Targets by developed country Parties to the Convention: assumptions, conditions and comparison of the level of emission reduction efforts

**Technical paper** Bonn, 9. June 2011



*Katia Simeonova, Manager* UNFCCC secretariat, Reporting, Data and Analysis Programme "Requests the secretariat to prepare a technical paper based on Parties' submissions with the aim of facilitating understanding of the assumptions and conditions related to the attainment of their emission reduction targets and comparison of the level of emission reduction efforts;" Decision 1/CP.16, para. 39



#### **Contents of the Technical Paper**

- Overview of the quantified economy-wide emission reduction targets, assumptions and conditions
- Discussion of the assumptions and conditions related to the attainment of these targets, including the use of carbon credits from market based mechanisms and LULUCF
- Comparison of the level of emission reduction efforts among developed country Parties



#### **Sources of Information**

- The technical paper is based on
  - ✓ Compilation of economy-wide emission reduction targets to be implemented by Annex I Parties (para. 36, decision 1/CP.16)
  - ✓ Workshops on assumptions and conditions related to the attainment of the targets, including information on the use of carbon credits from the market-based mechanisms and LULUCF activities, and options and ways to increase their level of ambition (para. 38, decision 1/CP.16)

◦*First workshop was held on 3 April 2011 in Bangkok* 

- ✓ Annual submissions of GHG inventory information and the fifth national communication by Annex I Parties under the Convention
- ✓ Information on the contribution of market-based mechanisms and LULUCF in attaining the targets when such information was not available from the sources above (FCCC/KP/AWG/2010/INF.2/Rev.1)
- A compilation of the information on targets, assumptions and conditions of developed country Parties is presented in table I in the technical paper



#### **Overview of assumptions and conditions (1)**

- Many Parties' higher targets are conditional on
  - ✓ Achieving a comprehensive global agreement, with the participation of all major economies;
  - $\checkmark$  Advanced economies agreeing to comparable mitigation efforts and actions;
  - ✓ Developing countries taking action in accordance with their differentiated responsibilities and respective capabilities; and
  - ✓ All Parties contributing their fair share to a cost-effective global emission reduction pathway
- Many Parties' targets are conditional on the definition of the rules for the use of market-based mechanisms and LULUCF
  - ✓ Use of market-based mechanisms important for cost-effectiveness, moving to higher target may lead to a more extensive use of such mechanisms

Changes in rules may affect targets, but not necessarily





## **Overview of assumptions and conditions (2)**

- Information on the quantitative implications of the use of LULUCF and carbon credits is available for several Parties only and is very preliminary
- Emission reductions of developed country Parties in 2020 in aggregate, 13 per cent to 18 per cent below 1990 levels for the low and high targets, respectively (emission levels excluding LULUCF)
- A need for Parties to provide more clarity on
  - ✓ Rules governing the use of the market-based mechanisms and LULUCF, which could considerably influence the stringency of the targets
  - $\checkmark$  Assumptions on methodologies, gases, sectors and common metrics



# **Comparison of the level of emission reduction efforts (1)**

- The metrics used and quantitative estimates presented in the technical paper are intended to be for illustrative purposes only and not as proposals on how to determine comparability of efforts
- The aim is to facilitate consideration by Parties of comparability of efforts
- Comparability of effort in the technical paper is limited to the mitigation effort
- National circumstances
  - $\checkmark$  Are important when considering comparability
  - $\checkmark$  Complicate such consideration given the diversity of factors
  - $\checkmark$  No metric can encompass all factors



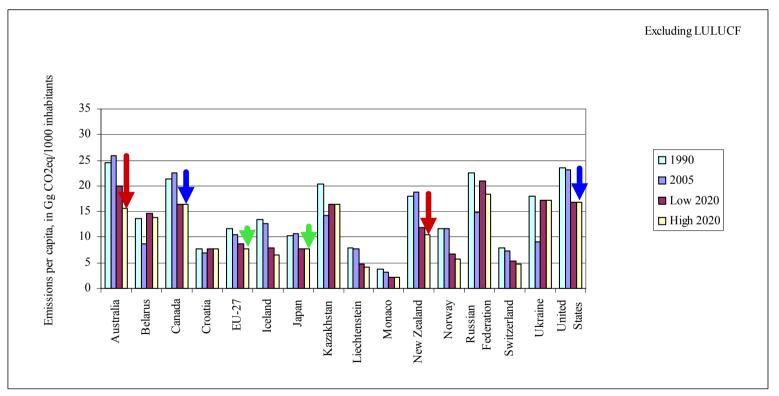
# **Comparison of the level of emission reduction efforts (2)**

- The following metrics were used
  - ✓ Emission reductions by 2020, individually and aggregate, with respect to 1990 (base year) and selected years 2000, 2005 and 2008
  - $\checkmark$  Gross domestic product per capita
  - $\checkmark$  Emissions per capita and reduction of emissions per capita
  - $\checkmark$  Emission intensity and reduction of emission intensity (decarbonisation)
- Selection of the starting point (reference year) to assess comparability of effort has major implication on the outcome of such assessment



# **Example of metrics (1)**

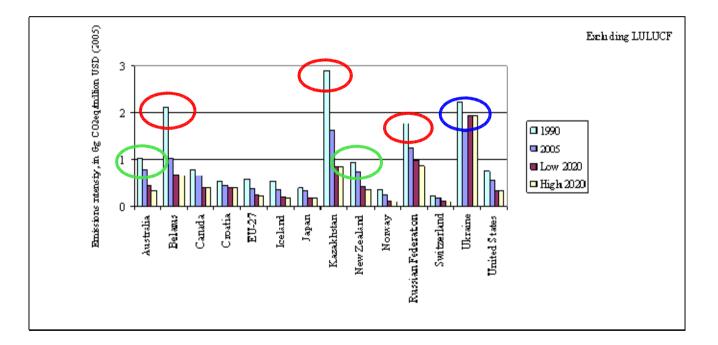
 Per capita greenhouse gas emissions excluding LULUCF in 1990, 2005 and 2020 (low and high targets)





# **Example of metrics (2)**

• Emission intensity (total greenhouse gas emissions per unit of gross domestic product) excluding LULUCF in 1990, 2005 and 2020 (low and high targets)





# Thank you for your attention

