Innovation is the buzzword for the new Indian entrepreneur—the driving force behind the country’s march to greener pastures.

BY SHREYASI SINGH
By 2020, industry experts say that renewable energy will be a nearly US$10 billion business in India. The size of the energy efficiency market is said to be many times that number. At a recent conference, Ajay Mathur, director-general of the Bureau of Energy Efficiency, said India’s energy efficiency market was worth about US$15 billion.

These numbers suggest India will be a major player in green businesses, and Indian companies will have to lead the eco-brigade. The Bureau of Energy Efficiency says to deliver a sustained economic growth rate of 8 per cent to 9 per cent in the next 20 years and to meet lifetime energy needs of all citizens, India needs to treble, even quadruple, its primary energy supply and increase its power generation capacity by six times.

Undoubtedly, India needs careful planning and creativity to successfully execute green business projects. Analysts say the country has definite leadership potential in greening the cement, paper, building and renewable energy sectors. This confidence flows from the incredible entrepreneurial buzz in this sector. Clever new ideas have mushroomed across industries like clean technology, eco-tourism, green building materials, recycle/reuse technologies, sustainable agriculture, renewable energy and water management. “Every day, we get three to four proposals,” says Poonam Garg, Assistant General Manager at IFCI Venture, which launched the Green India Venture Fund in 2008 with a corpus of INR 330 crore (US$ 70 million). “I have worked with IFCI Ventures for more than 15 years. But, in the last year, that I have been focused on the Green India Venture Fund, I have seen great, great growth,” adds Garg.

Since its launch, the fund has disbursed nearly INR 180 crore (US$ 38 million) to five companies. In fact, the fund has already exited from one of its portfolio companies, Luminous, with an unprecedented 42 per cent return in the first year. Luminous manufactures power inverters, solar inverters and several packaged power products. “In the last two years, both consumers and businesses have shown awareness of being environmentally conscious,” says Karan Gupta, Director, Breathe India Ventures, a new $30 million venture capital fund for seeding green businesses. “Workshops, conferences and investor events have doubled and tripled in the last year. We have already processed 150 entrepreneurs,” adds Gupta. He is especially bullish on small hydro electric projects and other off-grid energy generation ideas. “There is a bigger market for proven technologies rather than new ones. Earlier, these technologies probably did not manage to mainstream themselves for lack of support. Now, a strong government push and availability of commercial capital have ensured there is a huge potential in the off-grid sector.”

Niche areas are emerging, too, like fuel cell technologies, off-petrol products and eco-tourism. But investors believe the sun has just risen. The Green India Venture Fund says entrepreneurs were earlier cautious about inviting investments, but in the last six months specifically, there has been a great thrust. “For example, the solar sector has received a lot of attention. Probably in two more years, this field will mature and show profitability. Similarly, things are moving well in wind energy. The success of these industries also shows there is much more scope in industries that manufacture and supply to them. Backward integration is taking significant steps ahead,” explains Garg. She adds that the government can help growth by initiatives like instituting a body similar to the Technology Development Board, dedicated to nurturing green technologies.

Other industry observers agree, saying that the money coming into India is at the deployment stage. They believe the huge untapped R&D potential will move after the new technologies start getting traction with consumers. “What’s also great is that from a clean tech perspective, this entrepreneurial energy is a pan-India movement, though each industry does have its clusters. For instance, there are more hydro projects in the north, and more innovations in bio gas in central India,” continues Gupta.

Investors face another big challenge - to justly capture good ideas. There is a lot of innovativeness in the rural areas, especially in off grid sectors, but reaching these is not always easy.

But, with the grit and ingenuity many of our green entrepreneurs have shown, it’ll be wise to expect even more phenomenal growth in this powerful, emerging field. We look at a few companies who symbolise this spirit.

**Conserve India**

It’s an unusual proposition but one that defines global inter-connectionedness. At a factory in a crowded, industrial neighbourhood of Delhi, Shalabh and his wife, Anita Ahuja craft a stylish range of clothes, carpets, footwear, bags and jewellery for a foreign clientele from a material they call “HRP” or Handmade Recycled Plastic.

Shalabh and Anita’s company, Conserve India, has developed an alternative recycling or up-cycling process that converts discarded plastic bags into HRP. Conserve supports a motivated and well-trained team of rag pickers who scour overflowing land fill sites for the refuse. The bags are then processed into recycled sheets, using a process that is more energy efficient and eco-friendly than the conven-
tional recycling methods.

They convert used polythene bags into "renewed" innovative material with significantly different properties and great visual appeal, without using any colour or dye. Founded in 1998 as a social mission to work in energy efficiency and waste management, Conserve started making HRP in 2002.

Products made out of HRP now grace high street shelves across Europe, often retailing for as much as US$400. It’s a successful business model that delivers both high fashion and life-giving opportunities. The firm employs over 1000 people across three slums in Delhi using the ubiquitous plastic bag as an unlikely resource for income generation. It uses its profits to run welfare projects in education, health and training of workers.

Conserve products sell in 2,500 retail stores in Europe, USA and Australia and the firm is also a New Ventures India portfolio company, which says, “the company exemplifies the recycling spirit by converting trash to treasure”. NVI believes Conserve’s true value lies in the fact that by tackling the dual problems of waste and poverty, it manages to attract a captive audience of those who buy “fashion with a conscience”.

“When we started the business side of Conserve India we decided that our products would be a better fit in European, American, and Australasian markets. This was partly a pragmatic choice. Selling abroad meant that we were in higher value markets and could earn more from our products,” say the co-founders. Sales abroad have validated this profitable gut with a clear trend indicating that a “right-fit” clientele is willing to pay more for fair-trade articles, thus delivering large profits for a low-cost process.

International buyers already demand a higher volume of their existing products, and their product line can grow to other items such as shower curtains and floor tiles. Conserve is also preparing to launch its first store in Delhi, staffed by many workers who started out as rag pickers. “Attitudes are starting to change in India. There is now an understanding of the importance of preserving as much of the world’s resources as possible. People do want to make the statement that they care about the environment.” India will soon be the third largest consumer of plastics in the world, and Conserve will keep weaving threads of success.

Ecomantra

Ecomantra is a sustainable tourism venture promoting eco-friendly, activity-oriented eco-holidays.

It was founded in 2001 by a group of nature lovers and members of the Bombay Natural History Society.

They began with promoting eco-friendly home stays near Mumbai and Pune and conducting eco-workshops in Mumbai. But soon, Ecomantra was running an eco-camp, The River Trails, in Kolad, Maharashtra where it conducts programmes on proactive learning. Ecomantra has partnered with the local
community in Kolad to build, manage and run the camp. “In fact, the idea for the camp came about in 2004 when we were invited by a villager who owned a small piece of land,” recalls Mahrukh Goel, a former advertising professional who forms the nucleus of the firm along with her partner, Ravi. “Mahesh used to run a small boating operation in the river next to his land, a stunningly located 1.5 acre plot. But, he was running into debt which is why he asked us to take over his land and do something. What emerged was a community tourism project,” adds Mahrukh. She says the camp was entirely constructed by local residents, rendering a rustic look, and ensuring the project was low-impact and participative. It is also Maharashtra’s first and only community-owned campsite.

The adventure trail and customised itineraries for travellers, generate a turnover upwards of INR 1 crore ($10 million) for Ecomantra. “The mass tourist is not our target audience. We only aim at the well educated, upper middle class. As a genuinely eco-company, we can demand higher tariffs,” Mahrukh says.

Plans are afoot to grow to multiple sites, and Ecomantra is looking to attract suitable equity partners to chart this growth. The founders admit that raising funds is not going to be easy. Investors aren’t showing the same zeal for the business, but the capital should eventually trickle in. “Eco-tourism is growing rapidly, worldwide, but it is new in India. The potential is very, very large.”

**Solkar**

K.E. Raghunaathan personifies the spirit of brave entrepreneurship. He set up Solkar Solar Industry Ltd, in 1985, a time when terms like renewable energy and green business weren’t even coined. An engineer, Raghunaathan has stayed true to what he calls his passion.

His company’s mission statement underlines his belief: “to bring the sun closer to the common man.”

“Nobody would dare enter this industry then,” says Raghunaathan. His journey began with manufacturing industrial solar water heating systems. The first company with an ISI certification for this product, Solkar has installed nearly 45,000 sq feet of solar collectors, nationwide. Collaborating with a German scientist to make solar meal makers won Solkar the Best Small Scale Industry Award in 1996. Such meal makers are only made in India.

Solkar, however, has specialised in lighting, spanning a wide range of portable, indoor and outdoor products. In 2007, they launched a revolutionary LED Street Light, priced at INR 10,000 ($US 213). They also sell all-solar fans, mobile phone chargers and torch lights through more than 100 dealers across India.

An excited Raghunaathan says: “The market has picked up only last year. Consumers are aware, the need is high and people can afford it. I can finally see it taking off. What subsidy couldn’t all do those years, public demand will.” The company employs 75 people and reported a combined turnover of a little more than INR 6 crore ($US 1.3 million), last year. They have manufactured an affordable, innovative solar lamp named Wonderlite. Solkar has partnered with ExNoRa, a Chennai-based NGO, for Light A Home, a programme that aims to donate one million solar lamps to the poor.

ExNoRa’s campaign aims to replace the ageing and polluting kerosene lamps across Tamil Nadu.

“We need to create greater awareness, funding solar pilot projects at schools and engineering colleges,” adds Raghunaathan.

**Attero Recycling**

Nitin and Rohan Gupta see business in waste. Founders of Attero Recycling, an integrated end-to-end electronic waste recycling company, the Guptas have an eco-friendly solution to e-waste. Attero means waste in Latin. The idea germinated three years ago, when the brothers were struggling with trying to dispose of an old laptop. “We figured it was not only an environmental issue, but a viable business opportunity, too,” says Nitin Gupta, an IIT Delhi graduate.

At Attero, e-waste is an important resource. “E-Waste is a rich and cheaper source for metals. It contains precious metals like platinum, gold, palladium and silver and base metals like copper, lead, tin, etc. We extract all the precious and base metals that we source from across the country, and sell them in the commodities market at multi commodity exchange (MCX) rates,” say the Guptas.

Now, Attero is the first e-waste recycler to be registered with the Central Pollution Control Board (CPCB) under the Ministry of Environment and Forests.

Within months of setting up, Attero raised equity financing of nearly INR 25 crore ($US 5.3 million) from Draper Fisher Jurvetson and NEA-IUV.

Since computers carry hard drives and drives carry data, Attero helps its clients retrieve the files for security and privacy. India generated close to 440,000 tonnes of e-waste in 2008. The volume of e-waste is rising at 20 per cent in India. This is mainly because more people are buying electronic goods, and are discarding them far sooner than before, adds Nitin.  

“e-Waste is a rich source for metals, such as platinum, gold, palladium and silver, and base metals like copper, and tin, which we source, extract and sell at commodities market at MCX rate.”

—Rohan Gupta, COO, Attero Recycling