

Cost of climate change in a financial crisis

The US President, Mr Barack Obama, has articulated the first three challenges of his Presidency. These are: the financial crisis, climate change and the war on terror. He has spelt out his target on climate change — an 80 per cent reduction in emissions in the US by 2050.

Every CEO will also be faced with at least two of the challenges that Obama has named — the financial crisis and climate change. But how many CEOs would be willing to stay the course in addressing climate change during this financial crisis? It was far easier to talk about climate change when the price of oil was \$150 /barrel, when consumers had the ability to pay and when corporates were generating large profits.

There are many things common to both the crises. Both are man-made and are a consequence of living beyond our means, and both evolved dramatically over the last decade.

The solution to both these crises will have many things in common. Their solutions will need people to curtail greed, and will take time to yield results. They will call for people to come together and lasting solutions will be painful. In short, the remedies to both crises will involve a lot of give and take.

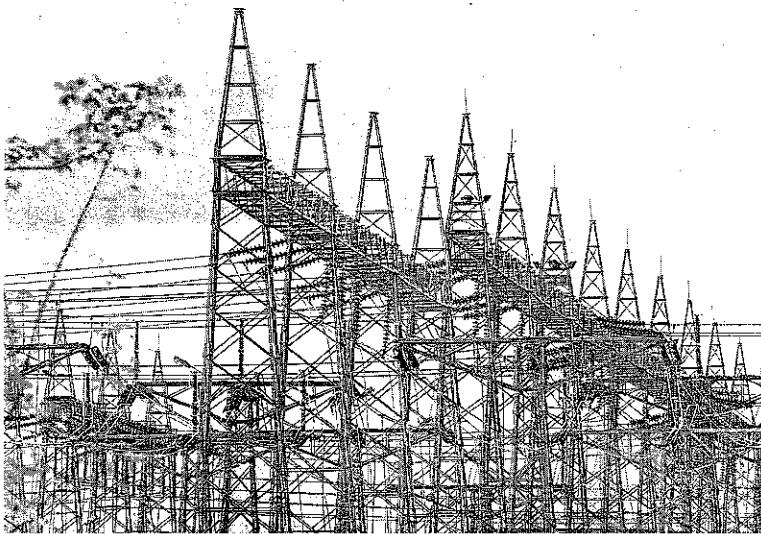
The key challenge would be to balance the short-term challenges of the financial crisis with the long-term challenges of climate change. Dealing with climate change needs capital. Power generation from renewable sources, for example, is about one-and-a-half times to four times more capital-intensive than fossil-fuel-based generation.

In the current financial environment, where capital is so scarce and there is so much capital needed for the basic survival of major institutions, generation based on renewables could easily take a back-seat.

This is the time when a new world order in the financial markets and climate change is being created. It is similar to re-writing some of the basic rules of global engagement. What is our position in India on these matters and in the related global dialogues?

On the ground, in India, we have been consistently taking quiet but significant steps. Our energy intensity, which is the ratio of emissions/GDP, has been steadily dropping. Our pollution control norms are some of the most stringent in the world. We have introduced stringent emission norms for the auto

There are many ways to deal with climate change despite the financial crisis. What is important is the mindset change that has to be created. This is the right time to make people realise that it is an economic and environmental imperative that they live within their means, says BANMALI AGRAWALA.



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industry. Fortunately, the impact of the financial crisis on India is limited and we should actually look at ways to capitalise on this advantage. The following should be in sharp focus in these recessionary times.

ENERGY EFFICIENCY

Energy efficiency is one the key points of the Prime Minister's action plan on climate change. There have been many attempts made to gently persuade people to be more energy-efficient but such persuasion has hardly yielded results. Energy efficiency actually has a negative cost of abatement, which means that by saving on energy consumption one not only reduces emissions but also saves money. Unfortunately, it seems the country needs to move from persuasion to legislation.

It needs to legislate on the kind of equipment that is allowed to be sold in the market. This means that all appliances sold would need to meet a certain minimum efficiency crite-

ria. Having efficiency tags is not enough. Energy audits should be carried out regularly to ensure that industry does not waste precious energy.

An energy efficiency trading platform, as articulated in the Prime Minister's action plan, should be introduced quickly.

TRANSMISSION NETWORK

The national power transmission network should be strengthened as a priority. Power generation is a main contributor to emissions. Power policy in India has swung from a focus on generation to distribution and currently back to generation. Between these swings, transmission issues have conveniently been lost sight of.

In India most energy sources, such as coal and hydel power, are in the East, and most consumption centres are located in the West, South and North. It is critical that power is generated close to where

the fuel is and then wheeled to where the demand is.

Generation and trading of green power should be allowed on a countrywide basis, with renewable power targets across the country, as in Maharashtra. Clear incentives should be offered to those setting up power plants based on renewables.

There is a 15 per cent shortage in peaking power but no policy to address it. Load-shedding is used as a tool to address peaking requirements.

PEAKING POLICY

The first priority would be to price peaking power at a substantially higher price so that people have an incentive to reduce consumption during peak hours. This is a good time to introduce the "time of the day" tariff regime.

Following this, the setting up of peaking power plants close to load centres, such as towns and cities, should be encouraged.

CONVERSION EFFICIENCY

It is time to make improvements in biomass combustion efficiency. Twenty-seven per cent of India's national energy needs are met from biomass, which is the second largest source of energy in the country.

Our present efficiency of converting biomass into useful energy is woefully low, at 5-6 per cent. There is hardly any surplus biomass available today. The Prime Minister's action plan needs to focus on the development of technology for mass scale because there is a large multitude of people that survive using biomass-based fuels. As there is currently no value attributable to such biomass, it would be difficult to find commercially viable solutions. The government, therefore, will need to step in.

Biomass can also be used for decentralised power generation in rural areas. The so-called "free power" distributed to the rural areas now actually "costs" the country dear. Further, this "free power" is only made available for a few hours, mainly during night-time! But, in actual fact, the rural consumers are more than willing to pay about Rs 3 per unit, provided they get reliable power.

CARBON CAPTURE

Carbon capture and storage should be made a national mission. It is clear that the major source of energy for India, in the short term as well as the long term, will be coal. If we have to live with coal in a carbon-restrained economy, we would need to find a way to treat the CO₂ emissions from coal-based power plants.

The only way to address this problem is to strip the carbon from the emissions and then find a place to store it. As India is going to remain coal-dependent for a long time it is imperative that we assume global leadership in carbon capture and storage technology.

There are a number of ways to continue on the path of dealing with climate change despite the financial crisis. What is important, however, is the change of mindset that has to be brought about when it comes to climate change. The present financial and ecological climate is the right opportunity to make people realise that it is an economic and environmental imperative that we learn to live within our means.

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