

Carbon Trading – The Role of Building Energy Performance

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Carbon Cap & Trade

Modeled on U.S. Acid Rain Program (1990)

- + Limit Established for Emissions**
- + Caps Allocated Among Major Emitters**
- + Trade Market Established – Options:**
 - Reduce Emissions to Meet Cap**
 - Buy Credits From Cleaner Companies**
 - Bank Credits if in Future Surpass Cap**

Carbon Cap & Trade

**Once Companies are Forced to Pay to
Emit Pollution the Emission Savings
Becomes a Commodity Worth Millions**

Carbon Cap & Trade

Potential Size of Market

“Global Market Worth \$1 Trillion in the First Five Years Alone”

James Smith, Chairman, Shell Oil

Carbon Cap & Trade

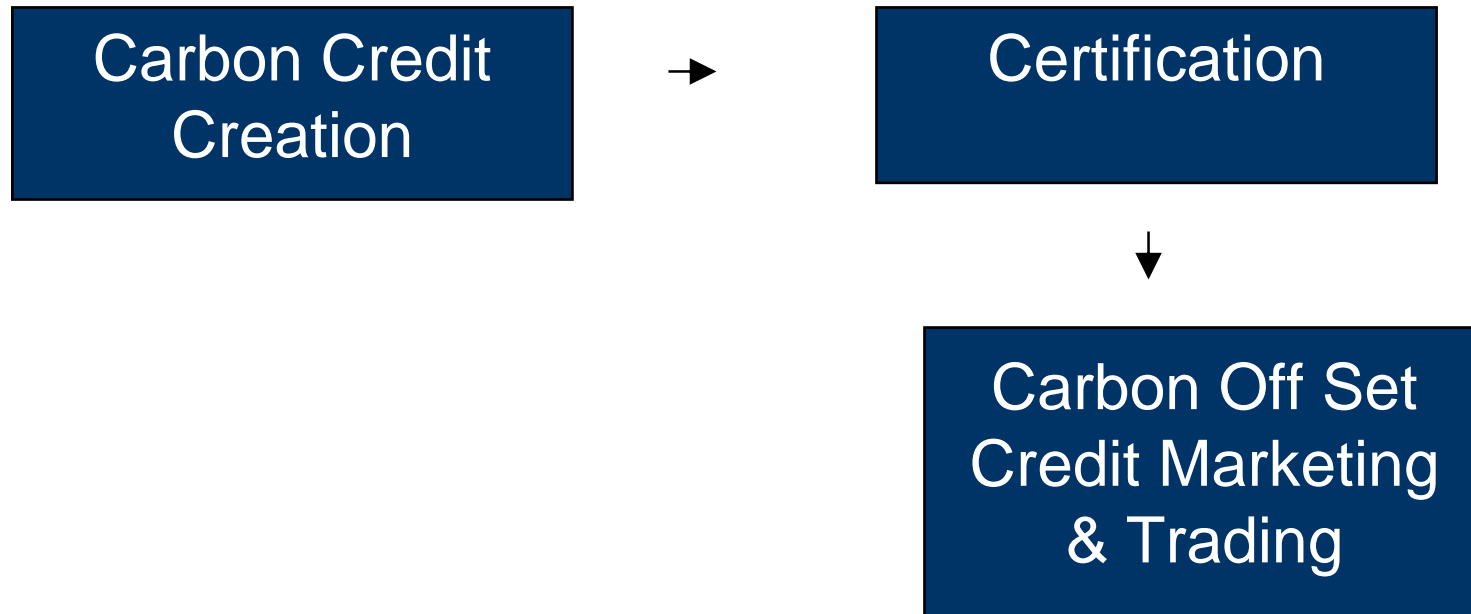
Created by Kyoto Protocol

**European Union Taken Lead in Develop
Carbon Cap and Trade Market**

In EU a Total of \$8 Billion Traded in 2005

European Climate Exchange, 2006

Kyoto Cap and Trade Framework



U.S. Current Carbon Market Voluntary

Chicago Climate Exchange

Only Binding Carbon Emissions Market in North America

Almost 200 Companies Voluntarily Buy and Sell Carbon Offset Credits

Ford Motor Company

IBM

DuPont

Amtrak



**The 2007 RESNET Building
Performance Conference is
100% Carbon Neutral Courtesy
of Carbon Emission Credits
from Native Energy**

U.S. Carbon Voluntary Offset Market

Market is experiencing significant growth as companies not subject to caps decide voluntarily to offset their emissions

Los Angeles Times Projects That US Market for Carbon Offsets Will Reach \$40 Billion by End of Next Decade

Associated Press Reported in 2006 the Carbon Offsets Traded in the Chicago Climate Exchange Increased by 1,425%

Comparison of EU Mandatory and U.S. Voluntary Carbon Markets

Value Per Metric Ton of Carbon

**EU Emission Trading
Scheme**

\$27.44

**Chicago Climate
Exchange**

\$1.70

U.S. Carbon Cap & Trade

State and Regional Government Mandated Initiatives

Northeast Regional Greenhouse Gas Initiative (REGI)

California – 25% Reduction Over Next 2 Decades

Oregon Climate Trust – Offsets New Power Plant Emissions Through Proposal Process Funding Efficiency Projects

Action on Creating Federal Carbon Cap and Trade Legislation

U.S. Climate Action Partnership

Alcoa, Inc.

BP America

Duke Energy

DuPont

Florida Power & Light

General Electric

Lehman Brothers

Pacific Gas & Electric

www.us-cap.org

Action on Creating Federal Carbon Cap and Trade Legislation

Congressional Action

Five Bills Introduced in Senate

Speaker Nancy Pelosi Set Climate Change Legislation as Top Priority – Created Select Panel to Craft the House Agenda on Energy and Climate change – Plan Due July 4, 2007

Action on Creating Federal Carbon Cap and Trade Legislation

Presidential Candidates

Candidates Proposing Climate Change Initiatives

Joseph Biden – D

Sam Brownback – R

Hillary Clinton – D

John McCain - R

John Edwards - D

Barak Obama – D

Bill Richardson - D

What Has to Do With Building Performance?

Buildings Produce 39% of U.S. Carbon Emissions

Residential – 21%

Commercial – 18%

Industrial – 28%

Transportation – 33%

Improved Building Performance is Low Hanging Fruit in Carbon Offset Market

Opportunities to Rating Industry

- + Already Home Energy Ratings Recognized by Mortgage Industry, DOE, EPA, and IRS**
- + RESNET Standards Solid Foundation for Establishing Metrics for Calculating and Certifying Building Emission Savings as Basis for Emissions Trading**

Carbon Cap & Trade

Once Companies are Forced to Pay to Emit Pollution the Emission Savings Becomes a Commodity Worth Millions

If Make Improved Building Performance a Recognized Off Set – Building Performance Would be Low Hanging Fruit of Carbon Off Set Market

Why Monetizing Energy and Pollution Savings is Important to the Path to Low Emission Buildings

Addresses “First Cost” Barrier

The barrier can be reduced if the consumer can access long-term, no-down-payment, affordable interest financing or if a third party finances the upgrades in order to have title to the monetized energy and pollution savings to trade in the open market

Why Monetizing Energy and Pollution Savings is Important to the Path to Low Emission Buildings

Economic Potential

If *LA Times* prediction of \$40 carbon market by end of next decade & able to capture same % of residential carbon production - it would equate to:

\$8.4 billion annual investment in U.S. in home energy performance improvements

Carbon Offsets

“There’s gold in them there hills”

Gabby Hayes

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- + Rater - \$200

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