

Canadian Forest Service Plantation Investment Forum

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Natsource at a Glance

Natsource's Global Offices

- Europe
 - London
 - Oslo
- Asia
 - Tokyo
- North America
 - Calgary
 - New York
 - Ottawa
 - Washington, D.C

Corporate Focus

- Emissions Markets
- Renewable Energy Markets

Three Business Units

- Asset Management Services
- Transactional Services
- Advisory & Research Services





GHG Emissions Experience

GHG Asset Management:

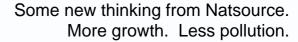
- Development of the Greenhouse Gas-Credit Aggregation Pool (GG-CAP)
- Representation of World Bank Carbon funds and Dexia-FondElec funds in Asia
- Manage account for Fortune 100 Company in North American and UK Markets

Emissions Brokerage and Project Structuring Experience:

- In 2004, brokered over 10 million tonnes of candidate CERs to European & Japanese buyers
- Early pioneer in GHG transactions
 - Brokered the first transactions of U.K., Danish national allowances and first swap
 - In 2000, brokered early transatlantic and transpacific transactions
- In 2002 2004, largest broker in UK ETS & ROCs markets
- A leading broker of US SO2 allowances, NOx allowances and credits, renewable energy certificates (RECs) and renewable obligation certificates (ROCs)

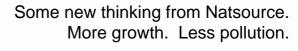
Strategic Services:

- Provide market intelligence, policy expertise and assess risk to assist asset managers, Fortune
 500 multi-national energy and manufacturing firms and governments
- Advisors to developers on project structure
- GHG project screening and portfolio modeling
- Advisors to governments on emissions trading system design
- Staff developed the first project-based mechanism designed to reduce GHG emissions and participated in the negotiations to develop the rules governing the project-based mechanisms in the Kyoto Protocol





- The world's first private-sector mechanism to assist entities manage their compliance with the EU ETS and Kyoto Protocol
- Strategy and benefits
 - Pool large-scale demand to allow for purchase of high-quality, costeffective compliance units
 - Use proprietary model to screen and score projects
 - Utilize risk management techniques to guard against under delivery
 - Acquire a diverse portfolio to achieve a more favorable risk profile
- Currently €98.6 million (approximately US\$130 million)
 - Six Japanese, European and Canadian firms have committed
 - Electricity Supply Board (Ireland), The Chugoku Electric Power Company., Inc., Hokkaido Electric Power, Company, Inc, Cosmo Oil Japan







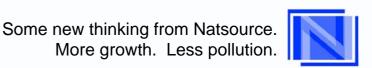
Greenhouse Gas Market Overview



Market Development Through 2004

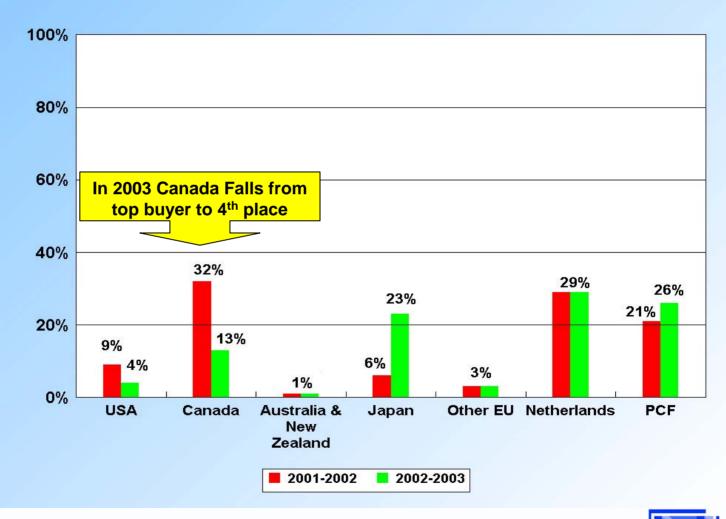
- Traded volume more than doubled from 02-03 to 78 million tonnes and doubled again to well over 150 million tonnes traded in 2004
- Buyers purchasing high quality, potential compliance instruments
 - Pre-compliance instruments trading for \$3.00-\$6.50 per tonne
- HFC destruction projects created 31% of traded reductions
- Reductions created by power sector projects account for 50% of traded volume
- 30% of traded ERs are created by renewable projects
- Over 75% of traded ERs created by projects in Latin America and Asia
- Japanese private sector has become most prominent market participant

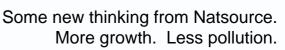
^{*} Lecocq, F. (2004) "State and trends of the carbon market 2004," Washington, DC: World Bank, based upon data and analysis provided by Natsource



2003 Market Buyer's Delta Region

Canada Falls From 1st to 4th

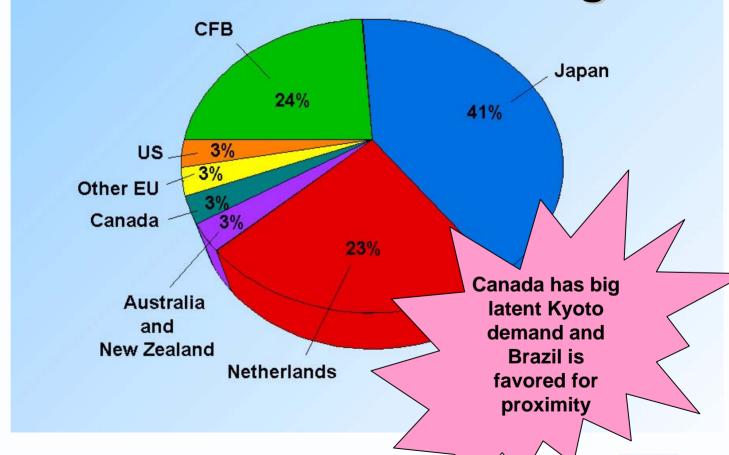




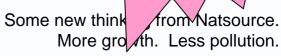


2004 Japan Doubles Participation

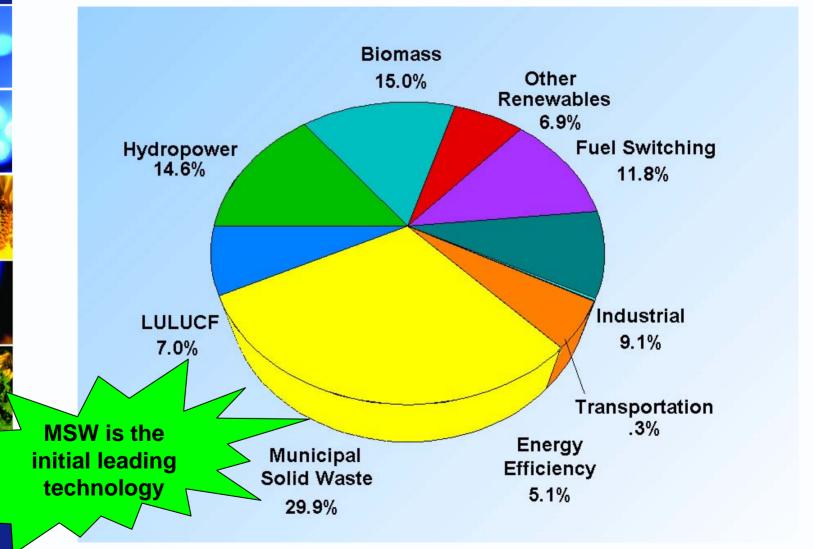
Canada's Share Falls Again



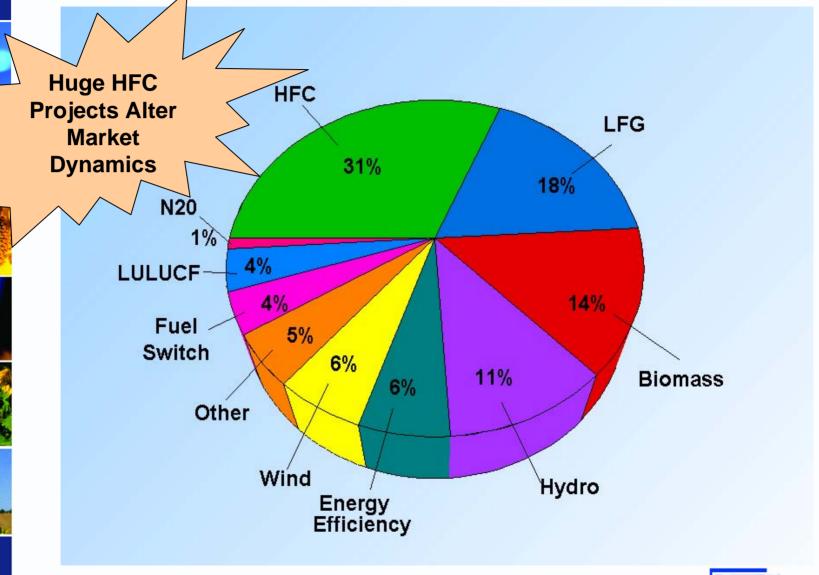
CFB =World Bank Carbon Finance



2003 Volume by Technology Type



2004 Volume by Technology Type





Commodity Type	Vintage Year	Price range (Offer) per tonne CO2e
Kyoto Compliance Tools		
CDM - CERs	2000 - 2012	EUR 4.00 - 6.50
JI - ERUs	2008 - 2012	EUR 4.00 - 7.00
Commodity Type	Vintage Year	Bid / Offer per allowance
National Compliance Tools		
UK Allowances - Bid / Offer	2002 - 2003	GBP 3.00 / 3.50
EU Allowances - Bid / Offer	1st period (2005-2007)	EUR 14.50 / 16.25

Source: Natsource, March 22, 2005





Estimates of GHG Market Demand

- Market driven by Kyoto Protocol entry into force
- Approximately 3.5 billion tons emissions shortfall in 2008-12 under BAU emissions estimates
 - Japan is estimated to be short by approximately 0.8 billion tons during the five year commitment period *
 - Canada is estimated to be short by over 1.2 billion tons during the five year commitment period **
 - Europe is estimated to be short by approximately 1.6 billion tons during the five year commitment period ***
- Modest demand in Europe from 2005-07
- * Japan's Second National Communication to the UNFCCC (based on existing measures)
- ** Climate Change Plan for Canada, 2002
- *** European Environmental Agency, GHG Emissions Trends and Projections 2003 (based on existing measures)



WE DON'T NEED NO SEQUESTRATION?

PINK FLOYD
Offsets their
GHG Emissions!

Besides aging rockers...Voluntary markets are very limited



Carbon Trading Issues Relating to Sinks



Issues that Standout

- Need for final rules now
 - Limited window to plant trees in time to repay investment without further assurances beyond Kyoto
 - Coefficient of C per acre?
 - Addressing issue of non-permanence to create tradeable instrument with value.
- Plantation?
 - Monoculture Plantations vs. Indigenous Forest species



Domestic Offsets System Issue of Non-Permanence

- Who should be responsible for project reversal and release of CO2?
 - The Project Proponent or the Buyer of the credits?
 - Should the liability be shared among various actors, including the government?
 - How can the risks be minimized (insurance, hedging, etc.)?
- How will temporary sequestration be integrated with the emissions trading scheme for LFEs?



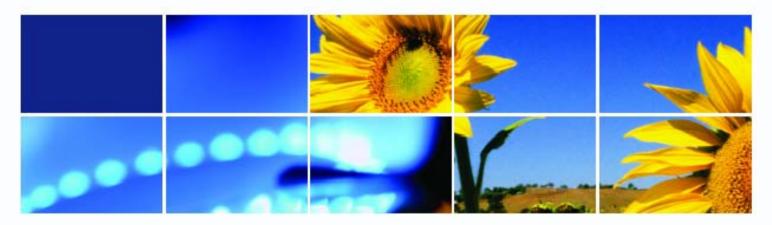
Gov Can Manage Sink's "Permanent" Offset Risk

- Buyer can not take risk of offset reversal
- Gov can aggregate and manage risk of natural reversal
 - Aggregation of a diverse portfolio with reserve margins
 - options
 - Insurance tools
- Gov has the ability to take legal action if seller causes the reversal

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Some new thinking from Natsource.

More growth. Less pollution.

