

Emissions trading: from the voluntary market to the compliance market

Kyle Danish
Van Ness Feldman, P.C.

Air Quality Regulation in the Northwest
Seattle, Washington
October 15, 2007

Overview

- Understanding emissions trading
- The current market
 - Regulatory carbon markets
 - Voluntary carbon markets
- Issues and options

Emissions trading basics

- Climate change
 - The atmosphere is indifferent to where GHG emissions are reduced
 - The wallet is not
- Emissions trading
 - Ensures emission reductions are made by those with lowest cost opportunities
- Two types of trading
 - Cap-and-trade
 - Project-based or offset trading

3

VanNess
Feldman

Cap-and-trade

- Impose emissions cap on group of facilities
- Distribute allowances equal to the cap
 - Each allowance is a right to emit one ton
- Facilities must submit allowance for each ton emitted
- High cost facilities can buy allowances from low cost facilities
- Outcome: cap achieved through lowest cost distribution of reduction activities
- Examples:
 - Clean Air Act Acid Rain Program (power plants)
 - European Union Emissions Trading Scheme
 - *Western Regional Climate Action Initiative*
 - *Future Federal Program*

4

VanNess
Feldman

But a cap doesn't work for everyone

- Facilities without easily monitored emissions
 - Landfills
 - Coal mine methane
 - Forests
 - Natural gas pipelines
 - Farms
- Political issues
 - Developing countries under the Kyoto Protocol
- Options
 - No regulation
 - Direct command-and-control regulation
 - ***Project-based emissions trading***

5

VanNess
Feldman

Project-based trading basics

- Investor and project host
- Demonstrate that the project achieve reductions “additional” to business-as-usual:
 - Reductions not otherwise required
 - Emissions below a standard
- Third-party verification
- Investor can use verified reductions on equal terms as allowances
- Example:
 - Kyoto Protocol Clean Development Mechanism
 - Future US state, regional, and Federal programs?

6

VanNess
Feldman

Current and future markets

- Current markets
 - Kyoto markets
 - European Union Emissions Trading Scheme
 - \$24.3 billion in 2006
 - Clean Development Mechanism
 - \$4.8 billion in 2006
 - Voluntary market
 - \$54 million in 2006
- Future markets?
 - Federal US cap-and-trade program expected to result in:
 - Primary demand of 260 mtCO₂ – 1.215 mtCO₂/yr
 - **Transactions worth \$10billion - \$50billion in 2015**

Sources:

The World Bank, State and Trends of the Carbon Market 2007 (May 2007)

New Carbon Finance, "North America and Global Carbon Market" (June 2007)

7

VanNess
Feldman

The global VER market

- Total global market in 2006 = 23.7 mtCO₂ \$91 million
- Who are the buyers?
 - Corporate social responsibility buyers
 - Meeting commitments to go "carbon neutral"
 - Retail buyers
 - Websites allowing for offsets for travel
 - Pre-compliance buyers
 - Hedging future compliance risk
- The US share of the global voluntary carbon market today
 - Global over-the-counter market = 13.4 mtCO₂ (\$54.9 million)
 - 43% sourced in North America
 - Chicago Climate Exchange = 10.3 mtCO₂ (\$36.1 million)
 - Already 3.3 mtCO₂ transacted in July 2007
 - 68% of voluntary market customers in United States

Sources:

New Carbon Finance, "North America and Global Carbon Market" (June 2007)

Ecosystem Marketplace & New Carbon Finance, "State of the Voluntary Carbon Markets 2007: Picking Up Steam" (17 July 2007)

8

VanNess
Feldman

Enhanced scrutiny of the VER market

- Press:
 - "6 Inconvenient Truths About Carbon Offsets," *Kiplinger's Personal Finance* (October 2007)
 - "Cost of Saving the Climate Meets Real-World Hurdles," *Washington Post* (August 16, 2007)
 - "The Baffling Menu of Emissions-Offset Options," *Economist* (August 15, 2007)
 - "Another Inconvenient Truth," *BusinessWeek* (March 26, 2007)
 - "Beware the Carbon Offsetting Cowboys," *Financial Times* (April 26, 2006)
- FTC to study offset market
 - Possibly update "Green Guides" on environmental marketing
- Results
 - A new phase → flight to quality

9

VanNess
Feldman

The US VER market presents opportunities and challenges

- Opportunities
 - Mobilizes capital to finance reductions that would not otherwise occur
 - Buyers can acquire low/discounted VERs → **credit for early action**
- Uncertainties in an unregulated market
 - What is being transacted?
 - What is the right standard?
 - What constitutes delivery?
 - What establishes ownership?
 - What is the right price?
- ***These types of uncertainties do not exist in a regulatory/compliance market.***

10

VanNess
Feldman

Efforts to bring standardization

- Standards
 - Voluntary Carbon Standard
 - Green-E
 - Gold Standard
 - World Resources Institute
- Registries
 - The Climate Registry

11

VanNess
Feldman

What the VER market may mean for your client

- Motivations to participate
 - Corporate commitments
 - Hedging future regulatory risk
 - Gaining experience
 - Monetizing reductions
- Cautions
 - Make use of standards, credible 3rd party verifiers
 - Transparency to the public
 - *Contract carefully*

12

VanNess
Feldman

For more information, please contact:

Kyle Danish

kwd@vnf.com

(202) 298-1876

Van Ness Feldman

MARKET SURVEY 2006

Environmental
Finance

PUBLICATIONS

One of two law firms recognized in each of the following categories:

* *GHG Emissions* (North American Markets): "Best Law Firm"

* *All Emissions* (North American Markets): "Best Law Firm"