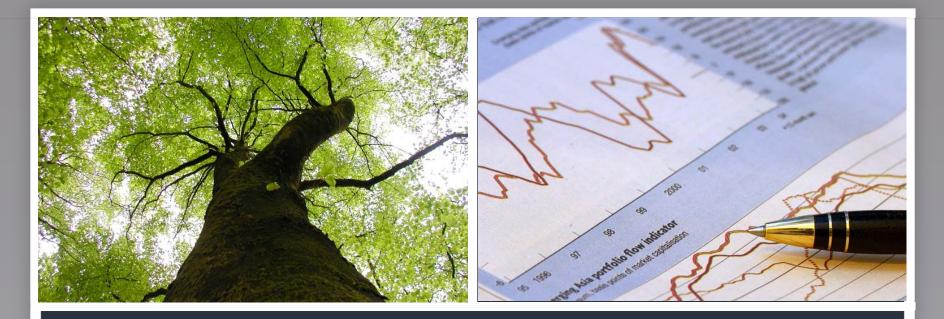


A Green Thumb for the Invisible Hand

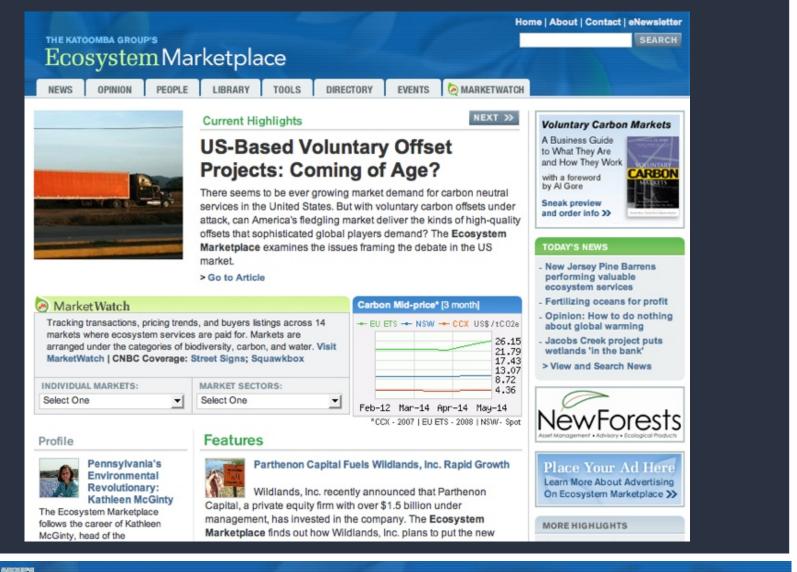
Katherine Hamilton khamilton@ecosystemmarketplace.com





About the Ecosystem Marketplace

- A Project of Forest Trends
- "Bloomberg" for Emerging Markets in Ecosystem Services
- www.ecosystemmarketplace.com
- Consistent information critical for building these environmental markets/ transactions
- News updated daily, with commissioned articles and newsletters, quantification



Categories of Services/ Products

- Biodiversity
- Water
- Carbon
- Others: Scenic beauty (eco- tourism), bundled services (land trusts, conservation easements)



Range of payment mechanisms:

- Government Payments
- One-off Transactions
 * Payments for watershed services
 * OTC carbon offset sales
- Markets

* Regular meetings of buyers and sellers to undertake transactions

* Ex. Regulated carbon markets





The Anti- commodity: Biodiversity

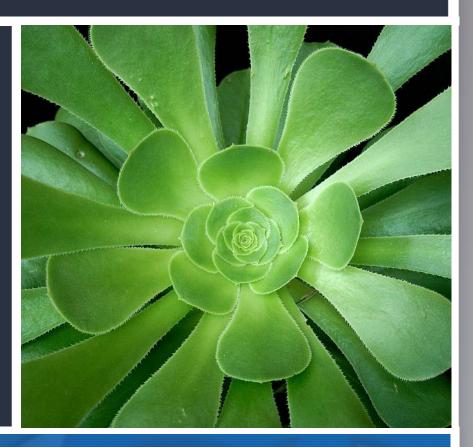
 Ecosystem Mitigation (Wetland and Species) Banking (US)

* \$3.3 billion a year spent on mitigation programs in the U.S. (ELI)

* \$1.3 billion sold from the roughly 120 species banks and 600 wetland banks in the US (ELI)

Bio-banking (NSW Australia)

- Voluntary Biod. Offsets/ credits (Malua Wildlife Habitat Conservation Bank)
- Gov't payments for biodiversity (Global)
- Other private sector 'payments'



Coming Soon...Speciesbanking.com

Trassmantion, Multiprist

Land Area Protected

or Restored

Find Banks

Salact an option

Delevit + Thate

Saloif a Species

DER beiterbeiteten

44,621 texterni

(110.260 advect)

Max Seattle Date Manufalian

100

+182

- Like wetlands, but species ►
- Dozens (@70 active) in the US
 - Most in California \mathbf{O}
 - Poised for growth in Florida, Texas etc. Ο
- Species credits selling for hundreds of thousands of \$8,000- 500,000 (acre)
- Market worth about \$250-350 million/ \triangleright year
- Investors diving in ⊳
- U.S. (then Australia most developed) ►

This site is part of the Bringstern Marketpiece Network, Laure Ners of Income & Hannel & Constant | Towns BASHS TRANSACTIONS SPECIES STATES NEWS-B-ARTICLES DIRECTURY FEAFURED ARTICLES + back next + Al Vero Los el Accinemists Endangered Selamander Habitat Protected (CA) et lueto Dignis almore SANTA CRUZ, CA, 6/9/84 - The Trust to Fublic Land (TPL) and the Docimon qui Blanditire California Wildlife Conservation Strand announced the purchase Praementium Volugitatum and permanent protection of the largest undeveloped area of chaparral Beteniti Atroc Corrupti and coastal woodlands on the west side of Highwar 1 between Aptos and Quero Dolores et Quee Websonville. The 209-acre Buena Vista property is the newest addition to Motestian Exceptors land the California Department of Fish and Game's Banta Chiz Long Toed Occurcali Copiditate No Salamander State Ecological Reserve. The property valued at \$6.7 million. Learn Mare >> Monte Harvey >>-NUMBER OF TAXABLE PARTY. OTINIONITI Humber of Basks 77 Banko States with Banks 10 Obden. 1 Comonimate **Species Available** ## Tpecies



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Search Transactions familiaria or early updated





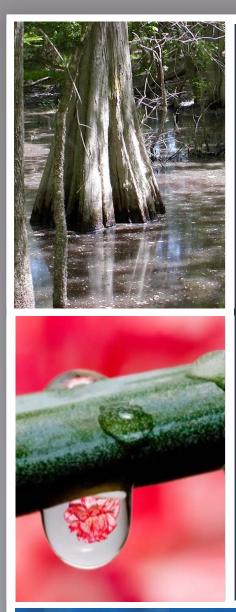
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THE EMAIL REWSLETTER

Don't least a beat. Subscribe by Mitgaligi Mal. the Ecosylfees Managplace's allowaldthe onadigators/conservation lanking.

THE KATCOREA SHOUPS **Ecosystem Marketplace**

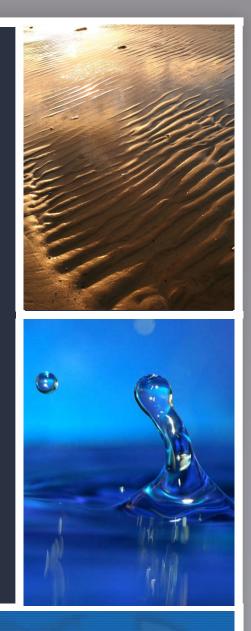


Water markets

- Payments for Watershed services (quality & quantity)
- Paying land owners (ex. Heredia, Costa Rica/ Perrier Vittel)
- Purchasing land (Water
 Conservation Fund in Quito)

Nutrient trading

- Nitrogen, phosphorus, sediments
- Small pilot programs across the United States (Ohio's Miami Conservancy District)



Nutrient trading: challenges

Not easily commoditized (not carbon)

- But markets want to be global and this will happen on watershed scale so smaller size (watershed)
 - i.e. will be lots of little markets, not global like carbon
 - Could/Should become a series of large markets:
 - Think Chesapeake, Gulf of Mexico
 - Forest Trends "Nitrogen Neutral" Fund



Chesapeake Fund

- Collaborative project: Forest Trends, Chesapeake Bay Foundation, and World Resources Institute
- Regional pilot with the potential to scale and model in other watersheds
- Focus on "offsetting" nitrogen emissions by investing in water quality protection and restoration projects
- Forest restoration and protection: potential for high-value return



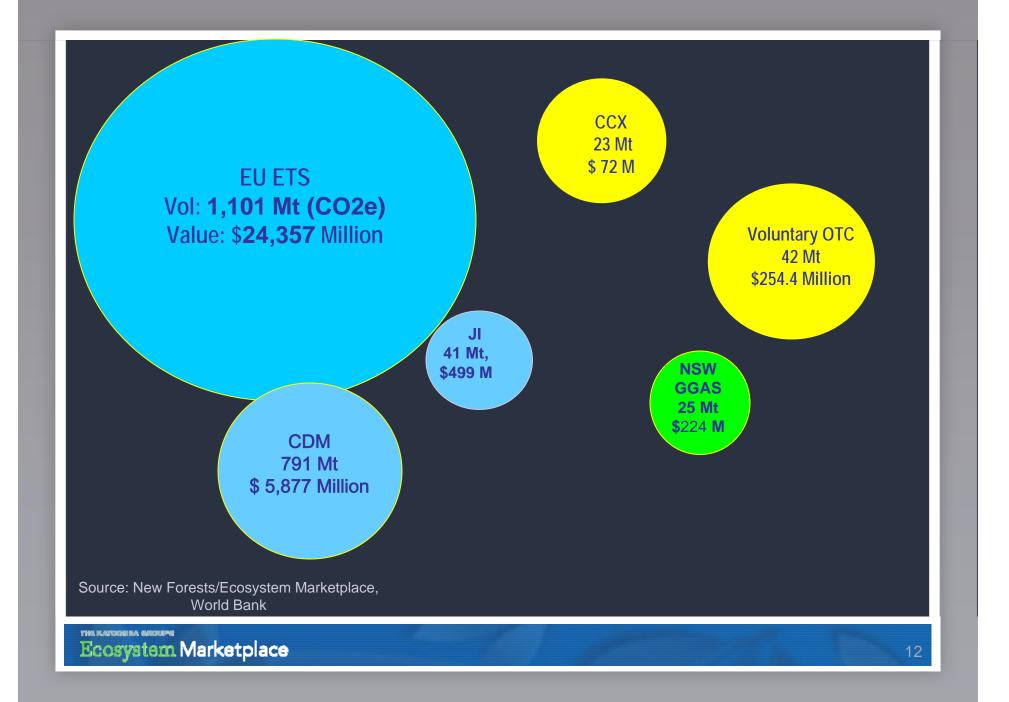


The Exploding Market..... Carbon!

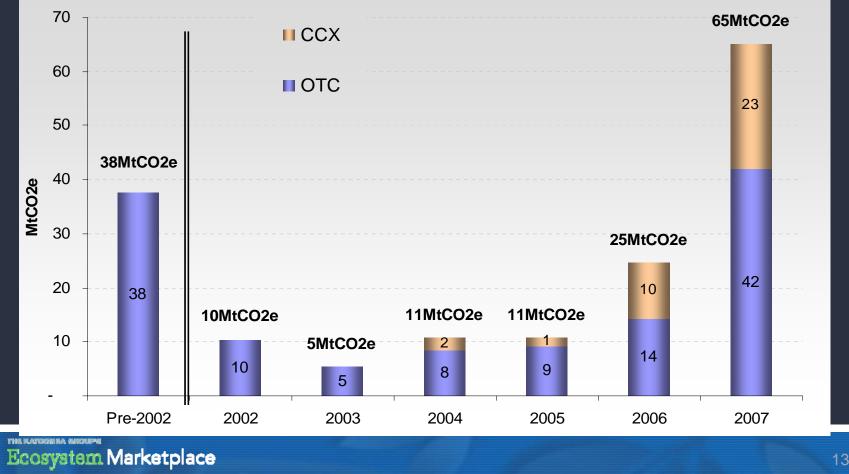
- Is currently the most global market as a result of Kyoto Protocol, European Emissions Trading
- EM info on carbon markets:
- Non- Kyoto carbon markets
 - Voluntary carbon markets
 - Evolving US carbon markets
- Markets for biological carbon sequestration

THE KATSORIEA BROUPS

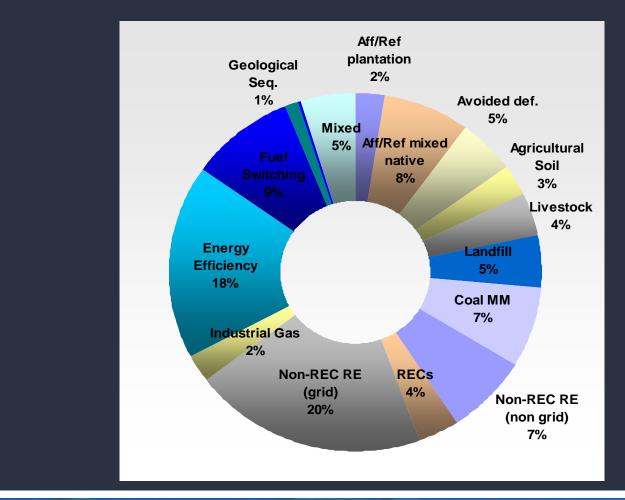




Size and Growth



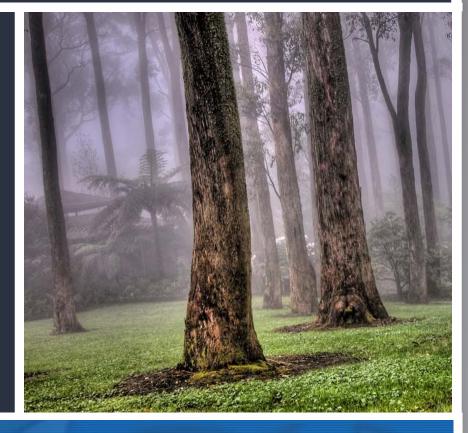
Project Type



Tree Huggers: Voluntary Carbon Markets Embracing Forestry

- Can potentially avoid CDM cost hurdles
- Space for innovation& testing methodologies
- Demand for "Charismatic Carbon" in voluntary markets
- Forestry easy for consumers to understand

But....



Lessons from the Carbon Markets for emerging PES programs....

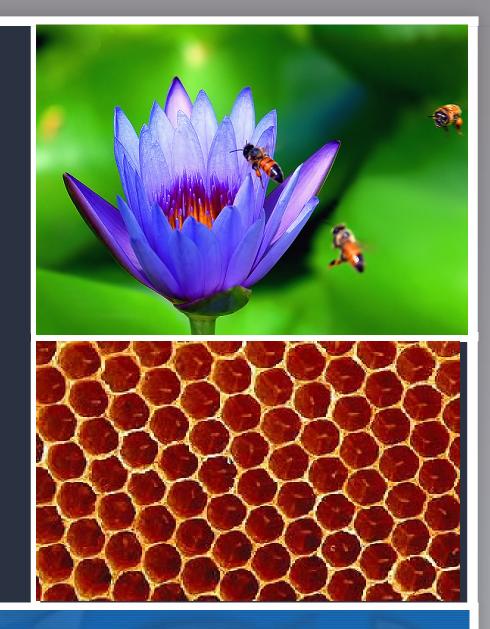
Finding a Driver

- Voluntary markets creating new "mental models" or public relations approaches
- Ex. Carbon foot printing = Wal Mart's Acres for America program
- Tool for education



Managing a Market

- A demand for real, measurable benefits
- Creating standard methodologies and registries to track units
- But balancing that need with transaction costs...



Blazing Trails...

- Voluntary markets potential incubators
- Early movers can reap huge rewards, but...
- Testing new ideas challenging and often risky
- Flux in market difficult







General Trends

- Most markets still difficult to track
 - Innovation across the globe
- Government, private sector,public/ private (demand & supply)
- Interest from investors not only carbon but also water & mitigation banking



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