United Nations Framework Convention on Climate Change

Aggregate effect of INDCs

25th AP seminar on Climate Change



20 June, 2016 Claudio Forner, UNFCCC secretariat, MDA

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161 INDCs

*Stats as at 4 April



189 Parties







100% mitigation

83% adaptation



Types of mitigation target communicated in the intended nationally determined contributions





- •Most: until 2030
- •Some: until 2025
- •A few: 2030 and 2025
- •A few: 2035, 2040, 2050



Aggregate effect



Approach





Approach

- Global aggregate emissions in 2025 and 2030
 - Directly linked to INDCs
 - > The rest
- Global aggregate emissions in relation to:
 - Past and present levels (1990, 2000 and 2010)
 - ➢ Reference case (pre 2020 action)
 - Cost optimal scenarios towards 2C and 1.5
- Qualitative trends







Expected change by 2030 2010 1990 in relation to Emissions +44 % +16 % Per capita -10% -5% emissions



Expected gain with respect to the reference scenarios





Expected gap with respect to the 2 °C scenarios





Expected gap with respect to the 1.5 °C scenarios





Summary



Cumulative emissions





- Increasing participation in and scope of climate action
 - National in scope and quantified
- Increasing institutional and political processes
 - Some backed by law
 - Higher public acceptance
- Increasing interest in cooperation
 - Markets
 - Finance, technology and technical assistance
- Increasing **ambition** and commitment to 2C
 - Balance national circumstances with science



INDCs synthesis report

Thank you for your attention



Estimates of global emissions in 2025 and 2030

- Party by Party calculation; country-level analysis limited to GHG emissions covered by the INDCs
- Adding:
 - Aggregate levels of emissions resulting from the implementation of the communicated INDCs in 2025 and 2030
 - Levels of emissions not covered by the INDCs in 2025 and 2030 using IPCC (pre-INDC) reference scenarios; emission growth rates of relevant countries, regions, sectors and gases



Estimates of global emissions in 2025 and 2030

- Extrapolations/interpolations for 2025/2030, when needed
- Emission level expressed as a median value with an associated range (20th to 80th percentile)
 - Ranges of effort expressed by Parties in their submissions
 - o Conditions expressed by Parties in their submissions
 - o Uncertainties underlying the aggregation of the INDCs



Estimates of cumulative CO₂ emissions

- Linearly estimated trajectory of GHG emissions between the last historical data point and estimated emission levels for 2020, 2025 and 2030
- Share of CO₂ emissions of total GHG emissions from the IPCC pre-INDC reference scenarios
- Summed for the cumulative emission estimate, starting after 2011
- Cumulative emissions in line with keeping global average temperature rise below 2°C from contribution of Working Group I to IPCC AR5



Estimates of global emissions 2025/2030 in relation to

- The global emission levels in 1990, 2000 and 2010
 - Contribution of Working Group III to the AR5; harmonised with 2005 emissions from the IPCC pre-INDC reference scenarios and adjusted for the different GWP values
- The global emission levels in 2025 and 2030 corresponding to pre-INDC trajectories
 - IPCC AR5 database: 22 reference scenarios under the AMPERE project; reflecting the effect from the efforts communicated by Parties for the pre-2020 period and assumed no change in climate policies thereafter until 2030



Estimates of global emissions 2025/2030 in relation to

- The global emission levels in 2025 and 2030 corresponding to 2 °C scenarios
 - IPCC AR5 database: all scenarios with a 66% or higher probability of remaining below 2°C over the course of the 21st century
 - P1 policy scenarios: immediate (e.g. as of 2010) enhanced global mitigation action that is sufficient to achieve a least-cost emission trajectory over the course of the 21st century
 - P2 policy scenarios: enhanced global mitigation action as of 2020 that is sufficient to achieve a least-cost emission trajectory over the course of the 21st century

