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WHY INDIA NEEDS RAGHURAM RAJAN TO REALISE ITS ECONOMIC DREAMS

EXCLUSIVE INTERVIEW WITH RBI GOVERNOR

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GREEN IS IN FOR INDIA INC

More Indian companies adopt 'green' business practices. Besides caring for the environment, it also translates into efficiency and saving costs.

SOLAR PANELS ATOP CEMENT HOUSE, ACC'S HEADQUARTERS IN MUMBAI

DANESH JASSAWALA

ECO SHEEN

- As of May 2015, India has over 3,155 green building projects covering more than 3 billion sq ft
- It has the largest green building footprint after the US
- India's green buildings market will be worth $300 billion by 2025
- India's waste water treatment projects are valued at $30 billion
- The market for renewable energy is set to grow to $16 billion in the next five to six years
- The energy efficiency market is worth $12 billion

ACC LIMITED

INITIATIVES

- Four green buildings, including its corporate office in Mumbai
- Commissioned 7.5 MW waste heat recovery power unit in 2013
- Set up pre-processing facilities for waste streams at two plants

BENEFITS

- Reduced its specific carbon footprint by over 33 per cent since 1990
- Cut nearly 44,180 tonnes of carbon dioxide emissions per year

By M.G. Arun

Going green makes strong business sense. Or so said management expert Michael Porter. As one of the key representatives of India Inc, the Confederation of Indian Industry (CII) realised the potency of those words more than a decade ago. In the summer of 2004, it unveiled the CII-Godrej Green Business Centre (GBC) in Hyderabad—a public-private partnership project between the Andhra Pradesh government, the Pirojsha Godrej Foundation and CII, with technical aid from USAID.

At the time it was India's greenest building—the only structure outside the United States and the third in the world to get a platinum rating, the highest level of certification for environment-friendly buildings under the Leadership in Energy and Environmental Design (LEED) system, developed by the U.S. Green Building Council. So what has this green power achieved? The building shows a 53 per cent saving in overall energy use, 35 per cent saving in the use of potable water, and 80 per cent usage of recycled and recyclable material. And that's just the tip of the proverbial iceberg.

Green then certainly seems in for India Inc. So you have cement companies such as ACC and Vasavadatta develop sustainable technologies in manufacturing, and real estate firm DLF ensuring some of its properties adhere to high standards of energy efficiency. In other sectors, Hindustan Unilever is aiming to cut carbon emission by 22 per cent, Pune-based Kirloskar Brothers is marketing a line of highly energy-efficient pumps, while in Jaipur UltraTech Cement helps burn 100 tonnes of municipal waste at its waste treatment plant every day.

That eco-friendliness is gradually finding its way into the Indian construction ecosystem is evident from the fact that as of May 2015, the country has at least 3,155 green building projects, covering more than 3 billion sq ft. That's more than all countries barring the United States. "There is an enormous potential for green business in India. Heavy energy users—such as those in steel, cement and paper—have adapted quickly to this change," says Jamshyd Godrej, CMD, Godrej & Boyce, and chairman, CII-Godrej GBC.

To encourage the movement, the Ministry of Power and the Bureau of Energy Efficiency have come up with a Perform, Achieve and Trade (PAT) programme for big energy consumers. The government has identified 478 companies that together consume 75 per cent of industrial energy and given them targets to reduce energy consumption over a period of three years.

On the corporate side, the CII has initiated the 'GreenCo' rating for companies based on their environmental performance across nine parameters, including energy efficiency, water conservation, use of renewable energy and waste management. Experts say it is more advanced than the ISO 14000 certification. "It is easier to convince companies on energy efficiency as the results are more tangible," says K.S. Venkatagiri, deputy executive director, CII-Godrej GBC.

Although there is a lot of ground still to be covered, here's a look at some of the success stories.

ACC CEMENTING THE FUTURE

Cement major ACC is a good case in point when it comes to green building initiatives. Step into its Mumbai headquarters near Churchgate and you will be hard-pressed to believe the building spread across 68,000 sq ft is 75 years old.

At six floors high, excluding a basement that houses a canteen, 'Cement House' is the nerve centre for ACC, a company formed by the merger of 10 cement units in 1936, and was then called the Associated Cement Companies Limited. The architects, Ballardie Thompson & Mathews of Kolkata, had planned a central atrium for ventilation and natural light but over the years, compulsions of space and an expanding workforce ensured that this atrium was covered up and numerous cubicles added, cutting out much light and ventilation. Then, in 2008, the company went back to the basics, restoring the building to what the planners actually wanted it to be, with added benefits of a green building: an airy atrium, cubicle-free open workspaces, terrace gardens and intelligent lighting and cooling systems that get activated only when needed.

PAWAN BHAWAR

THE KIRLOSKAR BROTHERS LIMITED PLANT IN DEWAS, MADHYA PRADESH

KIRLOSKAR BROTHERS LIMITED

INITIATIVES

- In 2009, adopted 3R (Reduce, Reuse & Recycle) principle for sustainability
- Nearly half of the Dewas plant's power needs met by wind energy
- Reuses and recycles all generated waste such as mild steel scrap and cast iron scrap

BENEFITS

- Dewas plant reduced energy consumption by 30 per cent and water by 40 per cent in the last five years
- KBL's products contain no hazardous waste, they are recyclable, biodegradable

In 2009, the building received the LEED gold certification and 5-star energy efficiency status from the Bureau of Energy Efficiency. Another 50-year-old ACC building, the La Residency in Thane, and the Central Control Room building inside its new Chandrapur cement plant received platinum certification from the Indian Green Building Council. A fourth green building is under construction in ACC's upcoming project in Jamul, Chhattisgarh.

Besides these buildings, the cement major, now a part of Swiss company Holcim, has established energy and environment management initiatives across functions, which employs 9,000 people and has an annual production capacity of 31 million tonnes. According to ACC officials, the company has reduced its specific carbon footprint by more than 33 per cent since 1990, and as per its Low Carbon Technology Roadmap, this will further reduce by 20 per cent by 2040.

ACC's Thane complex, for instance, is powered by the company's three wind farms of 19 MW installed capacity in Tamil Nadu, Rajasthan and Maharashtra. Last year, ACC received one of the country's top honours for sustainability—the CII-ITC Sustainability Awards 2013 for large companies. The same year, ACC commissioned its first waste heat recovery power generation unit of 7.5 MW, which has a potential to reduce nearly 44,180 tonnes of carbon dioxide per year while providing 7.5 per cent green energy for the plant.

KBL PUMPING DOWN EMISSION

A walk through the sprawling Kirloskar Brothers Limited's (KBL) corporate office campus in Pune can well be a lesson in botany. The gardens and ample open spaces are lined with native species of trees and plants, and they require less water and maintenance. The water used is treated waste water. The company's CMD, Sanjay Kirloskar, wanted the new building to adhere to KBL's commitment towards the environment and therefore planned 'Yamuna', the first LEED platinum-rated green building in this region. In step with KBL's eco-friendly policies, the corporate office focuses on water conservation and harvesting, while waste from the cafeteria goes into the vermicompost.

"There is an enormous potential for green business in India. Heavy energy users—steel, cement and paper—have adapted quickly to this change."

JAMSHYD GODREJ
CMD, Godrej & Boyce, and Chairman, CII-Godrej GBC

This, though, is just one of the several measures KBL has taken in its quest for green business practices. In 2014, the group became India's first pump manufacturing facility to receive the GreenCo rating. Its plant in Dewas, Madhya Pradesh, was recognised as a 'Green Company' by CII's GBC. The units in Dewas and Kaniyur have received the CII GreenCo silver rating certification.

Using energy-efficient technology, the Dewas plant has reduced specific energy consumption by 30 per cent in the last five years. Besides creating awareness among employees about the need to conserve water, it has put in place rooftop rainwater harvesting projects. This has helped the Dewas plant reduce water consumption by 40 per cent over the last five years and

SRINIVAS SHETTY

THE CII-GODREJ GREEN BUSINESS CENTRE IN HYDERABAD

become a zero water discharge facility for the last 15 years. According to KBL officials, 45 per cent of all power consumption at Dewas is wind energy and the facility has cut down carbon dioxide emission by 10 per cent in the last five years.

Waste management is another area where the plant scores high. It reuses 70 metric tonnes of mild steel scrap and recycles 100 per cent cast iron scrap. In supply chain management, KBL has taken initiatives to develop local vendors for components in order to reduce emissions due to transportation and has cut down the number of vendors from 87 to 72 besides reducing long-distance suppliers from 69 to 36.

Moving onto the green lane back in 2009, KBL had signed the CII code for "ecological sustainable business growth" and adopted the principle of 3R—Reduce, Reuse and Recycle. The focus is now on conservation of energy and water, minimising greenhouse gas (GHG) emissions and waste generation, improving recyclability, maximising material conservation, and use of recycled material.

CII BUILDING GREEN

A family of geese walks around from grass to stone and back on grass, totally at home, as you step into the CII-Godrej GBC in Hyderabad. Spread across nearly four and a half acres, natural rocks from the original site with more than 300 species of plants surround the building. "The building demonstrates how green practices can be adopted and sustained," says S. Srinivas, deputy executive director of the centre. "Our sustainable methods have translated into an annual 100-tonne reduction in carbon dioxide emissions, 20 to 30 per cent reduction in potable water consumption over a conventional building and nearly 55 per cent reduction in energy consumption."

The building has a rooftop garden covering nearly 60 per cent of its surface and houses the 23.5-KW solar power unit that caters to 20 per cent of its lighting requirements. Lighting is needed typically only around dusk, before which sunlight streams through the uniquely positioned glass panels designed to ensure maximum light and minimum heat. Temperature is further reduced thanks to the two wind towers that harness wind power and cool down the building, in turn reducing the need for air conditioning. Over the years, maximum water penetration and rainwater harvesting have ensured an increase in the area's water table.

Quite aptly, the building houses the CII's Centre of Excellence for green buildings, energy efficiency, renewable energy, environment and recycling, water management and climate change activities in India. "Ultimately, we need to demonstrate how green practices make tremendous business sense in order to get more people involved in the green building movement," says CII's S. Srinivas. As one of its latest initiatives, the CII is in talks with owners of nearly 130 buildings in the vicinity of HITEC City in Hyderabad to convert them into green buildings.

The industry chamber's Indian Green Building Council is actively involved in the green building movement, with more than 15 chapters across India and ventures such as Green Product Certification Process and Green School Certification Process, awareness programmes, with 516 certified green buildings already in place and several other initiatives in the pipeline.

In promoting green business, India has thus made some definitive strides. With more awareness of the economic benefits and greater government push, the initiatives will surely bear more fruit in the days to come. There should also be a willingness to change. As Jamshyd Godrej says, "There are no major challenges for companies that want to go green. It is a mindset issue."

with Aditi Pai and Mona Ramawat

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CII-GODREJ GREEN BUSINESS CENTRE

INITIATIVES

- 23.5 KW solar power unit that caters to 20 per cent of the lighting requirements
- Rainwater harvesting, recycling of waste water
- Wind towers installed on campus

BENEFITS

- 100 tonnes per year reduction in CO_2 emissions, 55 per cent lower energy use
- 20 to 30 per cent reduction in potable water consumption