

Suzlon in Gujarat: Partnerships for sustainable development

The western Indian state of Gujarat is among the nation's leading centers of industrial development. The people of the state have a long standing reputation for entrepreneurship and pioneering new industry. Few companies demonstrate this more vividly than Suzlon – which, born in 1995 in Ahmedabad.

Gujarat Wind power Policy 2007

Period: 20 Jun, 2007, to 30 Jun, 2012

Nodal Agency:
Gujarat Energy Development Agency (GEDA)

Power Purchase Options: Captive (Wheeling) & Sale to GUVNL /Distribution licensee

Tariff: Rs. 3.37 per unit - flat for 20 years

Powering Gujarat's economy:

It is also not surprising that Gujarat has been at the forefront of development of wind energy in the country, with over 1,000 MW of wind turbine capacity installed across the state.

Strong Winds:

With long coastline, and a supporting topography – the state offers a consistent wind regime highly suited for utility scale wind farm operations. The

Geographical coordinates

- Northing: 23 deg, 40 min - 22 deg, 45 min to
- Easting: 68 deg, 23 min - 70 deg, 29 min
- Average Elevation (msl): 2-3 m above sea level

state has a highly diversified economy, with a healthy mix of agricultural, industrial and domestic electricity consumption. Gujarat has grown at an average of 10% a year for the past five years, outshining the national economy and also bringing with it a proportional increased demand for power.

In this scenario, wind has proved itself to be a valuable part of the sustainable future of Gujarat. The state has well planned policy frameworks supporting the growth of renewable energy, and has taken the lead in developing assets with over 1414.70 MW already installed by 30 Sep 2008– of which Suzlon has installed 767.44 MW.

Windfarm Capacity

Total capacity (01 Dec 2008): 655.45 MW

Planned Capacity Installation: 1500 MW

Product mix: S52 - 600KW, S64 - 1.25 MW, S82 - 1.5 MW, S88 - 2.1 MW

First turbine: S64 -1.25 MW commissioned on 31st December 2005 for Gujarat NRE Coke – a mining major.

Policy Supports:

It is important to note that in the Indian model, the government has almost never been a direct investor in renewable energy, only providing policy and incentive mechanisms to encourage the uptake of wind and other forms of non-conventional energy. However, the support measures put in place by Gujarat's government and administration have played in driving the growth of wind energy in the state. A supportive power purchase framework assuring the investor a Rs. 3.37 per unit of electricity produced, wheeling and banking facilities, rapid

Key Wind Data

Air Density at site: 1164 g/cu m

Mean Annual wind speed: 4.86 m/s (measured at 20 m mast height)

Power Law Index: 0.37

Wind Power Density: 311 W/SQ. M

Ref: MNRE data of Motisindholi metmast

approvals and clearances for projects have all played a big part in making Gujarat one of India's leaders in the wind energy space.

Kutch:

The Kutch Windfarm was originally conceptualized way back in 2002 and preliminary project activities commenced in early 2003. The region offered several key advantages for the establishment of a very large scale windfarm. The coastal

topography made for consistent wind conditions, and the land was primarily non-agricultural due to the salinity of the soil caused by the proximity to the coast. The area was largely underdeveloped, making it an ideal destination for a wind project, which would attract further industry after it and generate direct and indirect employment.

The Government of Gujarat also extended support to Suzlon by signing of two MoU, under the aegis of the 'Vibrant Gujarat' initiative. One of this MOU was signed in the year 2003 specifically for the development of the Kutch wind farm project.

The Project:

The Suzlon developed windfarm in Kutch is without a doubt the largest such venture in the state – and in fact, all the way across Asia. Kutch recently overtook the Suzlon-developed windfarm in Dhule, Maharashtra, crossing 655 MW of installed capacity and seizing the mantle of Asia's largest windfarm project. The wind farm features a mix of Suzlon's entire product portfolio with a mix of 600KW, 1250KW, 1500KW, 2100KW turbines installed.

Key Customers	
DLF Group:	150 MW
Gujarat NRE Coke:	87.5 MW
ONGC:	51 MW
Jaypee Group:	8.75 MW
GNFC :	15 MW
GACL:	23.75 MW
GSFC:	10 MW
GSEC :	10 MW

Suzlon has set aim for an even higher target –an ultimate capacity of 1,500 MW, among the worlds largest, and Asia's largest by far.

Giving Back to Society:

Suzlon has consistently built on a partnership approach in every project and endeavor it has undertaken, from offices, to manufacturing facilities to windfarms – building synergistic relations with the community it operates in.

Suzlon has embarked on a multi-pronged strategy in Kutch partnering with several non-governmental organizations to drive programs in civic amenities, health and livelihood. These cover projects as diverse as funding for schools, decentralized drinking water program, rural health referral services and supporting textile and leather crafts.

Thematic Area	Project
Civic Amenities : Sahjeevan Trust	Revival of Drinking Water
	Community Managed Decentralized Drinking Water Programme
Livelihood: Khamir	Dutch-Kutch
	Textile Tailoring Unit for the Craft
	Support to the Revitalization and Development of the Leather Craft Sector
	Market Facilitation – Positioning the Crafts
Health: Bhojay SarvodayaTrust / Wagad Welfare Trust	Rural Referral Services

Contacts\Resources:

Suzlon:

Mr. Rohit Modi, President India Business Unit
Mr I.C.Mangal , Business Head – India (West & North)

Policy and Reg Bodies:

1. GERC
 - Mr. P S Shah (Secretary, GERC)
2. GEDA
 - Mr. Vagmin Bech (Director GEDA)
3. Dept of Energy & Petrochemicals, GoG
 - Mr. S Jagadeesan (Principle Sec., Dept of Energy & Petrochemicals, Govt. of Gujarat)
4. Dept of Energy & Petrochemicals, GoG
 - Ms. Avantika Singh (Dy. Chief Sec., Dept of Energy & Petrochemicals, Govt. of Gujarat)

Customers:

Sr. No.	Customer	Order placed to Suzlon
1	Gujarat NRE Coke Ltd.	87.5 MW
2	Gujarat Alkalies & Chemicals Ltd.	62.75 MW
3	ONGC	51 MW
3	Friends Group	26.5 MW
4	Gujarat State Fertilizer Corporation Ltd.	22 MW
5	Zaveri & Co. Ltd.	9.3 MW
6	Appolo Tyres	7.5 MW
7	Associated Transrail (Gammon India)	4.5 MW
8	Shahlon Industries	2.45 MW

CSR:

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