

NSL wind farm at Jagalur, Karnataka



NSL Biomass Plant at Nizamabad



Solar power plant



Hydel power plant

THE FASTEST GROWING RENEWABLE  
ENERGY PLAYER IN INDIA

# OVERVIEW

## VISION

*We aspire to be one of India's leading energy players, operating in the fields of renewable energy, as well as conventional energy.*

*In the field of renewable energy, we aspire to create a portfolio of diverse, sustainable solutions that will help balance India's energy needs with a concern for our environment, constantly seeking out relevant new technologies in the process.*

*To help meet India's urgent energy needs, we also look at conventional energy, investing in state-of-the-art, environmental-friendly technologies.*

*And through these efforts, we aim to deliver significant results for our society, as well as the company.*



**Wind farm at Bhimasamudra, Karnataka**



**Biomass plant at Nizamabad**

India's energy needs have long exceeded its supply. And, as the country's economic growth surges ahead, this demand gap is increasing. In the late 1990s we spotted a great long-term opportunity in helping to bridge this gap, and that's why, in 2001, we entered the energy sector with a 3.75 MW wind farm in Jagalur, Karnataka.

We are currently in the process of investing ₹100 billion in the energy sector - which will become the main focus of our Group in the future.

Given our background in the agri sector, our primary thrust has been in environmental-friendly, renewable energy projects. We believe this to be the



**Hydel power project**

energy source of the future, given the environmental problems our planet is facing.

Today, within a span of ten years, we are acknowledged as leaders in this field. We have an excellent track record of developing successful renewable power plants, and aim to leverage our experience and our specialist local knowledge to develop a portfolio of new energy projects. Our objective is to build a capacity of over 1,120 MW of renewable power by 2015.

We have a unique understanding of the business, and one of the best talent pools in the industry, which combines a wealth of expertise and experience in Engineering, Management and Finance. We also have our own highly experienced execution team to handle all projects, right from site identification to implementation. These factors, along with our unique Developer Business Model, and excellent relationships with all our stakeholders - customers, suppliers, employees and investors - combine to give us a competitive advantage.

Our goal is to operate and manage a portfolio of diverse energy assets, which will bring significant benefits to our society, as well as to ourselves.

### Capacity (2015)

Energy source	Capacity
Wind	850 MW
Biomass	15 MW
Hydel	155 MW
Solar	100 MW
Total	1120 MW





NSL wind farm at Jagalur, Karnataka

# WIND ENERGY

We are acknowledged as being one of India's leading wind energy players. From the start, we've pioneered the latest technologies: we were one of the first few companies in the country to install 750 KW, 950 KW capacity WTGs, and the first to install GE make 1,500 KW WTGs (one of our GE 1,500 KW WTGs has, in fact, achieved a world record generation of 58,50,000 KW per annum, with a 44.52% PLF). We are also one of the first companies to install Vestas make 1,650 KW WTGs. It is significant, too, that our Jagalur wind farm has twice received an award (06-07, 09-10) for the Best Operating Wind Farm from the India Wind Power Association.

Our business model is unique: we use the Developer Model, that uses our own highly-experienced team to execute our projects, right from site identification to implementation. This model gives us a host of advantages: better control, greater flexibility, timely execution, lower project costs, higher efficiencies and plant load factors, and ultimately greater optimisation of returns.

Our focus on optimising capacities and plant load factors has resulted in plant load factors that are among the highest in the world: an average of approximately 32% on an installed base of 98 MW.

Wind Farm	Capacity	Avg. PLF	CoD
Jagalur - Karnataka	27.65 MW 16 x 750 KW 7 x 950 KW 6 x 1500 KW	32% 33% 38%	Mar 2001 - Sept 2004 in different phases
Anthiyur	14.85 MW	30%	March - May 2005 in phases
Kappatagudda - Karnataka	5.00 MW	26.5%	Sept 2006
Bhimasamudra - Karnataka	50.40 MW	28%	Sept 2010
Poolavadi - Tamil Nadu	49.50 MW	30% (expected)	FY 2010-11
Chilarwadi - Maharashtra	132 MW	25% (expected)	FY 2011-12
Shri Palwan - Maharashtra	120 MW	23% (expected)	FY 2012-13
Bagalkot - Karnataka	120 MW	28% (expected)	FY 2013-14
Linganahalli & Rangayanadurga - Karnataka	33 MW	29% (expected)	FY 2014-15
Theni & Ambasamudram	300 MW	29% (expected)	FY 2013-15 in different phases

In addition to these, we are also now planning a total of 17 more wind farms totaling to 3,575 MW.



# HYDEL ENERGY



Hydel power project

We are very bullish on the potential of hydel energy in India and believe there is great opportunity in terms of the number of sites available for hydel projects. Our long-term strategy is to focus mainly on developing hydel projects, with capacities of up to 100 MW.

Starting in 2004, we have been allotted, or acquired, four hydel projects in

Himachal Pradesh, on the Rivers Tidong, Pabbar, Supin and Peja. Here we are in an advanced state of implementing projects that will generate a total of 155 MW of energy. All these projects are conceived to be highly environmental-friendly/run-of-the-river, and hence, eligible for awaiting CER Revenue under Clean Development Mechanisms (CDM).

Hydel Project	Capacity	PLF (Expected)	COD
Tidong (Himachal Pradesh)	100 MW	47.30%	December 2013
Tangnu Romai - I (Himachal Pradesh)	44 MW	45.80%	June 2014
Tangnu Romai - II (Himachal Pradesh)	6 MW	56.70%	December 2012
Masli (Himachal Pradesh)	5 MW	53.00%	December 2011

# BIOMASS ENERGY



NSL Biomass Plant at Nizamabad

The combustion of biomass fuel makes no net contribution to CO<sub>2</sub> concentrations and so its use can help stabilise CO<sub>2</sub> levels in the atmosphere. We generate biomass energy, by converting the bagasse by-product into cogen power. We use the latest specialist technology for this purpose, and have achieved significant value addition through this. Our projects are designed to be in line with Clean

Development Mechanisms (CDM).

We believe that by doing this we have pioneered a sustainable model for others to follow, using the plentiful supplies of biomass into an innovative, environmental-friendly source of energy to meet India's needs in the future, and helping to replace precious fossil fuels.

Biomass Plant	Capacity	COD
Indur Green (Andhra Pradesh)	7.5 MW	Feb 2003
Perpetual Energy (Andhra Pradesh)	7.5 MW	March 2003



Wind turbine of ReGen Powertech



Thermal power plant

# OTHER INITIATIVES IN THE POWER SECTOR

## **Nagapatnam Thermal Power Project**

NSL Nagapatnam Power and Infratech Pvt. Ltd. is setting up 4 X 660 MW in Phase I and Phase II at Thalanchankadu Village, Taragambadi/Sirkali Taluk, Nagapattinam District, Tamil Nadu. The proposed power plant is based on super critical technology, which is environmental-friendly and proposed to be adopted in the country for all the power plants coming up in the 12th plan.

## **Orissa Power Project**

The High Level Clearance Authority (HLCA), Government of Orissa, has approved NSL Power for setting up a pithead-based power generation plant of 1320 (2x 660) MW capacity at Anugul District, Orissa.

## **125 MW Thermal Power Project, Rajasthan**

NSL Nagapatnam Power and Infratech (P) Ltd. were allocated Merta Road - Lamba Jatan Lignite Block, Rajasthan, which will meet the annual requirement of 1.77 million tons and 83.25 million tons of lignite for life- time requirement of the proposed lignite-based thermal power plant of 125MW capacity.

## **Co-generation at NSL Sugar Plants**

At present, NSL Sugars operates 54 MW co-gen power plants to produce green power. As part of the expansion, it has plans to

increase the capacity to 550 MW by 2015.

The power plant uses Coal, Bagasses and locally available bio-mass as a raw material from sugar plants to generate steam and power. After internal consumption, the balance power is exported to the state grid. The sugar plants have excellent cane availability, which ensures the cogen plants have sufficient raw material available.

## **ReGen Powertech Pvt. Ltd.**

ReGen Powertech, the new name to power wind energy in India is committed to providing an alternative source of energy that is clean, green and sustainable. ReGen offers total “Turnkey Solutions” for wind power projects that include consultancy, manufacturing, supply, erection, commissioning and operations & maintenance services of Wind Energy Converters (WECs).

ReGen has a strategic technical licensing agreement with Vensys Energy AG, Germany, a global leader in WEC design and development with installations in key wind energy markets, including Germany, China, Canada, Czech Republic and Spain. Backed by Vensys’ expertise, ReGen manufactures technologically advanced WECs of 1.5 MW and 2.5 MW sizes at its fully-integrated, state-of-the-art production facility near Tada in Andhra Pradesh.



# SOCIAL RESPONSIBILITY

We believe in the responsibility of a corporation such as ours to the society it lives in, and the need for it to contribute to the betterment of that society. We have therefore set up the Mandava Foundation to pursue that goal.

The Foundation has identified four basic need areas in which we can most significantly impact society: education, healthcare, employment generation and the transfer of knowledge to the Indian farmer. And it is implementing an ongoing programme to help develop our target group in these four focus areas.

We are especially proud of the contribution we are making in the transfer of knowledge to the farmer

community. It is an example of leveraging our core competence and paying back to society with the body of expertise we have acquired over the years.

## FOCUS AREAS

- Education
- Healthcare
- Livelihoods
- Transfer of Knowledge

Donating vans to the Akshayapatra Foundation



Nuziveedu Seeds founder Shri. Venkataramaiah donates study material to students



Medical services sponsored by Mandava Foundation



Services at the veterinary hospital set up by Mandava Foundation



Nuziveedu Seeds



NSL Cotton branded bale



Cloth designs of NSL Textiles

## THE NSL GROUP

The NSL Group is one of India's fastest growing business groups today. Started in the 1970s with a seeds company, it has diversified strategically into a variety of agri-based businesses, as well as into the fields of infrastructure and power, where India has enormous future needs. Today, it is a ₹35 billion group (2010-11), whose interests cover:

- Seeds – Nuziveedu Seeds Pvt. Ltd. – It's India's No.1 seeds company
- Cotton – NSL Cotton Corporation Pvt. Ltd. – NSL aspires to be a global player in the cotton business
- Textiles – NSL Textiles Ltd. – NSL is the world's most integrated textile player today
- Sugar – NSL Sugars Ltd. – It aims to be one of Asia's leading sugar manufacturers
- Infrastructure – NSL Infratech Pvt. Ltd. – Aspiring to be one of India's major infrastructure companies
- Power – NSL Energy Ventures – Aims to be one of India's leading energy generators, with a special focus on renewable energy

- Wind Energy Converters – ReGen Powertech Pvt. Ltd. – It aims to be world class in quality in the production of wind energy converters and as wind farm developers

But this is just the beginning, because NSL is guided by a powerful vision: To take its place as one of India's leading industrial groups, and a leader in every field it operates in. In the process NSL aspires to achieve a market capitalisation of ₹250 billion by 2015.

As a responsible corporate citizen, NSL Group is contributing to help transform the society through the Mandava Foundation.

The team at NSL is working hard to realise this vision; driven by its proven entrepreneurial strengths; insistence on excellence; investments in technology; robust business models; strong execution capabilities; and its track record of delivery. Equally important, NSL is backing this entire effort with investments of over ₹200 billion.

NSL Sugars, Koppa unit

NSL ICON, Hyderabad (NSL Infratech)

Wind turbine of ReGen Powertech





**NSL Renewable Power Pvt. Ltd.**

NSL Icon, 8-2-684/2/A, Road No.12, Banjara Hills, Hyderabad - 500034, Andhra Pradesh, India.

Tel: +91 - 40 - 30514444 | [www.nslpower.com](http://www.nslpower.com)