Project cycle under the CDM and VCS

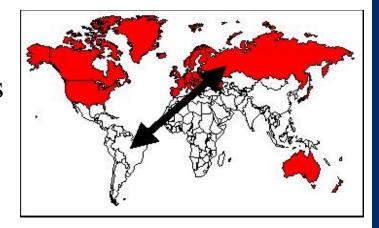
Lucio Pedroni

Promoting Transformation by
Linking Natural Resources,
Economic Growth, and
Good Governance



CDM = Clean Development Mechanism

- Kyoto Protocol, Art. 12
- The CDM is the only one "flexibility mechanism" with participation of developing countries.
- Two objectives:
 - ☐ Assist Annex 1 countries in complying with their GHG emission reduction commitments.
 - Assist host countries to pursue sustainable development.





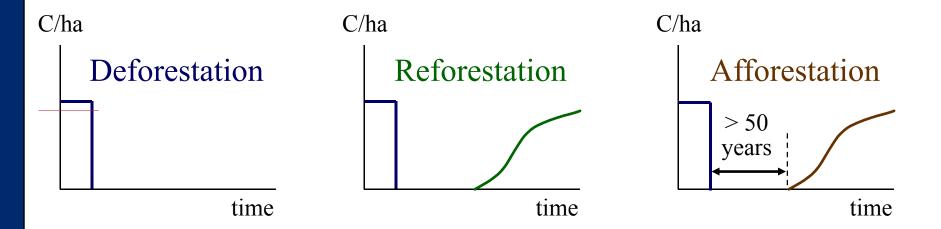
Sectoral Scopes of the CDM

- Energy industries
 (renewable/nonrenewable sources)
- 2. Energy distribution
- 3. Energy demand
- 4. Manufacturing Industry
- 5. Chemical Industry
- 6. Construction
- 7. Transport
- 8. Mining and Mineral Production
- 9. Metal Production

- 10. Fugitive emissions from fuels (solid, oil, gas)
- 11. Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride
- 12. Solvent used
- 13. Waste handling and disposal
- 14. Afforestation and Reforestation
- 15. Agriculture

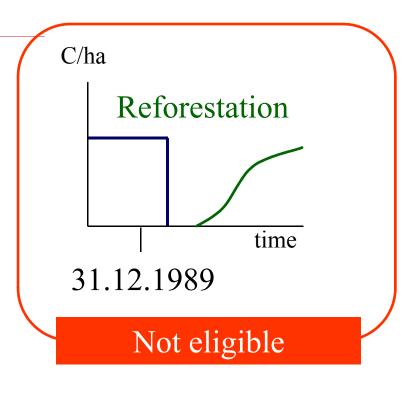


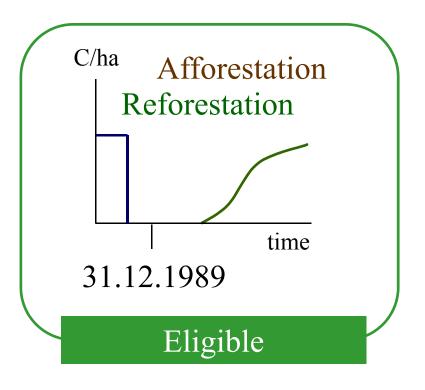
Afforestation and Reforestation



Within the Land Use, Land-Use Change and Forestry sector (LULUCF), only Afforestation and Reforestation are eligible during the first commitment period (2008-2012).

CDM - Eligibility of A/R activities is limited to lands without forests since 31.12.1989





CDM project cycle

In the host country:

- CDM project activities must be approved by the host country.
- Each country has its own national approval procedures.
- The Designated National Authority (DNA) supervises compliance.
- A Letter of Approval (LoA) must be issued to show national approval.

Internationally:

- Projects must go through several revision and approval steps.
- These steps are the result of international negotiations ("modalities and procedures").
- The CDM Executive Board (EB) supervises the compliance of all these steps.

CDM project activity cycle

Design

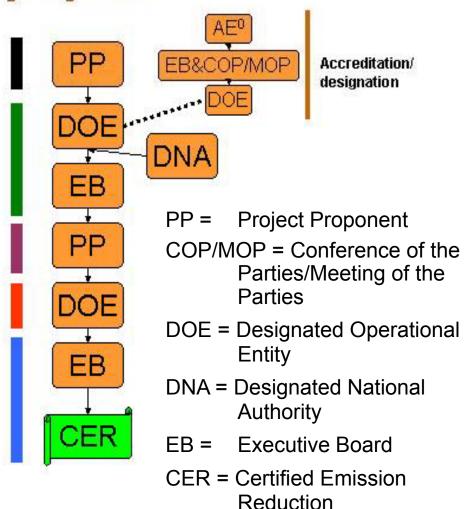
(Project Design Document – PDD)

Validation/registration

Monitoring

Verification/certification

Issuance









N N N

DOE – Designated Operational Entities

- These entities are accredited for specific sectoral scopes.
- Their name and sectoral scope are listed in the web page of the CDM (http://cdm.unfccc.int).
- Different DOEs must be used for validation and verification (except for small-scale projects).
- DOEs stick rigorously to the decisions of the EB and to the text of approved methododologies.

DNA – Designated National Authority

- These are public entities designated by the Governments that are Parties to the Kyoto Protocol.
- The address of all DNAs is available in the web page of the CDM (http://cdm.unfccc.int)
- The DNA is responsible for the national approval process.
- It is useful to contact the DNA at an early stage of project design.

RAZ SZ

EB – Executive Board of the CDM

- The EB is the regulator of the CDM.
- Its members are selected by the Conference of the Parties of the Kyoto Protocol for periods between 2 and 3 years.
- The EB has the final say on project registration, methodology approval and issuance of credits.
- Only a Party to the Kyoto Protocol can challenge a EB decision.
- All meetings and decisions of the EB are public.(http://cdm.unfccc.int).



A/R-WG – Afforestation and Reforestation Working Group

- The A/R-WG has an advisory role on A/R issues for the EB.
- Its main task is the review of proposed A/R methodologies and the development of "tools".
- Members are experts chosen by the CDM Executive Board.
- All document developed by the A/R WG are public (http://cdm.unfecc.int).
- A/R-WG does not take final decisions on specific projects or methodologies. These are always taken by the EB.

How to design a CDM A/R Project activity

- 1. Download and read the guidelines for completing the PDD (http://cdm.unfccc.int).
- 2. Assess the scale of your project activity ("small" or "full" scale).
- 3. Select an applicable methodology (read the "applicability conditions") Use TARAM (www.proyectoforma.com / www.carbonfinance.org) for an initial selection.
- 4. Avoid trying to prepare a new methodology.
- 5. Study the selected methodology.
- 6. Download the latest version of the PDD form.
- 7. Complete the PDD following the guidelines and the methodology STEP BY STEP.





Voluntary Carbon Standard

www.v-c-s.org

AFOLU Guidelines

VCS AFOLU Guidance Document

- First version published 19 November 2007.
- Second version expected to be published soon.
- <u>Project cycle</u> is similar to the CDM project cycle: Project Document, Validation, Registration, Monitoring, Verification and Certification, Credit Issuance.

VCS – Eligible Activities

- Afforestation, Reforestation and Revegetation (ARR)
- Agricultural Land Management (ALM)
 - Improved cropland management
 - Improved grassland management
 - Cropland and grassland conversions
- Improved Forest Management (IFM)
 - Conventional to Reduced Impact Logging
 - Convert logged to protected forest
 - Extend rotation age
 - Conversion of low-productive forests to productive forests
- Reducing Emissions from Deforestation (REDD)
 - Planned deforestation
 - Unplanned mosaic deforestation
 - Unplanned frontier deforestation
- Further activities can be added in the future



VCS verifiers

- VCS verifiers (equivalent to the DOEs of the CDM) can only perform validations and verifications within the sectoral scopes for which they are accredited.
- There are two VCS AFOLU sectoral scopes:
 - (1) Afforestation/reforestation, improved forest management,
 reduced emissions from deforestation & degradation covering
 ARR, IFM and REDD projects; and
 - (2) Agricultural land management covering ALM projects.
- Validators & Verifiers_are considered accredited for the AFOLU activities under the VCS if they are:
 - Accredited for the respective VCS scopes under the ISO 14065.
 - Accredited for scope 14 (Afforestation & Reforestation) of the CDM.
 - Accredited for ... of the California Climate Action Registry.



VCS – Addressing permanence

- AFOLU projects shall establish a "<u>buffer</u>" of non-tradable AFOLU carbon credits using the Tool for "Non-Permanence Risk Analysis and Buffer Determination for AFOLU Projects" in order to address the <u>risk</u> of non-permanence.
- The risk assessment (and corresponding percentage of credits) is subject to independent <u>double</u> <u>validation</u>.
- Buffer can be drawn upon over time as project's longevity is established and risks shown to be effectively mitigated:
 - 10% of project's buffer released every 5 yrs at re-verification

VCS – Addressing permanence

- Re-verification optional, but is in interests of project proponents to claim greater % of carbon held in buffer.
- Encourages developers to design projects for longer time-horizons and adopt strong risk mitigation strategies.
- 20-year minimum project life (max 100-year crediting period)
- Periodic "truing-up" process to ensure total portfolio carbon losses are being covered by buffers and unexpected gains → adjust buffer values and/or risk criteria as needed.

VCS – Addressing permanence

- If a project fails to submit a verification report to the VCS within 5 years from its latest verification, 50% of the buffer credits are cancelled.
- After another 5 years, all of its remaining buffer credits are cancelled.
- If no subsequent verification will be presented within a period of 15 years, and the crediting period of the project has not yet expired, buffer credits are cancelled from the <u>portfolio buffer</u> account to which the project belongs for an amount equivalent to the total number of tradable credits issued to the project.
- If the project does not belong to a portfolio buffer account, an amount equivalent to the total number of tradable credits issued to the project will be cancelled from the overall VCS pooled buffer account.

Buffer Ranges for AFOLU Activities

ARR Risk	Buffer Range		
Class			
High	40-60%		
Medium	20-40%		
Low	10-20%		

ALM Risk Class	Improved cropland management	Improved grassland management	Cropland & grassland conversions
High	30-60%	25-50%	25-50%
Medium	15-30%	15-25%	15-25%
Low	10-15%	10-15%	10-15%



Buffer Ranges for AFOLU Activities

				Conversion of
		Convert logged		low- to high-
IFM Risk	Conventional	to protected	Extend	productive
Class	to RIL	forest	rotation age	forests
High	40-60%	40-60%	40-60%	40-60%
Medium	15-40%	15-40%	15-40%	15-40%
Low	10-15%	10-15%	10-15%	10-15%

		Unplanned	Unplanned	
	Planned	frontier	mosaic	
REDD Risk	deforestation	deforestation	dforestation	
Class	(APD)	AUFDD)	(AUMDD)	
High	20-30%	25-35%	30-40%	
Medium	10-20%	10-25%	10-30%	
Low	10%	10%	10%	



Socio-Economic and

Environmental Impacts

- AFOLU projects that convert native ecosystems to generate carbon credits are not eligible under the VCS.
- VCS requires all AFOLU projects to:
 - Identify potential negative environmental and/or socioeconomic impacts they might have, and
 - Effectively mitigate them prior to generating VCUs.
- Could use:
 - Climate, Community & Biodiversity Standards (www.climate-standards.org)
 - EnCoFor CDm toolkit (<u>www.joanneum.at/encofor</u>)
 - Forest Stewardship Council certification (<u>www.fsc.org</u>) for forest mgmt projects)
 - Other means

VCS – Modules and tools

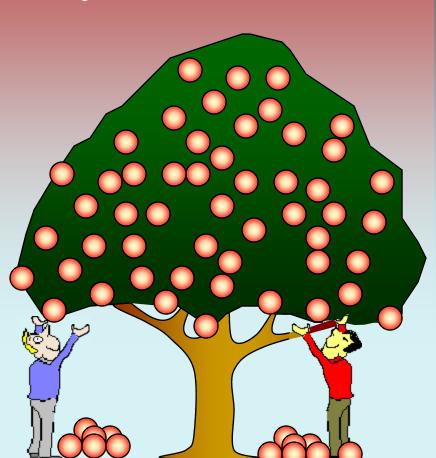
VCS approves <u>modules</u> and <u>tools</u> in addition to compete <u>methodologies</u>:

- Modules: Components of a methodology
- Tools: Guidelines or procedures for performing an analysis or calculations:
 - Tool for Non-Permanence Risk Analysis and Buffer Determination for AFOLU Projects
 - Tool for Methodological Issues Related to AFOLU Projects
 - Spreadsheets and/or software such as the "Tool to calculate sampling size for terrestrial sampling and the estimated costs of conducting sampling" or TARAM – "Tool for Afforestation and Reforestation Approved Methodologies").

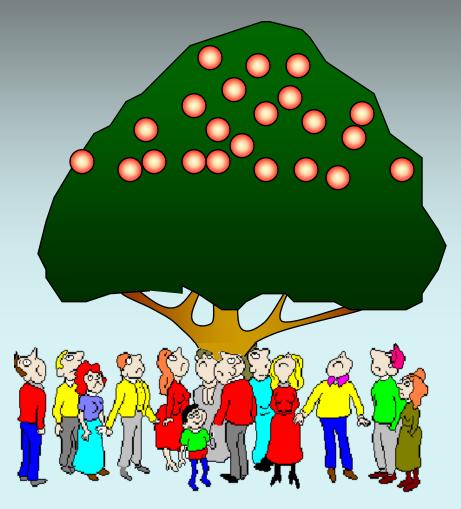
Tools approved by the CDM Executive Board and Joint Implementation Supervisory Committee or certified by CDM and JI DOEs are automatically accepted by the VCS.

Thank you for your attention!

Today: CDM & VCS



Tomorrow?



Buffer applies only to C-stocks

	Project A		Project B	
	tCO ₂ -eq	Comment	tCO ₂ -eq	Comment
Project compared to baseline:				
Change in carbon stocks	1000	non-permanent	1000	non permanent
Change in GHG emissions (e.g., from				
decrease or increase in machinery use)	50	permanent	-50	permanent
Total project vs. baseline	1050	= 1000 + 50	950	= 1000 - 50
Leakage:				
		considered		ignored when
Change in carbon stocks	-150	permanent	100	positive
Change in GHG emissions	-80	permanent	-80	permanent
Total leakage	-230	= -150 - 80	-80	= N.A 80
Carbon credits issued:				
Total credits issued	820	= 1050 - 230	870	= 950 - 80
Credits held in buffer (determined as a				
percentage of total carbon stock benefits)	200	= 1000 * 20%	200	= 1000 * 20%
Immediately tradable VCUs	620	= 820 - 200	670	= 870 - 200

VCS - Double validation policy

- **Risk Assessment**: The outcome of the risk assessment will be subjected to the VCS double approval process. If no agreement can be reached by the two VCS verifiers on the percentage of credits the project must withhold, the project can opt to go with the more conservative of the buffer determinations or appeal to the VCS Organization.
- New Methodologies: If no methodology exists for the project type, the project proponent must submit to the VCS Board a new methodology. New AFOLU project methodologies will be subject to the standard VCS double approval process.
- Leakage Assessment: VCS requires that a second verifier double check the initial leakage assessment.



VCS Registry and Project database

Registries:

- PX Inc.
- Bank of New York Mellon,
- Caisse des Depots
- TZ1

Registry and Project database are expected to be operational in late September, 2008.

