AOSIS Presentation

AWG-LCA workshop on assumptions and conditions related to the attainment of quantified economy-wide emission reduction targets by developed country Parties

9 June 2011
Bonn, Germany
Emissions are at record levels and so is sea level (since pre-industrial)

Sources: emissions – CRF(2011) National inventories, National communications, additional data from CDIAC, IEA, EDGAR, POLES, see PRIMAP4 www.primap.org; sea level – Church et al (2011)
global sea level is projected to rise by 0.9-1.6 m by 2100
1 metre of sea level rise by 2100?

• IPCC AR4 sea level rise projections did not include rapid ice sheet losses

• But observed, accelerating loss from Greenland and Antarctica, if continued, imply a sea level rise of 60 cm above 1990 levels by 2100 from this source alone

• Projections based on observed sea level changes indicate a likelihood of 1 metre or more above 1990 levels by 2100
  • Thermal expansion is likely to give around 15-40 cm of sea level rise
  • Small glacier contributions may give about 12 cm of sea level rise
  • Theoretical estimates of plausible ice loss from Greenland and Antarctica cannot exclude 2 m of sea level rise by 2100

• Past changes in sea level show risk of large, rapid, metre scale per century sea level rise due to the warming expected.

• Modeling and observations tend to confirm risk of unstable disintegration of the West Antarctic ice sheet under global warming
The problem: Annex I gap

- Including LULUCF and AAU provisions, pledges add up to -1% and -7% compared to 1990 emissions.

- This is less to moderately more ambitious than Kyoto and likely above BAU in 2020.

- Even the “best case scenario” without LULUCF and AAUs included is only -13% to -18% compared to 1990 and far from the required IPCC range of -25% to -40%.

- Far from the more than 45% reduction sought by AOSIS.

Total industrial emissions of all Kyoto gases excluding LULUCF relative to 1990.
Is the gap really so big?

• If all existing provisions that reduce the effectiveness of reduction targets by Annex-I Parties were eliminated, the aggregate reduction would be **13-18% below 1990**

• Assuming use of LULUCF credits, but no carryover and use of surplus AAUs from the first commitment reductions would be **10-15% below 1990**

• Assuming both LULUCF credits are used and carryover of surplus AAUs from the first to the next commitment period(s) reductions will be reduced to **1-7% below 1990**

► Yes, the most realistic gap taking into account the current status of negotiations is really so big
How can we close the gap?

Influence of options on aggregate ANNEX I reductions in 2020 (% from 1990 levels)
greenhouse gas emissions*

- Increase level of ambition and action
- Cap LULUCF credits, remove exceptions
- No carry over of surplus AAUs

2020 emissions range (-25 to -40%)
IPCC AR4 for 2 - 2.4°C

* total industrial emissions of all Kyoto-gases excluding land use, land-use change and forestry (LULUCF)
** based on most recent estimates of the impact of the financial crisis on emissions 2008-2012
AAUs and LULUCF – why they matter

**AAUs**
- Carried-over **AAUs** from the 1st commitment period of the KP can be traded with other Parties, effectively raising the allowances of the buying Party without requiring any additional reductions by the selling Party.
- An estimated cumulative total of about **9 to 13 billion tonnes of CO₂-equivalent** surplus AAUs will be generated by developed countries.
- Surplus AAUs from the first commitment period **deteriorate effective 2020 emission limits by roughly 8%** of 1990 Annex I industrial emissions.

**LULUCF**
- **Current LULUCF rules and rules proposed** in the negotiation text both result in overall credits, and thus an increase of allowed industrial emissions.
- If all countries were to apply the accounting method that they prefer, this would **add emissions equivalent to about 3% of 1990 Annex I industrial emissions in 2020**
Increase level of ambition and action is feasible

- Economic costs for higher level ambition are feasible
  - OECD recently estimated that Annex-I GDP by 2020 might be reduced by 0.3% for the strongest proposed reductions, leading to a reduction of emissions to 17% below 1990
  - IEAs World Energy Outlook estimates a reduction of GDP of 0.1% by 2020 globally to achieve a 450ppm scenario
  - IIASA estimated that up to 10% of reductions could be achieved at zero cost for Annex I countries
- IPCC SRREN confirmed that renewable energy is available and feasible
  - Renewable Energy Sources are needed for low GHG stabilization and if RE deployment is limited, mitigation costs increase and low stabilization levels may not be feasible
  - Some RE technologies are already broadly competitive at existing energy prices
  - There is no fundamental technological limit to RE integration to existing energy systems
Why is an internationally-legally binding instrument needed?

1. Collective action is needed
2. Urgency requires a legally strong regime.
3. Common MRV rules are cheaper, more transparent and improve environmental integrity
4. A strong regime improves economic efficiency of emission reductions.
5. A legally binding agreement enhances the confidence in making commitments.
6. A legally binding agreement enhances the confidence in the delivery of commitments.
7. A legally binding agreement facilitates domestic implementation
Work Programme on Options and Ways to Increase the Level of Annex I Party Ambition

Current ambition is insufficient – a work programme up to Durban is needed to consider ways to increase this ambition

• Possible inputs:
  – Update to technical paper on ‘mitigation potential’ (FCCC/TP/2008/10)
  – Update to technical paper on ‘possible means to reach reduction targets’ in the context of the global goal and gap (FCCC/TP/2008/2)
  – Update to paper on ‘financial flows’

• Possible modalities
  – Technical papers, workshops, submissions of views, expert inputs on potential and costs

• Possible outcomes
  – Identification of cost-effective global mitigation potential
  – Agreement on new mechanisms that generate substantial net global reductions
  – Broadening of access to international emissions trading under the Protocol
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