

# The Essential Elements in Creating Effective Environmental Markets

September 2010



markit™



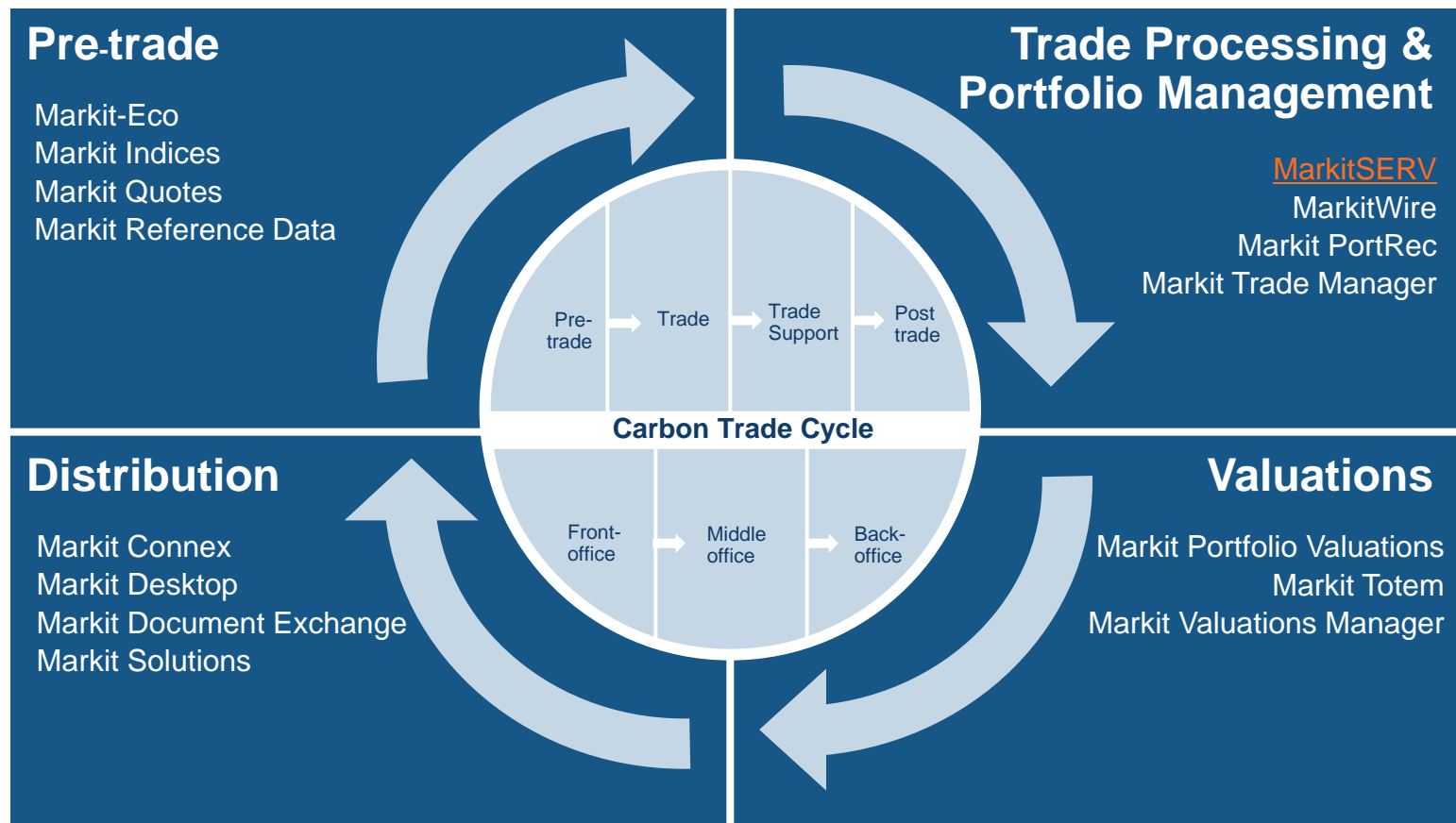
## Outline

- Introduction to Markit
- Overview of Environmental Markets
- The Role of Registry Infrastructure
- The Registry a Closer Look
- Service Provision Options

## About Markit

- Markit is a leading global financial information services company with over 1,900 employees and 21 offices worldwide
- We provide data, valuations and services across all asset classes to enhance transparency, reduce risk and improve operational efficiency
- Our client base includes the most significant institutional participants in the financial and commercial market place
- Markit Environmental Registry is the largest environmental registry in the world and the only registry to track carbon, water, and biodiversity

# The Markit Solution for Environmental Assets



# Markit Environmental Registry

- The only all-encompassing registry hub for carbon and ecosystem markets to provide transparency and confidence in the provenance and singularity of listed credits
- The largest carbon registry in the world with an 75% market share\*, over 600 customers, and 80 million credits listed. It lists all environmental assets and is the registry of choice for most international standards
- Lists eight of the ten primary market standards, four of which on a sole provider basis. Listings include: Voluntary Carbon Standard, Carbon Fix, ISO14064, Plan Vivo, Social Carbon, and Climate, Community and Biodiversity Alliance
- Takes a lead role in developing transparency in ecosystem markets such as water, wetlands, conservation banking and other biodiversity projects



# Overview of Environmental Markets

# Emergence of Market Mechanisms

**Market Mechanisms in essence is based on the concept of paying for or putting a price on services that were previously provided for free.**

**Aim:**

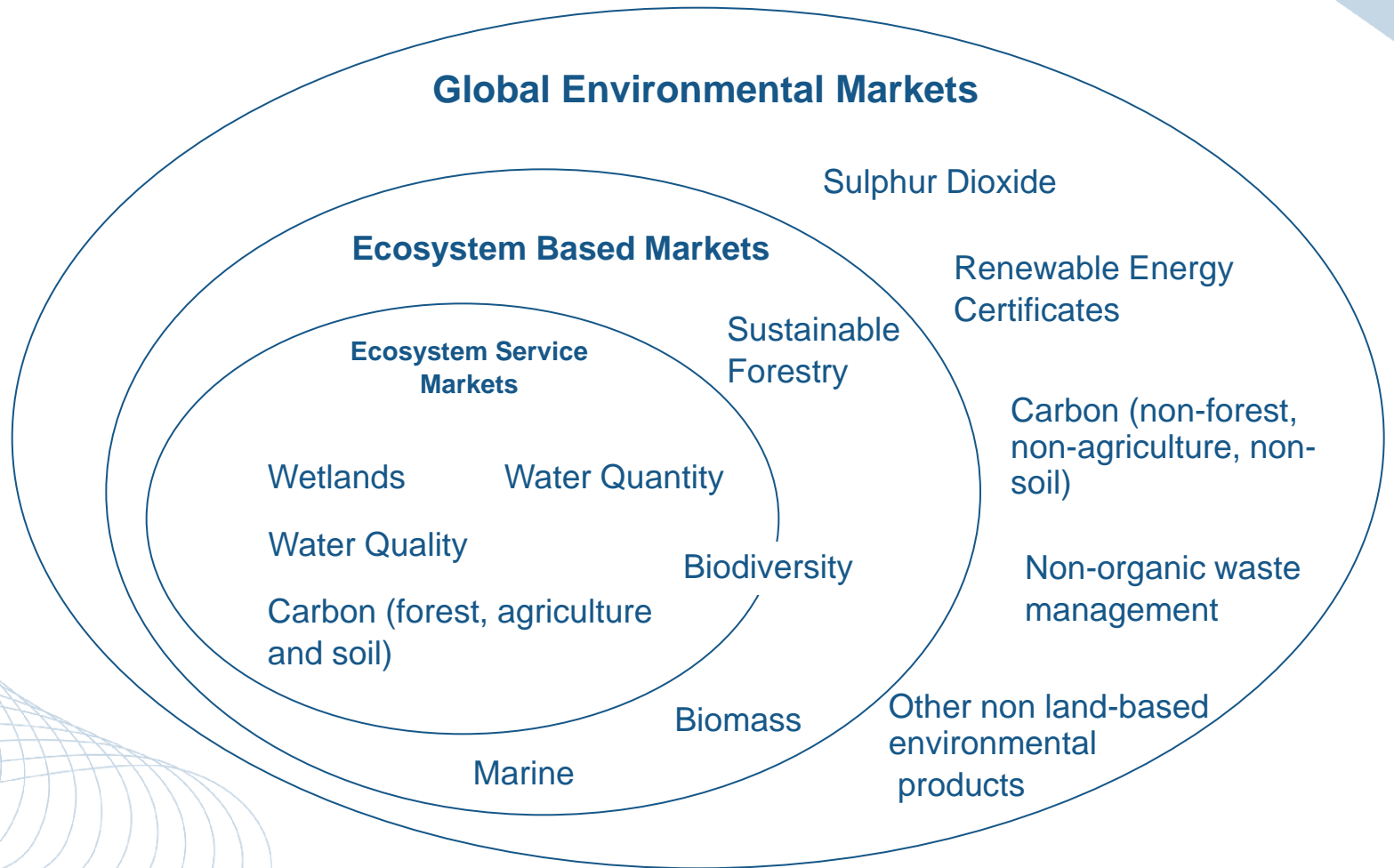
Abatement at lowest cost (let the market find the price) where:

- Damaging outputs are capped
- Beneficial inputs are rewarded with 'offsets' (increasing supply)
- Trading occurs
  - Those below cap can trade with those in excess of cap
  - Those exceeding cap can buy from those below cap + those with offsets to sell
- Provide environmental certainty at lowest cost
- Price signals change behavior and reward (not just punish)

*“The first essential element of climate change policy is carbon pricing”*

Sir Nicholas Stern

# Market Types



## Efficiency, Liquidity and Transparency

- Credible, transparent and efficient markets
- Effective environmental outcomes
- Wealth-creating options for project participants
- Increase investment (incentives and ROI for investors – local and international)
- Reduce costs for regulators and policy-makers
- Efficient identification system to track ownership
- Reporting on environmental outcomes versus investment dollars spent
- Tracking progress against our priorities in a meaningful way

## Markit's Infrastructure Requirements

- To ensure the integrity of Compliance market/s (Federal and State) and Voluntary Market/s (Verified Emission Reductions - VER) and to facilitate and incent efforts and actions in mitigating greenhouse gas emissions by:
  - utilizing world-class proven infrastructure
  - ensuring secure market platform/s for state and nationally produced compliance credits and VERs accessible to national or international buyers;
  - developing credibility and preventing double counting of carbon credits from state and federal agriculture, forestry and/or REDD projects;
  - using infrastructure to provide visibility to foster local demand for carbon credits through specialized carbon foot-printing and reporting software that supports corporate carbon mitigation.



# The Role of the Registry Infrastructure





## The Markit Environmental Registry Objectives

Provide an infrastructure arrangement to guarantee the quality, transparency and traceability of the state and nationally generated and their commercial transactions.

To strengthen the emission reduction at state and national levels bringing together compliance and voluntary market projects under one registry system ensuring a tracking system for all reduction units traded.

# Market Participant Roles

- **Governments Roles in the Market**
  - Sets the environmental priorities through the development of regulations, rules and guidance
  - Established the methodologies by which credits can be created
  - Ensure the integrity of validation and verification protocols
  - Inter-agency and public communication of key program information and statistics
- **Infrastructure Provider Role in the Market**
  - The foundational infrastructure requirement for markets
  - By implementing the rules established by the Governments for the full tracking of credits across their lifecycle (transparency)
  - Work with regulators to provide access and reporting to ensure the appropriate oversight of the markets
  - Ensures the credibility of the credits traded on exchanges
  - Post-trade infrastructure, services and information

## Role of the Registry relative to Policy Goals

<b>Integrity</b>	<ul style="list-style-type: none"><li>▪ Creates confidence in the provenance and singularity of credits</li><li>▪ Minimizes risks in the management of the issuance and lifecycle of credits</li><li>▪ Allows for effective market oversight and auditability</li><li>▪ Helps prevent fraudulent activity</li></ul>
<b>Transparency</b>	<ul style="list-style-type: none"><li>▪ To market participants and the public</li><li>▪ To governments and regulators</li></ul>
<b>Efficiency</b>	<ul style="list-style-type: none"><li>▪ Straight through processing</li><li>▪ Robust and efficient platform</li><li>▪ Nimble and easily adaptable with rapid speed to market</li></ul>
<b>Liquidity</b>	<ul style="list-style-type: none"><li>▪ Interoperability with financial markets fosters liquidity</li></ul>



# The Registry: A Closer Look

|

|

+

|

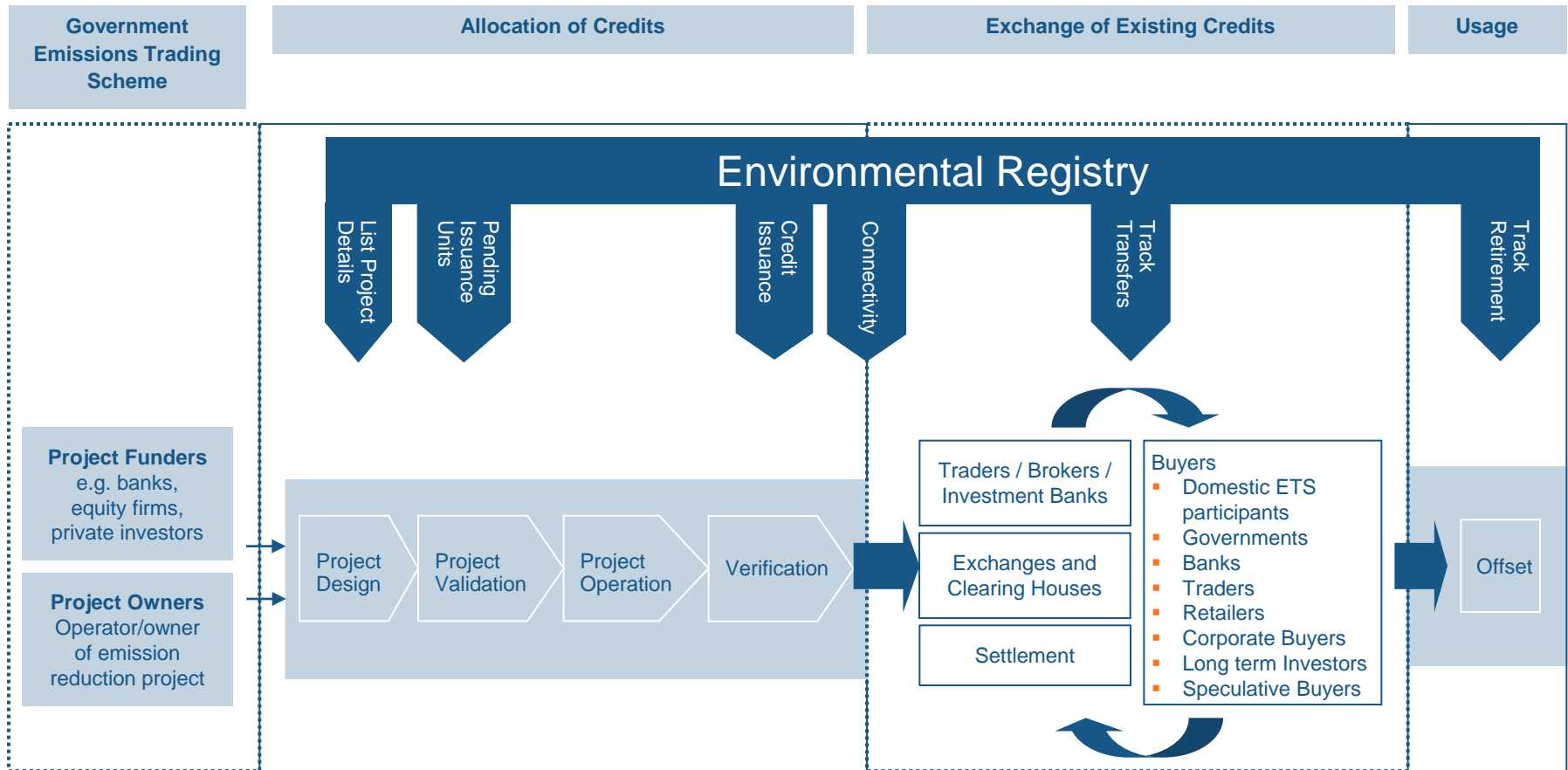
|

>

# The Role of the Registry in the Market

- Tracking credits
  - Project listing
  - Serial numbers
  - Ownership
  - Sub-accounts
- Supporting the market
  - 24 hour online web access
  - Facilitates efficient trading (compliance buyers and others)
  - Supports increased liquidity and participation
  - Supports financial markets and regulatory reporting
  - Low cost, efficient
  - Risk management
- Growing the market
  - Scalability
  - Credibility
  - Transparency

# The Role of Environmental Registries



# Markit's Registry Landing Page



Registry

Home | Environmental | Equities | Fixed Income | Processing | Commentary

Logged in as: ufe.user2  
Profile | He

Home | All Units | Projects/Issuances | RFI Listing | User Admin

Registry > Home

v 0.8.4

Welcome to Markit Environmental Registry

### Current User

ufe.user2  
ufe.user2@markit.com  
 Request New User

### Accounts

- New Open
- Barclays Bank Plc**  
Sub Account  
Active
  - EcoSecurities Internationa**  
Master Account  
Active
  - Nik's Test Account 1**  
Sub Account  
Pending Review (Markit)

### Credit Summary

Standard	Class	Issuances	Holdings	Retirements
<b>Account: Barclays Bank Plc (1 Item)</b>				
Voluntary Carbon Standard		5,600	5,600	611,100
		<b>5,600</b>	<b>5,600</b>	<b>611,100</b>
<b>Account: EcoSecurities International Limited (1 Item)</b>				
Voluntary Carbon Standard		44,744	68,190	71,664
		<b>44,744</b>	<b>68,190</b>	<b>71,664</b>

### Notifications

- | Date                     | Subject   |
|--------------------------|---|
| <b>Date: 02 Aug 2010</b> |   |
|                          | Project status change<br>Project "sukanya test" has ch    |
|                          | Project status change<br>Project "sukanya test" has ch    |
|                          | Project status change<br>Project "Sukanya's project2" t   |
| <b>Date: 01 Aug 2010</b> |   |
|                          | Issuance status change<br>Issuance for project "A test pi |
|                          | Project status change<br>Project "A test project 11" has  |

Page 1 of 1





# Service Provision Options

# Choices: Nature of Service Provision

	Benefits	Disadvantages
<b>Outsourced</b>	<ul style="list-style-type: none"> <li>▪ Fully contracted accountable provider</li> <li>▪ Speed to market</li> <li>▪ Leverage experienced provider</li> <li>▪ Permits governments to focus on policy</li> <li>▪ Government still have oversight and regulation</li> </ul>	<ul style="list-style-type: none"> <li>▪ No in-house management (lowest cost)</li> <li>▪ No asset ownership</li> </ul>
<b>Licensed</b>	<ul style="list-style-type: none"> <li>▪ Single Proven Infrastructure</li> <li>▪ Speed to market</li> <li>▪ Leverage experienced provider</li> <li>▪ Government registry operation, oversight and regulation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Annual licensing and maintenance fees (moderate costs)</li> <li>▪ Operational training</li> <li>▪ In-house management</li> </ul>
<b>Inhouse Development by Government</b>	<ul style="list-style-type: none"> <li>▪ Single infrastructure</li> <li>▪ In-house management</li> <li>▪ Technology asset ownership</li> <li>▪ Government oversight and regulation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Software development and hardware costs (most expensive)</li> <li>▪ Need to set up and manage rules and processes</li> <li>▪ Resource requirements in-house</li> <li>▪ Operational process development and training</li> <li>▪ Slow speed to market</li> <li>▪ Unproven technology implementation</li> </ul>

# Disclaimer

Opinions, estimates and projections in this report constitute the current judgment of the author(s) at the time of writing. They do not necessarily reflect the opinions of Markit Group Limited. Markit Group Limited has no obligation to update, modify or amend this report or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate.

The content, information and any materials (“data”) provided by Markit in this presentation is on an “as is” basis. Markit Group makes no warranty, expressed or implied, as to its accuracy, completeness or timeliness, or as to the results to be obtained by recipients, and shall not in any way be liable to any recipient for any inaccuracies, errors or omissions herein. Without limiting the foregoing, Markit Group shall have no liability whatsoever to a recipient of this report, whether in contract (including under an indemnity), in tort (including negligence), under a warranty, under statute or otherwise, in respect of any loss or damage suffered by such recipient as a result of or in connection with any opinions, recommendations, forecasts, judgements, or any other conclusions, or any course of action determined, by it or any third party, whether or not based on the content, information or materials contained herein.

Copyright © 2010, Markit Group Limited. All rights reserved. Any unauthorised use, disclosure, reproduction or dissemination, in full or in part, in any media or by any means, without the prior written permission of Markit Group Limited is strictly prohibited.