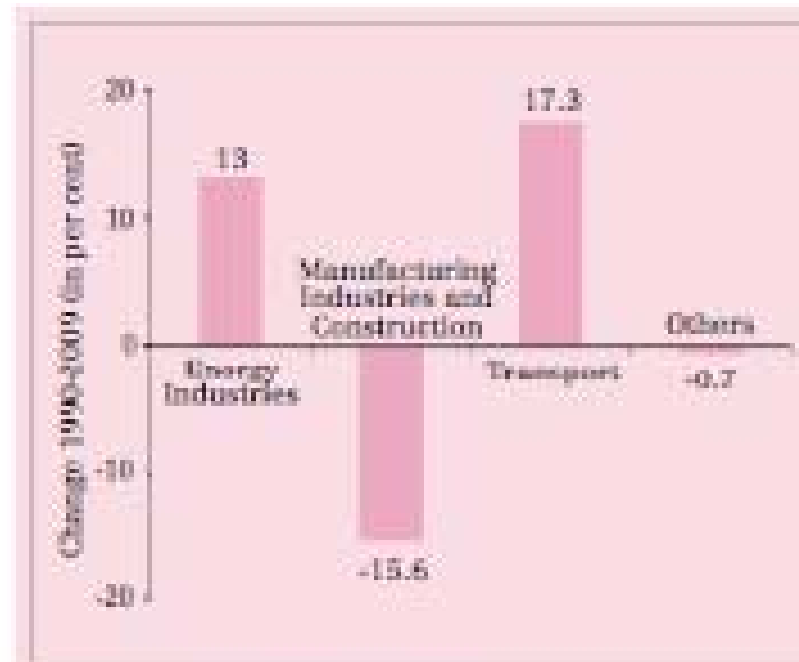
1990-2009: no transition in energy use



Energy and transport emissions **up**; manufacturing sent to China



Note: Excludes land use change and forestry
Source: GHG data from United Nations Framework Convention on Climate Change, 2011



Note: Excludes land use change and forestry
Source: GHG data from United Nations Framework Convention on Climate Change, 2011



Negotiations

Bali to Durban and now to Doha

Bali 2007



- ⑩ **Bali Action Plan:** Negotiations for post 2012 regime
- ⑩ **IPCC-AR4:** Cut emissions urgently – developed 25-40% by 2020; developing to deviate from BAU
- ⑩ Phase 2 of the Kyoto Protocol– **AWG-KP**
- ⑩ **AWG-LCA:** 4 pillars -- Mitigation, Adaptation, Finance & Technology
- ⑩ *AWG-LCA designed to bring the US into the fold; non-Kyoto developed countries to take legally binding commitments; developing countries to take domestic actions, enabled by technology and funding*

Copenhagen-Cancun: game changer for whom?



- ⑩ **Copenhagen 2009**: Deal under Bali Action Plan to be sealed; legally binding for Annex 1; NAMA for developing supported by finance & technology
- ⑩ But New deal floated: **Copenhagen Accord**
- ⑩ No legally binding agreement; **All countries** would take voluntary pledge; all actions **of all** would be measured, reported and verified (MRV) – **pledge and review regime**
- ⑩ Agreement based on promise of money – \$30 billion/year till 2012 and \$100 billion/ yr. by 2020

Terms of agreement changed



- ⑩ **Distinction** between Annex 1 and rest removed
– all would take action irrespective of responsibility
- ⑩ **No legal commitment** – but as actions would be internationally verified, it would be a commitment (backhand approach)
- ⑩ **Principle of historical emissions and equity** removed – actions would be based not on contribution to problem but willingness to act
- ⑩ **But Copenhagen Accord was not accepted**

Cancun deal and beyond



- ⑩ Copenhagen Accord, which was rejected in 2009 becomes Cancun Agreement in 2010: **deal sealed** (*read WikiLeaks*)
- ⑩ India became deal maker
- ⑩ **But what was the deal?**

Cancun deal



-
- Deal to set-up new institutions
 - Green Climate Fund - \$100 billion by 2020
 - Adaptation Committee
 - Technology Mechanism

 - ⑩ **No deal on Kyoto Protocol post 2012**

 - ⑩ **Copout on mitigation targets**

Cancun deal



■ Developed countries:

- ☞ US and Canada: 17% below 2005 level by 2020 only if energy and climate legislation is passed (0 per cent over 1990 levels). **Then walked out of this as well**
- ☞ Australia: 5-25% below 2000 levels by 2020 – conditional on developing countries joining
- ☞ EU: 20-30% below 1990 levels by 2020 – 30% conditional on developing countries joining

Cancun deal



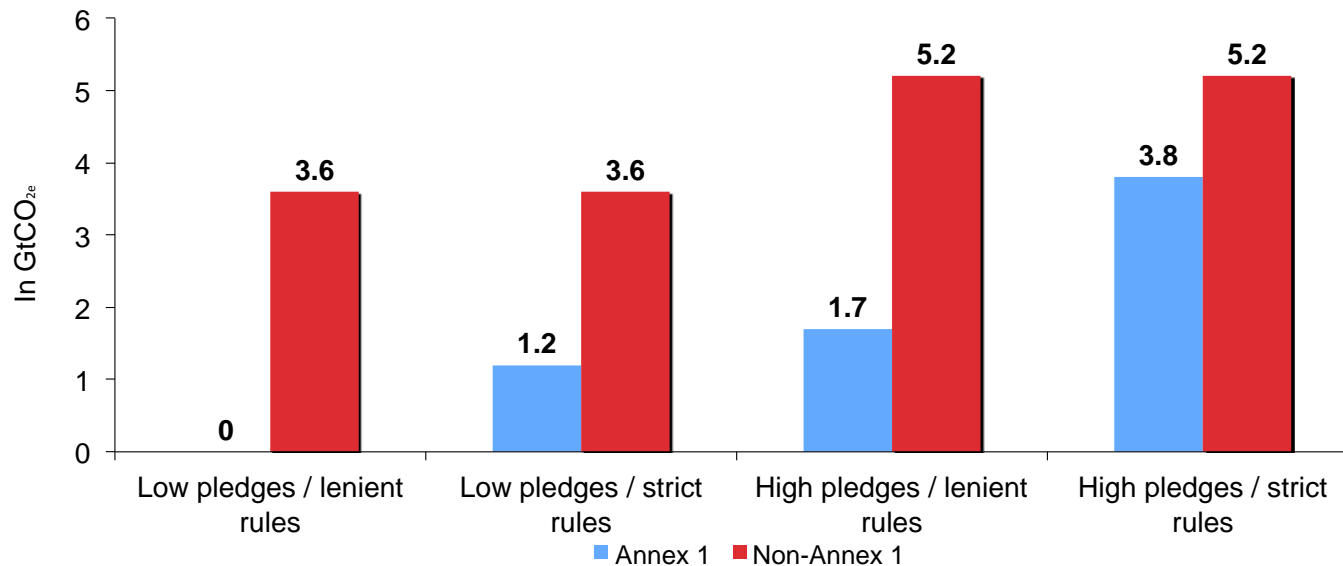
- **Developing countries:**
 - Brazil: 36-39% below BAU by 2020
 - China: CO₂ emissions per unit GDP 40-45% below 2005 levels by 2020 + 15% primary energy from non-fossil fuel+40 million ha additional forest
 - South Africa: 34% reductions in emissions below BAU by 2020
 - India: Emissions intensity of GDP 20-25% below 2005 levels by 2020

Cancun implications: Shifts the burden to the poor



10 SEI assessment of UNEP report on 'emission gap' makes clear **'gap is growing'** – between rich and poor

10



Cancun implications: Takes the world to 3-4⁰C warming



- ⑩ Current emission reduction pledges of all countries together **only 50%** (optimistic scenario) of what is required by 2020 – **Giga-tonne gap**
- ⑩ **Temperature rise in the order of 3-4⁰C**

Deal? Money?



- ⑩ Rich countries agreed to provide fast track funds to meet needs of most vulnerable countries – US\$ 30 billion start up; US\$100 billion by 2020
- ⑩ But no money on the table – juggling with development assistance and **trade** (Indian solar industry) to call it new and additional
- ⑩ Now say recession hit. Cannot pay

Durban 2011: Last blow to differentiation?



⑩ Countries met in Durban to wrap-up Bali Action Plan

- ☞ End of the 1st commitment period of KP and the fate of KP
- ☞ Negotiations under AWG-LCA and what the world should do between now and 2020 – *mitigation, adaptation, finance, technology, carbon market, REDD*
- ☞ Post 2020 deal?

The Durban outcome – outmaneuvered by the EU



- ☞ EU agreed for 2nd commitment period for KP only when all countries agreed for a new legally-binding agreement for 2020 and beyond **in which all countries participate**
- ☞ Developing countries desperate to save KP – **to keep the differentiation** – agree, but with few *proviso* – *new agreement to be negotiated under the UNFCCC and the legal form to be decided later*

The Durban Platform



- ⑩ Durban Platform on Enhanced Action (ADP), a new negotiating process to develop a *“protocol, another legal instrument, or agreed outcome with legal force”*. The new agreement is scheduled to be adopted in 2015 and to take effect by 2020.
- ⑩ Universal participation under a legal framework
- ⑩ Developed countries want to use this platform to finally remove the differentiation; **the fight has started**

Kyoto Protocol II: Durban and just after



- ⑩ Durban CoP agreed for 2nd commitment period for KP starting 2013.
- ⑩ But Canada, Russia, Australia, Japan and now New Zealand walk away. US never agreed.
- ⑩ Only EU part of KP –12% of the global emissions
- ⑩ EU's commitment – 20% reduction by 2020 over 1990 – their emissions are already 16% below 1990 levels – **developing countries feel cheated**



The Doha Agenda: 2012

- ⑩ Multiple track negotiations
 - ☞ Numbers for KP 2
 - ☞ End of AWG-LCA or fruitful culmination?
 - ☞ **Ambition between now and 2020?**
 - ☞ Money or only new institutions – GCF?
 - ☞ **Shape of the carbon market?**
 - ☞ Adaptation committee & fund and discussions on loss and damage
 - ☞ Technology transfer or fight over IPR?
 - ☞ **Post 2020 deal? How to negotiate ADP?**

Developments under the ADP so far



- ⑩ At the first inter-sessional in Bonn, fight over agenda – whether pre-2020 ambition (bridging the giga-tonne gap) should be part of ADP discussions
- ⑩ Parties decide to work under two work streams
 - ☞ One to discuss the work plan of the ADP until 2015, titled ‘vision’
 - ☞ Another on how to enhance ambition levels by 2020 to address the giga-tonne gap, titled ‘ambition’
- ⑩ Developed countries successfully opposed a third work stream which was to enable discussions on which principles under the Convention would be relevant to a future agreement – **discussion on equity and CBDR rejected**

Issues under the 'vision' work stream



- ⑩ Developing countries focus is the importance of any agreement to take place **under the Convention** – primarily to ensure that some kind of differentiation remained, as embraced by the CBDR principle
- ⑩ EU, US and AOSIS want the future agreement to apply to all parties reflecting the evolving economic realities

Issues under the 'ambition' work stream



- ⑩ Developing countries want developed countries to increase ambition – argue that gap in ambition until 2020 because of their poor targets (way below 25-40% reduction targets)
- ⑩ US, followed by all developed countries propose the following actions to increase ambition:
 - ☞ Address short-lived climate forcers (methane, black carbon, HFC's) – all to be done by developing countries
 - ☞ Developing countries that haven't already turned in NAMAs to do so
 - ☞ Implement REDD projects – use forests in developing countries as carbon sinks

New CDM: buy self out of mess



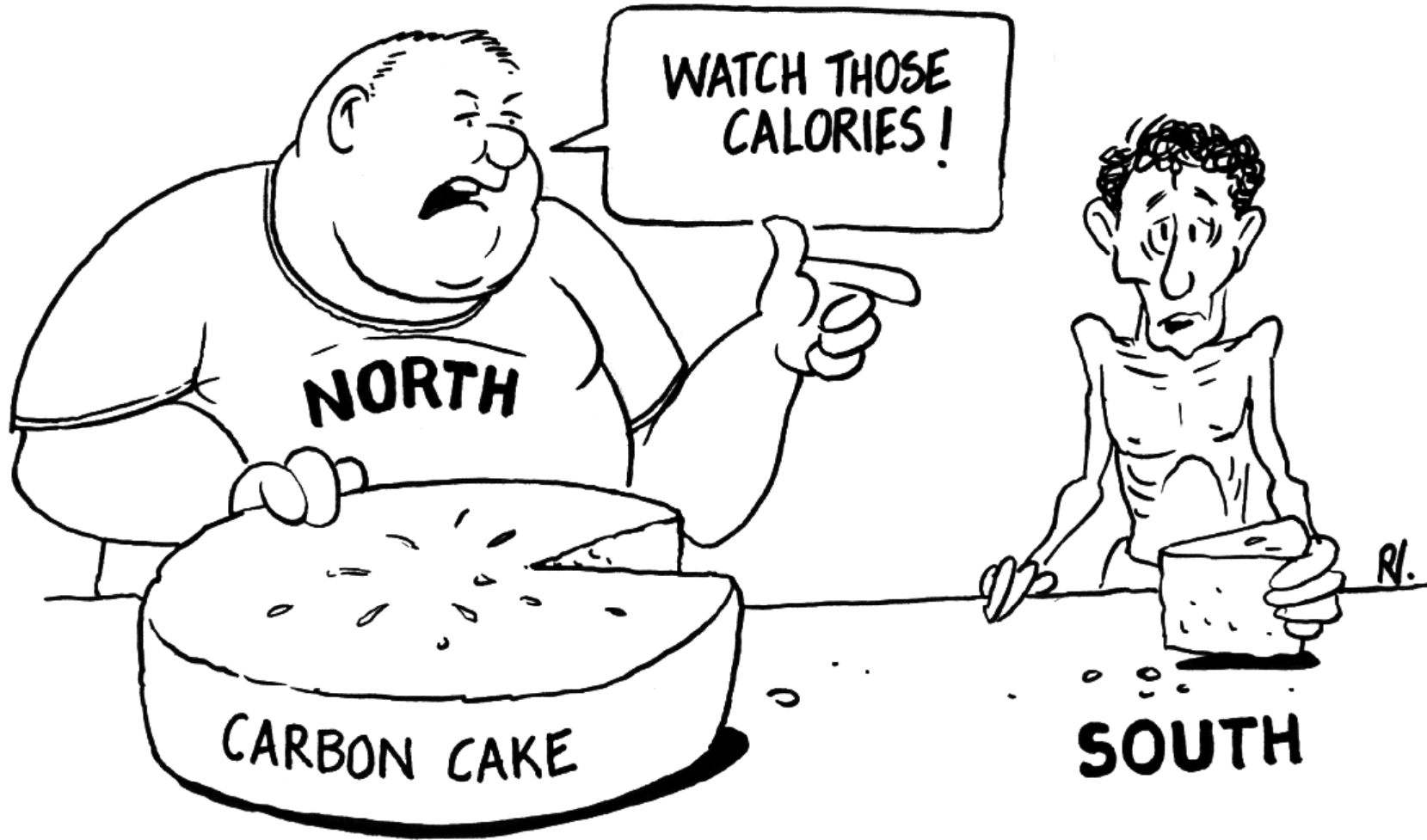
- ⑩ **CDM**: invest in 'cleaner' technology in south; get credits for additional; but only for Kyoto parties
- ⑩ With KP 2, CDM too extended
- ⑩ Big issue: Can parties not signing KP can still access CDM benefits?
- ⑩ UN high level panel on reforming CDM wants every one to get carbon credit benefits; developed and developing; Kyoto or non-Kyoto parties;
- ⑩ **New Market Mechanism?**



Climate change: hard facts

1. South Asia will be (is) a victim of climate change impacts
2. North wants to shift the burden of mitigation – cutting emissions on us
3. India must (**and is**) reducing emissions
4. **But reducing emissions should not mean we freeze development and inequity in the world**

No deal



Our Agenda in Doha



1. Emission reduction targets of rich countries till 2020
2. Reassert principle of equity and CBDR for post 2020 deal under ADP
3. Reassert need for funding and technology transfer
4. Establish principle of loss and damage
5. Operationalise adaptation committee and Green Climate fund