



# **SB- 18 Side Event**

## **Can permanence be insured ?**

**Consideration of some technical and practical  
issues of insuring carbon credits from  
afforestation and reforestation**

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# **Background on non-permanence**

- Task of the SBSTA to develop definitions and modalities for including A&R project activities under Article 12 in the first commitment period
- Decision on modalities to be reached at COP-9 in December 2003
- Non-permanence of LULUCF activities - one of the issues being elaborated and deliberated by the Parties
- Draft consolidated text on definitions and modalities being considered at SB-18

# Background on non-permanence

- Greenhouse gas removals by either A&R project activities are vulnerable to a variety of risks and uncertainties.
- Exist a possibility of partial or total reversal of such carbon removals. Hence, its temporary nature and non-permanence.
- Under existing modalities and procedures for the CDM, no provisions to account for emissions from A&R projects
- Specific modalities will have to be developed

# Background on non-permanence

- Options paper on modalities to address non-permanence:
  - insurance
  - credit reserves
  - buffers
  - temporary certified emission reductions (tCERs)

# Themes of the Discussion

Practicalities and potential difficulties of the insurance approach for addressing non-permanence

- Insurability of CERs, against insurability criteria,
- Technical questions for developing this new market -  
unanswered by the Canadian proposal
- Inequities of the approach

# Canadian Proposal - Technical questions ?

The OE will have to verify the documentation provided by the project participants to prove that insurance has been acquired for any CERs that would be issued and that the insurance will become effective upon issuance of the CERs, and that the insurance term covers the crediting period and an additional period of no less than 10 years after the end of the crediting period.

# 1. Ton-year approach revisited ?

- Insuring CERs for a definite period similar to the equivalence factor approach used in ton-year accounting
- What is the optimal time period that carbon must remain sequestered to be equivalent to permanent emission reduction ?
- Concept of GWPs and a 100-year reference time horizon adopted for use in the KP (Art 5.3)
- If C stocks released prior to 100 years, only partial credit awarded

# 1. Ton-year approach revisited ?

- Using the GWP approach to calculate the amount of permanent credits generated - over-insuring on number of credits when only less than 60% of credits contribute to permanent removal
- Insuring CERs throughout crediting period and an additional 10 years after the end of crediting - do not sufficiently fulfill environmental integrity of the sequestration project.



## 2. Transfer of risk vs. Removal of risk ?

- Insurance is only an instrument for transfer of risk, not complete removal of risk
- Depending on terms of insurance contract, may not be full compensation and a deductible is payable
- Lack of historical information on project participants' risk profile necessary to formulate coverage and premiums - problems of adverse selection and moral hazard could occur
- Forest restoration projects - may be little incentive to guard against losses of stocks after insurance cover.

### **3. Will project lifetimes be shortened due to insurance ?**

- Land use cannot be altered before insurance contract ends or liability revert to the insured
- Project participants are bound to a contract and will not be allowed to harvest before contract ends
- New owners to a project will also be bound to the same terms of the contract
- Binding land use might infringe on host country's sovereignty

### **3. Will project lifetimes be shortened due to insurance ?**

- Forest plantations - no incentive to extend crediting beyond first rotation. 10-year coverage beyond crediting would lead to trade-off between early certification and belated harvest.
- High CER values: incentive would be to end crediting by the time plantation would normally be harvested and maintain coverage beyond 10-years
- Low CER values: end crediting period early and certify at a lower amount of CERs so that insurance coverage ends by the time of harvesting

### **3. Will project lifetimes be shortened due to insurance ?**

- In forest restoration, little incentive to maintain insurance over long periods
- CERs would be certified as soon as maturity stabilization level is reached
- This maturity level can be reached in 15 - 20 years under tropical conditions, no incentive for prolongation of crediting period

## 4. When and for how long are premiums paid ?

- *Insurance will become effective when CERs are issued*
- CERs are only insured as soon as they are issued ?
- Payment of premiums is due at project start for the estimated total of CERs ?
- Payment of premiums on start of project : incentive to under-insure amount of CERs.
- No incentive for project participant to over-estimate probability of loss and over-insure in potential number of credits
- If no loss occurs at the end, would have lost out on over-payment of premiums.

## **4. When and for how long are premiums paid ?**

- Considerable uncertainties attached to long-term insurance.
- Prices of CERs determined by market and political forces. Premiums will vary on every contract renewal.
- Will also be variations in the risk profiles of insured projects.
- Difficult to gain long-term commitment of insurance companies for long-term coverage over several decades.
- Coverage usually on an annual basis.

## 5. Who bears the liability ?

- To preserve fungibility of A&R CERs, then seller should be held liable over crediting period
- If buyer is liable, product is not fungible because no certain value can be attached to the insurance premium and market value of insured CERs too uncertain
- Buyer liability is considered too impractical and too risky from insurers' standpoint
- A deadlock situation likely to result
- Will liability for loss of CERs revert to the tort liability system which is more expensive ?

## **6. Additional costs from monitoring and control measures**

- Unknown risks and lack of experience - insurance companies may impose certain monitoring and control measures to allow for pricing of premiums.
- Risk management plans may be mandatory to purchase insurance. But project participants may not voluntarily implement such a plan and incur additional costs.
- Insurance companies may require third party inspections to monitor project participants' activities and to deter non-compliance
- If found to be non-compliant, impose appropriate penalties or premium increases, further transactions costs.



# Inequities of Approach

- Likely to result in an inequitable distribution of A&R CDM projects among developing countries
- Countries with high CDM potential will benefit, as these are countries more likely to have adequate, existing structures for complex insurance writing
- Adverse selection: Hi-risk CERs will come first
- Insurance premiums likely to be high in the initial period and only the big players will be able to afford projects
- If accreditation of insurance companies (re-insurance companies) are necessary - a lengthy process and bulk of companies will be from developed countries.

# Conclusions

- Many technical questions unanswered with the insurance approach - rules defining the service, rights and liabilities of stakeholders, information on risks, supporting services and legislative framework required
- Will insurance companies invest time and money to develop this specialized product ? Demand remains unspecified and ambiguous
- Situation likely to become more complicated if tCERs and insured CERs were to co-exist

*upcoming*

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