

The Green Maharajah's Growing Empire

Balraj Bakshi, the face of Vestas RRB, a successful joint venture in the wind energy, can also be regarded the face of the wind energy in India with his work as Vestas RRB's managing director attracting accolades from across the country - its government agencies and industrial associations.



Balraj Bakshi
Managing Director
Vestas RRB India Ltd.



M. S. Sridhar Sridhar
Vice President (Operations)
Vestas RRB India Ltd.

Bakshi recognized very early the great potential that alternative sources of energy offered. He focussed on the ways and means to bring the latest technologies to India and put the country in the world map of wind super powers.

A mechanical engineer with post graduation in computer science and foreign trade, Bakshi is also the chairman of RRB Consultants and Engineers Private Limited, a well consolidated Indian company engaged in the field of new and renewable sources of energy since 1984. Bakshi is also the managing director of Solochrome Systems India Limited, a high tech company aimed at import substitution and technology upgradation in the field of solar thermal energy.

At 46, Bakshi is widely acknowledged as a pioneer in the field of non-conventional energy sources in India, having contributed extensively to harnessing and promoting renewables for everyday energy needs.

In 1991, in recognition of his contribution to the alternate sources of energy, Bakshi was honoured with the Padma Shri award. In 1995, he was recognised by the British Wind Energy Association as a Wind Energy Pioneer and in 1997, was conferred the Diploma of the National Association for Danish Enterprise and His Royal Highness Prince Henriks's Medal of Honour. In 1999, Bakshi was bestowed with the Climate Technology Leadership Award by the Climate Technology Initiative on the occasion of the 5th Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC). In 2000, Bakshi was bestowed with "The 2000-Millennium Award" by the World Renewable Energy Network (WREN) on the occasion of the World Renewable Energy Congress VI and in the same year "The Millennium Award" by the Rural Education and Development Society, Villore, Tamil Nadu.

In 2001, he was conferred "The Gold Medal 1999-2000" for management by the Indian Council of Management Executives, Mumbai and in 2002, "The Chairman Award for the Promotion of Renewable Energy" by WREN on the occasion of the World Renewable Energy Congress VII.

Thanks to his academic background and professional experience, Bakshi was able to come up with the type of wind energy generators (WEGs) and technology that suit to the Indian wind flow conditions and infrastructure. The WEGs have a optimum pitch-regulation system which constantly regulates the blades so that they are always tilted to the optimal angle for current wind conditions. This also helps in varying the rotor and generator RPM up to 10 percent and strikes the right balance between maximum production and minimum noise level.

Bakshi recognized very early the great potential that alternative sources of energy offered. He focussed on the ways and means to bring the latest technologies to India and put the country in the world map of wind super powers. Bakshi has successfully promoted several ventures that implemented advanced climate-friendly technologies specifically by converting renewable sources of energy into heat and power.

Since buying a wind turbine means entering into a long term relationship, Bakshi made the fundamental business principle of VestasRRB to be committed to develop wind turbines using well-proven and well-tested technology.

While giving final touches to his ambitious VestasRRB venture, Bakshi made sure that the new entity stood for total custom-built turnkey solutions in the area of harnessing wind energy for power generation including site selection, micro-siting, preparation of detailed project reports, project engineering, erection, commissioning and after-sales service.

Vestas RRB, established in 1987, has proved its contribution to the country's energy status substantial with its efficient approach to the creation of wind farms. The company has installed more than 1000 WEGs of various capacities successfully at different locations in the states of Gujarat, Maharashtra, Madhya Pradesh, Orissa, Tamil Nadu, Kerala and Karnataka. In particular, the WEGs installed at Muppandal site in Tamil Nadu and the Kappataguda site in Karnataka are rated among the highest generating machines now in operation in the country.

Vestas RRB has a state-of-the-art production facility to manufacture Vestas-type WEGs in Chennai. The company is now planning to invest around Rs. 3.5 crore in building its own blade and con-

troller manufacturing facility.

Vestas RRB pays enormous emphasis to quality that it is a ISO 9001-2000 accredited organisation. The company also undertakes to supply, erect and commission WEGs with the client providing land and other necessary infrastructure.

Its service teams are generally based near the WEG installations to monitor the performance of the WEGs and ensure maximum production. The service engineers are trained under



Rajesh Bhatia with Prime Minister of India, Dr. Manmohan Singh

the supervision of its Danish collaborator, Vestas.

Vestas RRB ensures that all major components of the WEG that it uses are tested down to the smallest detail in order to ensure that the WEGs perform well during their expected life cycle of 20 years. The company's clients include agro, cement, chemical and engineering industries, breweries and distilleries, hotels and hospitals.

Vestas RRB is expected to record a revenue of over Rs. 600 crore in 2004-05 - its sales target for the same year is Rs. 1,500 crore.

The company has already initiated various plans to expand its market to new windy locations of the country in add-



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tion to catering to the existing locations. During the remaining period of 2004-05, the company expects to set up wind power plants of more than 100 MW aggregate capacity for various corporate sector clients.

In its efforts to ensure a higher degree of indigenization, the company plans to manufacture in-house certain critical components in respect of the WEGs being produced at its works in Chennai.

Many Firsts

● Vestas RRB India Ltd is the first company to produce pitch-regulated wind electric generators (WEGs) in India. An Indo-Danish joint venture set up for the manufacture of Vestas Type Wind Electric Generators in India, Vestas RRB is promoted by RRB Consultants and Engineers Pvt. Ltd.

● Vestas RRB was incorporated in the year 1987 with the main objective of producing world class WEGs in India for harnessing of power from wind. Vestas RRB, an ISO 9001:2000 accredited company, is also an independent power producer based on wind energy. In India Vestas Type WEGs of various capacities are operating successfully at different locations in the States of Gujarat, Maharashtra, Madhya Pradesh, Orissa, Tamil Nadu, Kerala and Karnataka.

● India's first private-sector commercial independent power project of its kind, based on wind energy aggregating 15 MW and established by Vestas RRB for Mohan Breweries and Distilleries Ltd. was dedicated by the then Prime Minister of India, A B Vajpayee on July 5, 2000 at Kayathar, District, Tuticorin, Tamil Nadu, India. The project is unique and one of its kind as it is the first project in the wind energy sector in India to be financed under the Danish International Development Assistance (DANIDA) mixed credit facility.

● The first Indian Type Approval Certificate, issued for the first time in Asia and developing countries by the Centre for Wind Energy Technology (C-WET), an autonomous institution of the Ministry of Non-Conventional Energy Sources, Government of India, for the Vestas Type V39-500 KW WEGs with 47Mtr Rotor Diameter was presented to the managing director, Vestas RRB, Rakesh Bakshi by the then Minister of State (Independent Charge) for Non-Conventional Energy Sources, Government of India on August 13, 2001 at Chennai, Tamil Nadu, India.

● Bakshi has contributed to the successful establishment of more than 1000 Vestas Type WEGs of 55 KW, 90 KW, 100 KW, 200 KW, 225 KW and 500 KW capacity at various localities in the states of Gujarat, Maharashtra, Madhya

Pradesh, Orissa, Tamil Nadu, Kerala and Karnataka.

Some of the prestigious awards and recognitions won by Bakshi and his company include:

● Wind Energy Pioneer (1995): A recognition for significant contribution to the development of the wind energy industry by the British Wind Energy Association at their 17th Annual Conference held at Warwick, England in July 1995.

● Order of Merit 'Samajshri' for Management (1996): Conferred by the Indian Council of Management Executives (ICMEI), Bombay in 1996.

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Honour (1997): Conferred for outstanding services to trade relations between Denmark and India.

● Bakshi is a life member of Solar Energy Society of India (SESI) since 1986, life member of the Indian Society of Mechanical Engineers (ISME) since 1991, life member of the Indian Council of Management Executives (ICME), Bombay since 1996, member of the Governing Council of the Solar Energy Society of India from 1996-98 and subsequently re-elected for 1998-2000, member of the Board of Governors of Wirock International India since 1999, Life Fellow of the All India Management Association (AIMA), member of the Membership Development Committee of All India Management Association (AIMA) for the year 1999-2000 and for the year 2001. He is a member of the Programs Committee of All India Management Association (AIMA) for the year 2001 and for the year 2003.

2003, a member of the Himachal Pradesh Government's 'High Powered Tourism Advisory Board' constituted by the Governor of Himachal Pradesh on November 12, 2001.

● One of the three Conference Chairmen of '2002 Global Windpower Conference and Exhibition' held at Paris, France, from April 2 to 5, 2002 under the High Patronage of His Excellency, Mr. Jacques Chirac, President of the French Republic.

● Bakshi was made member on January 11, 2002 of the Climate Change Advisory Group on Renewable Energy constituted by the Ministry of Non-Conventional Energy Sources, Government of India. He was a member of the Steering Committee of The India Infrastructure Show (TIIS) organized by the Confederation of Indian Industry (CII) from February 5 to 8, 2003 in New Delhi, India; a member of the International Steering Committee of

Commerce and Industry of India (ASSOCHAM) for the year 2002-2003 and for the year 2004-05. He is the advisor to TERI for the area activities relating to 'Renewable Energy Technology Applications' since December 2002. Bakshi had been the 'Honorary Visiting Professor' in the Centre for Energy Studies (C.E.S.) at the Indian Institute of Technology, Delhi since December 30, 2002 for a period of one year and subsequently the appointment has been extended for a period of one year from 30-12-2003 to 29-12-2004.

● He was the member of the Climate Change Task Force constituted by Federation of Indian Chambers of Commerce and Industry (FICCI) for the year 2003 and member of the Steering Committee of the All India Management Association (AIMA) Centre for Public Governance (CPG) since December 2003. Bakshi had been elected as Vice President of the India Energy Forum by

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We will be able to realize the full potential of wind power in India in the coming years, if the government comes out with a long-term national renewable energy policy / legislation for this sector.

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● Bakshi is also a member in the year 2000 of the Steering Committee for the project titled 'Solving the CDM Maze for Renewable Energy Technologies in India'. He is the member of the Former GB Renewable Energy Task Force Advisory Group, member of the International Steering Committee of World Renewable Energy Congress-VII Renewables.

● He was a non-official member in the Governing Body of Himachal Pradesh Energy Development Agency (HIMEDR-JA) from February 24, 2001 to October 20, 2002. Bakshi was elected as Fellow of the Institution of Engineers (India), on May 31, 2001; is a member of the Chairmen Committee of World Council for Renewable Energy (WCRE) since

World Renewable Energy Congress - VII) & Expo to be held at Denver, Colorado, USA from August 28 to September 3, 2004.

● He was a co-chair of the Committee on 'Non-Conventional Energy' constituted by FICCI for the year 2002 and for the year 2002-03; a member of the CII-Green Business Centre (GBC) Renewable Energy Council for the year 2002-03 and subsequently requested to continue as a Member of the CII-Sohrabji Godrej Green Business Centre (GBC) Renewable Energy Council.

● Bakshi was the chairman of the Expert Committee on 'Renewable Energy' constituted by the Associated Chambers of

the President, India Energy Forum for the year 2003-04.

● Bakshi has been the Fellow of the Indian National Academy of Engineering (INAE) with effect from Jan 1, 2004. He was the chairman of the 'Non-Conventional Energy Committee' constituted by Federation of Indian Chambers of Commerce and Industry for the year 2004.

● Nominated as a Member of the Board of Governors of the National Institute of Technology (NIT), Kanyakshetra. Bakshi has been co-opted as a Member of the Governing Council of Bankers Institute of Rural Development (BIRD), Lucknow. ■