SLIDES: The CDM Carbon Market and the Upcoming U.S. Market

Evan A. Evans

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The CDM CARBON MARKET and the UPCOMING US MARKET

Econergy International Corporation

NRLC Climate Change and the American West Conference
June 8, 2006
Econergy’s Three Divisions

Consulting
Fee-based consultancy work providing engineering and financial expertise in the domains of renewable energy, greenhouse gas emissions management, and strategic planning.

Carbon Credits
Origination, development and monetization of Carbon Offsets (also known as Certified Emissions Reductions “CERs”) from projects eligible for the Clean Development Mechanism (“CDM”) of the Kyoto Protocol, where Econergy acts for its own account and for third-party project developers.

Project Investment & Development
Direct equity investment in renewable power and renewable fuels projects.
Carbon Brokerage

Leading carbon project developer and advisor to the carbon credit market with a portfolio of more than 17 million metric tonnes of CO2 offsets

22 projects registered by the UNFCCC

Numerous others submitted to UNFCCC for approval

First organization to submit a CDM methodology to United Nations

Best CDM Project Award at the 2004 Carbon Markets Insights Conference
The Clean Development Mechanism (CDM)
Evolution of the CDM

- Carbon trading modeled on US SOx trading
  - Proved the concept that market mechanisms could be harnessed

- US was leading advocate of CO2 trading
  - Entrepreneurial spirit
  - Belief in market forces

- CDM created under Kyoto Protocol
  - US was a guiding light before withdrawal
    - Market-oriented thinking in process of inventing the CDM
Evolution of the CDM

- After US withdrawal from Kyoto
  - Process of inventing the CDM fell to non-US academics and ministry staff
    - Excessive bureaucracy
    - Extremely high transaction costs
  - Consequently, insufficient supply of CERs
  - To some observers, CDM was a failure
Evolution of the CDM

Despite flaws CDM is important

- Grand experimental platform
  - Valuable field testing
  - Learning while doing
- Providing insights into post-Kyoto
- Can inform design of US trading
Tales from the CDM Trenches
Evidence that CDM is starting to work

- Vale do Rosario, Brazil
- Iguazu, Paraguay
- Ethanol Africa, South Africa
Example: Vale do Rosario Sugarcane Bagasse Power
Leading carbon project developer and advisor to the carbon credit market with a portfolio of more than 17 million metric tonnes of CO2 offsets
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FIRR and KWh/ton of sugarcane

Ex-Rate: US$/R$ = 2.5

FIRR

With CER at US$ 5 per tCO2e
Without CER

Electric energy sold per ton of sugarcane

10% 15% 20% 25% 30% 35%

1990-1997
1998-2000
2001
2002
2003
2004-2007

KWh/Ton
Example: Iguazu Hydro Project

Paraguayan grid is 100% hydro; zero carbon

JBIC wants to finance expansion of Iguazu project

But JBIC won’t finance without CERs
Example: Ethanol Africa
Corn-to-Ethanol

South Africa has large surplus of corn

Developer hired Econergy to ID paths to CERs

Fuel ethanol in Transportation is difficult path to CERs

Ethanol-to-electricity is clear path to CERs but uneconomic

Fuel switch at distillery will produce CERs
The Upcoming US Carbon Market
US Carbon Market

• Not IF but WHEN
  ▪ Regional trading regimes are under development
    ▪ RGGI
    ▪ Left Coast
  ▪ Activities in US Congress
    ▪ Senate
    ▪ House
  ▪ Chicago Climate Exchange
Leverage the CDM

- Valuable lessons-learned
- Take advantage of CDM tools
- Apply American entrepreneurial spirit
- Leverage CDM experiment
  - Market mechanisms that work for USA
- Time is running out!
  - *We must get in the game*
THANK YOU!

Evan A. Evans, VP Engineering
303.473.9007
evans@econergy.com

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