

Broker Perspective on Marketing and Selling CDM Deals

Jane Rigby, CO₂e
(A Cantor Fitzgerald Environment Company)
Montreal, March 18 2003





CO2e.com, LLC - launched in November 2000 - aims to be *“the global hub for carbon commerce.”*

CO2e.com is a subsidiary of the Cantor Fitzgerald Group, one of the world’s leading brokerage firms, and was developed in association with PricewaterhouseCoopers, the world’s largest professional services organisation.

Recent Investor in CO2e – Mitsui & Co.

Offices in London, Toronto, Tokyo, New York, San Francisco, Los Angeles, Connecticut, Houston

Developments in the GHG Market

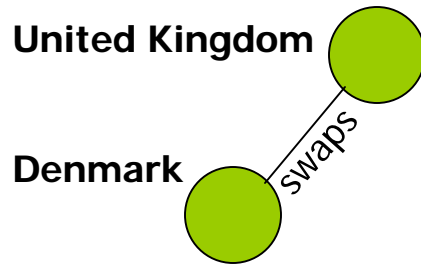


There is no SINGLE carbon market

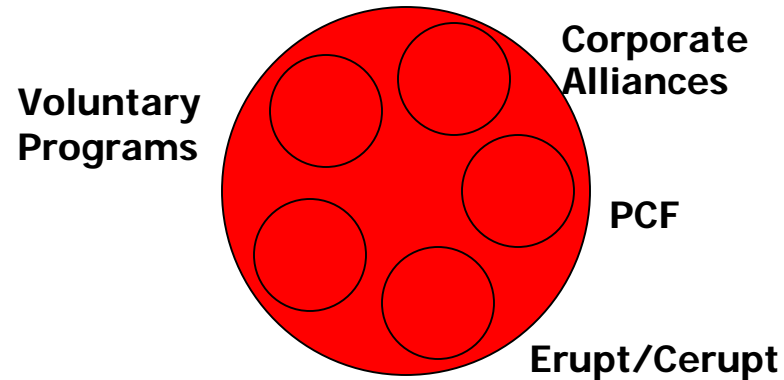
Value is driven by:

- legislation
- the expectation of legislation
- recognition
- product differentiation (quality and risk) and
- public commitments

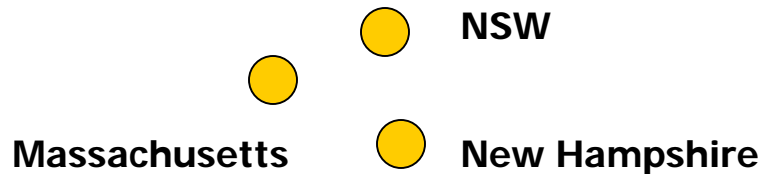
NATIONAL MARKETS



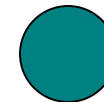
INTERNATIONAL PRE-COMPLIANCE MARKET



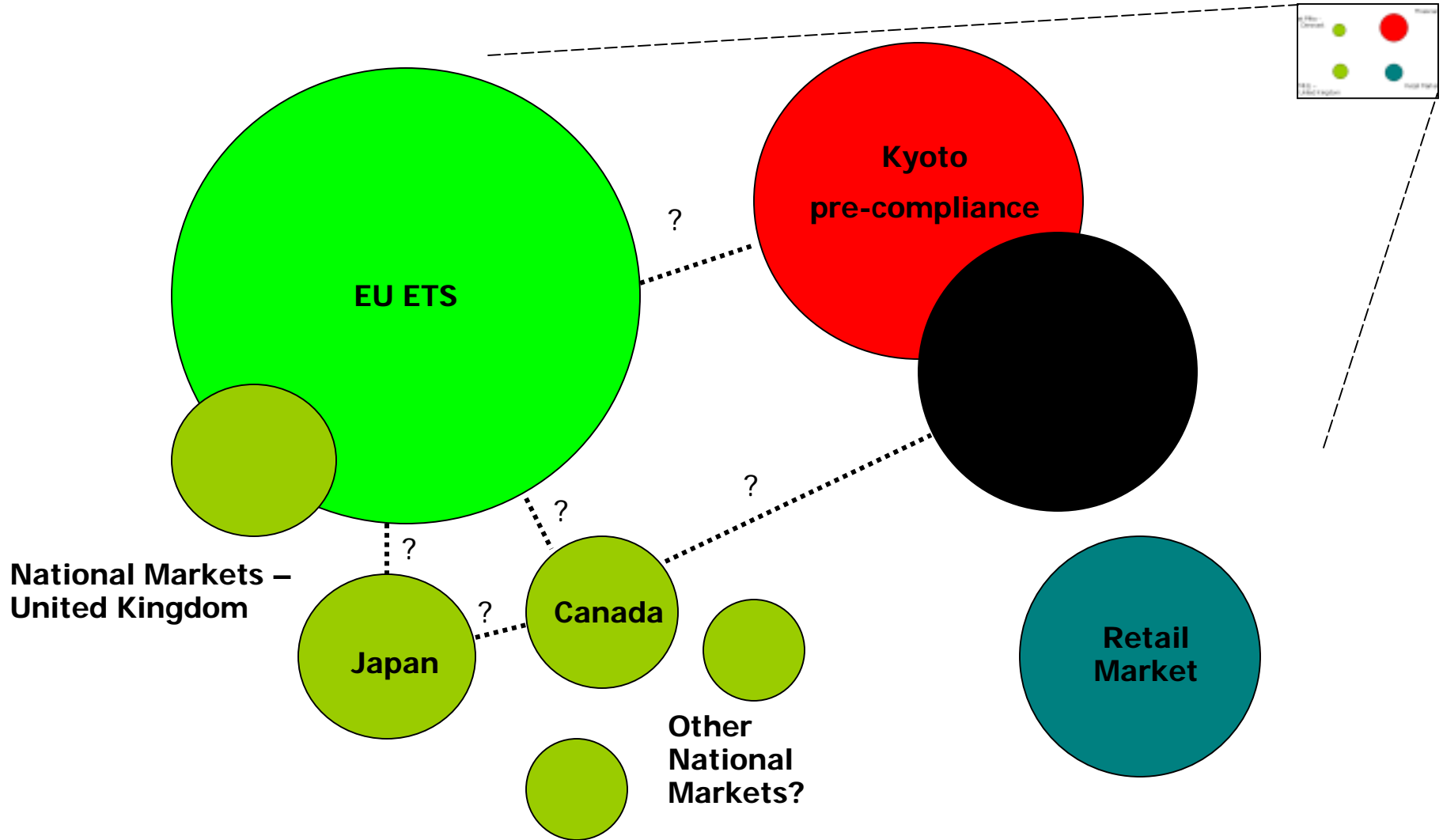
SUB-NATIONAL MARKETS

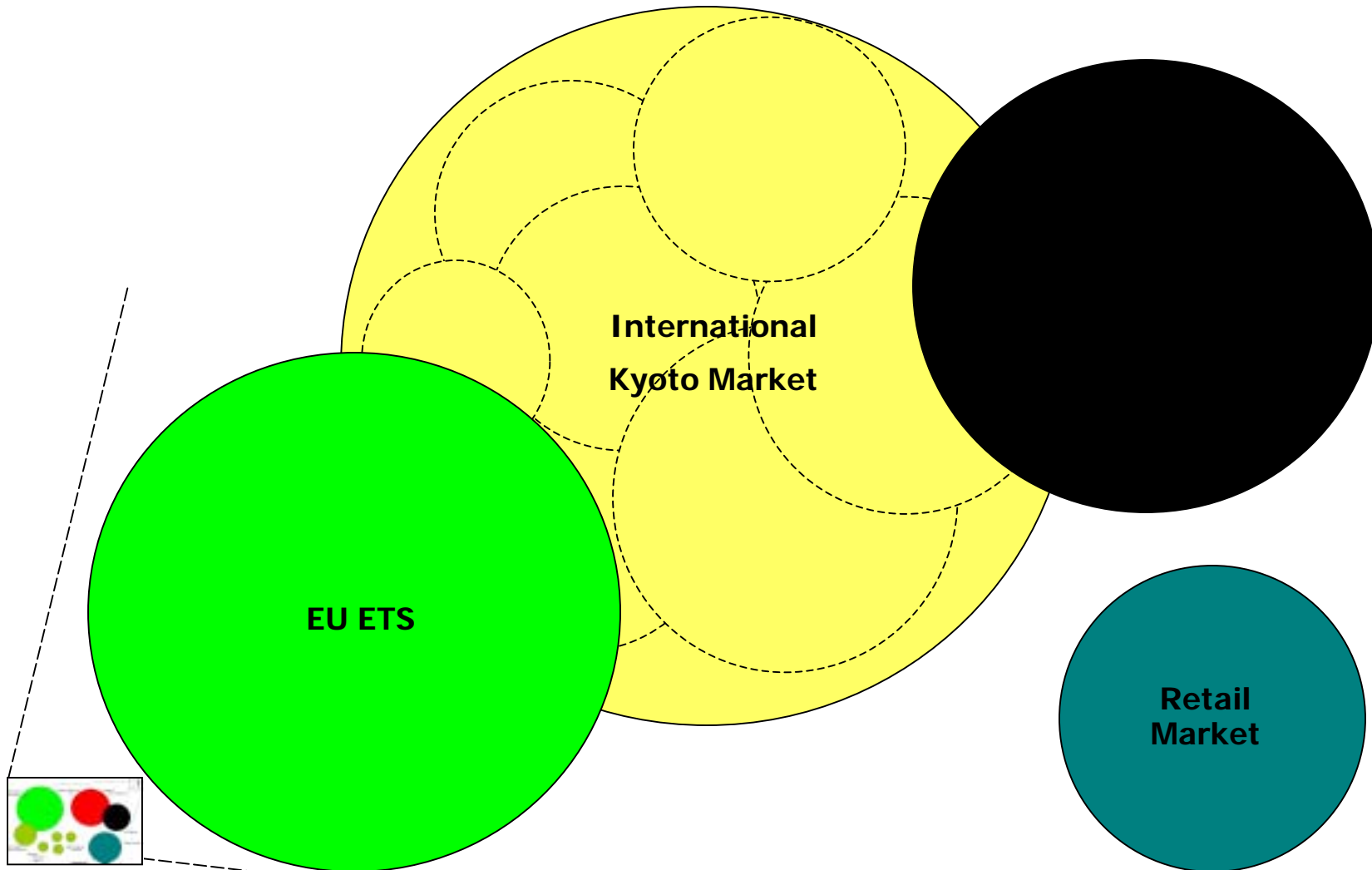


RETAIL MARKET

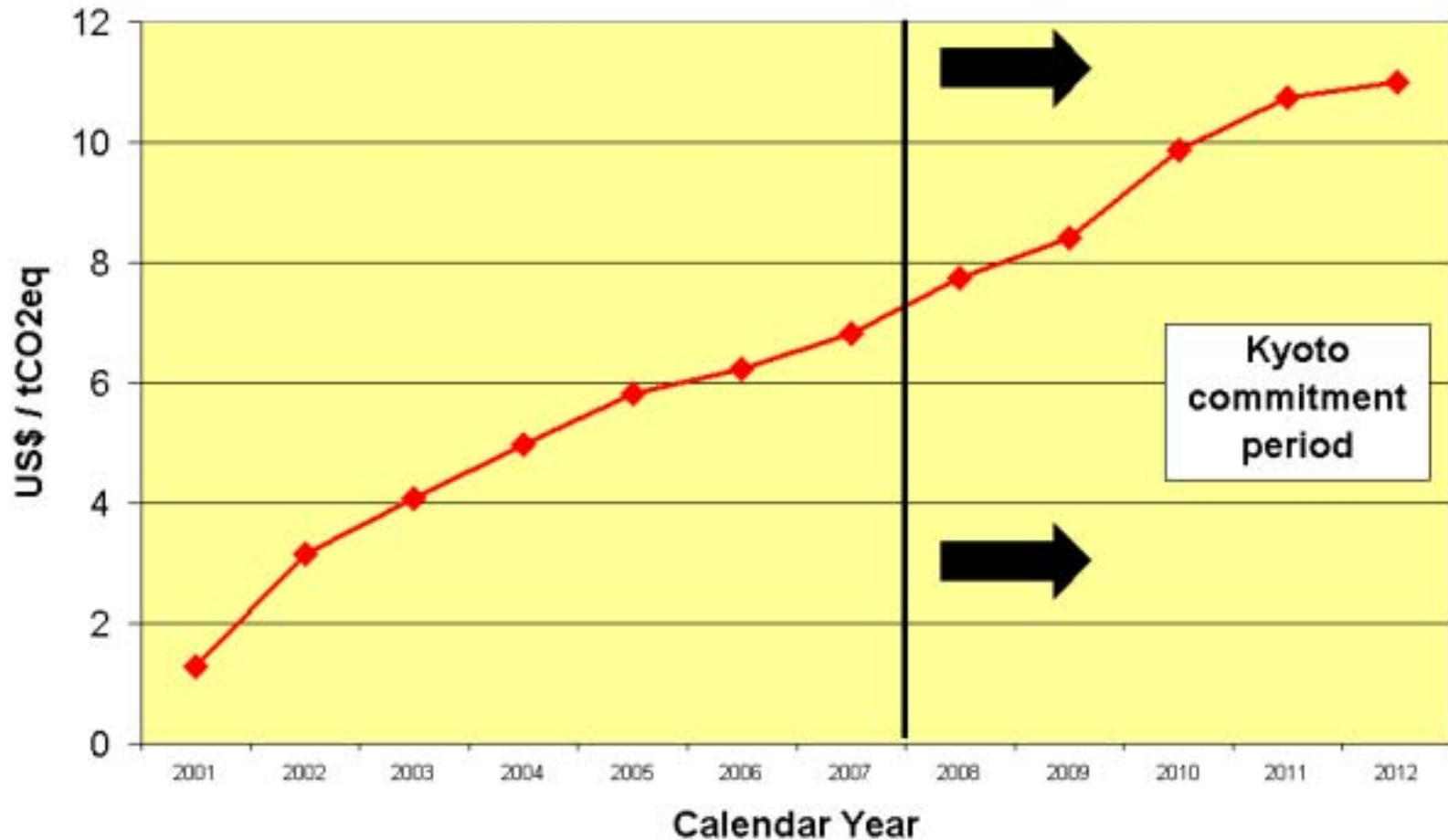


GHG market snapshot – 2006





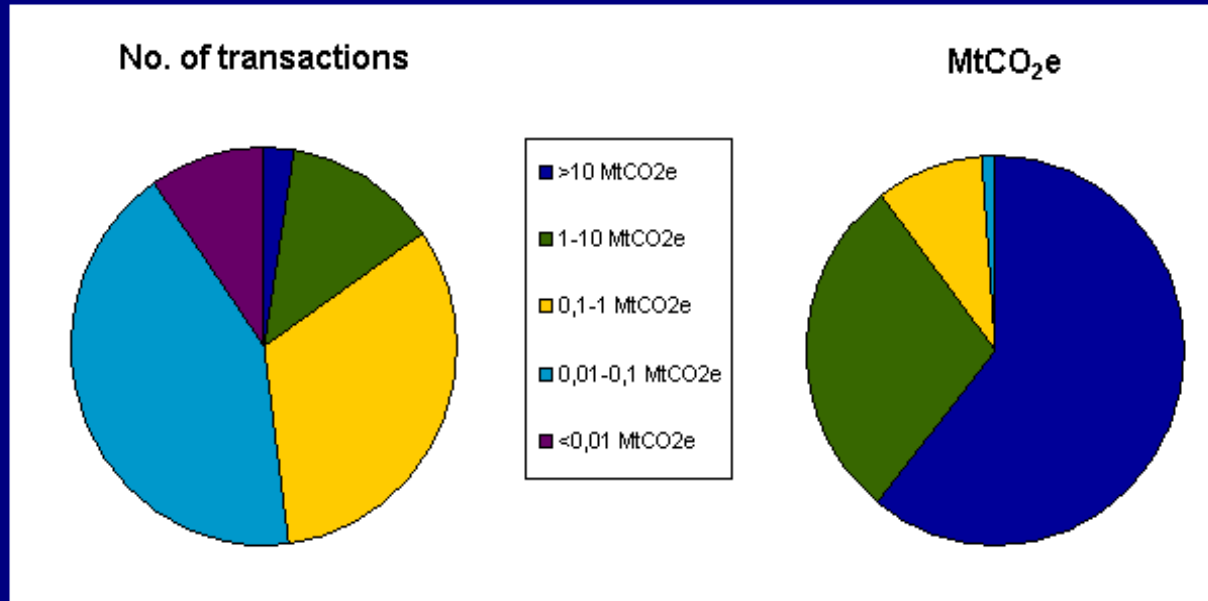
International project-based average offers to sell



The Carbon Market in 2002: Forecasted Volumes and Prices

System	Million tCO₂e	Price USD/tCO₂e
Erupt and Cerupt	12 – 16	4.2 – 5
Prototype Carbon Fund	4.5 – 7.5	3 – 4
UK Market	0.5-0.9	6.0 – 7.5
Denmark	0 - 0.8	4 – 4.6
North America	10 – 30	1 – 3

Size of registered transactions – 1996 - 2002



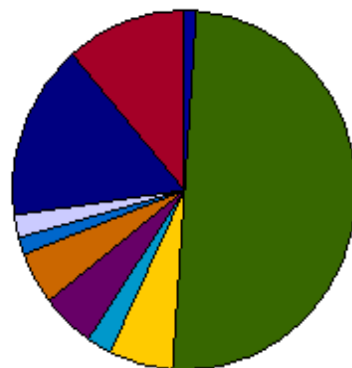
Size	No. of transactions	MtCO ₂ e
>10 MtCO ₂ e	4	118,14
1-10 MtCO ₂ e	18	56,53
0,1-1 MtCO ₂ e	46	17,87
0,01-0,1 MtCO ₂ e	60	2,14
<0,01 MtCO ₂ e	14	0,05
Total	142	194,73



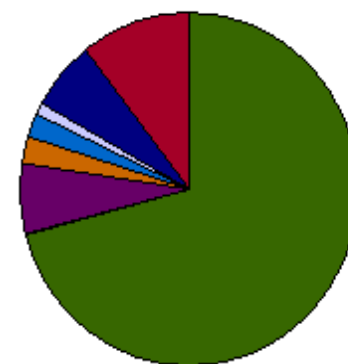
Buyers 1996 - 2002

Country	No.	MtCO ₂ e
Australia	2	0,27
Canada	70	137,02
Denmark	9	0,24
Germany	3	0,16
Japan	7	11,92
Netherland	7	5,10
Norway	2	4,17
PCF	3	2,15
UK	23	12,25
USA	16	20,74
Total	115	185,81

No. of transactions

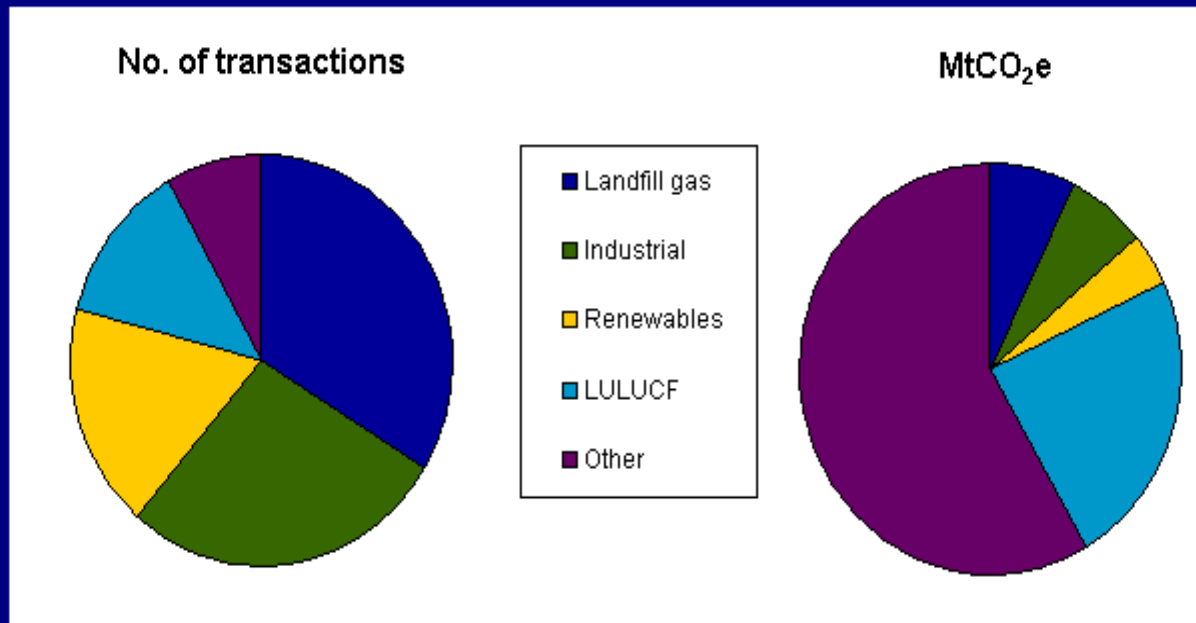


MtCO₂e



PointCarbon
Carbon Price Forecasting

Transactions by project category



Category	No. of transactions	MtCO ₂ e
Landfill gas	34	12,31
Industrial	27	11,27
Renewables	18	6,57
LULUCF	13	38,94
Other	8	96,55
Total	100	165,65



Transactions



- Immediate settlement
- Forward settlement
- Option
- Project investment
- More complex derivative-based structures
- CO₂e – recent experience:
 - 6 million tonne firm forward
 - 3 million tonne option
 - Emissions neutral – “retail” transactions
 - Government of Canada – India, Brazil, South Africa...
 - Emissions Marketing Association
 - 500 ppm travel website
 - Others under negotiation

- Combining forward purchase with option for additional volumes and vintages is common
- In a handful of contracts, an upfront payment is negotiated and sellers repay payment and interest with cash and ERs
- In a few transactions Seller guaranteed delivery of CERs. This guarantee commands a price premium
- In some instances the Buyer may also have significant equity or debt interests in the underlying project
- Deals overwhelmingly from Latin America

- Identify emission reduction project, outline how it meets sustainable development priorities, establish baseline and develop project design document
- **Develop financial pro-formas, obtain loans, PPAs, etc.**
- **Develop offer and proposed Term Sheet with broker**
- Develop measurement protocol/monitoring plan and go through CDM Executive Board Process
- **Negotiate contract (warranties, payment and delivery structure, M&V plan, etc.)**
- Execute Transaction

- Nowhere near commoditization, long negotiating periods
- Policy uncertainty...letters of non-objection
- No standard contracts – warranties, liquidated damages, delivery, payment
- High transaction costs mean demand for larger projects (or bundled smaller projects)

- Understand the goals of your counterparty
- Risk management (political, economic, export criteria) vs. business opportunity
- What “Value” the Carbon asset brings or should bring
- Partners (sometimes external partners from Annex B countries) and sharing of CERs
- Upfront payment vs. payment on delivery
- Patience!

Recent Research – CO₂e & Point Carbon

- Market study for World Bank – overview of recent policy activities, as well as a stratification of the market, including a database of publicly announced transactions, different types of financial instruments (contract types) currently employed in this market, current prices and forecast of future price trends.
- Sub-market analysis of the global greenhouse gas market (international pre-compliance markets, compliance markets, emerging markets).
- Summary of issues and challenges facing the emerging markets.

Jane Rigby
jrigby@co2e.com

416-350-2177

Or simply visit our website at:

www.CO2e.com