



CCS and the UNFCCC

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With inputs from CCSA and UNFCCC

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UNFCCC and CCS



Four negotiating bodies relevant to CCS:

UNFCCC:

- [COP – Conference of the Parties to the UNFCCC]
- AWG-LCA – Ad Hoc Working Group on Long-term Cooperative Action

Kyoto Protocol:

- CMP – Conference of the Parties serving as a Meeting of the Parties to the Kyoto Protocol
- AWG-KP – Ad Hoc Working group on Further Commitments for Annex I Parties under the Kyoto Protocol (Post 2012)
- SBSTA – Subsidiary Body for Scientific and Technological Advice

Kyoto Protocol and CCS



- 2008 - 2012 (Kyoto 1st Period)
 - Developed country emission commitments
 - CCS included in KP Art 2.1
 - IPCC GHG Guidelines 2006 allows CCS to be reported
 - CDM – Policy mechanism for rewarding CO₂ reduction in developing countries. Project-based carbon credits.
- Post 2012 – CDM ?



Kyoto Protocol and CCS



Considering CCS in CDM since CMP1 Montreal (2005)

- CDM Executive Board to consider new methodologies
- Under SBSTA:-
 - Technical workshops (2006)
 - Consideration of technical and policy Issues
 - Submissions from Parties and NGOs – two synthesis reports (2007 and 2008)
 - On agenda of every SBSTA meeting
 - Decision due at CMP4 Poznan (Dec 08) – failed
 - CMP request EB to look at implications
 - EB commission ‘Experts Report’
 - Decision due at CMP5 Copenhagen (Dec 09) – failed
 - CMP6/COP16 Cancun
- All CCS CDM reports and background <http://cdm.unfccc.int/about/ccs/index.html>

Key issues of concern



Included

- Timescales of benefits vs liability
- Impact on CDM market
- Scale and impacts of leakage
- Furthering use of fossil fuels – sustainable development
- Role of CCS in climate change mitigation

Since CMP 5

- Non-permanence
- MRV
- Environmental impacts
- Project boundaries
- Liability
- Perverse outcomes
- Safety
- Insurance and compensation for leakage

Negotiations characterised by a few countries having strong views against CCS – but need consensus to progress



CMP7/COP16, 2010, Cancun



Decision CMP.16

- CCS is eligible provided that certain issues are addressed
- Issues include site selection, modelling, monitoring, risk assessment, liabilities (short and long-term)
- SBSTA to develop new “Modalities and Procedures” which address the issues

Work programme for 2011:

- Submissions (by 21 Feb) and ‘Synthesis report’ - **out**
- Technical workshop (technical and legal expertise)
- UNFCCC to draft Modalities and Procedures for SBSTA 35 (Durban Dec 2011)



Technical Workshop 2011



- Abu Dhabi 7-8 Sep 2011
- Technical experts on site selection; modelling; accounting; project boundaries; transboundary; risk assessment; environmental impacts; monitoring; liability.
- Good Q&As from CCS-sceptic negotiators and others
- Technical concerns and misconceptions addressed
- Number of contentious issues shrunk considerably
- Liability remained as genuine concern – part technical, part policy issue
- UNFCCC produced draft Modalities and Procedures (M&Ps) drawing upon workshop and synthesis report – 20 pages of detail, the basis for negotiations in Durban

CCS in COP-17, Durban

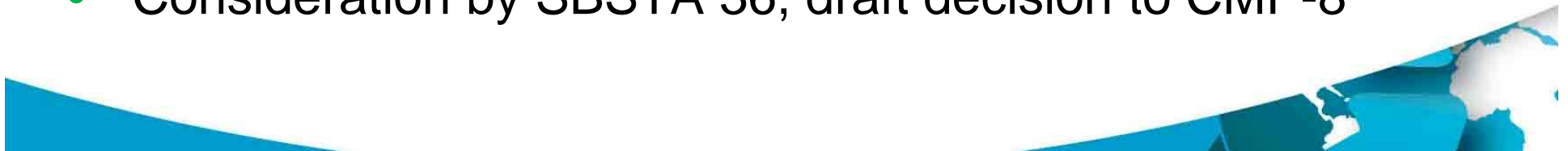


Decision CMP#.7 (final draft was FCCC/KP/CMP/2011/L.4)

- Adopted the Modalities and Procedures
- Review within 5 years
- Transboundary left to resolve

Work programme for 2012:

- Transboundary CCS
- Global reserve of CERs
- Submissions (by 5 March) and 'Synthesis report'
- Consideration by SBSTA 36, draft decision to CMP-8



Modalities & Procedures for CCS in CDM



CDM Modalities and Procedures (M&Ps)

- Apply mutatis mutandis (use existing as much as possible) with the addition of the CCS-specific M&Ps

Definitions:

- Seepage – transfer of CO₂ ultimately to atmosphere or ocean
- Net reversal of storage – seepage exceeds emission reductions during operational period, or seepage after project close



M&Ps - Requirements



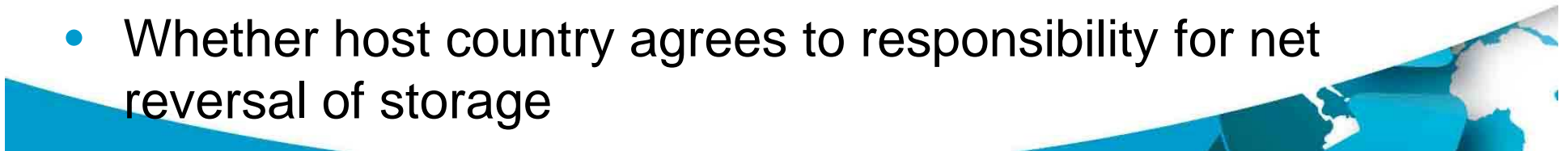
DOEs – CCS expertise

Participation Requirements

- Host to establish regulations to control and permit CCS. To include site selection and characterisation, storage rights, redress for affected entities, remediation, liability.

Validation by DOEs

- Site characterisation, risk and safety assessment, environmental and socio-economic assessment, liability provisions, financial provision.
- Host country has to agree to financial provision and liability
- Whether host country agrees to responsibility for net reversal of storage



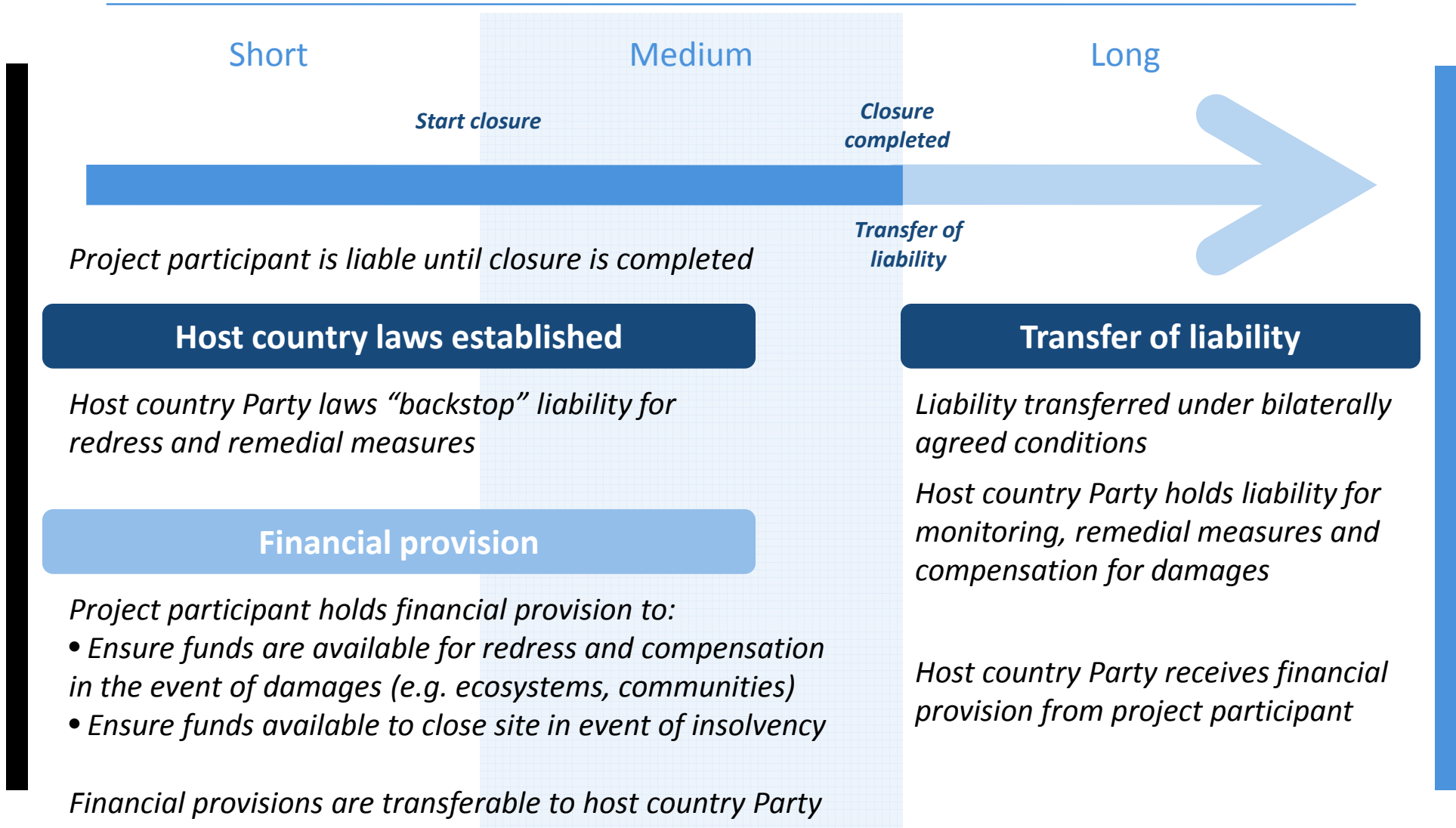
M&Ps - Liability



- **Treatment of climate liability** - obligations to surrender allowances for "net reversal of storage"
 - Any CO₂ seepage results in retirement of credits equivalent to seepage emissions
 - Host party has 2 options;
 - Ultimate responsibility resides with the host party
 - Ultimate responsibility resides with developed country using the credits, i.e. a buyer liability.
- **Treatment of local liability** - health, safety, environmental impacts
 - Participation requirement; host party establish national laws and regulations that address local liability
- Liable entity identified for each phase of project lifecycle
 - Project participants liable from operation phase until transfer of liability
 - Transfer of liability to host party after monitoring period ends (20 yrs after crediting period)

Approach to liability

(L.Schneider, UNFCCC, 28/12/11)



Approach to potential net reversal of storage

(L.Schneider, UNFCCC)

Net reversal of storage

Transfer of CERs to cancellation account from:

1. CER reserve
2. Pending account
3. PP holding account

Where these do not cover the level of net reversal, the balance of CERs...

...must be compensated by the project participant by cancelling the respective number of Compliance Units

And, where the project participant does not fulfil the obligation above, it must be met by....

...the host Party, where it agreed to take on this obligation in LoA

...the AI Party which holds the CERs in its registry, where this obligation has not been agreed by the host Party

Failure to submit *Verification Report* within 5 years after the last report

Cancel all CERs:

1. Held in the CDM Registry

And, within 1 year, all CERs issued to the project proponent ...

M&Ps – Provisions



- **Financial provisions**

- Project participants establish financial provision ahead of project proceeding
- Host party agrees to the financial provision
 - Appears to provide the flexibility to choose the most appropriate instruments

- **CER Reserve Account**

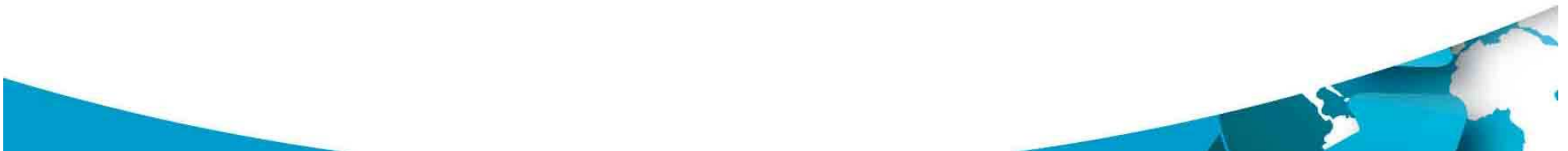
- 5% of issued CERs held in reserve account for the purpose of accounting for “net reversal of storage”
- CERs released once the last certification report has been received, i.e. at least 20 years after crediting period



M&Ps – Project Closure



- CDM project closure when monitoring stops
- Last certification report releases CERs from Reserve Account
- Monitoring stops when:
 - Not less than 20 years after last CDM crediting period
 - No seepage observed in previous 10 years
 - All available evidence from observations and modelling indicates CO₂ will be completely isolated from the atmosphere in the long-term
 - History matching of modelling and monitoring
 - Modelling confirms no future seepage expected



Durban Outcomes

COP-17/CMP-7



- **KP: Parties agreed to have Kyoto Protocol 2nd Commitment period**
 - 2nd Commitment period commences 1st January 2013 and ends 31 December 2017 or 2020
 - Continued project-based mechanisms (CDM)
- **LCA**
- New Market Mechanism to be developed
- Technology Mechanism
- Green Climate Fund



Green Climate Fund



Parties approve Governing Instrument for GCF

- Immediate functioning of GCF from 2012
- Expected to become “the main global fund for climate change finance”
 - ▶ Distribute significant % of \$100bn p.a. climate finance from 2020
- Eligibility;
 - ▶ Open to all developing countries
 - ▶ Funds adaptation, mitigation, technology development, capacity building and national reports
 - ▶ Explicitly recognises CCS; “The Fund will finance...technology development (including carbon capture and storage)”

Technology Mechanism



- Climate Technology Centre and Network (to be designed and operationalised)
- Parties adopted modalities and procedures for Technology Executive Committee (TEC)
 - TEC fully operational in 2012
 - TEC activities include;
 - Undertake periodic assessment of technology development, transfer and programmes
 - Make policy recommendations
 - Collaborate with organisations to share experiences
 - Develop knowledge–sharing platform that meets stakeholder’s needs
 - Meaningful engagement with stakeholders (includes business, NGOs, academics)



Durban Platform for Enhanced Action



- **New negotiating process established (AWG on the Durban Platform for Enhanced Action);**
- Recognises that current emission pledges inadequate <math><2^{\circ}\text{C}</math>
- Process to develop “protocol, another legal instrument or outcome...with legal force” for all Parties
- Timeline;
 - ▶ Process to completed no later than 2015
 - ▶ Implemented by 2020



Significance of CCS M&Ps from Durban



- **Allows CCS to be CDM project activity and earn CERs**
- Create incentives / signal for CCS in developing countries
 - ▶ CDM key international mechanism supporting low-C technology in developing countries
- Legitimises CCS as valid technology for developing countries
- Establishes precedence-setting regulatory framework for CCS funded under international mechanisms





Thank you