The UNEP Emission Gap Report 2013. Bridging the gap and staying on the two degree target

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The Emissions Gap Report 2013

Bridging the gap and staying on the two degree target

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What are we aiming for?

Post-2020 goals for staying on 2°C target

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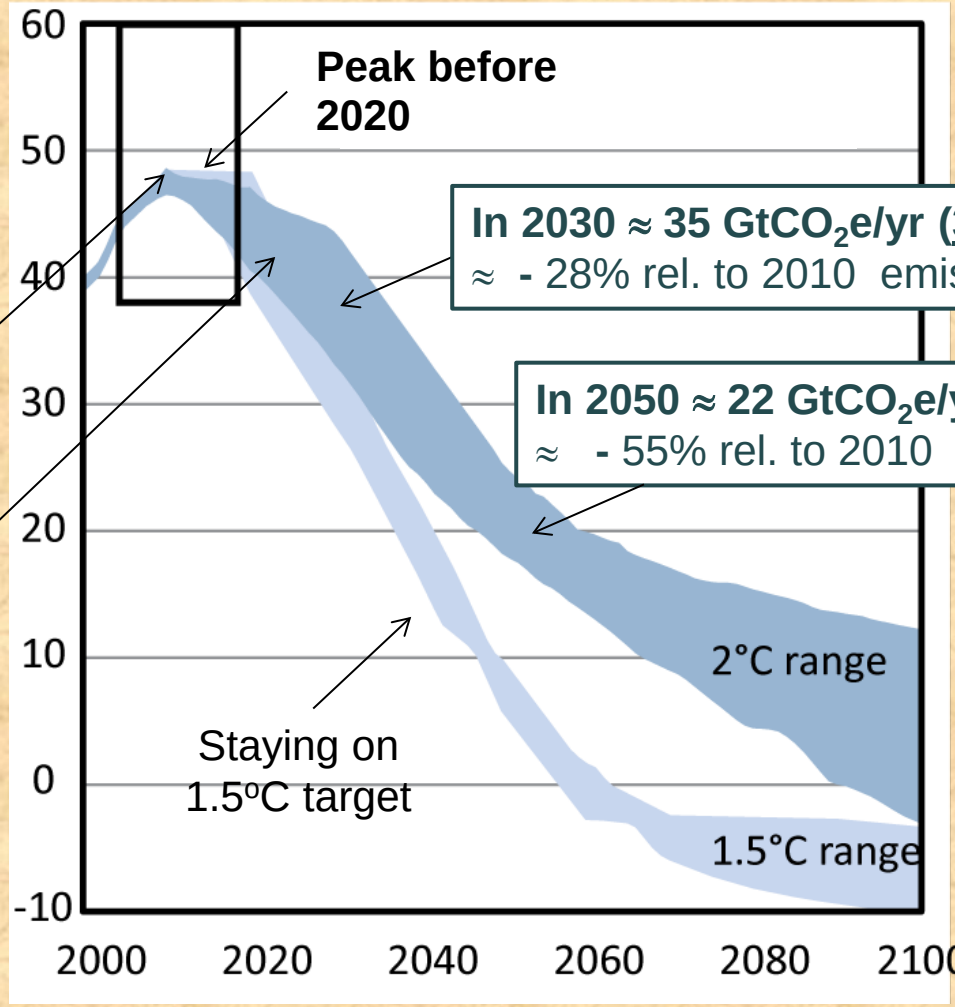
Global Greenhouse Gas Emissions

Gt/year CO_2-equiv.



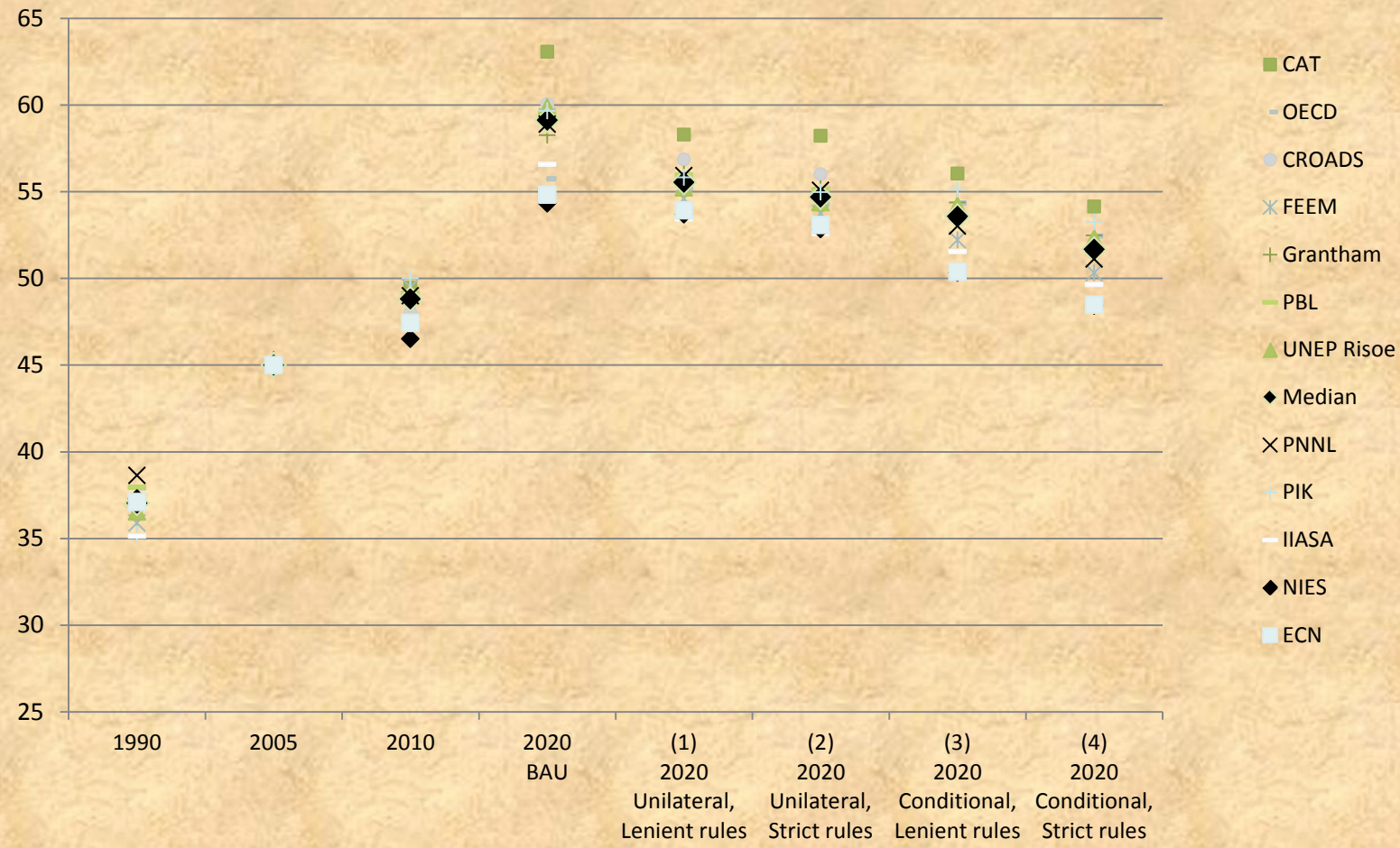
Now (2010) ≈ 49 $GtCO_2e/yr$

> 100 "least cost" emission pathways with likely chance of complying with 2°C target:

12 international teams delivered data

Global emissions, harmonised, including LULUCF emissions

GtCO2e/yr



What is the emissions gap ?

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Business as usual

Pledges – weakest case

Level consistent with likely chance of staying within 2°C target

$GtCO_2e/yr$ in 2020

59

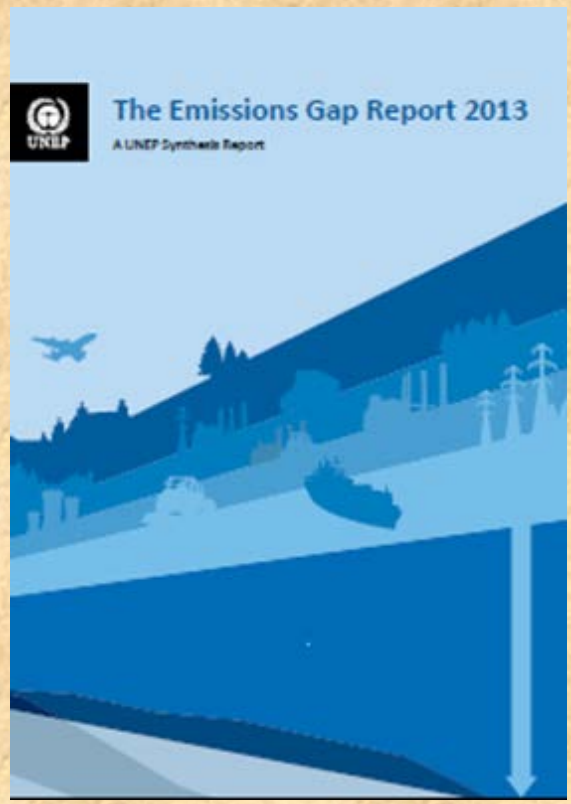
3

56

12

The Gap

44



What if we don't close the gap?

<u>One possible outcome</u>

Countries do not increase their pledges and do not act later

Consequences:

Trajectory to ≈ + 3 to 4^{o} C → greater climate impacts

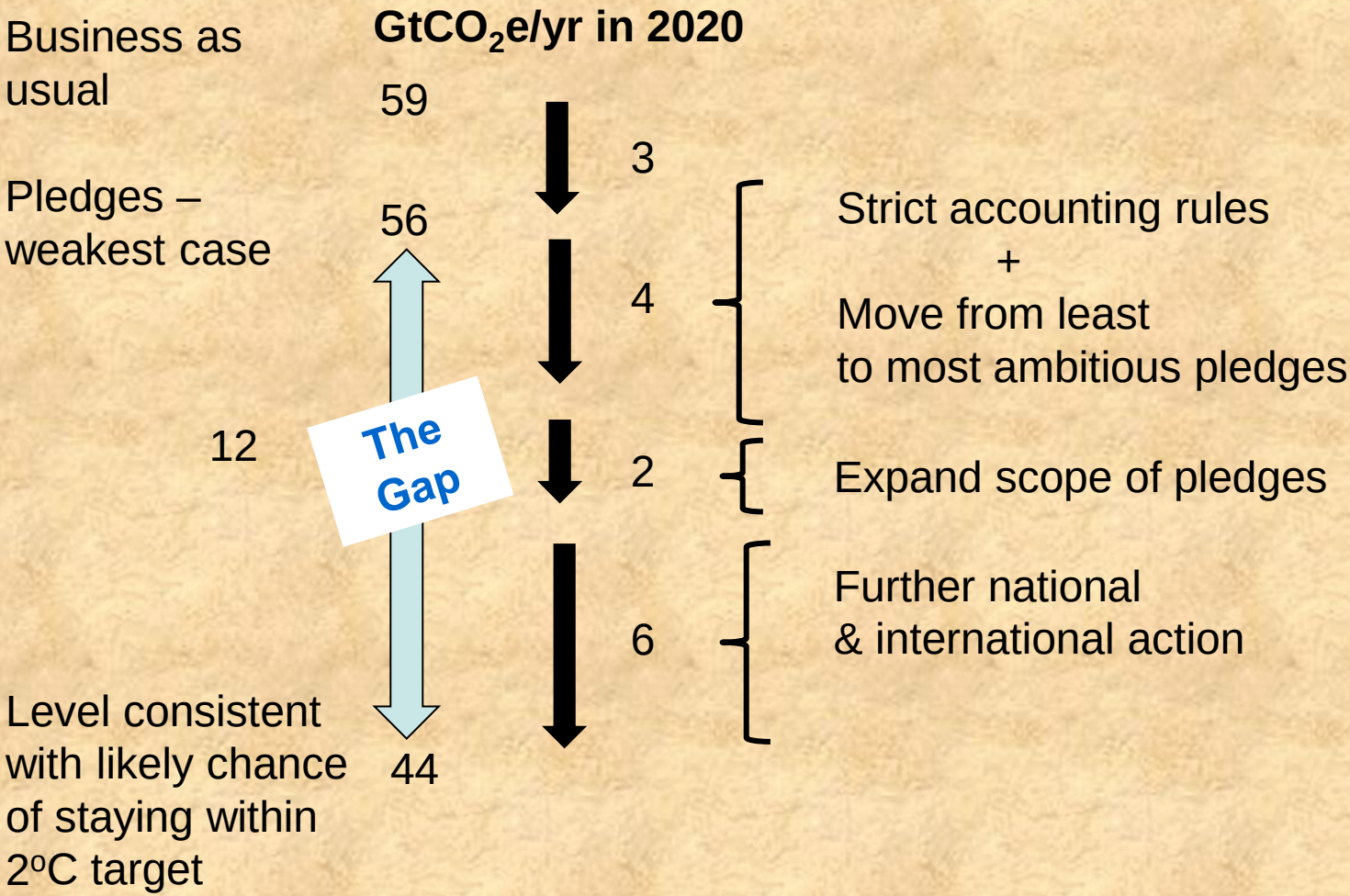
<u>Another possible outcome</u>

Countries start late (after 2020) & try to catch up to 2^{o}C target

Consequences:

- Much faster required rates of emission reductions
- Greater dependence on unproven technologies
- Greater lock-in of high-emissions infrastructure
- Higher costs
- Higher near-term climate change → greater impacts

How to bridge the emissions gap ?



Further national/local action can help bridge the gap & fulfill many national interests

Transportation

Potential: - 1.7 to - 2.5 Gt CO_2e in 2020

- **Bus rapid transit systems**
- **Vehicle performance standards**

Buildings

Potential: -1.4 to - 2.9 Gt CO_2e in 2020

- **Appliance standards and labels**
- **Building codes**

Agriculture

Potential: - 1.1 to - 4.3 Gt CO_2e in 2020

- **Conservation tillage**
- **Nutrient & water management of rice**
- **Agroforestry**

Further international action can help bridge the gap – *International cooperative initiatives*

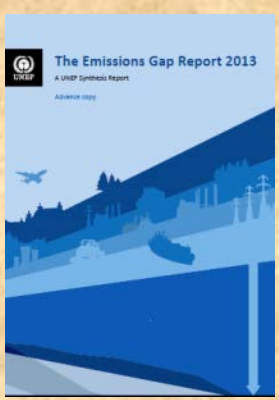
Increasing number of international cooperative initiatives

- Some overlap with pledges → *reinforce pledges*
- Some do not overlap → *help close remaining Gap*

Areas of initiatives with highest potential by 2020

- Energy efficiency (up to 2 $GtCO_2e$)
- Fossil fuel subsidy reform (0.4–2 $GtCO_2e$)
- Methane and other short-lived climate pollutants (0.6–1.1 $GtCO_2e$)
- Renewable energy (1–3 $GtCO_2e$)

Summing Up



→ Urgent to bridge emissions gap of 8-12 $GtCO_2e$ in 2020 to stay on least-cost pathway to meet the two degree target

→ Consequences of not closing the gap – higher costs & higher risks

→ Tough, but still possible to close the gap in 2020 with decisive action to …

… strengthen current country pledges

\+ … ramp up other national and international actions

Link to Emissions Gap 2013

http://www.unep.org/emissionsgapreport2013/

Involving 44 scientific groups in 17 countries and coordinated by the UN Environment Programme (UNEP)

CTCN = Climate Technology Centre & Network

CTCN is located in the new UN-city in the harbour of Copenhagen

UNEP Risoe won the UNFCCC tender for CTCN with the following team: UNEP, AIT (Thailand), Bariloche Foundation (Argentina), CSIR (South Africa), Energy and Research Institute (India), Environment and Development Action in the Third World (Senegal), Tropical Agricultural Research and Higher Education Centre (Costa Rica), World Agroforestry Centre, DGIZ (Germany), ERC (Netherlands), NREL (US) and the UNEP Risoe Centre.

National Designated Entities can submit request for assistance already en of this year.