



*Forest and Land-use Carbon  
Finance and Markets*

**HUILA WORKSHOP ON COOPERATION AND  
KNOWLEDGE**

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- 1. REDD+ Enabling Finance/Markets Framework**
- 2. Forest Carbon Market Overview**
- 3. Sources of Funds**

# REDD+ Enabling Finance/Markets Framework

## *Components Required to Scale Private Finance*

REDD+ OFFSET - SUPPLY	REDD+ OFFSET - DEMAND
INSTITUTIONAL FRAMEWORKS	PRIMARY CAPITAL
<i>REDD+ host country laws, policies, administrative processes, REL and MRV, tracking systems, financial/benefits mechanisms and social and environmental standards</i>	<i>Direct funding and risk mitigation tools that support and catalyze early investments in emissions reductions</i>
REDD+ MITIGATION ACTIVITIES	SECONDARY DEMAND
<i>Mitigation activities under government led programs and projects that are “investment-grade” and provide social and environmental benefits</i>	<i>Activities that create end-buyers of emission reductions as well as promote a well-functioning market</i>



# Supply - Institutional Frameworks

## *Challenges - Solutions*

- Land tenure and carbon rights
  - Local knowledge of REDD design options' impact on private sector participation
  - Capacity/desire to engage the private sector
  - Procedures for govt approvals
  - Tracking and registry systems
  - REL/MRV that harmonizes project & jurisdictional approaches
- *Higher donor coordination*
  - *Bringing private sector to the "table"*
  - *Promote and support countries/jurisdictions open to market approaches*
  - *Targeted public money to development of nested REL and MRV*
  - *Host country engagement with compliance countries*

# Supply – Mitigation Activities

## *Challenges - Solutions*

- Diffused public funding
- Level of REDD+ carbon readiness
- Varied degree of project partner capacity
- Capacity to create investment-grade emission reductions
- Funding gaps
- Capacity to engage in commercial and financial transactions
- Benefit sharing mechanisms vague or non-existent

- *Smaller but REDD+ targeted public funds to “jump start” early action*
- *Easy-to-access public funds to build project proponents commercial capacity*
- *Build skills to access:*
  - *Public-private partnerships*
  - *Accessing debt facilities*
  - *Private investors & markets*
- *Ability to adopt international market standards*

## Demand – Primary Capital

### *Challenges - Solutions*

- Liquidity/price curve concern
- Sometimes high opportunity costs of competing land use
- Counterparty risk and political risk
- Deal sizes often small
- Risk of conversion from project accounting to jurisdictional accounting
- No forest carbon price index
- Technical due diligence is complex
- *Build secondary markets signals*
- *Targeted subsidized approaches where carbon cannot compete*
- *Pooled investment vehicles*
- *Expansion of political risk insurance*
- *Loans to leverage equity returns*
- *Education for institutional investors*

# Demand – Secondary Market

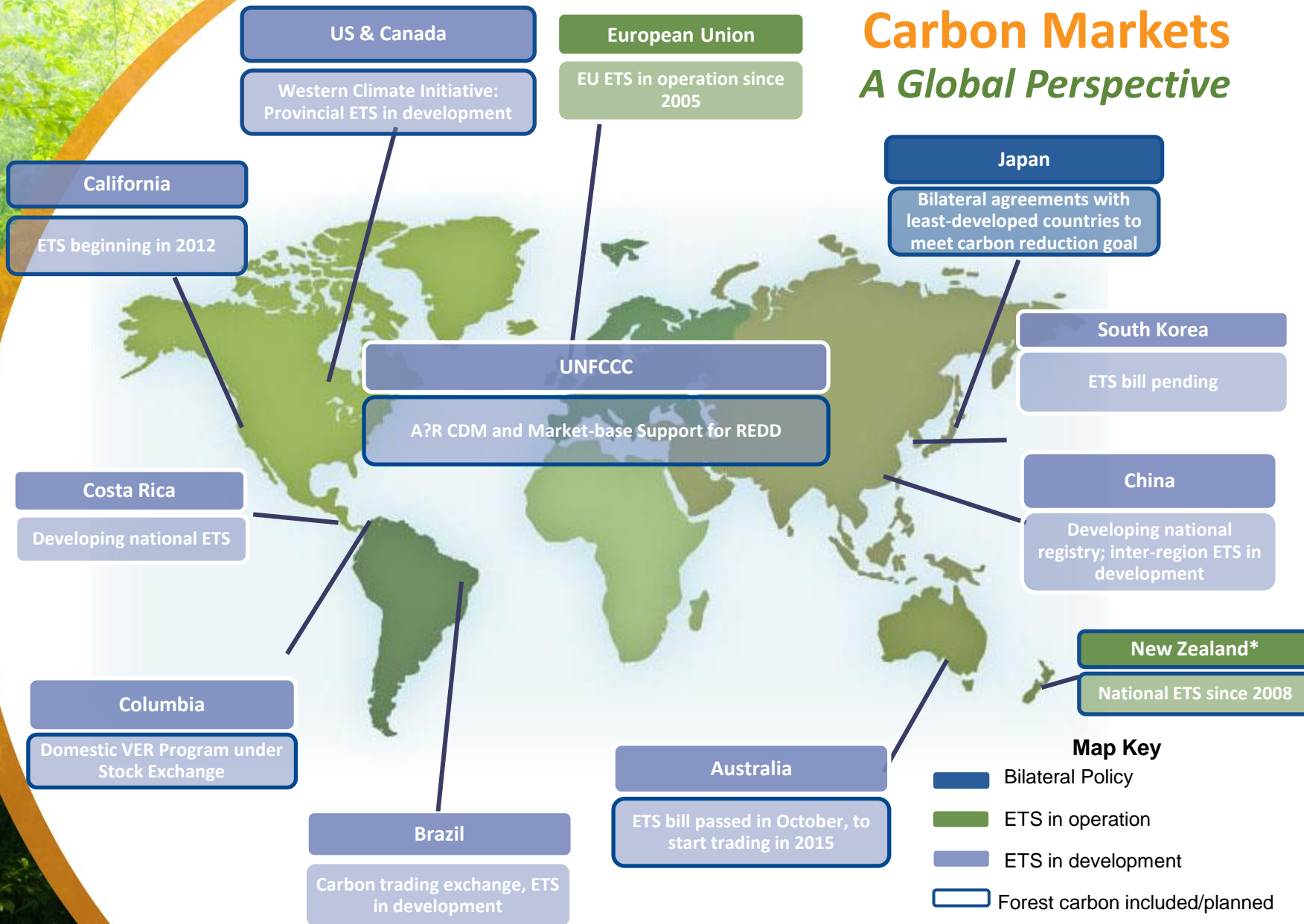
## *Challenges - Solutions*

- Low level of CSR buying activity
- Regulatory compliance systems that accept REDD+ offsets
- No publically funded credit purchase/floor facility
- Lack of/slow international UNFCCC framework
- Limited/closed nature of bilateral demand
- Low or no domestic demand
- *Conversion of donor focused CSR to “measured benefit”*
- *Market adopted rules for CSR offsetting*
- *Multilateral and country-level open architecture carbon purchase facilities*
- *Faster/clear signals from developing compliance schemes*
  - *Sector inclusion*
  - *Early action defined*
  - *Exclusion of govt controlled programs and requirement for nested accounting*



# Carbon Markets

## *A Global Perspective*



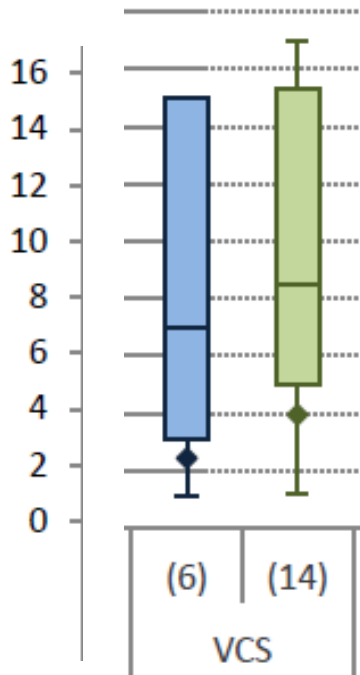


# Forest Carbon Pricing and Buyers

## *Growing Data Set in a Still Illiquid Market*

### VCS price data points doubled in 2010

- Median of \$8.5 (volume-weighted average lower due to high-volume low price outliers)
- 75th percentile increases from ~\$3 to ~\$5 from 2009 to 2010



### Today's buyers

- Voluntary /corporate social responsibility
- Pre-compliance buyers
- Financial intermediaries

### Other data points:

- Ecoscurities Forest Carbon Offsetting Report (207 surveyed) prices \$7-\$8 /ton from US buyers and \$11 - \$12 /ton EU buyers
- Leading brokerage weekly pricing for VERs offer price for REDD forestry of \$11

# Sector Demand Projections

## Voluntary and Compliance Markets

### Voluntary and compliance demand scenarios

- Based on World Bank data, State of Voluntary Market report
- Compliance markets included
  - California
  - Western Climate Initiative
  - Australia
  - Japan
  - Domestic schemes in non-annex I countries

\$10 / ton

Ceiling for Inclusion of Forest Carbon Offsets	LOW			BASE CASE			UPSIDE		
	Basis: World Bank Scenario 1, less EU demand			Basis: World Bank Scenario 2, EU demand discounted by 50%			Basis: World Bank Scenario 2, EU demand 100%, US Federal Program added		
	Volume	Market Value	Market Value	Volume	Market Value	Market Value	Volume	Market Value	Market Value
	2013-20	2013-20	Annual Average	2013-20	2013-20	Annual Average	2013-20	2013-20	Annual Average
	tCO2e Million	US\$ Billion	US\$ Billion	tCO2e Million	US\$ Billion	US\$ Billion	tCO2e Million	US\$ Billion	US\$ Billion
15%	801	\$8.0	\$1.0	947	\$9.5	\$1.2	1,349	\$13.5	\$1.7
25%	973	\$9.7	\$1.2	1,339	\$13.4	\$1.7	2,869	\$28.7	\$3.6
40%	1,144	\$11.4	\$1.4	1,730	\$17.3	\$2.2	4,390	\$43.9	\$5.5

Market value is based on US\$10 per ton for CO<sub>2</sub>e

\* LOW and BASE include Voluntary Market at Intermediate Growth Rate (20%), UPSIDE includes Voluntary Market at Slow Growth Rate (5%) given high cannibalisation of demand.

# Sources of Funds for REDD+

## Public payment-for-performance

- Donors are developing new payment-for-performance mechanisms e.g. Green Climate Fund

## Environmental fees programmed for mitigation

- Funds that could be programmed to directly support REDD+, e.g. Fondo de Regalias and the newly adopted compensation for biodiversity loss program in Colombia

## Private Investors

- Domestic/International investors motivated by financial return and risk - investments are made via equity or emission reduction purchase agreement
- Public-private partnership such USAID GDA program

## Loans and Guarantees

- Loans for REDD+ projects to finance start-up costs (often combined with equity) and loan guarantees that reduce risk to lender e.g. USAID DCA

## Insurance

- Two types of REDD+ insurance 1) political risk and 2) natural disaster can lower project and investor risk



A low-angle, upward-looking photograph of a massive tree trunk. The trunk is thick and textured, with a brownish-grey bark. It dominates the center of the frame, tapering slightly as it goes up. The top of the tree is lost in a dense, vibrant green canopy of leaves. Sunlight filters through the leaves, creating a dappled light effect. The overall mood is one of awe and natural beauty.

# Thank You