

# Climate Change – The Edge of a New Frontier

Climate change has suddenly become sexy. With Kyoto protocol being the hottest topic the C-word is what everyone is talking about. Whether you name it carbon dioxide, carbon trading, carbon credit or carbon footprint gas has become gold. Billions of dollars are changing hands to buy and sell carbon credits. CO2 is the hottest commodity being traded today. Brokers and traders and consultants are mushrooming everyday.

Chicago Climate Exchange is the world's first carbon exchange transacting over 3 million tonnes of CO2 every month. It has launched a futures and options market in carbon and sulphur and owns European Climate Exchange, world's biggest climate exchange where trading volumes achieved a record of over 3 million metric tones a day in March this year.

China , India and Brazil are major players in the emissions market. For each tonne of carbon dioxide saved, the UN body on climate change gives a certificate called Certified Emissions Reductions(CER). The certificate becomes a tradable instrument and can be sold to any entity that wishes to offset its carbon emissions. This is what is known as Clean Development Mechanism (CDM). Indian enterprises have already committed investments to generate more than 379 million tonnes of CERs. Worldwide investments aim to generate 2 billion tonnes of CERs by 2012. The main worry is what will happen when the treaty expires in 2012. This has lent uncertainties about carbon trading.

All is not hunky dory with carbon trading. A recent investigation by UK's Financial Times revealed large scale manipulations under the smoke screen of carbon trading and complete lack of audit and verification.

The study has found that while a large number of companies and individuals are rushing to go green spending millions on carbon credits projects, these have resulted in little environmental benefit. Some organisations are paying for emission reductions that do not take place at all . Carbon credit or carbon neutralisation industry is making a bomb from good intentioned companies and the green gold rush sparked by the Kyoto Protocol under the belief that offsetting their own energy use by buying carbon credits can reduce the impact of climate change. Their findings showed:

- i. Instances of people and organisations buying worthless credits that do not yield any reductions in carbon emissions.
- ii. Industrial companies profiting from doing very little or from gaining carbon credits on the basis of efficiency gains from which they have already benefited substantially.
- iii. Brokers providing services of questionable or no value. A shortage of verification making it difficult for buyers to assess the credits true value.
- iv. Companies and individuals being charged over the odds for the private purchase of the European union carbon permits that have plummeted in value because they do not result in emissions cuts.

HSBC, the UK's largest bank that went carbon neutral in 2005, said they found "serious credibility concerns" in offsetting market after evaluating for several months. They urged the government to launch investigation into the system by the police, the fraud squad and trading standards and went on to invent their own scheme thus adding to the existing muddle.

Some companies like DuPont are asking green consumers to pay them for the mess they themselves have created. DuPont asks consumers to pay them \$4 a ton to eliminate carbon dioxide from its plant in Kentucky that produces a potential green house gas HFC23. Companies have set up carbon offsetters without any idea as to how the markets operate. Blue Source, a US offsetting company invites consumers to offset carbon emissions by investing in enhanced oil recovery which pumps CO<sub>2</sub> into depleted oil wells to bring up the remaining oil. This process was profitable in itself because of the high price of the oil. Operators were making extra revenue from selling “carbon credits” for burying the carbon.

Climate change poses a classic spill over problem. It is not the individuals but the society at large that suffers the full burden of producing emissions. To offset governments can either create markets for carbon by using tradable permits or impose carbon tax. So far, the preferred method has been tradable permits.

But this is now causing problems as markets are not perfect and susceptible to manipulations by the greedy quick rich gangs. We need smart market designs to overcome problems of tradable permits. Besides, carbon markets fix the amount of carbon reduced, not the price. “Excessive volatility or unduly high prices of quotas on carbon emissions might disrupt the economy severely. Taxes create needed certainty about prices while markets and emission quotas create unnecessary certainty about short term quantity of emissions”, says the Financial Times in its editorial of 26 April 2007. Both carbon tax and markets put undue burden on the poor. FT argues that taxes are a better option to set the price of CO<sub>2</sub> provided governments can counter the regressive carbon taxes by lowering the levy on labour.

Goldman Sachs, the investment giant says their research indicates that the impact of NGO pressure or SRI funds or single pollution incidences on shareholder value is much less than government regulation. Self-regulation here does not work. They strongly advocate government regulation to create long term value for greenhouse gas emissions reduction and new technologies.

The business opportunity inherent in climate change is not confined to trading in carbon. Goldman Sachs says, “Money is already flowing to alternative energy sources ... markets have to be enhanced to significantly increase these flows globally and reduce our reliance on fossil fuels”.

In November 2005 Goldman Sachs surprised the financial world by announcing an ambitious environmental policy framework. The slew of green measures included commitments to consider environmental and social impacts of investment, encourage the development of markets and reduce investment bank overall climate footprint. On 21 January this year it quietly released its year-end environmental report demonstrating how its environmental commitments were in line with Goldman’s raison d’etre: making money. On the occasion, Sonal Shah, its Vice President Corporate Citizenship, said “We want to show that there is a way to make money on this”. The message is valuing environment can create wealth.

Climate Change is big money. According to Sir Nicholas Stern, former Chief Economist of the World Bank, head of the UK Government Economic Service and the author of Stern Review – Economics of Climate Change, cost of not taking action and allowing unabated climate change could amount to 5% of GDP which could be a staggering figure of \$650bn.

As such investors are deciding that successful stock-picking is about more than whether a company meets its quarterly profit target. AXA, the French Insurance Company has become the latest socially responsible investor. It has signed up Enhanced Analytic Initiative (EAI) to reward brokers that publish research on extra-financial issues such as climate change and brand management. The Initiative controls assets in excess of \$2.4 trillion. Another initiative called UN Principles for Responsible Investment has come \$5 trillion worth of assets with members ranging from ABP, the Dutch Pension Fund to Sumitomo Trust of Japan.

Joachim Faber, Allianz AG board member responsible for asset management, says “As an investor, we are concerned to know whether the companies we are investing in are adequately taking account of climate-related risks. However, the data is often not available, sometimes not comparable or of poor quality. As a part of the Carbon Disclosure Project, we hope to collect more reliable data, so eventually, a common emissions measurement methodology can be developed.”

Companies such as Marks & Spencer have already taken the bull by the horn and put climate change, zero waste and sustainability on top of their business agenda and invested £200 million to go green. BP has attempted to restyle itself with its Beyond Petroleum label. Toyota has made substantial investment in hybrid cars; and Tesco plans to 'carbon label' its products, to show how much carbon dioxide is emitted during their production, transport and consumption. Richard Branson, chairman of Virgin group claims to have made huge investments to reduce emissions of Virgin airlines by 30%.

Back home ITC Chairman Yogi Deveshwar in his keynote address at the Global Conference on Social Responsibility in Vilamoura (Portugal) in February 2007 claimed "It is matter of pride that ITC became carbon positive during the year on the back of several energy conservation measures, usage of carbon neutral fuels and carbon sequestration through large scale agro-forestry programmes ITC is making rapid strides towards attaining zero waste status". Tata Steel has also done pioneering work in this.

It is easy to understand the trigger of such investments when one realises that a group representing institutional investors controlling \$41 trillion worth of funds are monitoring companies worldwide on the level of their carbon emissions. The group known as Carbon Disclosure Project and launched on 4 December 2000 at 10 Downing Street has recently sent an information request to 2400 world's large corporations asking them to report on their emissions.

CDP is the world's largest investor coalition comprising 284 institutional investors. That includes ABN Amro Bank, California Public Employees Retirement System, CIBS, Deutsche Bank, Development Bank of Japan, Goldman Sachs, HSBC Holdings plc, Morgan Stanley, Old Mutual plc, Rabobank, UBS Global Asset Management, Warburg-Henderson and Zurich Cantonal Bank. It is funded by Esmee Fairbairn Foundation, The Nathan Cummings Foundation, Bridge House Trust, Polden Puckhan Charitable Foundation. UK's Department of Environment, Food and Rural Affairs, Oak Foundation, The Marmot Charitable Trust and WWF-UK.

Reliance Industries, ICICI Bank, NTPC, Ranbaxy, Infosys are all part of the 2400 companies that have received a questionnaire seeking disclosure on:

- (i) regulatory risk/opportunity(eg limits on emissions)
- (ii) physical risk opportunity (eg changes in weather patterns impacting operations)
- (iii) consumer sentiment risk/opportunity (eg reputation)
- (iv) total company wide global greenhouse gas emissions
- (v) steps taken to manage/reduce emissions.

Clearly business is appearing to move faster than the governments in responding to this monumental threat to the survival of business. Al Gore's persuasive film "An Inconvenient Truth", The Stern Review and the startling report of IPCC together with daily reminders of impending disaster have finally had their effect in raising the public psyche and business awareness of this global crisis of unprecedented proportion. The reality is coming home that if we continue to waste resources and generate green house gases, we will sink without a trace. Yet, the actions are not matching the gravity. It is the insurance industry and that too in US that is getting its act together. Post-Hurricane Katrina, a report on the insurance industry, commissioned by a national coalition of institutional investors and environmental organisations has found that insurers, government and consumers are all at great risk of rising cost from severe and sudden weather related disasters. Actuaries would simply go bust setting off a domino effect that would adversely impact the business right across the world.

The scenario in India is much worse than it looks. The inequity of climate change is writ large everywhere. The only glacier that feeds our seven rivers first be flooding India's coast for the next 40 years and then will dry up completely. So our grandchildren will have no fresh water and face severe drought conditions within

half a life time. Yet, the action we are taking is nothing more than making a few movies and engaging in symbolic acts. It is an irony that while the world has been polluted by the rich industrialised north, the real sufferers of climate change will be the poor of the east and inhabitants of African continent.

The developing countries are being criticised today for being unmindful of environmental damage caused by the high growth economies like India, China & Brazil. Whilst there can be no mercy for any kind of environmental pollution north have to realise that developing countries have a right to grow and that it is only fair that north meets the costs of South's growth at least upto a take off stage. In fact it was this moral compulsion that brought the concept of carbon credits. But over the years the price of these carbon credits has reduced so much that they have lost their shine.

There are already 25 million climate refugees displaced by climate-induced disasters such as those in Papua New Guinean Carteret Islands. They have been forced to relocate because of the rising ocean level. Bangladesh is one of the most vulnerable countries in the world. 259 km of river delta islands near the Bay of Bengal have vanished in the last 30 years. The strategy, therefore, to deal with climate change is going to be different for poor countries. While carbon tax, financial incentives and increased insurance premia can force people to go green in developed countries, the grim poverty of Asia and Africa calls for an integrated action plan where the north implements the polluter-pays-principles and provides scientific and technological know-how as well as infrastructural support and transfer of technology to the south to bring it to a level playing field.

The saving grace of poverty is that the environmental footprint of the poor is a fraction of their rich counterparts. Creating wealth through unbridled consumerism and proliferation of products that create unneeded wants can be disastrous for the ecology. India's ecological footprint i.e. the natural material used per person per year is one twelfth of US and Europe.

If the rapid rate at which the developing economies are growing translates itself into consumerism, our mission of the bridging the gap is going to result in an ecological catastrophe. We therefore need to change our growth model and move our economy from acquisitional mode to experiential mode. We have to find ways to dematerialise products and opt for minimalist designs. India will thus have an even more legitimate right to demand from the north credits for saving environment & CO<sub>2</sub> by adopting a dematerialised, low carbon, experiential model of growth.

Just as it is real that climate has changed due to human activity, humans have the power and technology to reverse the damage. For this to happen business has to be brought to the forefront of the climate change agenda. Never before in human history has the gap between an impending catastrophe and an infinite opportunity been smaller. Hence our focus has to be on galvanising businesses for a robust response to climate change in a way that opens new vistas of growth and development advancing human happiness.

The 8th Environment Conference in Palampur brought to the fore an eleven point plan called PROACTIVATE. The acronym denotes the action required for regeneration of the planet. It calls upon businesses to Price natural capital; Radically increase energy efficiency; Opt for minimalist lifestyles that emphasise the value of experiences as opposed to acquisitions; Adopt zero waste and closed loop systems Capture CO<sub>2</sub> through forestation; Turn to renewables; Invest in green issues; Vigorously pursue market mechanism to punish polluters; Activate women and children to drive the change; Train staff to eco-innovate and focus on Execution by example than exhortation.

Climate change calls for a holistic and approach designed to reduce the human footprint on the planet by committing to make a 180 degree shift in lifestyles. It challenges our current paradigms of wealth and prosperity. Who would prefer to be a billionaire with a parched throat in the arid world of 2050? It is time we started recognising the price of natural capital, of greens, rivers, mountains, oceans, glaciers and moved our natural assets way above the financial capital in the balance sheets. The pendulum of asset valuation has moved beyond tangibles. People have begun to question the very purpose of work and wealth creation.

In 1930 John Maynard Keynes imagined that richer societies would become more leisured ones, liberated from toil to enjoy the finer things in life. Yet, most people today work harder, have less leisure and less happiness. In his recent book on happiness LSE economist Lord Layard reveals – (i) money does not make people happier; (ii) middle class people who become upper class do not report feelings of happiness; Richard Farleigh, the Australian tycoon, says “You see all these boats [in Monaco] and think, well, actually I’m not that rich at all. If I’d stayed in hedge-fund game in 1995, I’d be a multi-billionaire by now. However, the billionaires I’ve met are some of the unhappiest people I know.”

The psychologist Oliver James has written a new book, *Affluenza*. In this he describes affluenza as an obsessive, envious addiction to consumerism that “increases our vulnerability to emotional disorders and causes high levels of anxiety and sleeplessness.” Psychologists like Daniel Kahneman of Princeton University recommend ‘experiences’ over ‘commodities’, pastimes over knick-knacks, doing over having as happiness giving. With all this evidence why should business not adopt policies and processes that make people happier rather than overload them with proliferations of products that create unneeded wants and disastrous for the ecology? As for capitalism’s wasteful materialism, even Adam Smith had a problem with it. “How many people ruin themselves by laying out money on trinkets of frivolous utility?”

On 8th December 1927, Mahatma Gandhi wrote in *Young India* “A time is coming when those who are in the mad rush today of multiplying their wants vainly thinking that they add to the real substance, real knowledge of the world, will retrace their steps and say: ‘What have we done?’

These words have a rug of truth even after 80 years.

Is it not the time business considered a growth model that focused on ensuring happiness not acquiring goodies? That would make some virtue climate change.

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