Interview with J.P. Chalasani

"Technology and innovation will drive growth in the renewables sector"

From the discontinuation of generation-based incentives (GBIs) and phase-out of the accelerated depreciation (AD) benefit in 2017, to the replacement of the feed-in tariff (FiT) mechanism with competitive bidding, the past year or so has been eventful for the wind power industry. While the industry's hopes have been uplifted with the promise of an increase in renewable energy targets by 2022, new and emerging opportunities such as repowering and wind-solar hybrids are expected to drive the future growth. In an interview with *Power Line*, J.P. Chalasani, group chief executive officer, Suzlon Group, speaks about the current state of the renewables industry, the issues and challenges, and the outlook in the next few years. Excerpts...

How do you think the renewable energy segment has performed during the past year? What were some of the key positives and negatives?

The renewable energy sector is growing and is already contributing to around 21 per cent of India's total installed power capacity – mainly driven by over 34 GW of wind power. Renewables will play a critical role in India's energy basket in order to ensure long-term energy security of the country and optimum utilisation of the existing grid infrastructure, enabled by a rapidly evolving technology. There is good visibility of volume for the next five years and Suzlon is fully equipped to capitalise on it.

The industry moved from FiTs to competitive bidding, which has resulted in wind energy becoming the cheapest source of energy across all sources. Global utilities are showing interest in the Indian renewable energy market. With a clear focus on promoting renewable energy, the Government of India has revised its renewable energy target to 227 GW by 2022 from the earlier target of 175 GW.

How do you think the competitive bidding regime for wind projects has evolved in the past one year or so?

Due to the competitive bidding regime, the profiles of wind energy players are changing significantly as the size of the projects have gone up to 250-500 MW. As a result, there has been an increase in the economy of size and the project cost has reduced. Improvement in technolo-



gy too has led to viable tariffs.

The competitive bidding regulations continue to evolve, addressing the initial teething issues. This will enable the streamlining of future auctions, as well as their execution.

What were some of the significant growth and business highlights for Suzlon in the past year?

"We are focusing on developing state-of-theart business models with the aim of offering repowering and wind-solar hybrid solutions." We gained a market share for the third consecutive year and increased it to 35 per cent in the year 2017-18. This achievement is reflective of our strong technical and project execution capabilities, and over two decades of experience in the Indian market.

The year 2017-18 was a positive one for our operations and maintenance O&M) services vertical. With around 15 GW of assets under maintenance, we have been able to demonstrate the highest ever machine availability of 97.01 per cent, which is a clear reflection of exceeding our customer commitments.

We are also the second largest O&M service provider in the Indian power sector, with over 12 GW of wind assets in India. We also successfully commissioned 340 MW of solar projects on a turnkey basis across Telangana, Rajasthan and Maharashtra during 2017-18.

Could you elaborate on your O&M business?

Our O&M business continues to grow in size with around 15 GW of renewable capacity under maintenance, including 12 GW from India alone. We are the second largest O&M company in the Indian power sector. Every single wind turbine sold by Suzlon in India is operated and maintained by Suzlon.

Suzlon's O&M service is leveraging internet of things (IoT), along with realtime data analytics for the digitalisation of services and to improve the performance of wind turbines. This enables higher energy yield consistently throughout the life cycle of a wind turbine generator (WTG).

What are some of the new and promising technologies for wind power? What are Suzlon's plans for bringing new technologies in the Indian market?

Technology and innovation will remain the key catalysts that will drive growth in the renewable energy sector. Digitalisation of services, innovation in tower and blade technologies aimed towards making unviable wind sites viable, ensuring better yield and increasing turbine utilisation will be the key focus areas in the coming days.

WTGs are becoming taller and bigger in size. Suzlon's research and development efforts focus on developing products with higher energy yield, reducing the levelised cost of energy (LCoE) and maintaining cost competitiveness. Last year, we launched three new products to optimally harness wind resources at higher altitudes. These are India's tallest 2.1 MW WTG (S111 - 140 m), India's largest 2.1 MW WTG (S120 - 140 m), and India's largest rotor diameter 2.6-2.8 MW WTG (S128 - 140 m). These next-generation turbines are well equipped to improve energy yield and support a competitive tariff environment in India while protecting customers' return on investment.

"Our growth strategy is based on strengthening our leadership position in India and expanding our global footprint, with a focus on select profitable markets. We also plan to focus on the digitalisation of services to maximise turbine efficiency."

Suzlon is also equipped with a futureready technology for O&M to ensure profitable and sustainable growth. In the future, the introduction of augmented and virtual reality-based solutions will effectively be utilised for training engineers in various health and safety scenarios, thereby reducing the chance of human and material losses.

We achieved another important milestone last year – Suzlon is the first private sector player to have installed and commissioned an operational offshore LiDAR-based met station with a remote monitoring system in the Arabian Sea, to the southwest of Jakhau port in Kutch, Gujarat.

We continue to focus on developing state-of-the-art business models with the aim of offering repowering and wind-solar hybrid solutions.

What will be the company's major focus areas going forward?

Our growth strategy is based on



strengthening our leadership position in India and expanding our global footprint, with a focus on select profitable markets. Our key priorities are to capitalise on the volume growth by leveraging our vertically integrated manufacturing set-up with a pan-Indian presence, and to leverage innovation and technology to bring down the LCoE.

We also plan to focus on the digitalisation of services to maximise turbine efficiency and availability. We now plan to expand our OMS vertical to explore additional growth opportunities such as providing OMS for third-party turbines and developing and offering valueadded products. We also plan to focus on wind-solar hybrid solutions.

Going forward, we are well positioned to capitalise on the market opportunities with our superior technology, project execution experience spanning over two decades, new-generation turbines offering higher energy yields, presence across the entire value chain, vertically integrated operations and best-in-class service capabilities.

What is your outlook for the power sector in the next few years?

Renewable energy has entered an exciting new phase and its growth is unstoppable. Once considered a niche industry dependent on government subsidies, today it is driven largely by economic realities, improved reliability and cost competitiveness backed by proven technology. We are confident that the evolving technology and economic viability of energy storage solutions will give a further impetus to renewables. While 2018-19 will see lower volumes due to a longer execution schedule, there will be a clear ramp-up in 2019-20 and 2020-21.