

**GREEN
CAPITAL
ADVISORS**

Generating a Competitive Advantage in a Carbon-Constrained Future

**What Does it Mean for
Business and Capital Markets?**

PPF-WWICS Event

May 23rd, 2007

Diana Smallridge, Managing Director

Green Capital Advisors

100 Queen Street, Suite 1350. Ottawa. Ontario. K1P 1J9. Canada

tel: 1.613.742.7829 fax: 1.613.742.7099 www.g-capitaladvisors.com info@g-capitaladvisors.com

How is competitive advantage created?

- For any industry, increasing competitive advantage can derive from:
 - Mitigating risks that destroy value
 - Capitalizing on opportunities that create value

- Success hinges on achieving an optimal mix of risk mitigation and opportunity realization

How does a carbon-constrained future affect competitive advantage?

- A carbon-constrained world presents unique risks ...
 - Reputational risk
 - Compliance risk
 - Economic risk
- ...and unique opportunities
 - Clean-tech
 - Emissions trading
 - Carbon neutralization

What does this mean for financial institutions?

- ❑ Insurers, banks, and other financial intermediaries are not immune to climate change
- ❑ For successful FIs, climate considerations will influence all aspects of their business
- ❑ Increasingly, climate impacts will affect both sides of their balance sheet

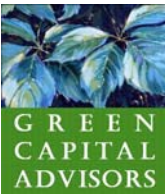
How can FIs climate-proof their balance sheet?

	Assets	Liabilities & Equity
Insurers	<ul style="list-style-type: none"> ✓ Sustainable investments 	<ul style="list-style-type: none"> ✓ New “green” insurance products ✓ Efforts to limit climate-related insurance risks ✓ New approaches to deal with catastrophic losses
Banks	<ul style="list-style-type: none"> ✓ New climate-related fee-based business (e.g., fund management, emissions trading) ✓ New “green” financing products 	<ul style="list-style-type: none"> ✓ Enhance attractiveness to climate-sensitive investor base

Insurers can mitigate climate impacts tactically and more strategically

6

- ❑ Allstate recently decided to stop writing homeowners' insurance policies in New York City and Westchester, as well as the (more expected) coastal areas.
- ❑ Insurers can promote building codes that encourage water savings and energy efficiency.
- ❑ They can promote prudent policies in zoning and land use regulations designed to limit climate-related insurance risks.
- ❑ They can explore new approaches (e.g., PPPs) to reserve against catastrophic losses.



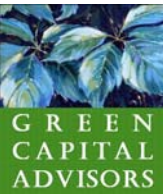
Insurers can pursue new product and service opportunities

7

- ❑ Coverage of uninsured
 - World Bank Caribbean Catastrophic facility is pooling risk for nations that currently don't have coverage

- ❑ Weather derivatives
 - Despite current challenges in performing actuarial analysis where future weather patterns may be less predictable than in the past

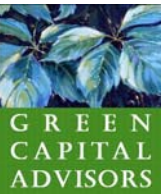
- ❑ Carbon credit delivery guarantees
 - Recent product offering by AIG and the World Bank's IFC



They can also promote sustainable investment

- ❑ This is crucial in order to protect their own reserves, promote practices that will slow down climate change, and fund the development of new climate-related technologies.

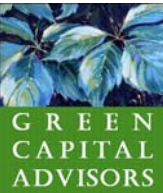
- ❑ This is evident by the large role of insurers in the Carbon Disclosure Project (CDP):
 - an initiative of 284 of the largest institutional investors with some \$41 trillion of assets under management
 - requests the world's top publicly listed companies to disclose their climate impact
 - now in its fifth year of operation



For banks, climate risks will impact the cost of raising capital

- ❑ Until recently, climate policies have been a minor part of a typical bank's broader CSR framework.

- ❑ This is changing, as CDP provides peer review and ranking of climate performance:
 - CDP's Climate Leadership Index ranks banks and "diversified financials" around the world
 - Over time, this will increasingly affect the attractiveness of FIs to institutional investors



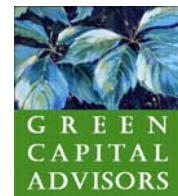
Meanwhile, attractive opportunities for banks lie in new fee-based business...

- ❑ Carbon credit brokering and trading
- ❑ Arranging, structuring and advising on carbon financings
- ❑ "Green" fund management
 - Clean-tech VC
- ❑ "Green" bond underwriting
 - Interest payments linked to carbon credit value
- ❑ Carbon derivatives
 - Carbon credit price hedging

... and risk-based financial products and services

- Financing “green” municipal infrastructure
 - ABN AMRO, Citi, Deutsche Bank, JPMorgan Chase, and UBS have committed (with the Clinton Foundation) to arrange \$1 billion each to retrofit cities with more energy efficient technology
 - This is expected to double the global market for building energy retrofits

- Developing new climate-related financing products:
 - Debt service linked to energy costs savings
 - PPPs for brownfield remediation
 - Merging traditional project financing with emerging carbon finance



In summary

- ❑ Financial institutions need to focus on ways to “carbon proof” their balance sheet.

- ❑ This will help them build competitive advantage by:
 - avoiding climate-related risks
 - opening up new “green” product and service opportunities