

# The important role of standards for forest carbon

**Joanna Durbin**  
**Director**

**Climate, Community & Biodiversity Alliance**

**Beijing Dec 2008**



# Key concerns about forest carbon projects



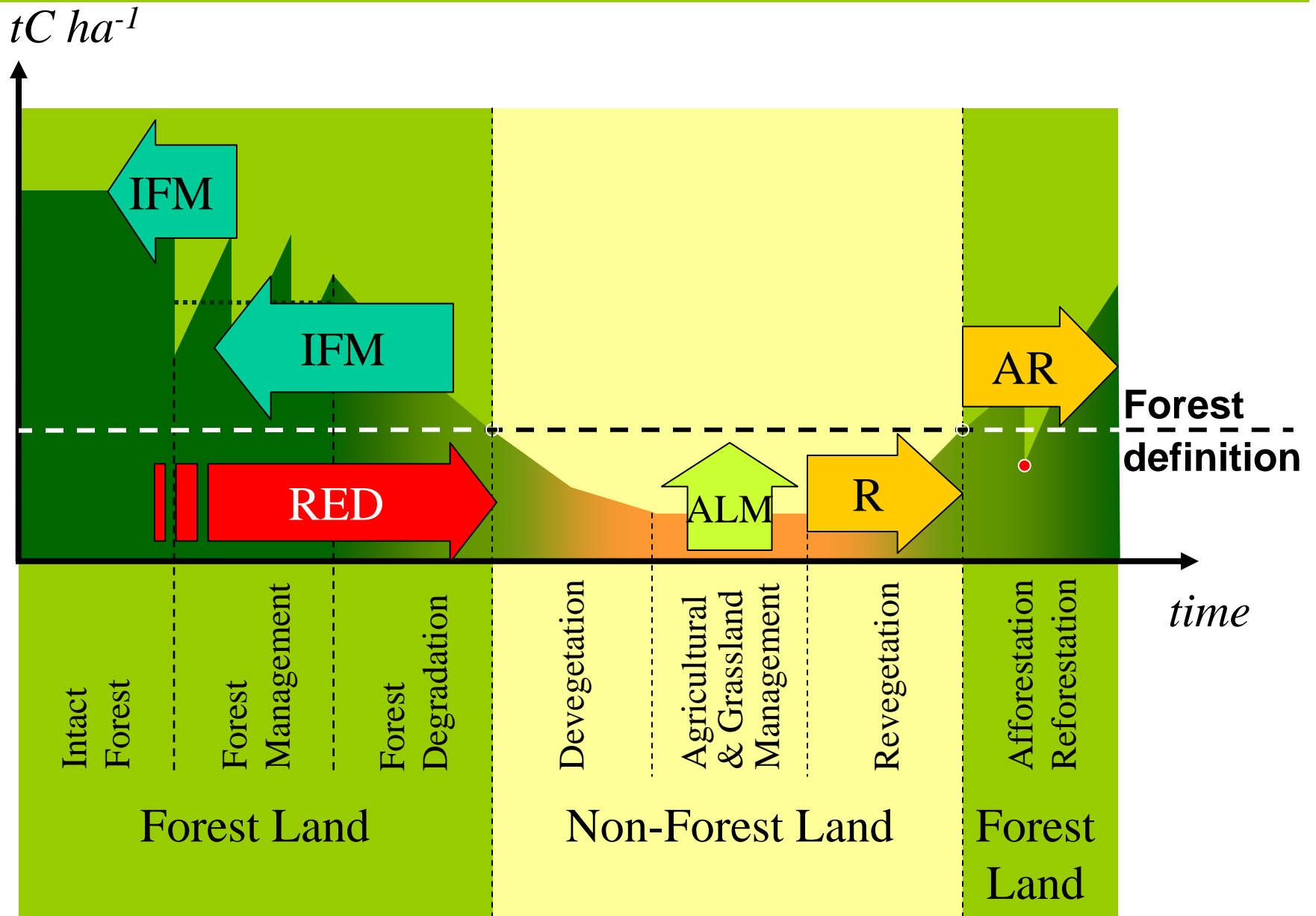
## Credibility of GHG reductions

- Additionality
  - Leakage
  - Measurement and monitoring
  - Permanence
- ✓ Carbon accounting standard  
VCS, CDM, VER+

## Social and environmental impacts

- ✓ Multiple benefit standard  
CCB Standards

# VCS AFOLU Eligible Activities



# Standards for forest carbon accounting



- Determine project boundaries (area, gases, C pools)
- Establish project baseline
- Establish additionality
- Assess and managing leakage
- Estimate and monitoring net project GHG benefits
- Reduce risks of non-permanence

# Non-permanence risk analysis for VCS buffer

## **Project risk**

Risk of unclear land tenure and potential for disputes

Risk of financial failure

Risk of technical failure

Risk of management failure

## **Economic risk**

Risk of rising land opportunity costs that endanger the future viability of the project

## **Regulatory and social risk**

Risk of political instability

Risk of social instability

## **Natural disturbance risk**

Devastating fire risk

Risk of incidence of pest and disease attacks

Risk of extreme climatic events (e.g. floods, drought, winds)

Geological risk (e.g. volcanoes, earthquakes, landslides)

# Land-based carbon activities have great potential impact on people and biodiversity

## Risks

- Exclusion from land and resources
- Non-respect of customary tenure/rights
- New influences (immigration, revenues, power) can degrade traditions and cause social conflicts

## Opportunities

- Watershed & soil protection
- Agricultural productivity enhancement
- Employment or new livelihoods
- Revenue sharing
- Biodiversity conservation
- Continued use of forest products, can be safety net for poor people
- Maintenance of traditional livelihoods and culture





# The Climate, Community & Biodiversity Alliance

## Alliance Members



## Advisors



# The Climate, Community & Biodiversity Standards

General Section		
G1	Original Conditions in the Project Area	Required
G2	Baseline Projections	Required
G3	Project Design and Goals	Required
G4	Management Capacity and Best Practices	Required
G5	Legal Status and Property Rights	Required
Climate Section		
CL1	Net Positive Climate Impacts	Required
CL2	Offsite Climate Impacts ("Leakage")	Required
CL3	Climate Impact Monitoring	Required
Community Section		
CM1	Net Positive Community Impacts	Required
CM2	Offsite Stakeholder Impacts	Required
CM3	Community Impact Monitoring	Required
Biodiversity Section		
B1	Net Positive Biodiversity Impacts	Required
B2	Offsite Biodiversity Impacts	Required
B3	Biodiversity Impact Monitoring	Required
Gold Level Section		
GL1	Climate Change Adaptation Benefits	Optional
GL2	Exceptional Community Benefits	Optional
GL3	Exceptional Biodiversity Benefits	Optional
<b>Total Project Points</b>		

#### CCB Standards Validation Levels

**APPROVED** All requirements met

**GOLD** All requirements and also at least one optional Gold Level criterion met

- Independent 3<sup>rd</sup> party validation
- Project documents posted on web
- 30-day public review
- Verification every 5 years



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**G1. Original Conditions in the Project Area**

**G2. Baseline Projections**

**G3. Project Design and Goals**

**G4. Management Capacity and Best Practices**

**G5. Legal Status and Property Rights**

# Climate Section

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[www.climate-standards.org](http://www.climate-standards.org)

**CL1. Net Positive Climate Impacts**

**CL2. Offsite Climate Impacts ("Leakage")**

**CL3. Climate Impact Monitoring**

# Community Section

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**CM1. Net Positive Community Impacts**

**CM2. Offsite Stakeholder Impacts**

**CM3. Community Impact Monitoring**

# Biodiversity Section

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**B1. Net Positive Biodiversity Impacts**

**B2. Offsite Biodiversity Impacts**

**B3. Biodiversity Impact Monitoring**



# Gold Level Section

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**GL1. Climate Change Adaptation Benefits**

**GL2. Exceptional Community Benefits**

**GL3. Exceptional Biodiversity Benefits**



## B1 - Net Positive Biodiversity Impacts

*Required*

The project proponents must:

- Use appropriate methodologies to estimate changes in biodiversity as a result of the project in the project zone and in the project lifetime. This estimate must be based on clearly defined and defensible assumptions. The 'with project' scenario should then be compared with the baseline 'without project' biodiversity scenario completed in **G2**. The difference (i.e., the net biodiversity benefit) must be positive.
- Demonstrate that no High Conservation Values identified in **G1.8.1-3** will be negatively affected by the project.
- Identify all species to be used by the project and show that no known invasive species will be introduced into any area affected by the project and that the population of any invasive species will not increase as a result of the project.
- Describe possible adverse effects of non-native species used by the project on the region's environment, including impacts on native species and disease introduction or facilitation. Project proponents must justify any use of non-native species over native species.
- Guarantee that no GMOs will be used to generate GHG emissions reductions or removals.

# The CCB Standards – progress on adoption

## Project Development - Supply

- Six projects validated
- Twelve posted for public comment
- 100+ projects planning to use CCB Standards
- CCBS covers all land-based carbon: afforestation/reforestation, REDD, forest management, agroforestry

## Demand

- Major portfolio investors/originators: World Bank BioCF, Merrill Lynch, EcoSecurities, Sustainable Forestry Management, CI
- Carbon brokers/retailers: First Climate (3C and Factor Global), CantorCO2e, The CarbonFund, 3 degrees
- Major corporations + carbon tenders: Marriott, Ricoh, Disney, Dell, 3M, Navtech, Hyundai
- Expressing a preference and willingness to pay a premium



Country/ Region	Type	Size (ha)	Size (tCO2e)	Other Standard	CCBS Validation
USA	Afforestation	716	460,200		
Tanzania	Affor/SFM	13,450	6,360,000	VCS, FSC	
Panama	Refor/SFM	700	881,370	Carbonfix, FSC	Y
Tengchong	Reforestation	467	178,984	CDM	Y
NW Sichuan		2,552	532,627	CDM	
NW Guangxi		8,015	1,979,097	CDM	
Longyang		1,342	223,189		
Maanshan		120	19,710		
UK	Reforestation	12	13,792		Y
Brazil	Reforestation	801	280,259		Y
Nicaragua	Reforestation	390	168,401		Y
Peru	Reforestation	748	151,000	VCS	
India	Agroforestry	18,180	3,942,830	CDM	
Brazil	REDD	589,612	3,611,723		
Costa Rica	REDD	12,000	1,935,074		
Indonesia	REDD	750,000	101,095,427		Y
El Salvador	REDD	70,000	6,692,738	ISO 140064	
USA	Avoided degradatn	26,300	795,777	ISO 140064	
Australia	Multiple		??		

# CCB in China

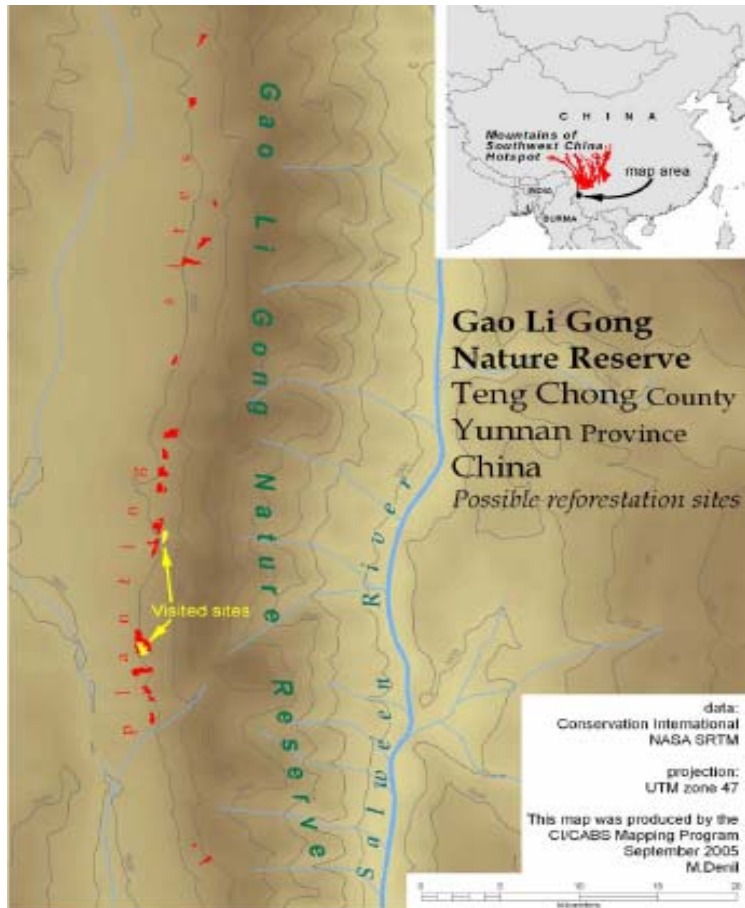
## Forest Restoration for Climate, Community and Biodiversity



- FCCB initiative launched in 2005 as collaboration between SFA-Shanshui-CI-TNC with 3M \$3M grant
- Forest carbon projects through native forest restoration for water, biodiversity & community benefits
- 4 CCB pilots to assess baselines & methodologies, and validate benefits in Yunnan & Sichuan
- Established long-term financing mechanisms to support the projects beyond the pilot phase

# CCB in China

## Forest Restoration for Climate, Community and Biodiversity



- First carbon pilot Gao Li Gong Nature Reserve, Tengchong county, Yunnan (467 Ha) – First CCB Gold Validation Feb 2007
- Afforestation and reforestation with native species on degraded lands in northwest Sichuan (2,552 ha) – submitted for audit April 2008
- Longyang Project, Yunnan, reforestation with native species (1,342 ha) – submitted for audit July 2008
- Multiple reforestation on degraded lands in Maanshan Nature Reserve, Sichuan (120 ha) – submitted for audit Oct 2008



# CCB Standards + carbon accounting standard address key forest carbon concerns

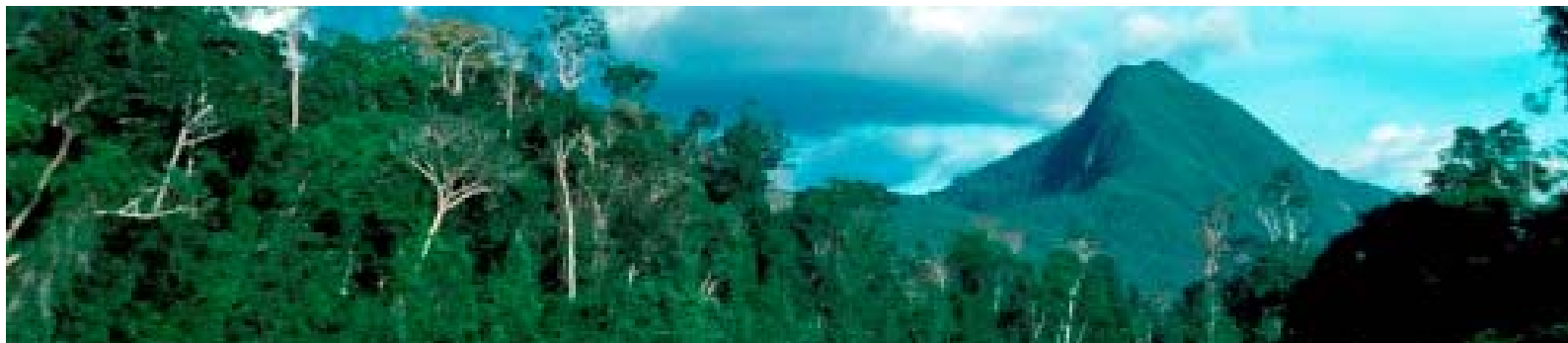
## Credibility of GHG Reductions

- Additionality
- Measurement & Monitoring
- Leakage
- Permanence
- Registration



## Project Design, plus Social and Environmental Impacts

- Local communities
- Biodiversity
- Critical ecosystem services
- Sustainability
- Climate change adaptation



# Important role of standards for forest carbon

- Reduce risk and uncertainty for investor
  - Carbon credits
  - Social and environmental impacts – permanence/reputation
- Identify additional value of multiple-benefit projects
  - Bundling of ecosystem services
  - Multiple goals achieved for Corporate Social Responsibility
- Design Standards
  - Stimulate integrated approach to risk mitigation and multiple-benefit enhancement

More information available from...



The Climate, Community & Biodiversity Alliance

[www.climate-standards.org](http://www.climate-standards.org)

<http://www.shanshui.org/ccba/>



**Joanna Durbin**  
Director, CCBA

[jdurbin@climate-standards.org](mailto:jdurbin@climate-standards.org)

**He Yi**

山水自然保护中心 Shan Shui Conservation Center

[yhe@shanshui.org](mailto:yhe@shanshui.org)

# Guidance on risk factors and risk ratings for RED projects

<b>Land ownership type</b>	
Private or public forest conservation organization with a credible track record in similar activity / legally protected land with good enforcement	Low
Privately owned land / legally protected land	Low-Medium
Uncertain land tenure / legally unprotected land or protected with weak enforcement	Medium-High
<b>Net revenues from the protected forest (including carbon)</b>	
Lower than pre-project / lower than alternative land-uses	High
Similar to pre-project / similar than alternative land-uses	Medium
Higher than pre-project / higher than alternative land-uses	Low
<b>Infrastructure and natural resources</b>	
High likelihood of new road/rails being built near or inside the protected forest	Medium-High
Low likelihood of new road/rails being built near or inside the protected forest	Low
High-value natural resources (oil, minerals, etc.) known to exist in the protected forest	High
High hydroelectric potential within protected forest	Medium-High
<b>Population surrounding the project area</b>	
Decreasing, or increasing but with low population density	Low
Stable and high population density	Medium
Increasing and high population density	High
<b>Net financial returns for deforestation agents</b>	
< 10% compared to pre-project situation	Low

<b>Risk Class</b>	<b>Buffer</b>
High	20-30%
Medium	10-20%
Low	5-10%