THE ABCs OF CARBON MARKETS

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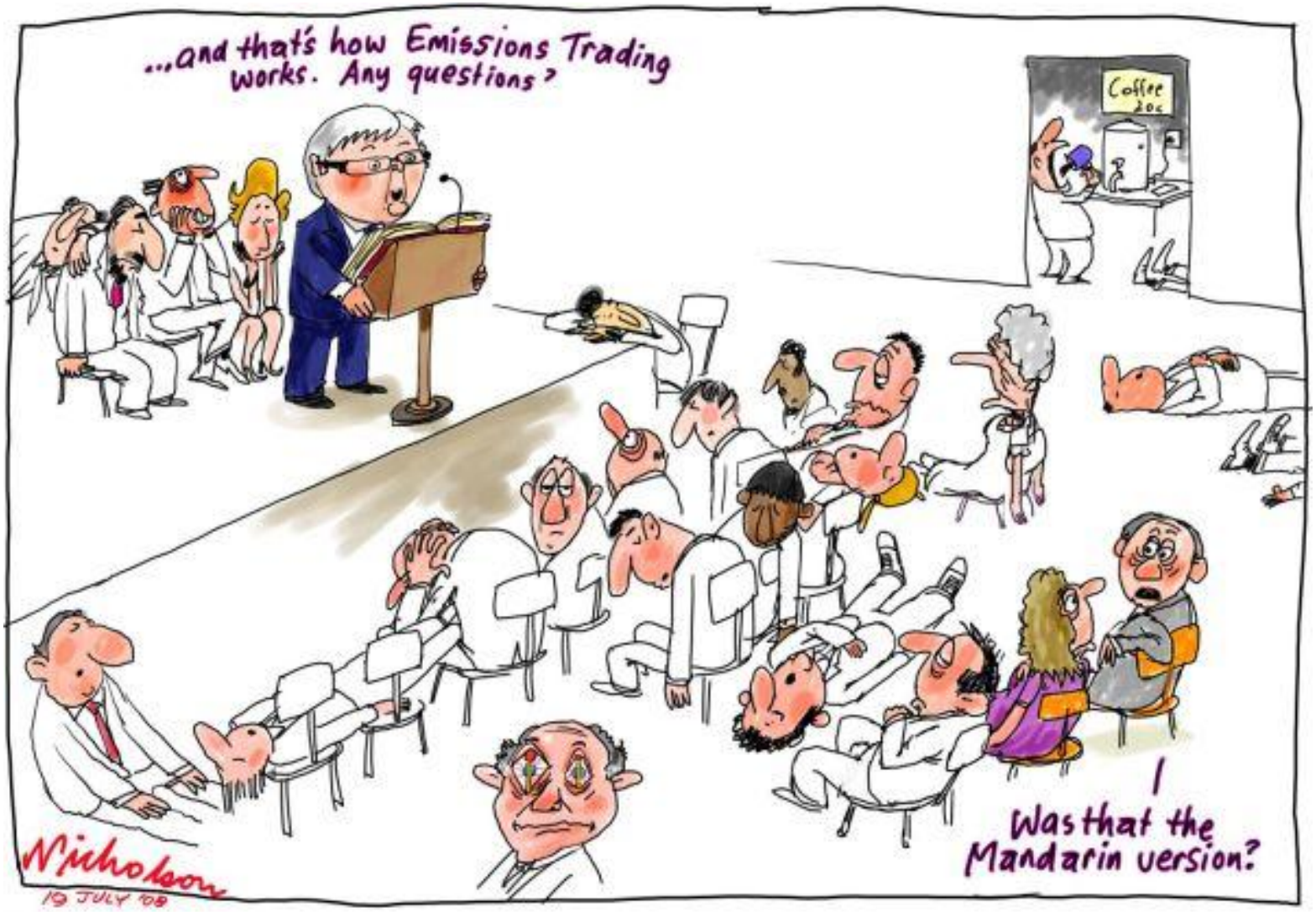
...and that's how Emissions Trading works. Any questions?
Coffee 20c
Was that the Mandarin version?
Nicholson
19 JULY 08

Carbon Offset Credits

This is to certify that Carbon Credits representing

One Tonne of Carbon Dioxide

has been created, and surrendered on behalf of the Certificate Holder under the NSW & ACT Governments' Greenhouse Gas Reduction Scheme by Enviro Friendly Products Pty. Ltd. (www.enviro-friendly.com)

David Payne
Director Enviro Friendly Products Pty. Ltd.

John Payne
Chariman Enviro Friendly Products Pty. Ltd.

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Carbon Allowances v. Carbon Offsets

- Allowances: cap and trade
- Offsets: project driven

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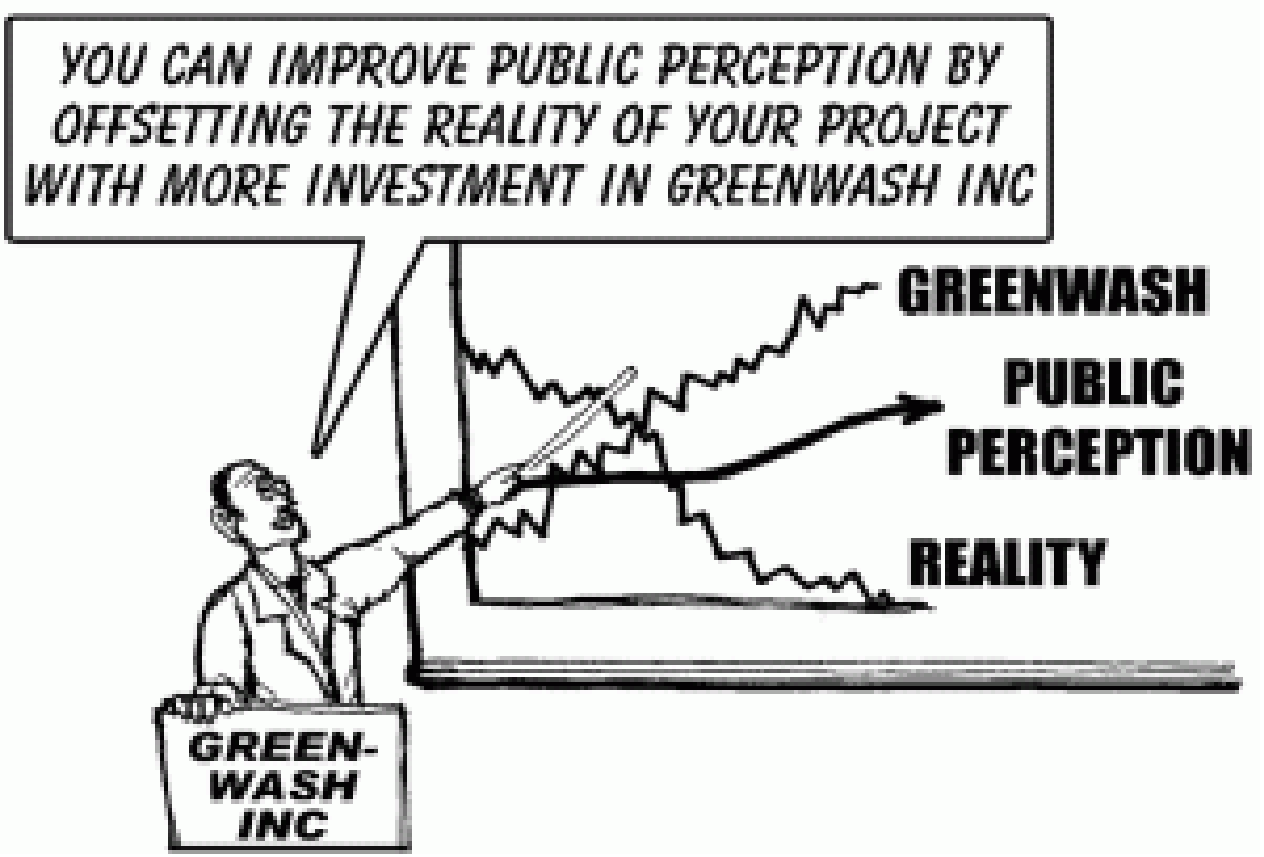
Mandatory v. Voluntary Markets

- Mandatory: EU Scheme, W-M bill
- Voluntary: VCS, CCX?


YOU CAN IMPROVE PUBLIC PERCEPTION BY OFFSETTING THE REALITY OF YOUR PROJECT WITH MORE INVESTMENT IN GREENWASH INC
GREENWASH
PUBLIC PERCEPTION
REALITY
GREEN-WASH INC

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Carbon Tax v. Cap and Trade

- Carbon tax: cost certainty
- Cap and trade: environmental certainty

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Devil (and Angels) is (are) in the Details

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Carbon Offsets v. Renewable Energy Certificates

- Offsets: carbon sequestered or avoided
- RECs: one MW hour from renewable source

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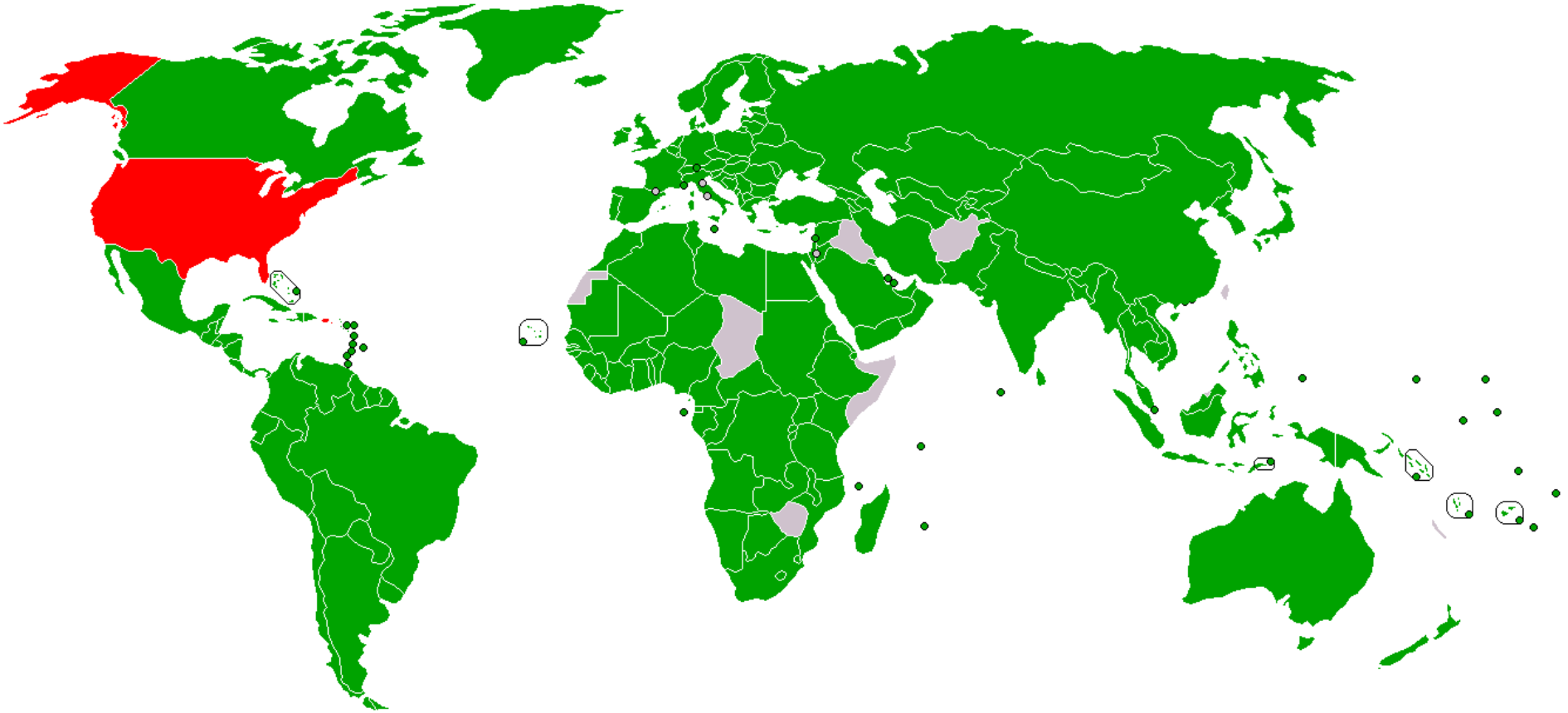
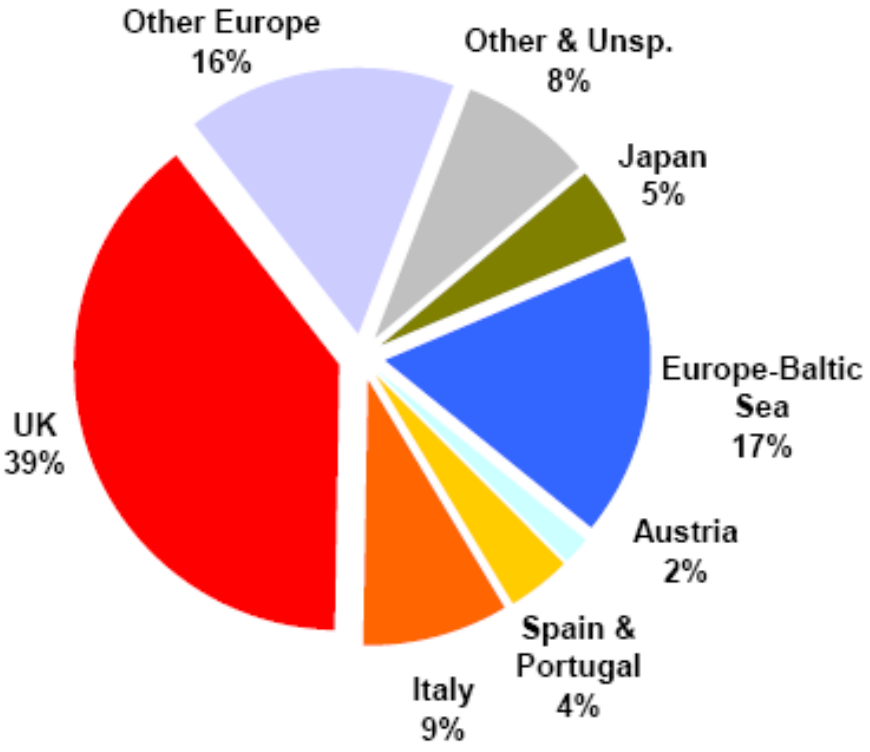
Kyoto Protocol Participation

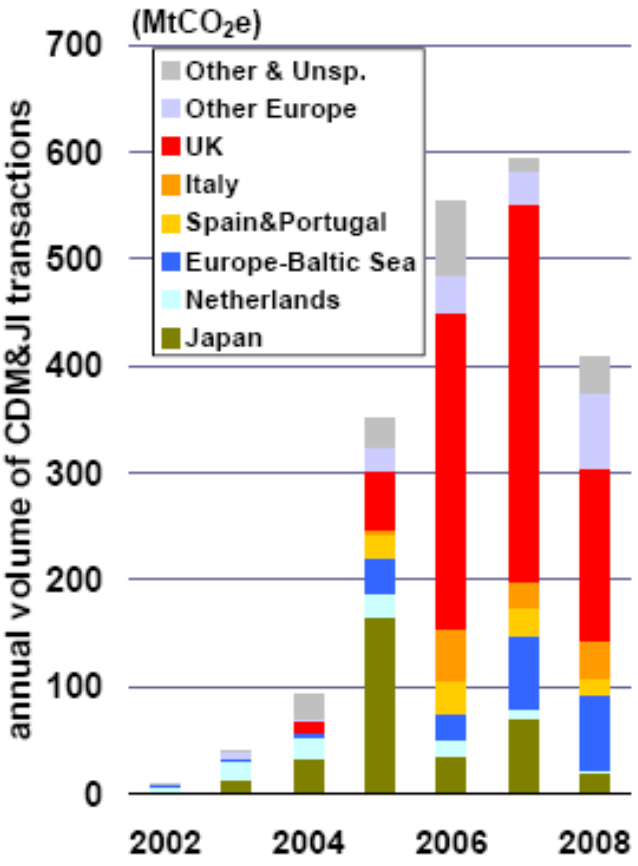



HEY, I CAN'T EVEN THINK OF REDUCING THE SIZE OF MINE UNLESS YOU REDUCE YOURS AS WELL!
WHY THE U.S. KILLED THE KYOTO TREATY

CDM and JI Buyers

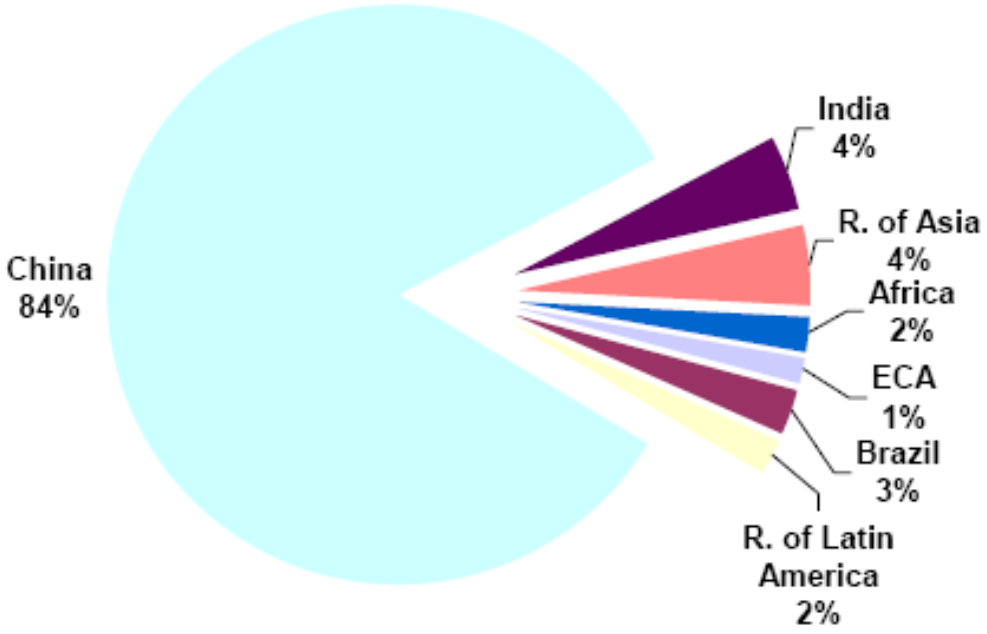


2008
Overall volume 409 $MtCO_2e$

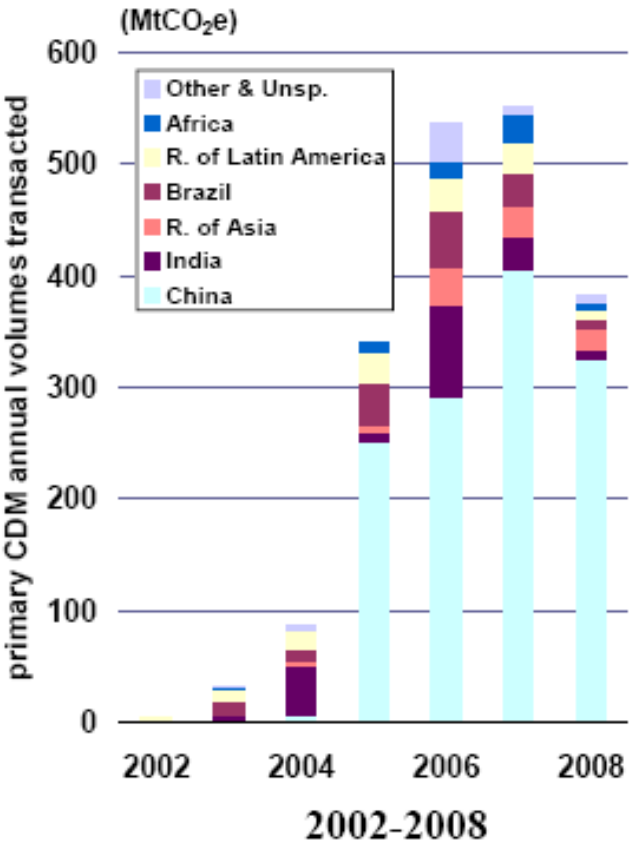


2002-08

Location of CDM Projects



2008
(as a share of volumes supplied)[68]

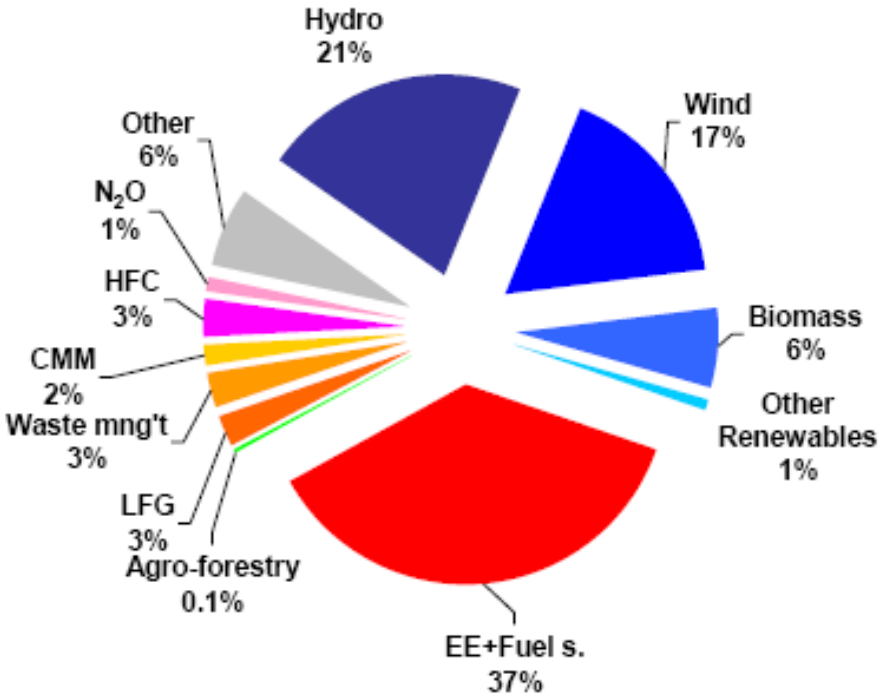


2002-2008

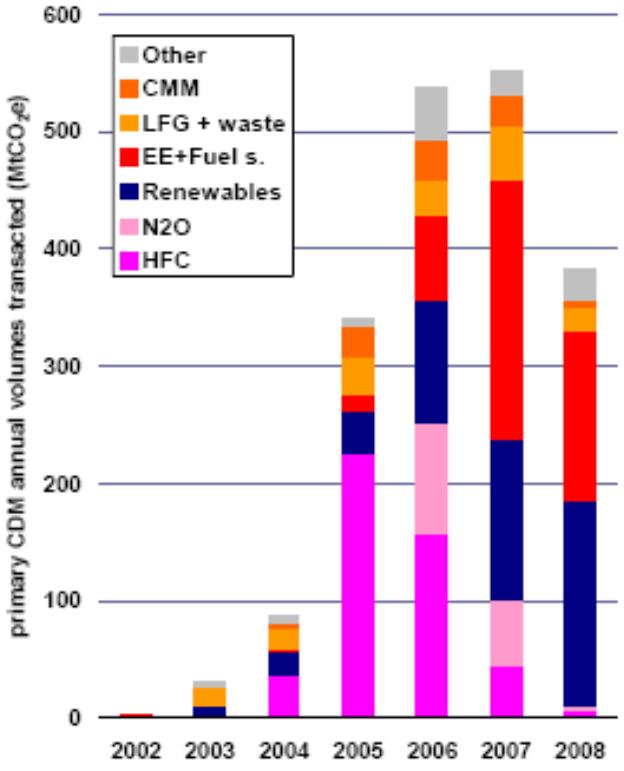

AKRON BEACON JOURNAL ©06
OHIO.COM
HAVE SOME MORE BEANS, BESSY.
GLOBAL WARMING AXIS OF EVIL


503

CDM Project Types



2008
(as a share of volumes supplied)



2002-2008

Kyoto 2012?

"Dreaming of a White Christmas!"

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- Modeled after Kyoto CDM and JI
- Provides protocol and standards for measuring and accounting as well as registration

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- Cap and trade
- Ten States
- Auction system of distribution


ME
VT
NH
NY
MA
CT
RI
PA
NJ
MD
DE

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Chicago Climate Exchange

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EU Emissions Trading Scheme

Table 1: Carbon Market at a Glance, Volumes & Values in 2007-08

	2007		2008	
	Volume ($MtCO_2e$)	Value (MUS$)	Volume ($MtCO_2e$)	Value (MUS$)
Project-based Transactions				
Primary CDM	552	7,433	389	6,519
JI	41	499	20	294
Voluntary market	43	263	54	397
Sub total	**636**	**8,195**	**463**	**7,210**
Secondary CDM				
Sub total	**240**	**5,451**	**1,072**	**26,277**
Allowances Markets				
EU ETS	2,060	49,065	3,093	91,910
New South Wales	25	224	31	183
Chicago Climate Exchange	23	72	69	309
RGGI	na	na	65	246
AAUs	na	na	18	211
Sub total	**2,108**	**49,361**	**3,276**	**92,859**
TOTAL	**2,984**	**63,007**	**4,811**	**126,345**

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Chart 2. Value of the EU ETS according to World Bank

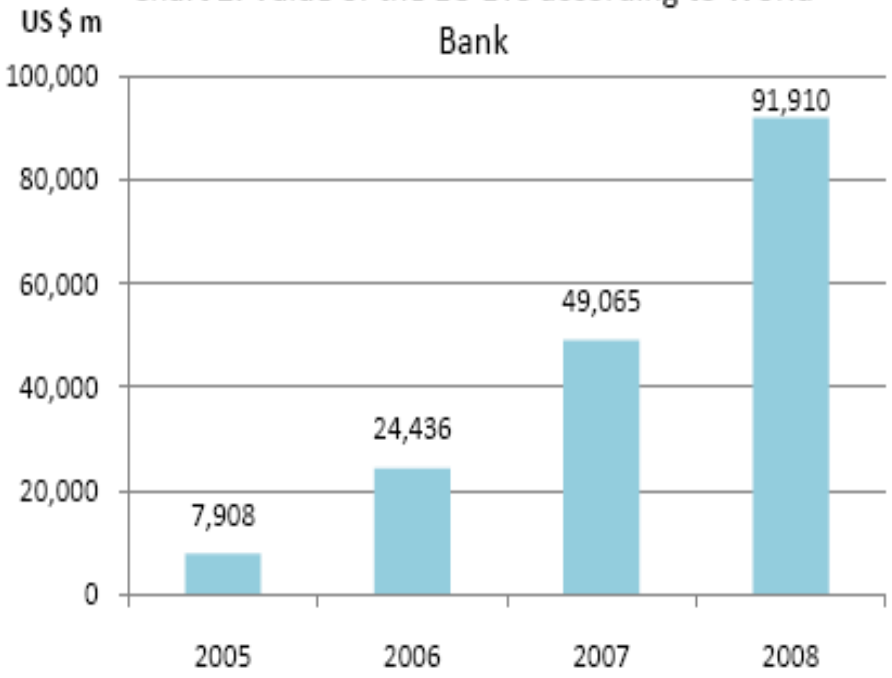


Chart 3. Volume of trading in EU ETS according to World Bank

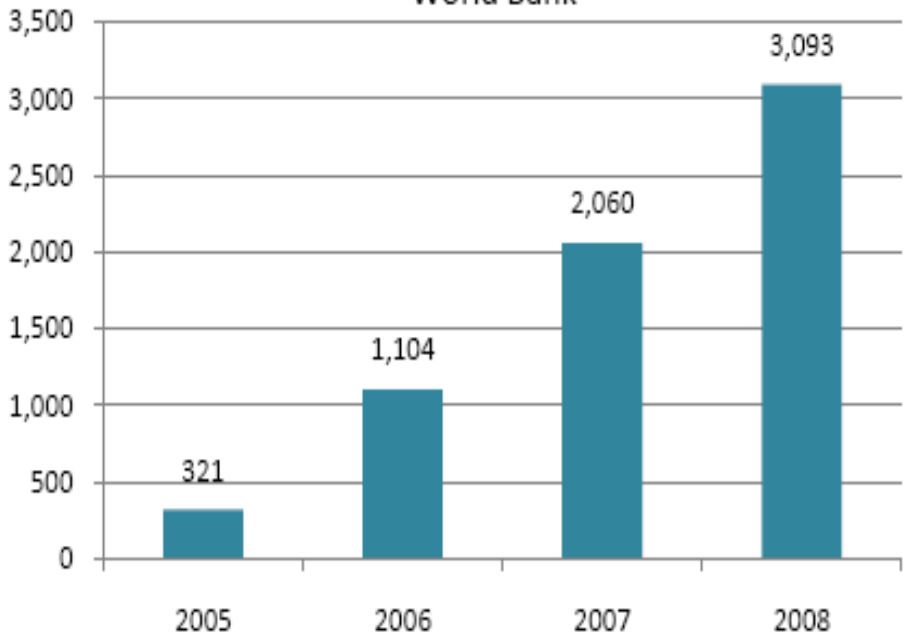
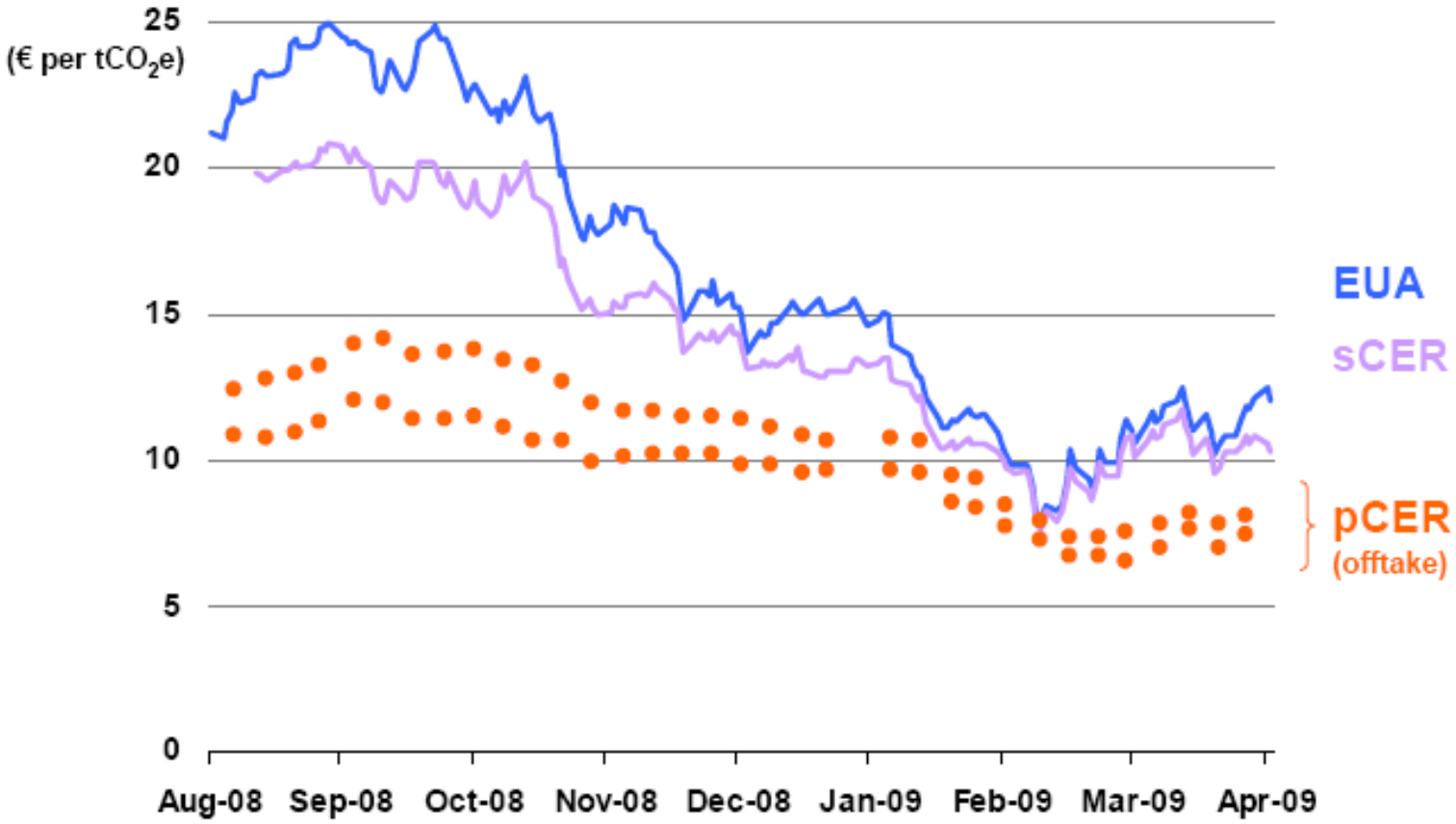


Figure 1: Carbon Prices Respond to the Recession



Source: Spot EUA and sCER (closing price): Bluenext; primary CER (average price for categories b and c): IDEA Carbon.

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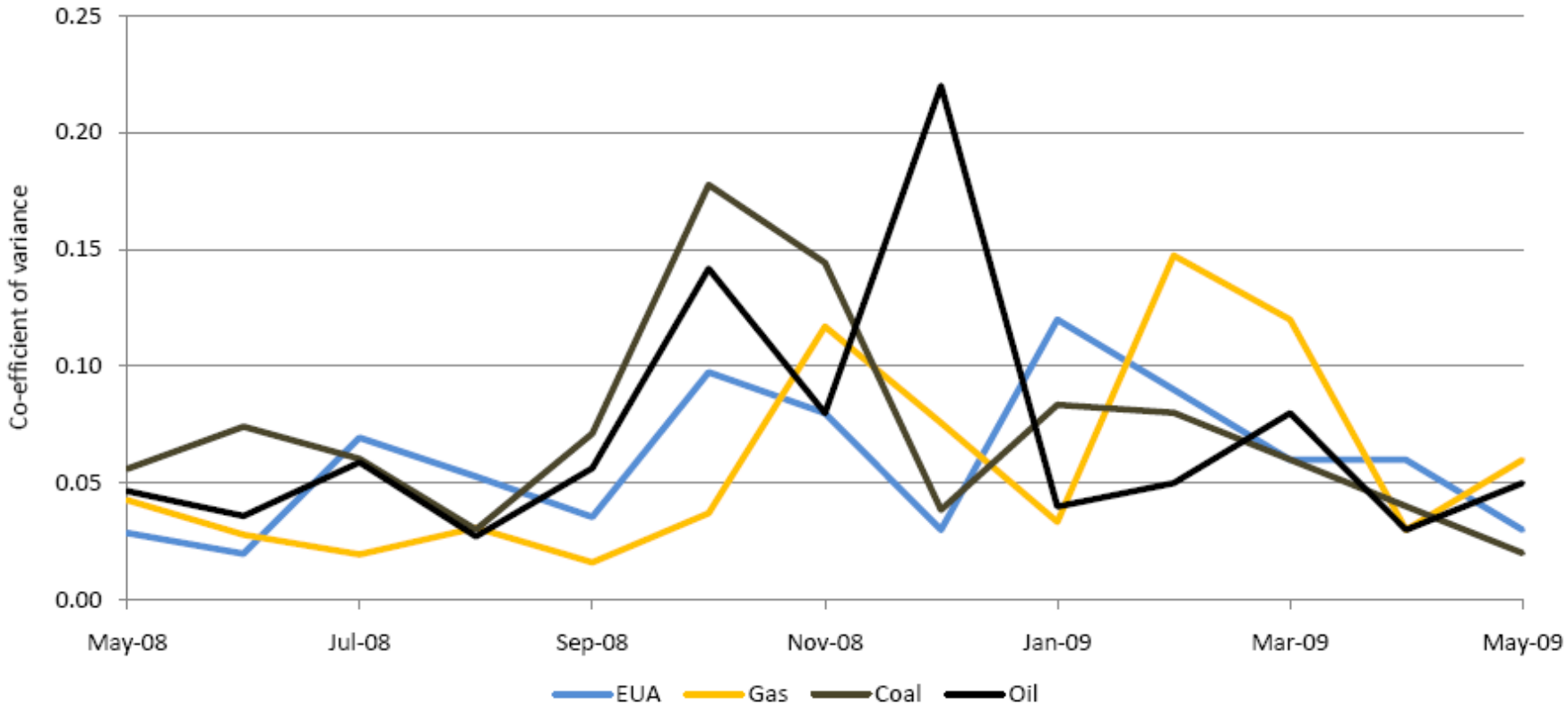
Price Volatility: EUA v. Gas v. Oil



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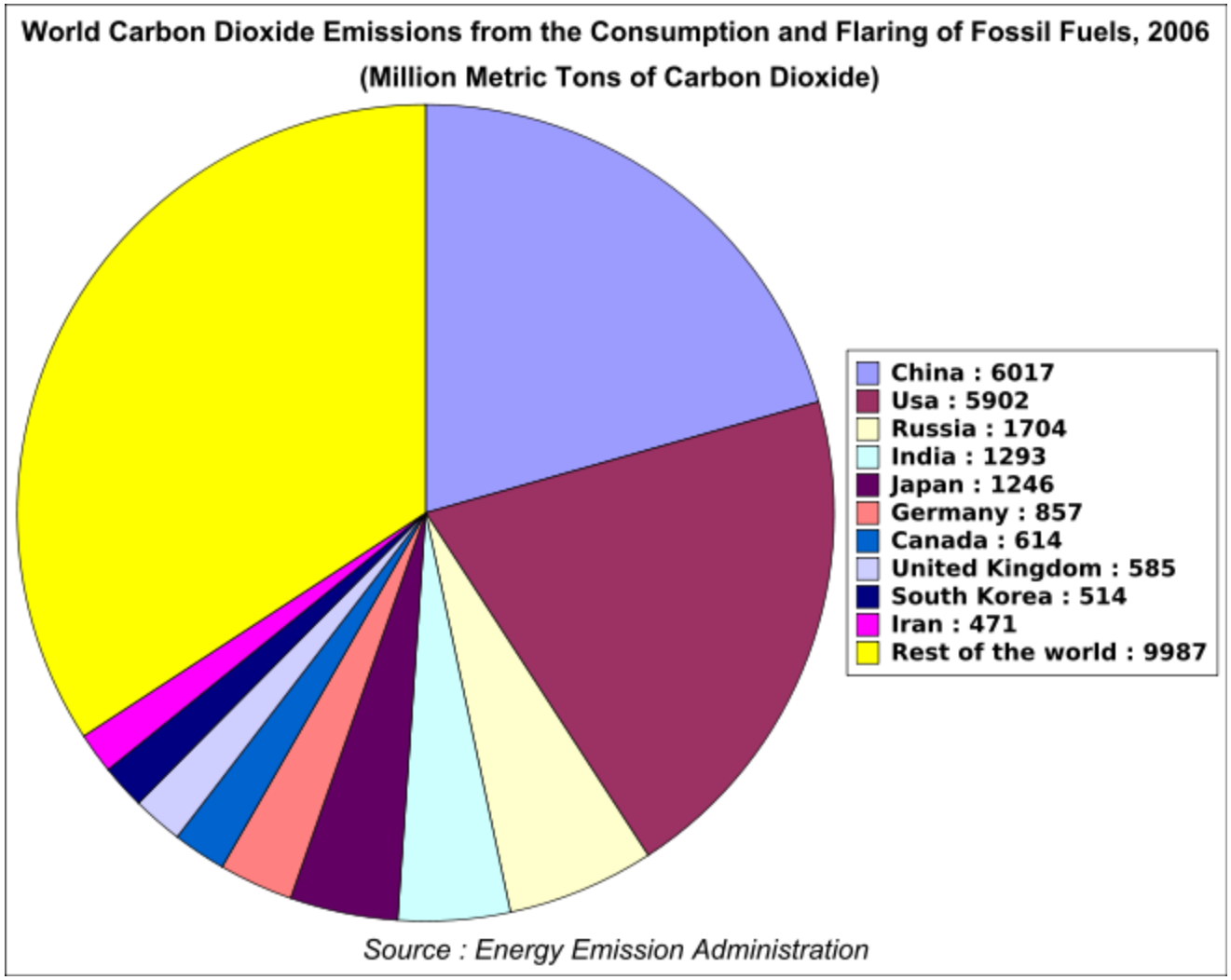

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China v. US v. EU

State	***Population***	***Economy***	***Emissions***
China	20%	10%	21%
U.S.	4.5%	20%	20%
E.U.	7%	22%	13%

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Comparison of Proposed Schemes

Country or region	2020 target	2020 target (ref: 1990 emissions)	2020 target (ref: 2005 emissions)
EU	20% below 1990 levels, scaling up to 30% if international agreement	-20% to -30%	-14% to -25%
Australia	5% below 1990 levels, scaling up to 15%, possibly 25%, if international agreement	+13% to +1%, possibly -11%	-11% to -21%, possibly -30%
Canada	20 % below 2006 levels	-3%	-22%
US	17% below 2005 levels	-4%	-17%
Overall ambition		**-10% to -15%**	**-16% to -21%**

Note: 1990 and 2005 emissions GHGs excluding LULUCF, Source: UNFCCC


Repentance and Redemption
Forgive me, for I have S.U.V.'d
Go thy way. Thy sins are offset.

Ron Barrett

DERIVATIVES

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What is a Derivative?

- A financial instrument whose value is based on an underlying asset, index, event, or condition.
- The underlying asset does not change hands. Only money is exchanged.

Exchange Traded v. Over-the-Counter

- Exchange: intermediary, standardized, highly regulated
- OTC: bilateral, unregulated (for now), subject to counterparty risk

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Why Use Derivatives?

- Speculation
- Hedging

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Types of Derivatives

- Futures
- Forwards
- Options
- Swaps
- Swaptions

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How Might Derivatives Fit in a Carbon Market?

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THE END