Key tools to create transparent and efficient water markets in the US

Kathy Benini \ ACES and Ecosystem Markets 2012 \ 12 December 2012
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- **Year founded**: 2003
- **Employees**: 2,500+
- **Institutional clients**: 3,000+
- **Global locations**: 20
Our global position

570 55
Registry clients Countries in which clients are located

780 100 million
Projects registered Credits listed (for carbon, water and biodiversity markets)

19 33 million
Environmental standards listed Credits retired

Awards

Best Registry Provider, Environmental Finance: 2010, 2011, and 2012
Environmental Initiative of the Year, Financial Sector Technology: 2010
Attributes of a healthy market
Attributes of a healthy market

What a market needs to succeed:

— Supply (a willing source of activities from which credits can be generated) and demand (a willing source of entities required or incentivized to buy those credits – largely based on environmental priorities established by government, industry or other mandates)

— Rules governing how credits are created, validated and can compare from one state or watershed to another

— Infrastructure to enable sellers and buyers to confirm and demonstrate ownership and transfer of the credits, and for those credits to be tracked and transacted in an efficient, low cost, low risk and highly transparent way
Outline

Registries: Tracking the market
Workflow: Building a pipeline
Prices: Ensuring a transparent market
Auctions: Helping make the market happen
Registries: Tracking the market
What is a Registry?
In its simplest form a Registry is:
Online infrastructure to track environmental credits through their lifecycle

A Registry comprises:

**Technology** – user interface and the database behind the Registry

**Terms & Conditions** – rules governing behavior of parties using the Registry

**Operations** – review of documentation, support of users and oversight of technology

Role of a Registry

Track projects and credits
- Project listing
- Credit issuance with serial numbers
- Ownership
- Sub-accounts and portfolio management

Support the market
- Facilitates efficient trading
- Supports liquidity and participation
- Supports financial markets and regulatory reporting
- Low cost, efficient
- Risk management

Grow the market
- Scalability
- Credibility
- Transparency
**Registry overview**

**Manage My Units**

<table>
<thead>
<tr>
<th>Credit Summary</th>
<th>Measure</th>
<th>Issuances</th>
<th>Holdings</th>
<th>Retirements</th>
<th>Pending Issuances</th>
<th>Pending Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account: Demo Master Account 1A (2 Items)</td>
<td>VCU (CO2e)</td>
<td>10,000,000</td>
<td>15,000,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account: Demo Master Account 2 (1 Item)</td>
<td>Verified Carbon Standard</td>
<td>450,000</td>
<td>450,000</td>
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</tr>
</tbody>
</table>
Angel Mounds (ID: 1000000000001275)

United States

Developer

American Farmland Trust

Description

Angel Mounds on farm nutrient reduction project

Documents

- Monitoring, Reporting and Verification Protocol
- Project Design Description (inc Monitoring Report)

Units

<table>
<thead>
<tr>
<th>Category</th>
<th>Standard</th>
<th>Project Type</th>
<th>Certification</th>
<th>Linked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Quality</td>
<td>Ohio River Basin Interstate Trading Program</td>
<td>Nitrogen reduction/removal</td>
<td>No</td>
<td>Details</td>
</tr>
</tbody>
</table>
Registry overview

Regulator approval capability
Registry overview

RFI Platform

Acts as an anonymous online participant introductory platform

Connects market participants who wish to explore credit offerings

Enables market participants to discover potential counterparties on their own timeline.
Key registry considerations when setting up a market:

- Track issuance, transfer and surrender of credits
- Credits must have unique serial numbers
- Online, 24/7 access and support
- ‘Know Your Client’ checks are undertaken to prevent fraud
- Robust integrity and security of access and data
- Protection of personally identifiable information
- Regulator log-in / approval for all registry functions
- Scalable system that can handle large volumes
- Public visibility with Google maps
Workflow: Building a pipeline
Registry project pipeline tool:

— Tracks projects throughout their lifecycle

— Assigns project statuses and determines next actions for the projects

— Determines which users are permissioned to update the project based on the project’s current status and next action item

— Sends notifications to all relevant users upon status/action item changes and any updates by third-parties
Pipeline tracking tool

Project pipeline dashboard

- Easily access all project information in one dashboard view
- Track the progress of projects throughout their lifecycles
- Receive alerts and reminders when actions are required for specific projects
Prices: Ensuring a transparent market
The importance of price transparency

— Sellers can assess value of their environmental asset
— Investors can meaningfully assess value of their investment
— Buyers can choose the best commercial strategy (reduce or offset)
— All parties can forecast and budget
— Ensures fair competition with the market
— Builds stability and support for the market

Considerations

— Regulators can capture pricing via registry/RFI platform or auctions
— Pricing should be aggregated and anonymized
— Distributed to market at regular intervals
Auctions: Helping make the market happen
What is an auction?
Buyers and sellers enter bids / offers for credits over a period of time. Auctions concentrate liquidity for a specific time and are an ideal tool to bring buyers and sellers together to transact in an efficient way.

How do water quality credit auctions work?
Pre auction: enrolment, eligibility of participants, training, process, credit registration

Auction: Offers / bids submitted, auction engine runs, results generated (all price information is confidential)

Post auction: Winners declared, prices published, settlement cycle
How does it look?

Auction illustration
Thank you.
mines data
pools intelligence
surfaces information
enables transparency
builds platforms
provides access
scales volume
extends networks
& transforms business.
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