



Bali Road Map, Climate Change and Official Statistics

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What needs to be accounted for/reported? **Convention**

All Parties:

- GHG inventories – sectors as defined in IPCC 1996 guidelines (information from 2006 guidelines is also recommended) – provide for a set of sectors
- Vulnerability assessments & Adaptation – no single methodology – a set of sectors in IPCC

Developed countries (Annex I Parties):

- Annual GHG reports
- Regular reporting includes also information on policies and measures (PAMs)

Developing countries (non Annex I Parties):

- Every 3,4 years. Depend on availability of data. No “obligation” to report on PAMs. LDCs: National Adaptation Plans of Action.

What needs to be accounted for/reported? **Kyoto Protocol**

Annex I Parties:

- More detailed accounting of GHG emissions and PAMs – need to link them up to “assigned amounts” to account for QELROs (“targets”) and participate in emissions trading.
- National institutional framework in place: national systems
- Emissions trading accounting: national registries

Non-Annex I Parties:

- No additional obligations
- Under Clean Development Mechanisms however: importance of information availability of data for setting baselines and monitoring emission reductions.
- Some tracking of national accounts in CDM registry also possible

Mitigation/GHG sectors

Sectors	Sources of emissions, sub-sectors, means,
Energy supply	Natural gas; Renewables; Hydropower; Nuclear; Crude Oil, Coal
Industry	Pulp and paper; Cement; lime, and other non-metallic minerals; Nonferrous metal smelting and iron and steel smelting; Metal and non-metal mining; Chemical products; Other manufacturing
Transportation	Passenger and freight movements by road vehicles; railways; aircraft; and both inland and maritime vessels
Buildings	Residential floor space and all commercial or service activities, fuel use and emissions for space and water heating
Waste	Landfills, wastewater
Agriculture	Agricultural lands, comprising arable land, permanent crops and pasture
Forestry	

Economic sectors and mitigation sectors

Mitigation sectors	Economic sectors
Agriculture Forestry Energy supply	Agriculture, hunting, forestry and fishing Mining and quarrying Electricity, gas and water supply
Industry	Manufacturing
Transportation Buildings	Transport, storage and communications Financial intermediation real estate, renting and business activities
Waste?	Construction Wholesale retail trade, repair of motor vehicles, motorcycles, etc., hotels and restaurants Public administration and defence, compulsory social security Education, health and social work, other community, social and personal services

Matching mitigation and economic sectors / data

In order to assess investment and financial flows for energy supply one needs to link to economic sector information

Components of energy supply are divided between two economic sectors. Specifically:

- Oil, gas and coal production and petroleum refining are part of the mining and quarrying sector, together with other mining activities;
- Electricity generation, T&D and gas distribution are part of electricity, gas distribution and water supply sector.

Adaptation sectors

The same challenges apply to Adaptation sectors:

- Agriculture,
- Forestry
- Water supply
- Human health
- Natural ecosystems (terrestrial and marine)
- Coastal zones
- Infrastructure

Bali Road Map - What is new?

- Recognition that actions to address climate change are intimately linked to economic growth and sustainable development goals and needs.
- Breakthrough in international climate change policy, highlighting a shared understanding for the necessity of common efforts, both by developed and developing countries and setting a deadline by 2009.
- The road map for negotiations laid down four main building blocks: mitigation, adaptation, technology and financing, and established a timetable under the Kyoto Protocol for emission reduction targets for industrialized countries by 2009.

Bali Road Map - Challenges

- Increasing understand that to promote increased resilience to climate change impacts and a lower-GHG emission economy **fall across a variety of sectors**, such as energy, agriculture, health, water resources, infrastructure, etc
- In order to effectively participate and develop positions in such a challenging and **complex negotiation process**, developing countries -- in particular those with medium- and small-size economies -- will be required to involve and increasingly co-ordinate various government decision makers across key economic sectors at the national level as well as other relevant stakeholders.
- Bali Road Map **Deadline of 2009 is challenging** – options need to be laid down and understood.

Bali Road Map negotiations - Convention

Bali Action Plan calls to identify **mitigation actions** that are:

- Measurable
- Reportable
- Verifiable



MRV

- MRV implies **support** for technology, finance, and capacity building for developing countries that is also **MRVed**
- **Developed countries must make commitments** and take actions
- Need to define **what will be eligible actions** to be MRV
- Existing capacity to collect, maintain and report data will have to be **significantly scaled up**
- Need to include a **larger number of stakeholders and decision makers** in MRV exercises

CDM examples on data - Tool to calculate the emission factor for an electricity system

Element	Source of data recommended
Amount of fossil fuel type consumed by power plant / unit	Utility or government records or official publications
CO ² emission factor of fossil fuel type i in year y	<p>Option 1: Values provided by the fuel supplier of the power plants in invoices (If data is collected from power plant operators (e.g. utilities))</p> <p>Option 2: Regional or national average default values (If values are reliable and documented in regional or national energy statistics / energy balances)</p> <p>Option 3: IPCC default values at the lower limit of the uncertainty at a 95% confidence interval as provided in table 1.4 of Chapter1 of Vol. 2 (Energy) of the 2006 IPCC Guidelines on National GHG Inventories</p>

Bali Road Map negotiations - Convention

- **Adaptation** : Moving from stand alone projects to programmes and national adaptation plans
 - Importance of scale up predictable **financing** that can be “MVRed” – access to finance depends on national capacity!!!
 - **Identification of measures** and its implementation is a complicated process that presents challenges
 - Require **adjustments across** every aspect of society, environment & economy
 - **Not stand-alone issue**: linked to economic development, poverty reduction, disaster management
 - Requires **capacity for short- and long-term planning**
 - Adequate **institutional arrangements** (systematic planning, co-operation, and regulatory frameworks)

Bali Road Map negotiations - **Kyoto Protocol**

- To agree on levels and criteria for targets for Annex I Parties.
- Discussions also focus on **means to achieve targets**: mechanisms, national policies, role of LULUCF, etc.
- **Contentious issues** include:
 - Role of LULUCF (what activities should be accounted both for the base year as for the emission reductions)
 - Whether to consider or not obligations relating to emissions by bunker fuels
 - Timing for agreeing on final criteria and starting discussions on exact targets by developed countries
 - Extent of use of sectoral targets
 - Extent of use of mechanisms and their possible expansion
 - How to consider national circumstances and national abatement costs

Conclusions – Existing Convention and KP requirements

- Data **needs and barriers** are not a new issue
- Need for **national institutional framework**
- Consider **flexible** ways to support capacity of countries (rather than create more reporting burdens)
- **Experience with GHG inventories, national communication and CDM** provide useful basis – methodologies and categories are available – they will need to be **CONSIDERABLY scaled up** if countries are to undertake “MVRed” mitigation actions
- Capacity to project, collect and monitor data will be linked to **financial resources**

Conclusions – New requirements

- Role of data for **longer term planning** (history data and continuous collection and monitoring)
- Possible **new sectors** or activities (LULUCF, Bunkers, etc.)
- Need for **economic assessment** of mitigation and adaptation options
- Linkages amongst **mitigation / adaptation sectors and economic sectors**
- **Capacity for tracking measurable, reportable and verifiable information on financial and technology support** provided will also be needed!

Conclusions – Climate Change and official statistics

- Possible methodological linkages between IPCC, CDM, other carbon accounting standards (e.g. WRI/WBCSD) and official Statistics such as SEEA
- Importance of SEEA in assisting improved monitoring and measuring at national level and in supporting modeling/long term planning (both for mitigation and adaptation actions as well as for finance)
- Need to enhance capacity of developing countries to consider climate change across sectors and enhance ongoing capabilities to collect and maintain data
- Need to consider further how to formulate statistical information that provide for economic / finance accounting of mitigation / adaptation options