Outcome of COP-15 and prospects for climate mitigation through energy efficiency and renewable energy

UNFCCC

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

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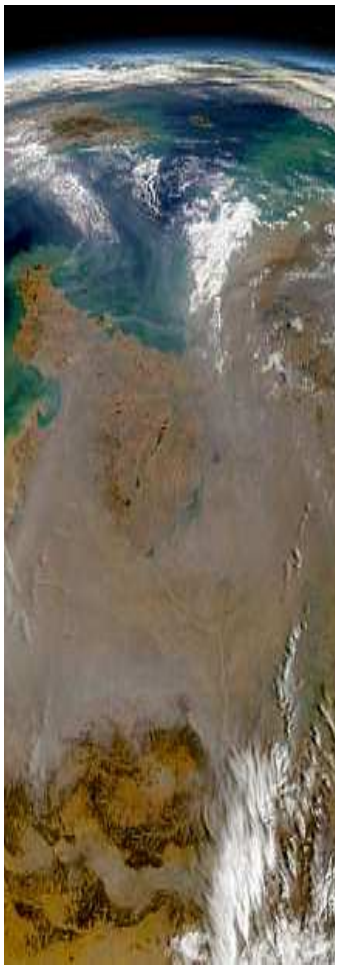
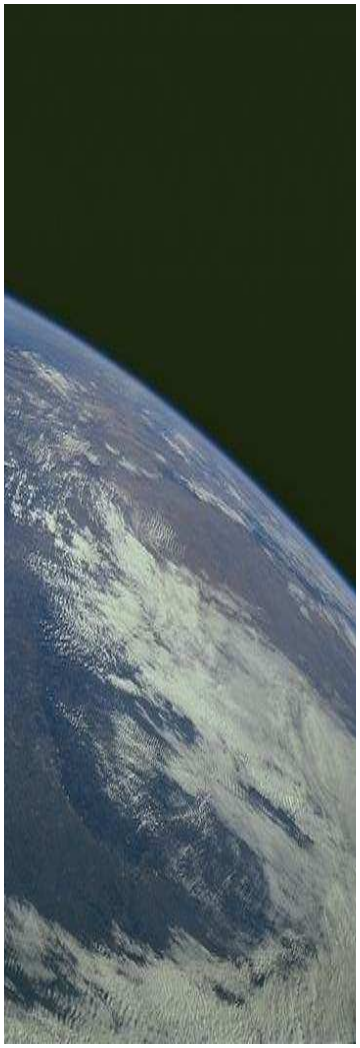
Geneva, 10 June 2010

Outline



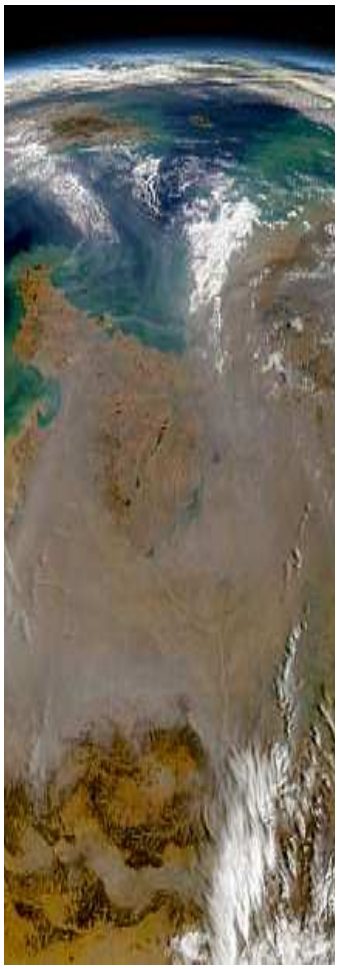
- Overview of COP-15
- Copenhagen Accord
- AWG-LCA and AWG-KP
- Outlook for Cancun and next steps
- Mitigation through energy efficiency and renewable energy
- Conclusions

Overview of COP-15



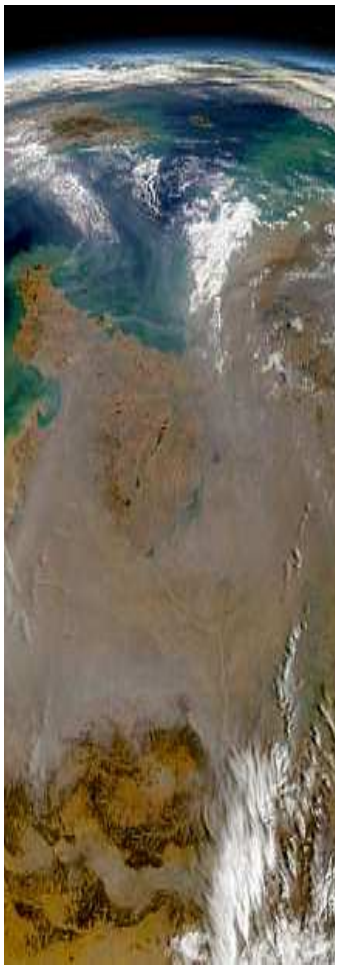
- COP-15 in Copenhagen was a critical event because of many reasons:
  - It raised climate change policy where it belongs: the highest political level
  - Significantly advanced the infrastructure needed for well-functioning global climate co-operation
  - Achieved significant progress in narrowing down options and clarifying choices
  - Copenhagen Accord
  - Generated unprecedented interest: 40,000 participants and 120 Heads of States

Copenhagen Accord overview



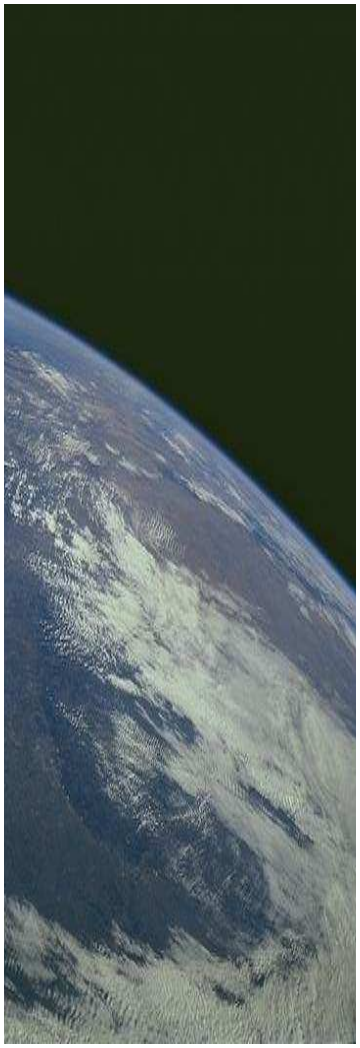
- COP took note of it and 122 (+18) Parties indicated support
- Political agreement on some of the most difficult issues
  - Prevent global temperature from raising more than 2 degrees
  - Emphasize on enhanced action on adaptation and mitigation (and REDD) subject to support
  - New additional, predictable and adequate funding on mitigation, adaptation, technology transfer and capacity building
  - Set-up of Technology Mechanism
  - $ 30 billion (2010-2012) and $ 100 billion by 2020, Copenhagen Green Climate Fund and High Level Panel on finance under COP

Copenhagen Accord and mitigation



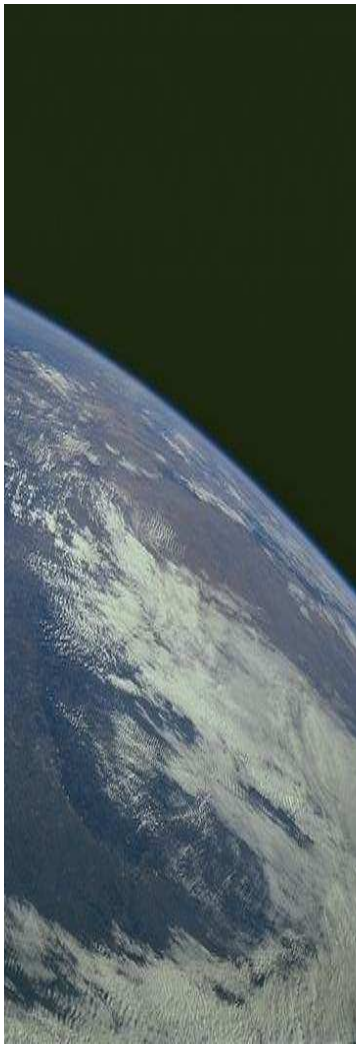
- Did not include:
  - Specific targets on mitigation commitments by developed countries and actions by developing countries
  - Aggregated target for developed countries (IPCC)
  - Appendices to inscribe targets and NAMAs
- Massive expansion of coverage of mitigation: pledges and NAMAs covering all key players (Kyoto Parties, United States, China and India)
- MRV on commitments, action and support
- NAMA registry

AWG-LCA and AWG-KP



- **Long-term emission reduction target**: options on temperature limits, global emission reductions by 2050, aggregated emission reduction for developed countries and peaking of emissions in 2015
- **Enhanced action on adaptation:** Copenhagen Adaptation Framework and funding
- **Enhanced action on mitigation:**
  - Developed countries: options on legally binding/non-binding commitments or actions/policies; economy-wide emission reduction objectives
  - Developing countries: establish a NAMA mechanism/registry subject to support and REDD (phased approach with set up of action plans, establishing reference emission levels and forest monitoring system)
- **Technology development and transfer**: areas of co-operative action and support, Technology Mechanism and committee
- **Elements for modalities for implementation, new institutional framework and guidelines for MRV**
- Continuing the consideration of amendment of new commitments to be inscribed in Annex B of the Kyoto Protocol
- Use of the **existing and new mechanisms**, market and sectoral approaches

Outlook for Cancun and next steps



- Challenges in three levels: process-related, substantive and political
- **Substantive challenges**:
  - Almost ready decisions on adaptation, technology and elements of mitigation
  - Implementation architecture on finance and technology transfer to facilitate matching of adaptation and mitigation action and the role of markets
  - Modalities for implementation and guidelines for MRV that are adequate to the emerging "pledge and review" system and massive expansion of coverage
- Practical steps to make the new climate framework operational and facilitate practical steps to adaptation, technology transfer and REDD
- **How to mobilize jointly $ 100 billion by 2020 and fast-track finance of $ 30 billion before 2012**
- **Kyoto Protocol matters**
  - Increasing of the level of ambition and
  - Reform of the CDM, including standardized baselines
- **Old challenges and long-term issues**: mitigation of emissions from bunker fuels, setting more ambitious mitigation objectives (IPCC AR5), integrated assessment of adaptation and mitigation, and research and systematic observation

Mitigation through energy efficiency and renewable energy

- Why energy efficiency and renewables are important for climate change strategies
- Decarbonization of energy supply mix and enhancing efficiency at every stage of energy supply chain are central to the mitigation strategies of **industrialized countries,** and also cost-effective
- Enhancing energy efficiency and the share of renewable energy is also important for **developing countries**
  - Allows the use energy resources in a more effective way
  - Helps to meet energy needs of the poor in rural and remote areas and to improve foreign trade balances

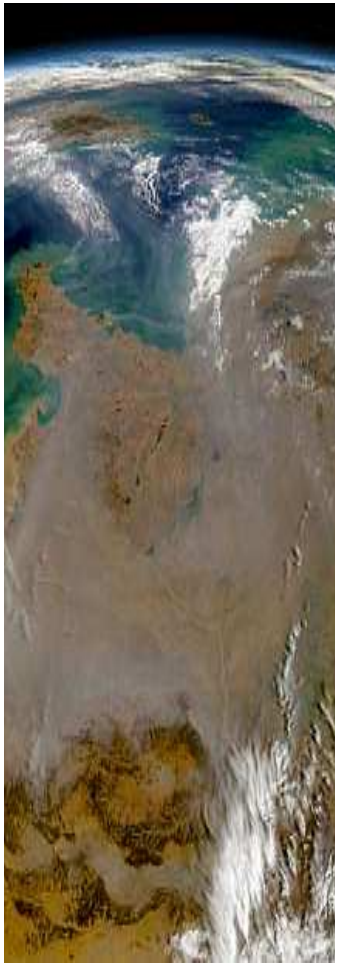
Mitigation, energy efficiency and renewable energy and CDM

Three countries and three-project types with largest amounts of CERs issues so far in 2010

Source: Adapted from Carbon Market Monitor

Country	Amount issued, kt	Project type
China	15,119	Industrial processes
India	5,052	Renewable energy
Republic of Korea	4,992	Energy efficiency
Total	**25,093**	

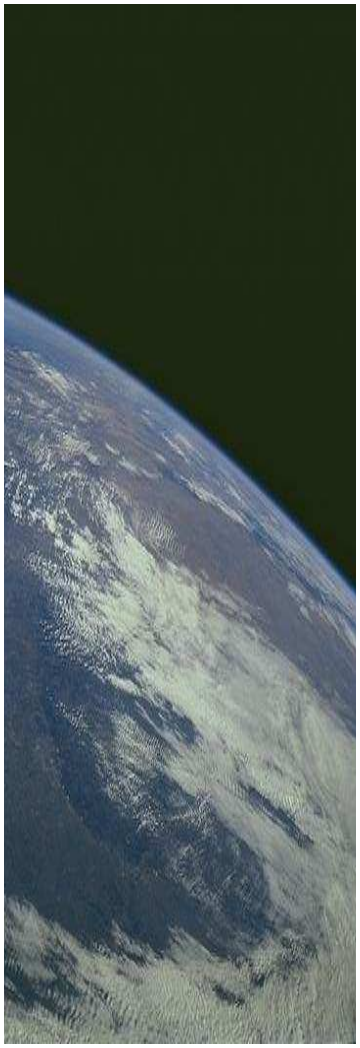
Mitigation potential from energy efficiency and renewable energy



- McKinzey 2009 estimates of 14 Gt could be saved from energy efficiency only by 2030
- World Energy Outlook 2009 and emission saving by technology also shows energy efficiency and renewable energy delivering the major share of emission savings (see below)
- However, despite the huge potential, only 730 energy efficiency projects out of 5,000 projects currently in the CDM pipeline

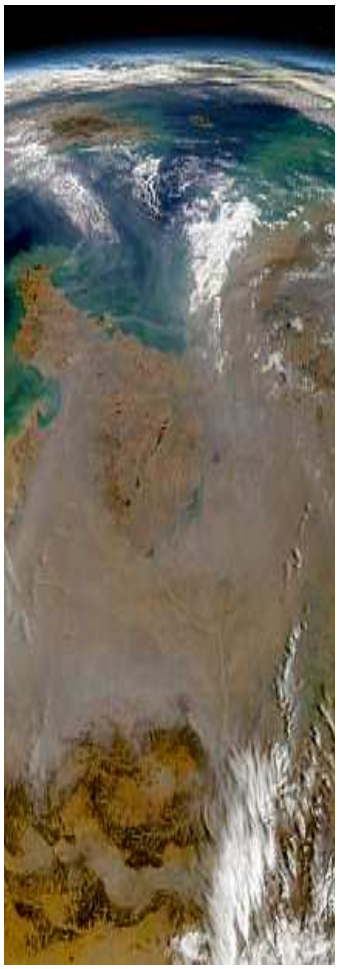
	2020	2030
Total savings, Gt	3.8	13.8
Efficiency, %	65	57
Renewables, %	19	23
Nuclear, %	13	10
CCS	3	10

What is needed to achieve the full potential for mitigation from energy efficiency and renewables



- **Ambitious emission reduction targets that drive substantial policy developments to be agreed by Parties to the Convention and the Kyoto Protocol**
  - Conversely, existing targets under the Kyoto Protocol create a relatively small demand for the Kyoto Protocol credits (around 1.6 billion tons according to Point Carbon)
- **Financial barriers**
  - Lack of sufficient financing and low prices for electricity and fuel (partly due to subsidies)
- **A number of non-financial barriers that need to be addressed**
  - Lack of policy and institutional framework to encourage investment in energy efficiency and renewables, split incentives (landlord-tenant problem), lack of knowledge on how to prepare good projects that are likely to be financed by banks
- **These are areas where the work of the UNECE and the other regional commissions could make a huge difference**

Conclusions



- Expectations to finalize and formalize the new framework for an enhanced action on climate change at COP-16 of shortly thereafter
  - Increase the level of ambition for emission reduction by developed countries
  - Facilitate action by developing countries subject to support
  - Provide certainty in long-term climate responses, avoid technology lock-in
  - Stimulate change towards the sustainable development, higher efficiency and low-carbon emissions pathways
- The new framework requires huge effort to prepare modalities and guidelines that will make it fully operational
- Necessary to facilitate practical steps to adaptation, technology transfer and mitigation, including REDD
- Energy efficiency and renewable energy are likely to play a major role within the global mitigation effort
- The UNECE role in facilitating climate change mitigation through energy efficiency and renewable energy could be more prominent