

# FROM YARN TO WIND

Behind the fairytale story of entrepreneur Tanti Tulsi's creation of Suzlon – the wind power giant – lies grit, guts and some good luck



The 1.4 million inhabitants of Rajkot in central Gujarat are noted for their entrepreneurial instincts. Despite being perennially drought-stricken, Rajkot is among the fastest growing cities in the world (ranked 22nd according to the City Mayors Index). The growth is a product of the local flair for trade. The 51-year-old Tulsi Ranchodbhai Tanti, along with his younger brothers Vinod, Jeetendra and Girish, embodies that spirit although the joint family transplanted itself from Rajkot to Pune, Maharashtra, about 13 years ago.

Tanti has bootstrapped a startup called Suzlon Energy which had 20 employees in 1995, into a global empire with over 14,000 employees and a market capitalisation of \$13 billion. (Suzlon \$7.6 bn, REPower \$2.5 bn, Hansen \$2.9 bn). This feat

has been accomplished through a combination of risk-taking, communications skills and numerical savvy.

#### Entrepreneur as opportunist

The focus on wind turbines came about opportunistically. In 1990, the brothers started a textile unit processing polyester yarn, and making furnishing fabrics. They called it Suzlon, contracting the colloquial Gujarati “suz-bhuz” meaning “smart”, and “loan”. The Rajkot factory ran into chronic power shortages. In 1994, out of desperation, Suzlon bought two wind turbines from Danish manufacturer Vestas. That freed Suzlon from the vagaries of the grid.

During the installation, Tanti learnt the hard way about inefficiencies in the wind turbine generator (WTG) industry. The turbines were supplied by Vestas, installed by another company

and maintained by a third. Thus was born the intuition that there was an opportunity to provide end-to-end WTG management and installation services.

#### Entrepreneur as risk-taker

The next step was for Tulsi Tanti to move out of the textile business and to take the risk of this uncharted wind power market. In April 1995, the Tanti's sold some property and together subscribed \$600,000 as capital to start Suzlon Energy. Suzlon started hawking the wind-power concept locally. Apart from installations on client-sites, Suzlon pioneered the concept of selling turbines at the wind farms it managed, and supplying the output to owners.

#### Optimist and communicator

Among Tanti's forces are his confidence in his business model and ability to communicate that confidence. He enjoys and

is clearly skillful at talking. He was able to launch his startup by calling upon a couple of visible companies, and using his verbal charm to convince them of the feasibility of his value proposition.

In his communicative manner, he leveraged a relationship with IPCL, a petrochemicals company (now merged into Reliance Industries) that was supplying raw materials to Suzlon's yarn business. Suzlon installed 3.5 MW capacity for IPCL. And then Tanti approached and converted a couple of behemoths: the Tata Group and Bajaj Auto. Suzlon was on its way.

Tulsi Tanti's optimism and charisma are not reserved for outsiders. He has used them to build a company characterised by its can-do attitude. Tanti is known for his interminable pep talks, where he convinces employees to buy into his vision

of Suzlon making it to global number one. It seems to have worked and his confidence has percolated down. Company insiders at all levels have extremely high morale and genuine belief in their company.

#### Entrepreneur's dilemma

When a startup becomes successful, the entrepreneur is often faced with a dilemma. Either he seeks stability but that often means keeping the business relatively small. Or he runs the risk of greater instability with the possible benefit of greater growth. A small fish in a pleasantly calm pond or a big fish in a potentially stormy ocean – such seems to be the alternative. Tanti chose the second option.

He was aware that scaling would only be possible by acquiring technological capability. So in 1997, when German company Sudwind went

bankrupt, Suzlon bought it and turned it into an R&D centre based in Rostock, along the windy northern German coast. In 2001, seven years after dipping his toe in the WTG waters, Tanti jettisoned all fallback positions, sold off the company's heritage textile manufacturing unit and focussed entirely on WTG.

#### Entrepreneur does finance

Tanti's childhood friends remember him as good with numbers. That facility no doubt contributed to his choice of commerce and engineering as degrees in college. The numerical savvy combined with a taste for negotiation and deal-making have served him well in growing his enterprise. This skill and pleasure at wheeling-dealing differentiates him from some other entrepreneurs (particularly the entrepreneur-inventors) who are more comfortable nurturing

#### Suzlon Basic Data

Year founded	1995
Employees	14,000
Global market share	10.50%
Sales*	13,679 crore
Net profits*	1,030 crore
Capacity installed*	2,311 MW

\* Year ending March 31, 2008, Source: Suzlon Annual Report

## A 3.4 BILLION KNOT WIND

Cost control through vertical integration makes Suzlon a particularly profitable manufacturer

Suzlon Energy is currently the fifth largest manufacturer of wind turbine generators (WTG) with 10.5 % marketshare in the \$25 billion global market. If its 90% control of German WTG maker REPower is taken into account, it will hold over 14% in 2009, pushing it to no: 4. By 2010, when a massive capacity expansion is completed, it could be challenging the top two, Vestas (Denmark) and GE's Wind division. Or in Tanti Tulsi's words: "We are the fastest growing (WTG) company in the world. We are the fourth-largest based on the RE acquisition and within three to four years, our target is number one."

In 2010 Suzlon should have doubled its capacity to around 5,700 MW. It installed around 1,980 MW in 2007. Its orders, as of May 2008, stood at \$4.3 billion for 3,454 MW. Of the new orders, around 55% are from the US and 17% from China with Indian installations coming in at about 5% of total orders booked. REPower had another €1.5 billion (\$2 bn) of orders in hand.

Suzlon, just 13 years old, has grown at warp speed, far outpacing an industry that is itself growing at breakneck pace. In the last financial year, Suzlon's revenues climbed 71% to \$3.4 billion. That is almost thrice as good as the WTG industry's impressive CAGR of 26%. But Suzlon's profitability is just as impressive as its growth. With profit before tax of \$480 million, the margin of 14% is almost twice as good as the industry average (8%)

How does Suzlon deliver this impressive profitability? Many Indian manufacturers rely on labour arbitrage to keep costs down. While that is undoubtedly a factor with Suzlon, it relied principally on vertical integration. Its tight control of its supply chain enables it to run at 65% material costs. The industry benchmark is 70-80%. "The skeleton of our structure is low cost," says Tanti. "Globally, power costs are 8-9%. My cost is not more than 4%. That makes me at least 10% more competitive."

Suzlon is one of the globe's foremost global companies. It has dedicated centres for gearbox technology in Belgium, technology innovation in Denmark, process engineering in India, aerodynamic development in the Netherlands, and composite wind turbine technology in Germany. These R&D and knowledge management centres leverage European expertise in different aspects of wind power, and Indian expertise in IT systems and process engineering. Its factories are spread throughout the northern hemisphere, in Europe, the US and China. And not only are Suzlon's sales impressive, so is the breadth of its product range. Including the recent acquisition of REpower, it offers the widest range of WTGs (600Kw to 6 MW). ■

#### Timeline

<p><b>1995</b></p> <p>Formation of Suzlon Energy Limited</p>	<p><b>1999</b></p> <p>Award of contracts by corporate majors such as Tata Finance, Bajaj Auto</p>	<p><b>2002</b></p> <p>Suzlon's first 1.25 MW Wind Turbine Generator is commissioned</p>	<p><b>2003</b></p> <p>Entry in China : Suzlon Energy Limited opens its representative office in Beijing.</p>	<p><b>2005</b></p> <p>ChrysCapital III, LLC, Mauritius, one the largest Private Equity Investor in India, invests Rs.100 crores in the company</p>	<p><b>2006</b></p> <p>Suzlon Energy Limited opens its Initial Public Offer (IPO) for 29.34 million shares. Shri Tulsi R Tanti , CMD Suzlon Energy Limited is awarded the prestigious 8th Ernst &amp; Young Entrepreneur of the Year Award</p>	<p><b>2007</b></p> <p>Suzlon upstages Areva in a battle for acquisition of RE Power.</p>
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# DOSSIER - WIND POWER ENTREPRENEURSHIP

their products in more secluded climes.

Donning those number-crunching and deal-making hats, Tanti was able to convince private equity firm ChrysCapital, and Citigroup Venture Capital, in 2004, to pick up stakes which helped to fund the first global expansion. ChrysCapital invested \$11 million at Rs. 27 per share while Citi paid around Rs 21.6 per share for 23 million shares.

That was followed by the entrepreneur's proof of success, an IPO. On October 19, 2005 Suzlon raised about Rs. 15 billion at Rs 510 per share. The public listing was oversubscribed 45 times and catapulted the Tanti's into the billionaire category. At the end of the first day of trading, Suzlon closed at Rs. 692 for a first-day capitalisation of Rs. 200 billion.

## Entrepreneur as strategist

Tanti was struck by the division of labour in the wind power segment. Few manufacturers focused on vertical integration from turbine to tower to installation. And within the construction of the turbine nacelle itself (see operations case study on page \_\_\_), few manufacturers controlled a complex supply chain that included rotor blades, gearboxes, transmission shafts, the generator itself, and the controller electronics. The majority of Suzlon's competitors concentrated solely on the generator technology. This meant that component supply became a bottleneck – many component manufacturers had order books amounting to two or three years of capacity. Tanti reasoned that vertical integration could become his strategic advantage.

The strategic choice of vertical integration meant acquisitions.

Here Tanti used his financial savoir-faire to achieve his strategic goals. With the capital from the IPO and his bargaining ability, Tanti acquired Hansen Transmissions International, a Belgian maker of wind turbine gearboxes, in 2006, for €371 million, thereby securing long-term supplies of another key component.

But the second acquisition tested even Tanti's superior negotiational cunning. In May 2007, Suzlon paid €450 million for 33.6% of REPower, a German wind-turbine maker. In a protracted exercise of financial brinkmanship against Areva, Tanti got the upper hand. Concurrently, he was negotiating for the 22% stake held by the Portuguese firm, Martifer. At the beginning of September, he reached an agreement or that stake, thus gaining unfettered control of REPower.

In addition to vertical integration, Tanti embarked on what might call a strategy of horizontal blanketing. He set up various unlisted companies that specialised in aspects of offering integrated wind-power management services. These include Sarjan Realty, Shubh Realty (South) and Shubh Realty (Gujarat). All these specialise in land acquisition for wind farm projects. In addition, Suzlon Infrastructure Limited – an

## GOOD EYE FOR INVESTMENT

How ChrysCapital spotted Suzlon at an early stage

In late 2003, Ashish Dhawan, Senior Managing Director and co-founder of ChrysCapital, a Mauritius-based private equity player which claimed \$2.25 bn Assets Under Management (2008), liked the look of Suzlon. In 2004, ChrysCapital invested \$11 million for 7% stake at a valuation of about Rs 27 per share. ChrysCapital sold half of the stake just before the IPO in September 2005, at a small discount to the IPO price of Rs 510. ChrysCaps divested its residual holding in 2007. Dhawan remains an independent director on the board of Suzlon. He shares his thoughts on a company that he knows very well.

### What made Suzlon look attractive?

"When we came across Suzlon in late 2003, the company had gone through a difficult year. It was Western-India-centred, where it had carved out a niche despite the presence of global majors. Then Maharashtra spent a year reworking its wind-policy. Orders dried up while everyone waited. (Suzlon's turnover dipped from Rs 5.25 billion in 2001-002 to Rs 2.6 bn in 2002-03 and then jumped to Rs 8.6 bn in 2003-04)."

"During that lean year, Suzlon did a pilot project in Pipestone, Minnesota, putting up around 24MW. They also pushed into South India. They were prepared to look aggressively for new markets. It was a show of technological confidence to enter US. The project was proof of concept that it could compete globally. They scaled up to 2 MW turbines. So, despite the choppy financials, we liked the corporate dynamics."

### What about the broader picture?

"We liked the sector dynamics for renewables in general, and particularly wind. The Europeans wanted energy security. India also offered tax-breaks. In fact, we underestimated the sheer growth."

### What about the entrepreneur?

Tulsibhai came through as very ambitious, very driven, very focussed. He was also very hands-on. He understood WTG technology. He knew where to go for R&D. He had the vision to carry people but also down-to-earth execution capability. Suzlon always had a very clear understanding what a project delivery requires. Our favourable impression of the entrepreneur was of course, a key factor in the investment decision.

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## A Global Company: Plant Locations

Components	Locations
Rotor Blades	India : Daman, Maharashtra, Gujarat, Pondicherry US : Minnesota China : Tianjin
Gearboxes	Belgium: (Hansen Transmissions)
Generators	India : Maharashtra (JV with Elin, Austria)
Control systems	India : Daman, Pondicherry
Towers	India : Gujarat, Maharashtra

# DOSSIER - WIND POWER ENTREPRENEURSHIP

SUZLON REVENUE BY GEOGRAPHICAL AREA						
	FY 2006-07		FY 2007-08		By Area	Revenue growth
	Rs crore	MW	Rs crore	MW		
India	4,121	955	5,571	976	49%	35%
Europe & Other	118	27	3,151	609	27%	2570%
USA	1,591	374	2,289	593	20%	44%
China	300	100	455	134	4%	52%
<b>Total</b>	<b>6,130</b>	<b>1456</b>	<b>11,466</b>	<b>2311</b>	<b>100%</b>	<b>87%</b>

unlisted subsidiary – specialises in the engineering project construction required to install WTGs.

## Entrepreneur cuts red tape

Entrepreneurs are typically the antithesis of bureaucrats. They think outside the rules or they invent new rules, and they work unbureaucratic hours doing so. Tanti is no exception. He kept long hours in the beginning and still does. He routinely works 14-16 hours every day, 7 days a week. Unlike many other smaller entrepreneurs, he is a thoroughly globalised one and travels more than 75% of his time. In fact he flies more than a professional pilot, booking some 300 flights a year. All this means that he spends only slightly more than a month per year at his home base of Pune.

And then there's the bureaucrat as roadblock.

Bureaucrats are relatively impervious to market incentives. And Tanti is not sanguine about India's bureaucrats. He displays irritation at the slow implementation of reform in the Indian power sector and also at the difficulties of land acquisition in India. Insiders say that he is somewhat disillusioned about the prospect of fast business expansion in India and has tended to focus abroad as a result.

## Conclusion

All entrepreneurs have a bit of Don Quixote in them – a fanatical belief in their enterprise. Tanti has that bit of Quixote. But whereas the man from la Mancha was a Spanish knight mistakenly attacking windmills, the man from Maharashtra is an Indian knight profitably manufacturing WTGs. GO salutes Don Tanti de la Maharashtra! ■

## GOOD EYE FOR INVESTMENT

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### What factors helped the company grow overseas so fast?

Suzlon did several things right in its push overseas.

**First:** It put together a global marketing team of 80-100 people, hiring experienced people at competitive salaries. That shortened time to market considerably.

**Second:** Suzlon was ahead of the curve in seeking control of the supply chain through vertical integration. WTG technology is complex, there are many components, sourcing is a perpetual worry. Building in-house capacities solved short-term shortages. In the long-term, it gave Suzlon a big cost-edge. That is blindingly obvious when you see Suzlon's cost structure (cost to materials is 65%) visavis Repower (80%).

**Third:** Suzlon sequenced market entries carefully. It focussed on US, China and Australia. It soft-pedalled Europe. It went to Europe for R&D and to build its supply chain. But it entered less mature markets with higher growth rates.

**Fourth:** It was open to locating R&D abroad. The Europeans had mastered certain pieces of the technology and locating cutting-edge R&D in Europe would accelerate learning. Buying Hansen was brave. Suzlon realised that it was such a key global asset – it stole a march there. REPower is easier to understand strategically. REPower's WTG range complements that of Suzlon.

### What do you see in the future?

Now, the interesting thing is that REPower opens up offshore plays because it makes 5MW offshore turbines, which is not part of Suzlon's range. Offshore will become a high-growth area through the next four or five years. The combination of low-cost manufacturing, fast expansion and cutting edge R&D should help Suzlon grow faster than the industry.

I continue to be bullish about wind in general. I think it can make more optimistic projections though of course, this sort of long-term prediction is difficult. The strategic arguments for energy security apart, the Green Philosophy is becoming more popular. This is true even in the US, after Al Gore's movie, An Inconvenient Truth.

Many US state governments already back the concept of renewables. If there's a new federal administration, which pushes renewables, wind is very well-placed. For example, look at China, where policy support has helped wind grow faster than anybody imagined possible. Obama's Convention Speech where he spoke of the challenge of breaking the US' oil addiction also makes it clear that he would back renewables.

Wind can compete on price against high-priced conventional fuels. It doesn't need subsidies. It is much cheaper than any of the other new, clean technologies. It will get even cheaper as WTG technology improves, and steel prices fall. But policy support would certainly be a boost.

### Have there been any hiccups and pitfalls along the way?

Of course there have been hiccups. That always happens along with fast growth. The problem with cracking blades and the required retrofit was highlighted in the WSJ. But the acquisition of REPower helps to maintain technological credibility. Suzlon should certainly make its 2010 targets in terms of capacity expansion and sales. ■