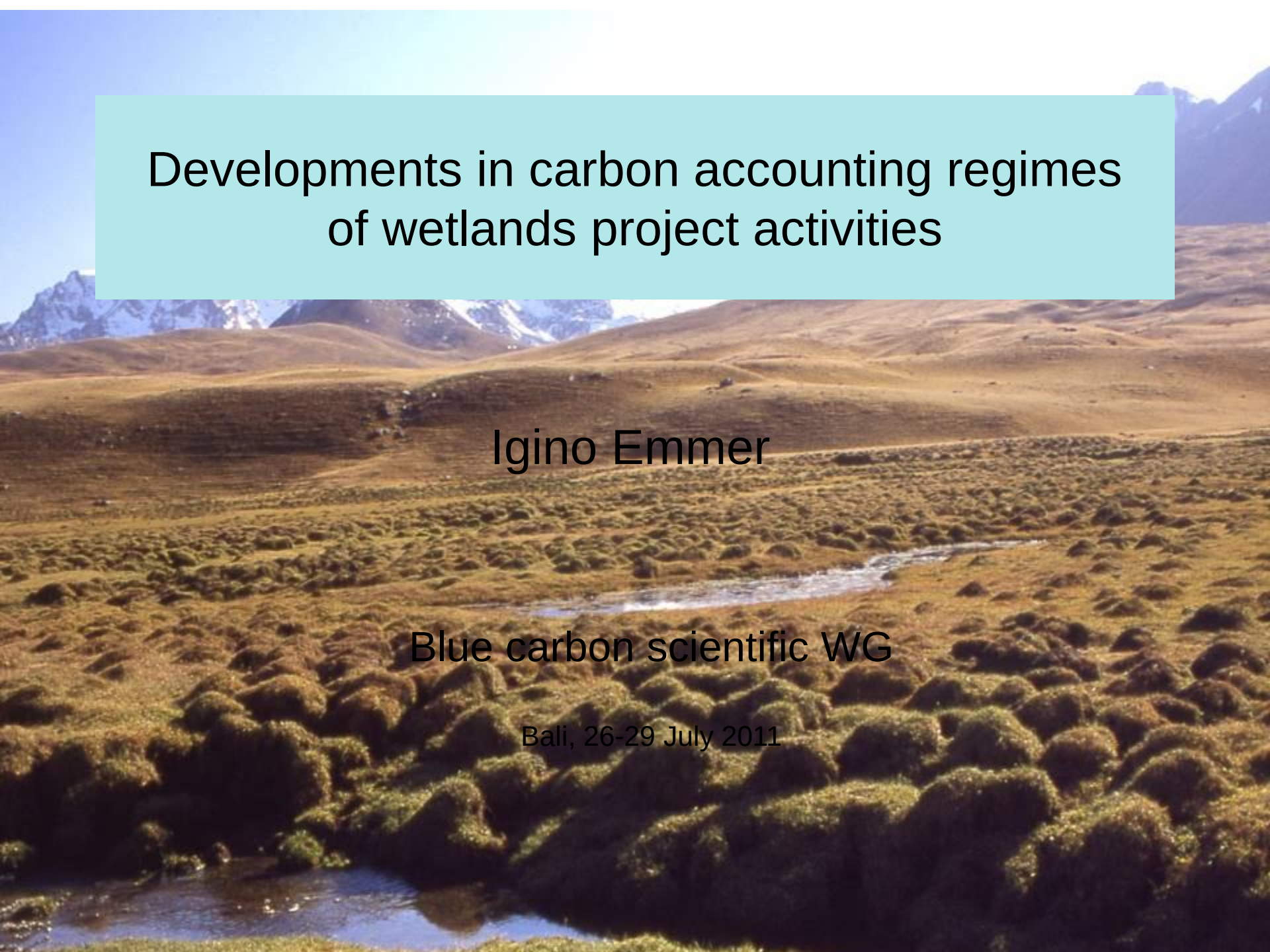
Developments in carbon accounting regimes of wetlands project activities



Igino Emmer

Blue carbon scientific WG

Bali, 26-29 July 2011

Carbon markets

- Compliance market: UNFCCC
  - Kyoto Protocol: Domestic reductions, CDM, JI, ET
- Voluntary markets
  - VCS
  - ACR and others
  - Only project-based activities

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CDM LULUCF

- Only A/R
- Normal-scale methodologies
  - Mangrove restoration methodology 2011
- Small-scale methodologies (16k CERs/yr)
  - 1 wetlands methodology

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CDM ssc wetlands A/R methodology

UNFCCC/CCNUCC

CDM – Executive Board

AR-AMS0003 / Version 01
Sectoral Scope: 14

Simplified baseline and monitoring methodology for small scale CDM afforestation and reforestation project activities implemented on wetlands

I. Applicability conditions, carbon pools and project emissions

1. The simplified baseline and monitoring methodologies are applicable if all the conditions (a)-(g) mentioned below are met.

(a) Project activities are implemented on wetlands[1]. The DNA of the host country shall provide a

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CDM Mangrove restoration methodology

UNFCCC/CCNUCC

CDM – Executive Board

AR-AM0014 / Version 01.0.0
Sectoral Scope: 14
EB 61

Approved afforestation and reforestation baseline and monitoring methodology

AR-AM0014

"Afforestation and reforestation of degraded mangrove habitats"

(Version 01.0.0)

I. SOURCE, DEFINITIONS AND APPLICABILITY

1. Source

This methodology is based on elements from the following methodologies:

- ARNM0038 "Afforestation and reforestation of degraded tidal forest habitats." The

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Content of methodologies

- Applicability conditions
  - Relate procedures provides to specific project circumstances
- Project boundaries
  - Geographical – temporal – carbon pools – GHGs
- Baseline scenarios and additionality
- Baseline GHG accounting
- Project GHG accounting including leakage
- Permanence
- Monitoring protocol

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CDM Mangrove restoration methodology

- Degraded mangrove habitats → tool
- If mangrove species are used the project may also restore the 'natural' hydrology
- Minimal (10%) soil disturbance is allowed
- dSOC = 0.50 t C/ha/yr from t_0 to t_{20} – very conservative compared to a degrading system
  - No sea level rise effects accounted for
  - No avoided loss in baseline accounted for
- Leakage: displacement of fuelwood collection – 10% of carbon in baseline trees and shrubs

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Verified Carbon Standard

- Afforestation, Reforestation, Revegetation (ARR)
- Agricultural Land Management (ALM)
- Improved Forest Management (IFM)
- Reduction Emissions from Deforestation and Degradation (REDD)
- Peatland Rewetting and Conservation (PRC)

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Typical project activities

- Conservation of mangroves – REDD
- Improved management of mangroves – IFM
- Restoration of mangroves – A/R and restoring hydrology

- Conservation of peat swamp forests – REDD
- Improved management of peat swamp forests – IFM
- Restoration of peat swamp forests – A/R and rewetting

- All can be part of REDD+ and NAMAs
- VCS accepts multiple categories in one project

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Carbon accounting

- Project boundaries
  - Geographical – temporal – carbon pools – GHGs
- Baseline scenarios and additionality
- Baseline GHG accounting
- Project GHG accounting including leakage
- Permanence
- Monitoring protocol

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PRC categories

Baseline Scenario		Project Activity	Applicable Guidance
Condition	Land Use		
Drained peatland	Non-forest	Rewetting	RDP
		Rewetting and conversion to forest/ revegetation	RDP+ARR
		Rewetting and paludiculture/ erosion avoidance	RDP+ALM
	Forest	Rewetting	RDP
	Forest with deforestation/ degradation	Rewetting and avoided deforestation	RDP+REDD
	Forest managed for wood products	Rewetting and improved forest management	RDP+IFM
Undrained peatland	Non-forest	Avoided drainage	CUPP
	Forest	Avoided drainage	CUPP
	Forest with deforestation/ degradation	Avoided drainage and deforestation	CUPP+REDD
	Forest managed for wood products	Avoided drainage improved forest management	CUPP+IFM

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Wetlands project categories

- PRC becomes WRC: Wetland Restoration and Conservation
- RWH: Restoration of Wetland Hydrology and hydrogeomorphology
- CIW: Conservation of Intact Wetlands

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₱WRC categories

Baseline Scenario		Project Activity	Applicable Guidance
Condition	Land Use		
Drained peatland	Non-forest	Rewetting	RDP
		Rewetting and conversion to forest/	RDP+ARR
	Forest managed for wood products	Avoided drainage improved forest management	CUPP+IFM

- Replace
  - PRC with WRC
  - RDP with RWH
  - CUPP with CIW
  - Drained peatland with degraded wetland
  - Undrained peatland with intact wetland
  - Rewetting with restoring hydrogeomorphology
  - Avoided drainage with avoided conversion
- Add open and impounded water
- Add creation of wetlands

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Outlook for WRC

- Peer and public review in 2011
- Launch in 2012

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Thank you

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