

Transiting to a Low Carbon Economy

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According to the World Economic Forum¹ (WEF), major economies in the world are gearing to spend US\$3 trillion to stimulate growth but the WEF envisioned that our future prosperity is totally dependent on achieving high growth while maintaining a low carbon economy. A low carbon economy refers to an economy with sustainable growth which has a minimum output of greenhouse gases (GHG) into our biosphere.

While it is obvious that power generating companies, transportation and automobile companies, airlines, factories and commercial enterprises play key roles in the global climate change, it is less obvious that financial institutions have an important financing role to facilitate the transition from the current economy that is reliant on fossil fuels to one that is powered by cleaner and low carbon technologies. However, financing carbon emission reduction/carbon mitigation projects and carbon trading are only parts of the total ecosystem as the loan books of many banks are still loaded with carbon intensive projects. Moreover, banks are still continuing to finance such projects in the oil, gas, chemical processing and manufacturing industries. To the uninitiated, what is this great deal about low carbon economy and how are financial institutions involved?

The low carbon economy has arrived

Arising from the increased public awareness of the implications of global warming, there has been a growth in the quantity, complexity and enforcement of legislation around the world that relate to the protection of the environment, consumers and workers. As noted in last month article "Whither Carbon" by Chan Kah Khuen, more than 180 countries as at Jan 2009 have ratified the Kyoto Protocol and committed to various degrees of carbon emission reduction based on the principles of "common but differentiated responsibilities" for the countries listed in Annex 1 and Annex B of the Kyoto Protocol.

For instance, countries in Europe under the European Union Emission Trading Scheme (EU ETS) have committed to a target carbon emission reduction of 21% by 2020 based on its 2005 baseline level. The EU ETS covers primarily the power, aviation and industry sectors and will address 50% of the total carbon emissions in EU. Australia's Carbon Pollution Reduction Scheme (CPRS) have set a range of reduction targets of between 5-15% for 2020 below the 2000 baseline level. Except for agriculture, the rest of the major industries are covered under the CPRS. In the US, the Waxman-Markey Draft Bill before the Senate has set 2005 as its baseline level and a reduction target of 3% by 2012, 17% by 2020, 42% by 2030 and 82% by 2050.

While trading volume in carbon allowance is still relatively small at about US\$ 92 Billion in 2008, McKinsey² projected that the global market for carbon credits and offsets could grow to US\$ 800 Billion and possibly to US\$ 2 Trillion by 2020. In the Jun 2009 Report by the Environmental Committee of the Greater London Authority entitled "What Role can the Mayor Play in Developing a Low Carbon London Economy?", it was mentioned that the future global market in renewable energy, energy efficiency and low carbon finance is estimated at £368 Billion and the report recommend that London should build on its strength to capture a portion of this global carbon market. As part of London Mayor's key low carbon policies, London estimate to invest some £14 Billion by 2025 which will result in 14,000 jobs created and £700 million in Gross Value Added annually.

Although the global economic crisis has dampened many investments across the globe, many governments as part of their economic stimulus packages have also identified low-carbon investment projects as an appropriate mean to create jobs in the environmental, energy related and carbon emission industries. In the US, the Obama government will invest US\$100 Billion in renewable energies, new electric vehicles, environmentally efficient green buildings and ecologically sound agriculture. In the article "Doing more for climate change" in May 2009, I wrote that countries like Japan and South Korea have pledged between 2-3% of GDP costing tens of billions of dollars to invest in environmental projects while Singapore will be investing S\$1 Billion over the next 5 years as part of its Sustainability Development (Green Blueprint) Plan.

This week, in the article "Green path is key to growth", Jeffrey D Sachs, Professor of Economics and Director of the Earth Institute at Columbia University argued that "... the (financial) crisis can yet be an opportunity to turn from a path of financial bubbles and excessive consumption to a path of sustainable development...".

In addition, the investment and insurance communities mainly in European countries have also increased their environmental disclosure requirements involving environmental, social and governance factors. In the US, there is expansion of the disclosure requirements to include environmental costs and liabilities under the Sarbanes-Oxley legislation. Even private enterprises such as Wal-Mart have since 2006 involved its 60,000 suppliers in its "Sustainable Value Networks" to reduce its carbon footprint. Another company is Cadbury which is also engaging its suppliers to teach them sustainable practice to reduce carbon emissions. The Carbon Disclosure Project which is an alliance of nearly 400 investors with over US \$57 Trillion of assets are stepping up their demands that companies disclose their GHG emissions data so that its members can make more informed investment decisions.

At present, many such requirements are largely voluntarily but it is only a matter of time when companies that do not have an established environmental protection policy and carbon emission reduction targets will find themselves out of the supply chain as well as securing funding opportunities to grow their businesses.

Banks are adopting a "Wait-and-See" attitude

The low carbon economy has arrived but in contrast, except for some financial institutions, the majority is still taking a "wait-and-see" attitude as revealed in the first strategic analysis report commissioned by Ceres³ on how global banks are integrating climate change into their business strategies. The Ceres report published in Jan 2008 covered 40 largest banks⁴ in the world (16 US banks, 15 European banks, 5 Asian banks, 1 Brazilian bank and 3 Canadian banks) and below is a brief summary of some of the key findings extracted from the report:

- Many of the 40 banks have done little or nothing to elevate climate change as a governance priority—a trend that cuts across European, North American and Asian banks.
- Only 12 of the 40 banks have board-level involvement in climate change
- Only 14 banks have adopted risk management policies or lending procedures that address climate change in a systematic way.
- Only 6 banks say they are formally calculating carbon risk in their loan portfolios, and only one of the 40 banks, a US bank has announced a specific target to reduce the rate of greenhouse gas emissions associated with the utility portion of its lending portfolio.
- No bank has set a policy to avoid investments in carbon-intensive projects such as coal-fired power plants.

Mindy S Lubber, President of Ceres noted that "...there is now overwhelming scientific evidence that worldwide temperatures are rising, glaciers are melting ... Scientists believe most of the warming in the last 50 years is human-induced. This confluence of evidence has galvanized public attention and governments worldwide to take action to avert a possible climate catastrophe. With nearly US \$6 trillion in market capitalization, the global financial sector will play a vital role in supporting timely, cost-effective solutions to reduce U.S. and global GHG emissions..." Ms Lubber further emphasized that since banks are primarily risk management experts⁵, it is essential that banks begin now to consider the financial risk implications of continued investment in carbon-intensive energy technologies.

What can banks do?

While the financial industry has done a very poor job as a risk manager in the sub-prime mortgages that triggered the global financial meltdown in Sep 2008, there are still many risk managers in banks that have the expertise and experience to assess the far-reaching risks associated with climate change that will impact both the financial industry and the global economy.

Taking the findings from the Ceres Jan 08 report, here are some of the actions that banks can consider incorporating into their business strategies:

1 Board oversight

As banks increase their regional and international footprints, climate change must become a governance priority for board members and the banks' C-suite of executives. At HSBC, there are 2 committees at the board level that look into climate change related issues: (1) Group Management Board chaired by the Group CEO and (2) Corporate Responsibility Committee.

2 Carbon as a new asset class

As regulations on carbon emission reductions, environmental protection and carbon asset trading become more globalised, banks must recognise that carbon will quickly become a new class of asset that require a new set of risk assessment parameters and at the same time offer new opportunities in the areas of carbon asset management and securitisation, carbon trading and brokering, lending and financing of clean energy projects and technologies that lead to energy efficiency and reduction in GHG emissions.

3 Transparency in carbon

With pressures from regulators, shareholders and customers, climate change will have profound impact on the banks' existing loan books as mentioned earlier in the article. In time to come banks will have to publicly declare the quantum of their loans that are still financing carbon intensive projects such as coal-power plants and the financial risks involved. In this regard, risk factors for lending criteria to such sectors will have to be reviewed so that cost of lending can be incorporated to reflect the higher regulatory risks as well as the cost of containing carbon emissions. In the area of carbon transparency, JP Morgan⁶ has established a set of environmental policy covering 6 areas including environmental risk policy, climate change policy, etc. Likewise, Standard Chartered⁷ has also allocated a key area on its international website on its policies and standards on sustainability.

However, some banks do face challenges in shifting away from financing of traditional power generation industry. For instance Brazil which is renowned in the world for the development of renewable energy (80% of its energy consumption comes from hydro-electric power and Brazil is the world's largest exporter of ethanol) is no longer seriously looking at alternative energy after it has discovered a massive oil field off the coast of Rio de Janeiro two years ago. Now banks are financing oil rig companies to hunt for fossil-fuel which is a key source of GHG emissions.

4 Green products

As many bank customers have become more environmental conscious, several banks surveyed by Ceres have responded to these customers' demand and have over the past 2 years offered various forms of "green" products. Generically, there are 2 groups of green products: (1) Investment and (2) Retail. The former are managed funds that invest in climate-related funds and indexes while the latter focused on retail products such as "green" credit cards, auto-loans for the purchase of green vehicles and mortgage loans for "green" houses.

However, these products form only a small selection of the range of investment and retail products that banks typically have. Moreover, in this region, "green" products offered by banks and asset management companies are only a handful. The lack of "green" products and increasing customers' awareness provide banks in the region excellent opportunities to develop more "green" products with suitable partners.

5 Carbon Neutrality

Internally, banks should first take stock of their emission inventory. Some areas to look at include IT data and call centres, back-office processing centres where activities are mostly 24X7 leading to high energy consumption (air-conditioning, lighting, servers and equipment) and consequently emissions of GHG. Besides inventory, banks should look at auditing their energy systems to identify ways to reduce emissions. Besides buildings and facilities management actions, some banks have started setting up funds to invest in carbon emission reduction projects in non-Annex I countries to reduce their corporate carbon footprint.

Learning from the past

During the dot.com period, while some banks had reacted quickly, the majority had initially taken a "wait-and-see" attitude. As we would recall, many non-bank organisations have seized the opportunity with some entrenching themselves as intermediaries in e-payment and mobile-payment related services.

Already non-financial institutions have emerged over the past few years offering custodian and registry services for certified emission reduction credits to facilitate sellers and buyers. Some research companies have started offering market and risk analysis and research tools for parties interested in the carbon economy. Another company has positioned itself as the equivalent of rating agency for carbon asset.

Banks can continue to wait for others to take the lead positions as we transit into the low carbon economy or take concrete actions to do otherwise.

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Notes:

¹ World Economic Forum at <http://www.weforum.org/en/initiatives/ghg/index.htm>

² Profiting from the low-carbon economy (Aug 2009) by Nick Hoffman and James Twining, McKinsey & Co.

³ Ceres (pronounced "series") is a national network of investors, environmental organizations and other public interest groups working with companies and investors in the US and Europe to address sustainability challenges such as global climate change. Ceres managed a total asset size of over US\$ 4 Trillion focusing on financial risks and investment opportunities from climate change.

⁴ The 40 largest banks were based on their ranking prior to the collapse of Lehman Brothers on 15 Sep 2008 and the subsequent global financial meltdown.

⁵ With the global financial crisis triggered by the sub-prime mortgages, many are questioning whether financial institutions are actually good risk managers themselves.

⁶ JP Morgan's Environmental policy can be found at:

<http://www.jpmorganchase.com/cm/cs?pagename=Chase/Href&urlname=jpmc/community/env/policy>

⁷ Standard Chartered's policies and standards on Sustainability can be found at:

<http://www.standardchartered.com/sustainability/home/en/index.html>