

Committed to the crusade

Tata Power is expending a lot of energy in addressing climate change issues within the company as well as with consumers

"We have to participate in the climate change movement because it is the right thing to do, and the Tata Group has always been in the forefront of activities which benefit the environment and the society as a whole. "When JJ Irani, director, Tata Sons made this statement to officials of the US Government Accountability Office on 2nd July, 2008, he was encapsulating the Tata Group's broad stand on environmental issues which is but an extension of the Group's inherent values and beliefs. The Tata Power Company is a shining example of how Tata companies have stepped up to the plate to address the issues of climate change.

Crusading for the environment

Tata Power is one of the 53 signatory international companies to sign up for the 3C initiative aimed at creating a global group of companies that are demanding integration of climate issues into the world markets. The company has formed a steering committee and working group to drive the climate change initiative across the Group.

The company has already undertaken steps to measure its impact on the environment by mapping its carbon footprint. (A carbon footprint is the measure of the environmental impact of a particular individual or organization's lifestyle or operation, measured in units of carbon dioxide).

With this in mind, the company has evolved a sustainability policy that aims to integrate economic progress, social responsibility and environmental concerns with the objective of improving quality of life. And, to further ensure its adherence to this policy, the company has appointed Dr Avinash Patkar as chief technology and sustainability officer in addition to being head of corporate safety, health and environment. Tata Power is the only energy organisation in India that has a person on the team whose sole responsibility is to devise ways in which the company can contain the damage to the environment and societies around it.

A big responsibility

Research data indicates that as much as a quarter of all carbon emissions globally are from power generation activities. And within power generation sources, coal-based power plants rank highest in air pollution, waste generation and water consumption. Coal plants are also the largest emitter of carbon dioxide, the major greenhouse gas. From mining, to transportation, to generation, to waste disposal, coal causes environmental problems that other energy resources do not.

Tata Power produced 14.71 million MWh of energy in the year 2007-08; it also released 11.17 million tonnes of CO₂ as emissions. This includes carbon emissions from other business activities such as road and air travel for company work, all of which contributes substantially to the overall carbon footprint.

In a country like India, energy companies such as Tata Power deal with a double-edged sword. India with its vast population, long coastline, and water scarcity is especially vulnerable to the impact of climate change. Yet, the country is also desperately short of power and yet is flush with coal reserves. Banmali Agrawala, executive director (strategy and business development) rationalises this irony, "We as a country have a need for development hence we can't afford to do anything that may hamper our march. And development needs more energy. Now since coal is the abundant resource it is a challenge figuring out how to balance the carbon footprint with our need for progress. I believe we at Tata Power are at the forefront in achieving this balance."

The company is ready to stretch itself in more ways than one to further its cause of environment protection. Says Dr Patkar, "We are aware that technology and R&D in the area of combating climate change will cost money but we are ready to make that commitment." For example, significant effort will have to be put into newer and upcoming renewable energy sources such as solar power and geothermal power. Tata Power is actively exploring opportunities to increase its renewable generation portfolio including an emphasis on hydro-power.

Climate change is now a significant component of the company's corporate strategy. Mr Agrawala explains, "Our initiative is more out of our concern for balanced development and also to differentiate ourselves from our competitors. Also we are not limited to India in our growth so our efforts in this direction can be implemented and appreciated overseas as well."

The way forward

Climate change issues are going to generate plenty of heat at Tata Power over the next five years; the company plans to grow its generation capacity five times from 2,474 MW to 12,861 MW. Most of this increase will be thermal energy, the most polluting of all sources.

This is where Tata Power's Sustainability Council comes in with several objectives:

- Developing a plan to reduce carbon intensity by improving thermal efficiency in fossil fuel based plants, generation based on renewables, using clean coal and installation of carbon sinks (oceans, forests and soils remove CO₂ from the atmosphere through physical or biological processes)
- Recommend training /recruitment for sustainability
- Regularly disseminate knowledge through internal seminars and workshops

- Be involved in advocacy with regulating agencies

The company is already working with external agencies to garner expertise and resources to combat climate change; it is working on a technology interface with American Electric Power of the US and European energy major Vattenfall on their 3 C's (Combat Climate Change) global initiative.

The company is also trying to encourage intelligent use of energy at the consumer end to improve energy efficiencies. Tata Power and the other electricity distribution agencies of Mumbai have launched an advertisement campaign to educate consumers about power conservation measures. Called 'I Will, Mumbai Will', the campaign is focused on shifting power usage away from the peak consumption period, more intelligent use of high power using devices such as air-conditioners, responsible electricity consumption behaviour (such as switching off devices from the plug point when not in use) and educating consumers to invest in energy efficient devices.

That the company's awareness of its environmental impact is absolute is evident from the fact that Tata Power's power plant emissions are better than the norms laid down by the National Ambient Air Quality Standards (NAAQS). As Mr Agrawala puts it, "The driver for our commitment to climate comes from within, from our long ingrained value system."

Way back in 1910 when Jamsetji Tata set up the Tata Power Company, it was with the objective of providing clean, cheap and reliable energy. Mumbai's hydropower plant was established in 1915. Tata Power today is only trying to keep up to that commitment.