Renewable Energy Markets: Interaction with Carbon Offsets
Molly Peters-Stanley, Ecosystem Marketplace Carbon Program

Renewable Energy Markets 2010
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Ecosystem Marketplace: Making the Priceless Valuable

Original reporting, reposting market news, bi-weekly newsletters
Compliance scheme price tracking
State of the Markets reports: voluntary + forest carbon, watershed payments, biodiversity
Building Bridges
State of the Voluntary Carbon Markets 2010
This year, a record 205 respondents from 34 countries responded to our survey

- Market-wide, comprehensive survey of the voluntary carbon markets
- Survey itself purely focused on the over-the-counter (OTC) market
- Market-wide survey that covered offset suppliers across the value-chain: developers, aggregators/wholesalers, and retailers.
- Other than the direct respondents, further data was obtained from brokers, registries, and exchanges.
• **The Lion Sleeps?**: Year went in “like a lion and out like a lamb”

• **Building Bridges**: A key theme was linkages – between infrastructure providers and third party standards – and expansion to new locations and emerging markets for supply and demand

• **Recession / regulation**: while CSR and PR were reported as main buyer motivations, pre-compliance activity scaled up as major market influence

• **Carbon+**: Consumers increasingly seeking specific options given more freely available project information
Transaction volumes declined 26% in 2009

Voluntary Markets Volume

MtCO2e

Average OTC prices declined to $6.5/t to produce a $326m market, constituting 87% of the total. 

Behind landfill methane, A/R and wind, volume fairly evenly disbursed among project types.
Methane was the major winner capturing 41% of volume, followed by forestry with 24%.

Run-of-river sustains hydro + other renewable project types decline

Volume Renewable Credits by Project Type, 2008 v. 2009

- **Wind**: 7.7 (2008) to 3.4 (2009)
- **Hydro**: 16.4 (2008) to 3.2 (2009)
- **Fuel Switching**: 0.5 (2008) to 1.1 (2009)
- **Energy Efficiency**: 2.1 (2008) to 0.6 (2009)
- **Biomass**: 1.7 (2008) to 0.4 (2009)

Top three regions dominate 84% of supply

Transaction Volume by Location and Project Type

US: 56%

Latin America: 16%

Asia: 12%

LDC’s: 2% volume
3% value

Offset Volume
- up to 0.1Mt
- up to 0.5Mt
- up to 1Mt
- up to 3Mt
- More than 3Mt

Dominant Project Type
- Efficiency/Fuel Switching
- Methane
- Renewables
- Forestry
- No project type data

Asian and Turkish supply dominated by renewables while LA opts for forestry

US leads in offset purchases, largely attributed to pre-compliance motives

Customer Location

- **US**: 49%
- **EU (incl. Russia)**: 41%
- **AU/NZ**: 4%
- **Asia**: 2%
- **Canada**: 2%
- **Latin America**: 1%
- **Remaining**: 1%

Recession, pickiness cut off EU buyers from Asian market

Price premium for most renewable technologies

Average Prices and Price Ranges by Project Type

Two standards account for two thirds of the market

Transaction volume by standard utilised

- VCS: 35%
- CAR: 31%
- CCX: 12%
- GS: 7%
- Internal: 4%
- ACR: 4%
- None: 3%
- CCB: 2%
- ISO-14064: 2%
- Social Carbon: 2%
- Remaining: 1%

Most popular standards close to average prices

Average Prices and Price Ranges by Standard

- **CDM/JI**: 15.2 US$/t
- **GHG Friendly**: 12.1 US$/t
- **GS**: 11.1 US$/t
- **CarbonFix**: 10.9 US$/t
- **VER+**: 10.3 US$/t
- **Plan Vivo**: 8.9 US$/t
- **ISO-14064**: 8.1 US$/t
- **Soc. Carb**: 7.6 US$/t
- **CAR**: 7.0 US$/t
- **Green-e**: 6.2 US$/t
- **CCB**: 5.8 US$/t
- **VCS**: 4.7 US$/t
- **ACR**: 3.4 US$/t
- **Internal**: 1.2 US$/t
- **CCX**: 0.8 US$/t
- **None**: 7.5 US$/t
- **Other**: 9.2 US$/t

**Volume-weighted average price**

**Maximum transaction price**

**Minimum transaction price**

CCX and CAR dominant in pre-compliance space, VCS and GS for pure voluntary buyers

Customer Motive by Standard

- Chicago Climate Exchange: 70% Pre-compliance, 23% Resale, 7% "Pure" voluntary
- Climate Action Reserve: 49% Pre-compliance, 44% Resale, 6% "Pure" voluntary
- American Carbon Registry: 94% Pre-compliance, 5% Resale, 1% "Pure" voluntary
- Voluntary Carbon Standard: 64% Pre-compliance, 11% Resale, 5% "Pure" voluntary
- Gold Standard: 52% Pre-compliance, 43% Resale, 5% "Pure" voluntary

CAR pays it forward

Registry Issuance Versus Transactions

VCS the clear leader, while suppliers also plan to use GS, CAR, CDM and CCB in future

Future Standard Usage, According to Participants

Suppliers bullish on future of voluntary markets, respondents indicate 1,300 MtCO2e by 2020

Projected Market Growth for the Voluntary Carbon Markets, according to Participants

A Great Thanks to Suppliers!!!

Molly Peters-Stanley
Associate, Ecosystem Marketplace
+1-202-298-3005
Mpeters-stanley@ecosystemmarketplace.com