



**Suzlon
Sustainability
Report
2017-18**

RAISING THE BAR

About this Report

Suzlon takes immense pleasure in publishing its first Annual Sustainability Report, which centers on the theme of 'Raising the Bar'. This report features the Sustainability Strategy, related recent developments, activities and key performance indicators (KPIs) of Suzlon. This is the first time Suzlon embarked upon publishing its sustainability related activities in accordance with the Global Reporting Initiative (GRI) Standards. Thus, the report provides a complete picture of the Company's current business status, taking account of the financial and non-financial parameters.

The report is structured in alignment with economic, environment and social performances and reflects significant achievements of the Company for FY 2017-18. As this is the first Sustainability report there are no significant changes to the Company and its supply chain. Further, there are also no significant changes in reporting or any restatements from the Company.

The Company has appointed Goodera (formerly known as NextGen PMS) for advisory services to compose this Sustainability Report. The information which this report encompasses is compiled through direct and indirect interactions with various departments of Suzlon.

Readers are welcome to submit their feedbacks or suggestions about this report on the below mentioned details:

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Reporting Boundary: The Company's reporting boundary for disclosing on the sustainability performance comprises of Suzlon Energy Limited and Group Companies [Suzlon Energy Limited (SEL), Suzlon Gujarat Wind Park Limited (SGWPL), Suzlon Global Services Limited (SGSL), Suzlon Generators Ltd (SGL) and Suzlon Power Infrastructure Limited (SPIIL), all of them have Indian operations. The significant locations of operations are the 12 manufacturing locations across India, 4 R&D/ testing plants at Pune, Vadodara, Chennai and Bengaluru and various site locations spread across in 9 States in India. Further in the report, these will be referred to as Suzlon. However, the report excludes the performance of the international location, other subsidiaries, group associates and Joint Ventures.



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Message from the Founder

Chairman and Managing Director



Renewable energy sector is undergoing radical changes. It has entered an exciting new phase, where renewable is no longer considered an alternative source of energy and its growth is unstoppable. The renewable sector was a niche one, which was dependent on government subsidies, but in the current scenario there is a swift decline in the cost of renewable energy, the energy efficiency has been enhanced, electrification has been rampant, with proven technologies and further continual breakthroughs have brought about sustainable energy within reach. Investments in the renewable sector have grown as cost of producing energy has fallen dramatically. An estimated USD 6 trillion is the proposed investment for the renewable sector globally between 2014-2035. From this amount, approximately USD 1.2 trillion would

be invested in both wind and solar and close to USD 620 billion would be invested in wind alone.

Globally, there is an increase expected in the share of renewable energy in the power sector from 25% in 2017 to 85% by 2050, majorly through rise in solar and wind power generation. New records were set for solar and wind installation, with additions of 94 GW in solar photovoltaic and 47 GW wind power, including 4 GW of offshore wind power. India has emerged as the third largest renewable energy market in the world in terms of annual installations and the fourth largest in cumulative terms. It has the potential of 300 GW of onshore and another 100 GW of offshore capacity. Indian wind energy sector recorded its highest capacity addition in a single year with 5,400 MW, taking cumulative installed capacity to over 34 GW. The renewable energy sector in India is going through a major transition with the introduction of the policy norms like competitive bidding in wind, record low wind & solar tariffs and GST roll-out. The transition to bidding led to some short-term challenges; that has helped in laying the foundation for sustainable and inclusive sector growth. In addition to this, technological advancement and increased competition have created new possibilities for clean energy. Despite of the challenges faced during the year, Suzlon maintained its number one position in the market. It showed great resilience and commissioned 626 MW installation, being the highest by any Original Equipment Manufacturer (OEM).

The Government of India (GOI) is treading on its path to achieve its target of installing 175 GW of renewable energy capacity by 2022. This would lead to provision of uninterrupted power to all and help the nation to achieve energy security. Thus, GOI has laid emphasis on the renewable sector, which has kindled the interest of many investors. They are bullish and excited to be part of the renewable growth story. The sector has an annual manufacturing capacity of 10 GW and created over a million jobs in India. India has the potential and capability to lead the global transition towards renewable energy sources. It also has the potential to become the renewable energy

technology hub and global wind turbine manufacturing hub to the world. Wind is truly 'Make in India', as the nation has exported more than 7 GW so far.

Technology and innovation will remain the catalyst that will drive renewable energy growth. 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.

Suzlon is leading the growth of wind industry in the country, having built one-third of the nation's wind energy capacity with approximately 12 GW of installed capacity in the country. Suzlon is the second largest Operations and Maintenance Service (OMS) provider, servicing over 8,500 WTGs. The Group has generated 10,000 direct jobs and creates close to 1,00,000 indirect jobs.

Suzlon is well-equipped to capitalize on the inevitable growth of renewables, both in the domestic and international markets. The growth strategy is based on strengthening our leadership position in India and expanding our global footprint,

with focus on select profitable markets. We are best positioned to capitalize on the growth with approximately 8 to 10 GW volumes each year starting from year 2020 onwards. The key priorities will be to leverage innovation and technology to reduce the Levelized Cost of Electricity (LCoE), strengthening the capital structure, to remain cost competitive, by leveraging India as the manufacturing hub and to increase market share.

We at Suzlon are fully committed to the development of renewable energy sector in the country. The aim is to build sustainable green economy and to provide affordable energy for all, in pursuit of better life for future generations. We thank all our stakeholders for shouldering and sharing our vision of powering greener tomorrow.

Best Wishes,
Tulsi Tanti

Message from the CEO



Dear Stakeholders,

In the current times, India is ranked amongst the top energy consumers in the world. Progressing forward the population and GDP of India is expected to grow, which would bring about a significant increase in the energy demand. Predominantly, fossil fuels were the cheapest and easily available source of energy to cater to the growing energy demand of the nation, thus leading to a further rise in greenhouse gas (GHG) emissions. This would conflict with the national goals of sustainability and the Intended Nationally Determined Contributions (INDCs) to which India has endorsed (reduce emission intensity per unit GDP by 33-35% below the 2005 level by 2030).

Renewable energy plays a crucial role to secure a fine balance between the growing energy requirement and the national goals for Sustainability.

The nation is on its path to energy upsurge while shifting its focus from fossil fuels to renewable energy. The thrust now is on renewable energy to enhance energy efficiency. India has shown remarkable growth in the field of renewable energy, having attained a global 4th and 6th position respectively in global Wind and Solar Power installed capacity. The largest renewable capacity expansion program in the world is being taken up by India. A capacity addition of 27.07 GW of renewable energy has been reported during the last three and half years under Grid Connected Renewable Power, which include 12.87 GW from Solar Power, 11.70 GW from Wind Power, 0.59 from Small Hydro Power and 0.79 from Bio-power.

Today, India is a major player in the global wind energy market, though it's potential is far from exhausted. The untapped resource available is potent enough to sustain the growth of wind energy sector in India in the years to come. Suzlon, is one of the leading wind energy company of the nation and is driven by a vision of Sustainable Development. We have identified sustainability as a core value for conducting business and have been working relentlessly to transcribe it into reality by undertaking various initiatives for renewable energy, by strengthening our infrastructure and Person power, and our community development programs.

It gives me immense pleasure to present to you the first 'Suzlon Sustainability Report FY 2017-18 - Raising the Bar'. The report details our activities for FY 2017-18 and sketches our comprehensive approach to incorporating sustainability goals into business planning and decision making. The complex global challenges are climate change, resource depletion and increasing cost of energy. We see them as significant opportunities to be addressed. We endeavour to invest and harness the latest technology that shall benefit the industry in the long run. Going forward we would focus on cost reduction, driving further working capital efficiency and achieving debt reduction.

Our endeavour is to bring down the cost of energy and provide clean and affordable energy to all. We make efforts to meet expectation of growing competition in India and globally by leveraging technology. We have introduced three new WTGs in FY 2017- 18. These next-generation turbines are well equipped to improve energy yield and support competitive tariff environment in India. Our campus One Earth in Pune is one of the greenest corporate campuses across the globe. The campus is completely powered by renewable energy, including hybrid wind turbines, solar panels and photovoltaic cells.

Health and safety is of paramount importance to us. We strive to ensure that that all our stakeholders remain safe and all projects are executed in complete adherence to all the health and safety norms. In future, we plan to make use of Augmented and Virtual Reality based solutions, which will effectively be utilized for training engineers, in various health and safety scenarios, thereby reducing the chance of human and material losses.

We believe that our success lies in the passion, hard work and commitment of our workforce that hails from diverse backgrounds and geographies. We value our employees and make attempt to integrate them with the Eco-system of the Company. The initiatives undertaken for employee engagement are 'Connect', 'Dialogue for Change', 'WindChimes', 'Die Hard Suzlonians' and 'Employee Engagement Survey 2018' which help us in understanding their needs. This enables us to build employee development programs which would enable them in achieving professional excellence.

We believe in balancing growth in all aspects of business within the context of building a sustainable business, and a sustainable world at large. Suzlon through its CSR initiative works across all business verticals predominantly in India. Suzlon Foundation is the implementing arm of Suzlon's CSR initiatives. Suzlon Foundation has completed 10 glorious years and touched the lives of over 12,32,250 individuals through its various initiatives such as providing clean drinking water, medical care, girl child education programs, self-help groups, 'Zero Darkness Program', 'Zero Cataract Blindness Program', 'Zero Garbage Program', technology-based knowledge sharing, soil and water conservation initiatives. We are proud of what we have been able to accomplish as we strive to develop resources responsibly and create lasting value for communities.

While we have carved a niche for us in the renewable energy sector, we still want to remain agile and adopt to the changing market dynamics. Thus, enabling us to remain ahead of our competitors and help to accomplish our vision of becoming the best renewable energy company in the world. It takes more than just advanced turbines to bring clean and affordable energy to the world. Our success would not have been possible without the steady support of our investors, shareholders, customers, employees, vendor partners and local communities.

Best Regards,
J.P. Chalasani

Sustainability at a Glance

Suzlon showed great resilience and **commissioned 626 MW** installation for the year;

Suzlon reported **Rs. 8,881.64 Crores revenue in FY 2017-18** from all its India operations

Suzlon gained a **market share of 35%** in FY18, which is the largest by any Original Equipment Manufacturer (OEM) in India

Suzlon has commissioned **340 MW solar** projects

Suzlon is tested for **logistics of SB63** (Blades Blade Adaptor Trailer)

Suzlon has **developed 4500+ Off-Roll Skilled Person** power in wind Energy Business, especially

Suzlon Foundation completes a **decade of difference**

Improved Livelihoods of **1,83,308 families**

Over 12,32,250 population reached across **800 villages**

Over 6,86,926 animals treated

Provided better education to **1,36,323 students**

Lit up homes with **more than 8,047 Solar Lighting systems**

Treated **over 10,704 HA of land** planted over **15,85,474 trees**

Reached **over 1,387 schools**

Strengthened **500 village development committees**

4,24,75,684 cubic meters of water conserved

4,26,681 kgs of waste recycled

Eye sight restored of **5,654 cataract patients**

1,368 specially abled persons supported

Vision, Mission and Values

Vision

To be the Best Renewable Energy Company in the world

*Work towards Social, Economic and Sustainable development,
to create better life for future generations*

Mission

Deliver utility scale, best in class, end-to-end integrated renewable energy solutions to our customers

Focus on high volume & profitable markets

**Focus on Wind-Solar Hybrid utility
scale solutions**

**Deliver best in class value
added service globally**

Continuously reduce Levelized Cost of Energy (LCOE)

Regional Manufacturing with global sourcing

End-to-end Integrated Renewable Energy Solutions provider

Asset Light, Debt Light Business Model

Create customer centric and performance oriented organization



SUZLON
POWERING A GREENER TOMORROW

THE SUZLON VALUE SYSTEM

The foundation of our organization is built on strong values that help us in achieving our vision. These values ensure that we stay true to everything we do.

AGILITY

CREATIVITY

ADDING VALUE

COMMITTED

INTEGRITY

About Suzlon

Suzlon Group is one of the leading global renewable energy solution providers founded in 1995. It is headquartered at Pune in Western India. Its vision for growth is driven by the concept of Sustainable Development.

Suzlon is revolutionising and redefining the way sustainable energy sources are harnessed across the World. The Company's growth for more than two decades is backed by its cutting-edge research & development and extensive range of reliable products designed to ensure optimum performance, higher yields and maximum Return On Investment for the customers.

Suzlon is powering a greener tomorrow with its strong competencies in the wind and solar renewable energy systems. Suzlon dedicates its success to its dynamic workforce and considers them the most valuable asset.

Over the past two decades, the Company has installed capacity of 17.9 GW of wind energy. In India, Suzlon is a market leader with 100 wind farms and an installed capacity of over 12 GW. Suzlon is credited with developing one of Asia's largest wind farms in the western Indian states of Rajasthan and Gujarat. Suzlon aims to make renewable energy cost effective for all its customers and has a varied client portfolio which comprises of variety of industries, from private and public-sector companies to power utilities and independent power producers.



Key Milestones in Suzlon's Journey



- 1995**
 - Suzlon is born...
 - First overseas JV with German wind major Sudwind
- 1996**
 - First 0.27MW turbine in Dhank, Gujarat for IPCL
- 1997**
 - DNV (Det Norske Veritas) ISO 9001/2 certification for Suzlon
- 1998**
 - Commissioning first wind turbine in Satara, Maharashtra
 - Suzlon bags its first order from Ghodawat Group
 - Suzlon Wind Farm Services Pvt Limited set up
- 1999**
 - Suzlon forays into Tamil Nadu
 - Bajaj Auto Ltd. contract awarded to Suzlon
 - Tata Finance Limited contract awarded to Suzlon
- 2000**
 - Formation of Suzlon Green Power Ltd.
 - 100 MW milestone crossed in Maharashtra in a span of 2 years
 - Suzlon's first 1 MW WTG commissioned for the Tatas
- 2001**
 - Suzlon goes global; forays into US and European markets
 - Incorporation of AE Rotor Holding B.V. and AE Rotor Technik B.V. (AERT)
 - Suzlon receives the Excellence Award by Institute of Economic Studies
- 2002**
 - Commissioning of 1.25 MW wind turbine for M/s Velathal Spinning Mills Ltd.
 - Dispatch of its first export order to the US
 - Suzlon Energy GmbH, Germany becomes operational
- 2003**
 - First wind turbine commissioned in the US
 - Suzlon sets foot in China
 - Conferred the Export Excellence Award
- 2004**
 - Suzlon sets foot on Australian market with formation of Suzlon Energy Australia Pty. Ltd.
 - Crosses 800 MW of installations globally
 - Formation of Suzlon Generators Pvt Ltd., JV with Austrian company ELIN-EBG Motoren



- 2005**
 - Crosses 1 GW installations in India
 - Launch of a successful IPO on the BSE & NSE, over subscribed by 15.44 times
 - BTM report ranks Suzlon 6th globally
- 2006**
 - Formation of SE FORGE Ltd.
 - Takeover of Hansen, a major industrial gearbox manufacturer
 - First US manufactured wind turbine blade rolls out at Pipestone (Minnesota)
- 2007**
 - Acquisition of RE Power, an asset with strategic importance
 - SWECO secures 630 MW repeat order from Edison Mission Group in US
 - The Best PE/V/C backed Company award
- 2008**
 - Superbrand status for Suzlon
 - Renewable Energy Technology Centre established in Hamburg
 - The KPMG Infrastructure Today Award for Suzlon
- 2009**
 - BTM report ranks Suzlon 3rd globally
 - Mr. Tulsii R. Tanti named "Champion of the Earth" by UNEP
 - Inauguration of the Australian 'Capital Wind Farm'
- 2010**
 - First S88 Turbine generates power in China
 - 2 GW installation mark crossed in the US
 - Nearer home, Suzlon's maiden project in Sri Lanka
- 2011**
 - Pure Air Lovers Society (P.A.L.S) launched in 86 cities
 - Lauded as the 'New Sustainability Champion'
 - Suzlon makes its presence felt on the South African market
- 2012**
 - Suzlon initiates work on S111, latest addition to 2.1 MW fleet
 - Suzlon bags the "Olive Crown" for Excellence in Green Communication
 - Awarded Asia's Best CSR Practice Award
- 2013**
 - Suzlon crosses 20 GW in global installations
 - India's largest wind park established in Kutch, Gujarat
 - Suzlon receives 'Top 100 CISO Award'
- 2014**
 - Suzlon installs world's first 120 mts. hybrid tower turbine in Kutch
 - Suzlon powers 65 MW Wind Park in Uruguay
 - Suzlon acquires Big Sky wind park from Edison Mission Energy



SUZLON
POWERING A GREENER TOMORROW

Suzlon's Outreach

Suzlon is guided by the philosophy of pursuing social, economic, ecological and sustainable development for the planet. The vision is 'Powering a Greener Tomorrow' which leads to ensuring sustainable operations across all its Business Units.

Suzlon since its inception has rapidly expanded its footprint across the world and made a mark for itself through technological and product innovation. It is a pioneer in the field of wind energy and has its manufacturing footprint spread across India covering 14 facilities in Maharashtra, Tamil Nadu, Karnataka, Gujarat, Andhra, Madhya Pradesh, Rajasthan, Pondicherry & Daman and one manufacturing facility in China (joint venture).

However, two manufacturing locations of SE Forge and a manufacturing location at China (joint venture) are not included in the boundary of this report. The 'Concept to Commissioning' model in the wind energy industry was pioneered by Suzlon, which led to opening the market to new customer segments. The full scope of services offered include feasibility studies, complex front-end engineering design to conceiving and executing of wind farms as well as long term operations and maintenance of the fleet, thereby providing customers with a single window for all their needs.



7,500+
Workforce



1,800+
Customers Globally



18,000+ MW
Installed Capacity



11,800+
WTGs Installed



No.1 in India's
Renewable Sector

Products and Solutions

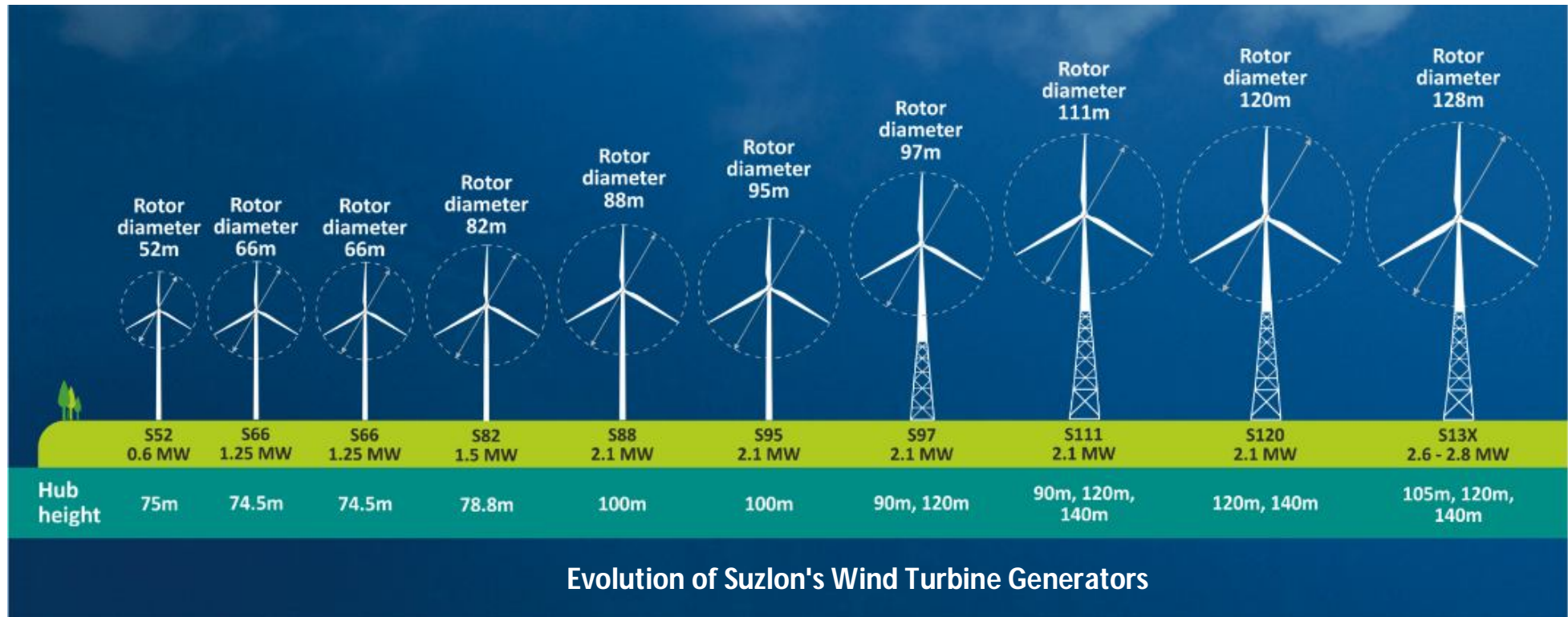
Suzlon envisions to be an outstanding renewable energy company in the world. Therefore, it develops highest efficiency products to meet market requirements and offers a 360-degree total solution package to its customers, covering the entire spectrum of wind energy projects. It ensures smooth functioning of these products through long term service agreements and provides value-added products and services to meet the ever-growing customer requirements.

It provides turnkey solutions throughout the product's lifecycle in:

1. Supply of equipment (Nacelle, Towers, Blades, Transformers, etc.).
2. Develop scope for setting up Wind farm (Wind Resource assessment, Turbine Micro-siting, facilitating in procurement of Development and Power Evacuation permits, land).

3. Executing Wind farm (Foundations, Turbine Installation, Site development, Power evacuation).
4. Operations and Maintenance (ensuring Machine availability and offering solutions to boost power with advent of newer technologies).

Suzlon has a multi-dimensional approach - value engineering and cost reduction. This approach provides better margins and competitive advantage to the customers. Thereby, being able to provide and sustain the very best in renewable energy solutions while maintaining an eco-friendly approach. Suzlon specializes in developing wind energy solutions and has now penetrated into the solar segment as well.



Suzlon's Product Portfolio of Wind Turbine Generators

S111 Wind Turbine Generator

It is the latest product from Suzlon. It has a 2.1 MW platform designed for higher energy generation and better ROI. It has a rotor diameter of 111.8 meters and swept area of more than 9,500 square meter which is suitable for low wind sites. This is one of the tallest wind turbines in India with the height of 140 mts. It has a safe and efficient nacelle design for higher reliability and machine availability. This turbine generator is available in three variants:

- a. **S111-90m:** All steel-tubular tower that reaches a height of 90 meters.
- b. **S111-120m:** All steel tower which combines the lattice and tubular structure with a unique transition piece and reaches a height of 120 meter.
- c. **S111-140 m:** Enhanced performance delivered by an all steel tower which combines the lattice and tubular structure with a hub-height of 140m.

S120 2.1 MW Wind Turbine Generator

It is built on the highly successful 2.1 MW platform and set to improve the ROI for customers and a new benchmark in the wind industry. It is suitable for low wind sites, has a rotor diameter of 120 meters and swept area of more than 11,225 square meter. Its grid-friendly electrical systems continue to smoothly integrate wind



"We are proud to announce that our latest state-of-art product S111-120 wind turbine generator, which has achieved 42% plant-load factor in its first 12 months of operations in Gujarat. This is the highest PLF registered by any renewable technology in India till date."

Tulsi Tanti - Founder, Chairman and Managing Director, Suzlon Group
(“Suzlon Energy Limited FY17 Earnings Conference Call”),

turbines into the ever-demanding utility network while meeting the latest grid requirements. Next generation controls and state-of-the-art-software maximises the energy yield further and helps reduce the Levelized Cost of Energy (LCoE). There are two variants available for this turbine generator:

- a. **S120-120m:** All steel tower which combines the lattice and tubular structure with a unique transition piece that reaches a height of 120m.
- b. **S120-140m:** All steel tower which combines the lattice and tubular structure with a unique transition piece that reaches a height of 140m.

S128 2.6 MW is India's largest Wind Turbine Generator

It has a rotor diameter of 128 meters and swept area of more than 13,070 square meter suitable for low wind sites. It is the latest addition to Suzlon's product portfolio and features the time-tested Doubly Fed Induction Generator (DFIG) technology. This technology provides excellent performance in low wind sites. This next generation turbine is well equipped to improve energy yield while protecting customers ROI.

Classic Fleet

Suzlon has built a range of turbines that generate 600 KW to 2100 KW power across the world. The manufacturing of older model like S97, S88, S82, S66, and S52 has been phased out. However, the continuous functioning and maintenance of all the turbines is supported by Suzlon's operations and maintenance services (OMS).

Services

Suzlon provides world class renewable energy services along with its exceptional products. Suzlon Reliability (SURE services) which is Suzlon's assurance of dependability at every stage of investment, is a suite of services designed to ensure optimum performance, higher yields and maximum ROI. Suzlon Group currently is the custodian of Wind Turbine Generators (WTG) assets worth more than 11 billion USD globally. It is using advanced infrastructure to service over 11,600 WTGs with a total installed capacity of over 17.9 GW. The WTGs installed more than 20 years ago are still working with an excellent track record with the right kind of monitoring.

Suzlon has the wherewithal to service a diversified portfolio — ranging from a 225 kW plant to a 2,100 kW. To ensure minimum breakdown over 3,000 service engineers are dedicated towards the preventive maintenance of WTGs thereby leading to higher machine uptime. Further, Suzlon also provides Operational and Maintenance Services for its commissioned solar energy projects. Suzlon's Range of Service Offerings are as follows:



Operations and Maintenance Services

Suzlon acts as the custodian of its customer's assets throughout the project life-cycle and is committed to ensure best services for them through its world-class sustainable OMS. Suzlon offers customers to choose either part or full services basis their requirements.

To ensure the best ROI for investors, Suzlon does not limit to designing the best turbine or erecting the same on the best site but also by managing turbine efficiency throughout its lifecycle. Suzlon inspects all aspects of maintenance of the turbine through its proactive and reactive maintenance activities. With a rich experience of over two decades, Suzlon has scripted OMS best practices that enable it to operate WTGs across any climatic zone or condition: from 50 degree Celsius to -35 degree Celsius. In addition to this Suzlon provides O&M services to 340 MW of Solar Farms commissioned by it. These farms have a mix of trackers, fixed systems and state of the art robotic cleaning.



15+ GW
Under Service
Globally



10,100+
Wind Turbines



Value Added Products
Fire Suppression System,
SC-Trinity, Quick Climb,
Quick Sense



>97%
Average Machine
Availability

Performance Enhancement and Digitalisation

At Suzlon, a steady vigil is kept on the global industry trends and the future needs of the customers. The focus is on enhancing the service standards to improve the turbines' reliability and performance. Suzlon leverages on advanced data analytics and digital technologies to improve the turbine generation, operational efficiency and customer satisfaction. Harnessing the power of data forms the DNA of Suzlon's Next-generation technology.

SCADA (Supervisory Control and Data Acquisition) system remotely measures and monitors wind turbines performance and provide real-time information on the entire global WTG fleet. It enables proactive monitoring of field conditions, improve energy yield of turbines and allows for better scheduling and forecasting. SCADA data is stored in in-house data center, which is designed with TIA 942 with TIER 3 available. The SCADA system connects each WTG to Suzlon Monitoring Centres



(SMC) in Pune, India, Chicago, USA and Melbourne, Australia, where 24x7 monitoring is carried out.

SC-TRINITY is an in-house developed, application based on SCADA system that enables real time monitoring, reporting and analysis tool for the customer. Rich and intuitive interfaces of this application make it a world class product.

In addition, the CMS (Conditional Monitoring Systems) used in Suzlon WTGs helps to predict component failures accurately which helps the OMS team to plan for corrective actions. This improves the timeliness and optimisation in WTG maintenance, thereby resulting in win-win situation for customers and wind farm operators. This allows them to gain enhanced revenue while having a reduced operations and maintenance cost.

Operations and Maintenance Services (OMS) processes at site and head office levels have been automated using the SAP based ERP system. This technology enables end-to-end digital transactions. In addition there has been a deployment of mobile apps for various work processes such as Preventive Maintenance, WTG Quality Inspection, Recording of Safety related incidents, WTG Quality audit inspections. It was not long ago that every turbine took many sheets of paper in the form of checklists, work instructions, technical documents necessary to maintain the turbines.

Predictive analytics-based maintenance solutions have deployed for major components of wind turbines viz. Main bearing, Gear box, Generator, Pitch & Yaw system. These models detect failure patterns to determine wind turbines components that are at the greatest risk of failure. This early identification of issues helps to deploy skilled maintenance resources ahead of time to mitigate potential failures before they happen. This lessens the down time for the turbine and eliminates possible collateral damage due to a failed component. This also reduces the demand on the quality and supply chain teams. The predictive models have been developed using machine learning algorithms and big data technologies in order to provide a high degree of accuracy and actionable insights.

In addition, various initiatives are underway, which aim to build applications using latest technologies such as Big Data & Cloud, Data Lake, Drones, Augmented/Virtual Reality and AI based tools

Digitalisation initiative aims to maximize turbine efficiency and availability by leveraging these technologies. This not only enables increase in energy production at lower lifecycle cost, but also results in greater transparency of performance at all levels.



Value Added Products to deliver service excellence

Suzlon constantly works towards increasing efficiency, yield and ROI for its clients through technology and innovation. Suzlon's promise of excellence is delivered on both its range of services and its range of wind turbines. Suzlon, offers the following solutions that redefine the benchmarks of services in the renewable energy sector.

Fire Suppression System: Fire Suppression System: is solution designed and implemented by Suzlon to enable quick action in case of fire. It has response time of approx. 32 secs where it detects increase in temperature and mitigation action takes place. Thus, safeguarding turbines and reducing the downtime.

SC-TRINITY: It is best-in-class fleet performance analysis tool which enables a user to view the real-time performance of turbines. This next-generation SCADA platform is developed in-house developed and extremely user-friendly.



Quick Climb: It is a compact remote- controlled climbing device for OMS engineers which enable hurdle-free climbing of turbine towers. It ensures a safer and faster way for technicians to reach the nacelle of the wind turbine and facilitates carrying of tools, thus significantly reducing human effort and risk.

Quick Sense: is a sensor which identifies the wind direction. The new wind vane, once deployed, ensures enhanced resolution and accuracy of the wind direction. This leads to better alignment of the nacelle to the wind direction, resulting in an increase in the Annual Energy Production (AEP).

History of Wind

"Thought is the wind, Knowledge the sail and Mankind the vessel" a saying by August Hare. The flow of wind may have varied impacts. Strong blowing winds could harm trees, man-made structures impact livestock etc. but the energy trapped in the same strong blowing wind could be tapped to generate power, which can further be converted to electricity.

Wind energy is one such pivotal resource which in the envisioned future could drive just more that turbines to produce electricity rather it could help cease the onslaught of climate change because of global warming. Wind is plentiful, it is

renewable, widely distributed, clean, produces no greenhouse gas emissions and there is no water consumption.

Wind power is generated by the usage of structures called windmills. Windmill is a machine that converts wind into usable energy by rotating sails or blades. The air flows through the turbines providing mechanical power which is further converted into turn electricity through the generators. Wind power has come a long way from it being used to propel boats five thousand years ago, to its use for grinding grain and pumping water and currently it become a key technology for future energy security.



Windmills

The earliest known wind powered machine was used for drawing up water and grinding grain. It was a type of 'panemone'. It is believed to have originated in Persia around 500-900 CE.



It was a vertical axis drag type device enclosed within a mud brick chamber with four to eight woven reed sails attached by horizontal struts to a central vertical shaft. The walls channeled the wind to one side of the rotor, turning it, at the same time protecting the sails on the other side from being affected by the advancing wind.

In the 12th century there were several types of windmills popular across Europe, but the most prevalent ones were the post mills. They were mainly found in Western Europe and England. It is apparent that the post mill evolved due to the need of a windmill to be adaptable to the variable wind directions.

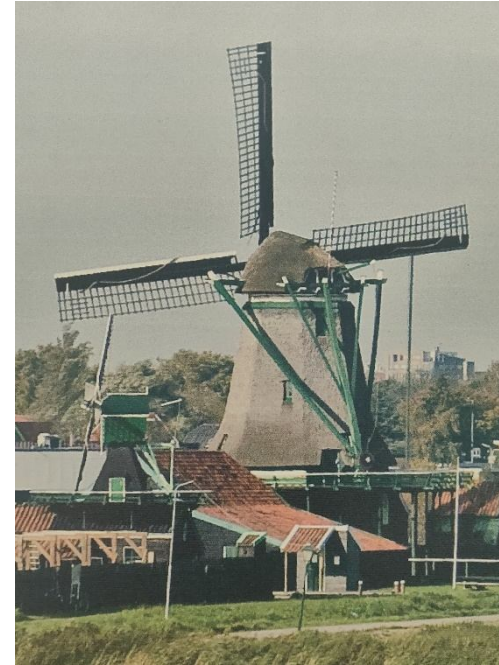


Post mill comprises of a wooden body, the buck, which carries the sails, the wind shaft, the gears and the millstone. The buck is mounted on a huge oak post which vertically runs through it, enabling the entire mill to be pivoted around manually with a tail pole, to face the wind.



European windmills were invariably customised to suit a site and its wind condition. Due to this, windmills were similar purpose often varied in design. In locations where the wind faced obstacles, the tower height was increased. The extra height enabled for instance, the grain grinding process to be separated on several floors with ample space left. They were believed to have originated in 13th Century.

Tower mills of Northwestern Europe were slightly conical in shape unlike their cylindrical counterparts in Mediterranean region. These mills comprise of a stone or brick tower with a cap that can be rotated to orient the sails of the wind.



In the 17th Century, wind-powered sawmills gave a major impetus to the Dutch ship- building and the timber trade. While the paltrok sawed the lighter wainscot planks, sturdier smock mills with their larger span of sails, revolving caps and reefing platform, handed bigger logs. With these industrial mills production increase to the extent that the bulk of Europe's wood was sawn here.

In smock sawmills, the layout of the machinery was essentially the same as in the paltrok, but the crankshaft was driven by a short vertical shaft from the windshaft inside the cap due to which the working space inside the mill became larger.

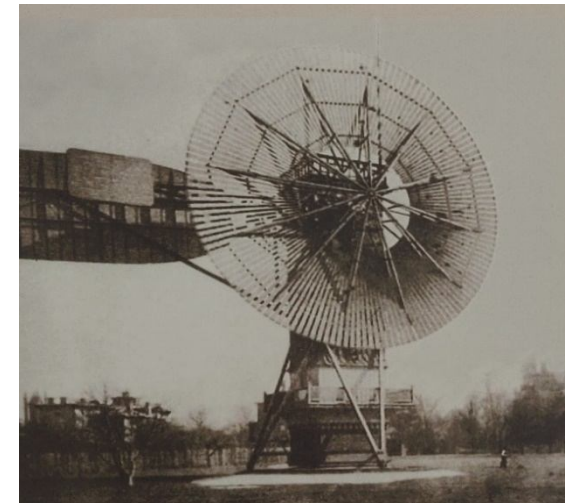
In the 18th Century Europe, with the coming of steam, windmills largely went into decline only to remerge as power generating wind turbines in a world that is concerned with alternatives to fossil fuels.



In the 19th Century, the Industrial Revolution got a major fillip from advances in steam technology. Steam could provide much more energy than water or wind power, was compact in size, versatile in its application, available on demand and not site dependent at all. Best of all, steam power could be expanded at will.

Wind Turbines

The First Wind Turbine: Prof James Blyth of Anderson's College, Glasgow was the first to produce electricity from wind power in 1887. There was a 33 ft high, cloth-sailed wind turbine designed by him. He adapted the accumulators for this turbine developed by Alphone Faure. This turbine was installed in the garden of his holiday cottage at Marykirk, Scotland.



The Automatic Wind Turbine: Charles Brush built a machine in 1888. This machine had a 56 ft diameter rotor which was connected to a dynamo and it was mounted on a 60 ft tower. It supplied 12-kilowatt power to 350 incandescent lights, two arc lights and several motors in his home for two decades. It was built in his backyard, in Cleveland, USA and was probably the first automatic wind turbine to generate electricity.

Wind Electricity



Danish pioneer of wind turbines, Paul la Cour, experimented with aerodynamics in his own wind tunnel. Also, he did research on methods of storing energy. He used electric power from electrolysis from his own wind turbine which leads to production of hydrogen for gas lights. His wind turbines were placed at the school where he taught. His work stimulated Danish interest in wind energy. This led to wind electricity catering to 3% of Danish electricity requirements by 1918.

Modern Wind Turbine

The wind turbines being used currently are the three-blade horizontal axis type, irrespective of power output. They have three basic components- a tower on which wind turbine is mounted, a rotor that holds the blades, and a nacelle which houses the generator and other machinery.

In the 20th century small wind stations were developed, suitable for farms or residences, and larger utility-scale wind generators that could be connected to

electric power grids for remote use of power. Today wind powered generators operate in every size range between tiny stations for battery charging at isolated residences, up to near-gigawatt sized wind farms that provide electric power to national electrical networks. Wind farms are established on land as well as on water. The off-shore wind farms are installed more than 10 kilometers away from the land as the wind speed is much higher, also the turbines used as much larger, the output is also higher as compared to the on-shore farms.



Operation

Suzlon provides total solutions in Renewable Energy sector across the value chain - from design to lifecycle asset management. It is built on the legacy end to end solutions which ensures to maintain a comprehensive approach in all its areas of operation. Suzlon's unique 'end-to-end solutions' business approach is designed to take care of every aspect of wind energy projects. Suzlon has the proficiency to construct and manage customised wind farms, irrespective of the geographic and climatic conditions. It has implemented both, forward and backward integration in order to fulfil its offerings of 'End-to-End Solutions' business model, while assuring satisfaction.

1. Wind Resource survey

A wind resource assessment program requires appropriate planning and coordination, detailed study of wind and atmospheric parameters, data analysis and various calculations using latest tools / software and methodology with a clear set of objectives. Wind resource assessment involves identification of windy sites, wind measurement at identified site, wind flow modelling, wind park layout designing & optimisation, Energy Prognosis and selection of suitable Turbine Models for sites. The process commences with identification of the wind farmable sites. These are based on the references from global data sets, government's measured wind data, MESO data etc. A met mast is installed at Identified site to collect measured site wind data. The met mast is Installed on a land parcel mostly leased from the land owner for a defined period. For measurement purpose mostly, the land is not purchased and hence ownership of the land remains with land owner. Prior to commencement of meteorological (met) mast installation, the area is screened for the presence of biodiversity aspects and exclusion zones (i.e. wildlife sanctuary, CRZ, Airforce/ Airbase stations, Military RADAR stations, etc.). The met mast is not set up in any eco-sensitive or defense related zones. Currently met masts are installed at 140/150 mts. height. The standard practice is to utilize met masts to measure wind data and other atmospheric parameters It captures the wind speed, its direction, temperature, pressure and humidity.

Suzlon executes all its orders through its project development process which includes the following steps:



The wind and atmospheric data captured by met mast is analysed and used for wind flow modelling. Based on analysis of the measured wind patterns and wind flow modelling, an optimized layout of wind farm (Micrositing) is finalised. Energy prognosis is carried out for the optimized Layout of wind farm using suitable Turbine Model and a report is prepared. The Energy prognosis report is shared to the Planning team to initiate further activities viz. Business development / sales, land procurement, Power Evacuation & Project execution etc.

There is a potential risk for the individuals associated with met mast installation and maintenance. They travel to remote locations and also perform jobs at height (140-150mts). There are advanced technical solutions available as of date to mitigate these risks. Remote data transmission & collection has now reduced the need for physical visits to the site. Further, the health risks for those climbing the mast are minimized by the usage of fixed safety rail on mast, safety harness having lumbar support, personal protective equipment's (PPEs) & having resting platforms on the mast.

2. Land acquisition

The project life cycle begins from acquiring land resource for the Wind Farm. The steps in land acquisition are identifying land, have the legal due diligence done, acquiring legal rights of the land, seek clearances and permissions from relevant government authorities, and thus start the process of developing a wind park.

3. Site Infrastructure Development

Wind farms typically comes up in remote rural location, far from existing power infrastructure. Thus. it creates direct positive economic impact in terms of jobs, infrastructure development, access to markets and power and over period of time overtime bringing greater opportunities into these regions. Suzlon has expertise in creating local infrastructure in such remote areas and implementing the following:

- Land levelling and laying the foundation for wind turbines.
- Erecting buildings to house Person power and equipment.



- Operations and maintenance facilities.
- Laying down cables and establishing pooling substations.
- Road network to approach the site.

4. Procurement, Manufacturing, Production and Logistics

Suzlon is one of the most vertically integrated wind turbine makers in the world ably supported by its efficient supply chain management processes. Suzlon has in-house capacities to manufacture all the key components of a wind turbine. It has production facilities in India and China. The combined manufacturing capacity of the Company includes facilities owned by Suzlon, obtained through joint ventures and outsourced to vendors. The collaborations and manufacturing facility locations have been strategically made and chosen for their proximity to the key markets, manufacturing-friendly policies, economic climate, easy availability of raw materials and skilled Person power. Therefore, enabling Suzlon to gain the advantages of cost optimisation and simplified logistics.



Suzlon's supply chain is an interwoven system of all independent functions working together in an inter-related process. Each function complements the other, therefore ensuring timelines of service delivery are always fulfilled. Suzlon ensures consistency in practices and quality in products through a rigorous vendor development process.

All vendors and subsidiaries are carefully screened and analysed on numerous criteria to meet the quality standards, strategic goals and vision of the Company.

The screening criteria are related to materials, processes, quality, Engineering capability (to resolve unanticipated complex issues), Ethical practices, Solvency, Human rights and environment and is executed by a dedicated unit comprising of



members of senior management among other experts. The factories manufacture all the key components (Plant Scope) and deliver it to Site whereas the BoP (Balance of Plant) which comprises of all other material to erect the Turbine and evacuate the generation to the Grid is procured and delivered separately.

5. Erection and Commissioning of WTG's

Erecting and commissioning of wind turbine projects is carried out under extreme climates and in difficult terrains. Therefore, Suzlon ensures that safety measures are implemented with zero-tolerance during erecting the Wind Turbine and Generator. Critical inspections are undertaken at every stage to ensure compliance, considering different location-oriented requirements of setting up a wind project.

The Balance of Plant (BoP) comprises of Services and Goods besides the delivery of



Wind Turbine Components and makes up the cost of erection of the Turbine and development of the wind farm. These facilities include Foundations, crane pads,

approach roads, civil, Cranes, Local logistics & Installation Service Providers and Electrical elements with its execution service providers for the substations, etc.

The specifications of these facilities are dependent on the climatic and geographical conditions of the site. Therefore, the solutions and facilities of BoP for each site are customised to ensure the continuous highest-level reliable performance of the wind farm. Suzlon endeavors to have optimal BoP costs by using an advance cost tool while maintaining highest level of the technical specifications. Using this tool, an estimate of BoP cost can be generated for the wind farm. This estimate is then further analysed to keep the BoP cost within reasonable levels.



6. Hand Over/ Take Over (HOTO) and Operations

The overall wind power project delivery is through as end-to-end solution, turnkey project service suite or selective service offering based on the customer and the project requirements. Suzlon's project services range from complex front-end engineering design, construction, to installation and commissioning. Suzlon covers the

complete customer requirements across the value chain. Suzlon has reached successful installations of over 17 GW across 18 countries. Moreover, its global expertise in project execution assures the customer of best-in-class wind parks delivering high reliability and consistent energy generation.

Suzlon's project services and solutions stand apart from others because of:

- Proven track record of successfully constructing and managing customized wind parks.
- Coverage of diverse climatic zones and site complexities.
- Strong front-end engineering.
- Interface management skills.
- In-house talent pool of its multi-cultural, multi-ethnic and global workforce.

7. Operation, Maintenance and Services (OMS)

Suzlon ensures establishing client partnerships that go beyond the installation and commissioning of WTGs. It offers the advantage of lifetime support to its customers.



The Operations, Maintenance and Services (OMS) division offers Suzlon Reliability Services (SURE) which is an assurance of dependability at every stage of investment.

assetSURE

Asset Management, Operations,
Maintenance and Optimization

windSURE

Wind Resource Measurement and Analysis

projectSURE

Project Management, EPC,
Power Evacuation and BoP Management

Handled by the OMS team, this range of services offers support to ensure smooth functioning of all WTGs and includes the following practices:

- Repair of damage caused by extenuating conditions.
- Service of equipment to negate the regular wear and tear of parts.
- Stocking of spares, including those for WTGs no longer manufactured but only maintained, at pivotal locations.
- Recalls in case of any grievance.
- Regular services, and services during peak seasons.

8. Corporate Social Responsibility

Corporate Social Responsibility (CSR) is an indispensable part of Suzlon's business. CSR at Suzlon revolves around the core principle of 'Sustainability'. The Company

believes in balancing growth in all aspects of business within the context of building



a sustainable business, and a sustainable world. Suzlon through its CSR initiatives works across all business verticals predominantly in India. All the impacts caused by Suzlon's operations on the communities in and around its operating areas are managed through its CSR activities and initiatives. Details further on this topic are mentioned in the Chapter – Connecting with Communities.

Corporate Governance and Ethics

Corporate governance is of prime importance to the Company. Suzlon's corporate governance philosophy comprises of values like integrity, accountability, equity, transparency and environmental responsibility. Suzlon endeavours to develop and strengthen the management systems and processes to achieve sustainable business growth and maximise shareholder value through ethical business conduct which includes establishing strong partnerships with stakeholders, employees, customers, vendors, service providers, local communities and government. Effective and transparent corporate governance practices presents opportunities to manage risks and creates value for the Company and its stakeholders.

The Board is responsible to oversee the strategic direction and performance of Suzlon. It is entrusted and empowered to oversee the management, direction and performance of the Company with a view to protect interest of the stakeholders and enhance value. As on 31st March 2018, the Board of Directors comprises of 12 Directors, out of which 2 are Executive Directors, 4 are Non-Executive Directors

including 3 nominee Directors (including one-woman nominee Director), and 6 are Independent Directors (including one-woman Independent Director).

The Board of Directors meet periodically to discuss usual Board business along with policy and strategy matters. In FY 2017-18, the Board met four times and the gap between any two Board meetings did not exceed 120 days. Certain matters were approved by Board and Committees through passing circular resolutions which were agreed on at the next Board meeting as required in the terms of Companies Act, 2013.

Suzlon has various Board Committees which focuses on specific areas to make informed decisions. Every Committee of the Board function according to its charter that defines its composition, scope, power and role. Presently, the Board has seven Committees namely Audit Committee, Stakeholders Relationship Committee, Nomination and Remuneration Committee, Corporate Social Responsibility Committee, Securities Issue Committee, ESOP Committee and Risk Management Committee. The process audit, risk management and mitigation units fall under the Management Assurance team.

The composition of various committees as on 31st March 2018 is as under:

AUDIT COMMITTEE	STAKEHOLDERS RELATIONSHIP COMMITTEE	NOMINATION REMUNERATION COMMITTEE	CORPORATE SOCIAL RESPONSIBILITY COMMITTEE	SECURITIES ISSUE COMMITTEE	ESOP COMMITTEE	RISK MANAGEMENT COMMITTEE
Mr. V. Raghuraman – Chairman	Mr. V. Raghuraman – Chairman	Mr. V. Raghuraman – Chairman	Mr. Tulsi R. Tanti – Chairman	Mr. Tulsi R. Tanti – Chairman	Mr. Tulsi R. Tanti – Chairman	Mr. Tulsi R. Tanti – Chairman
Mr. V. Subramanian – Member	Mr. Tulsi R. Tanti – Member	Mr. Marc Desaeleer – Member	Mr. Girish R. Tanti – Member	Mr. Vinod R. Tanti – Member	Mr. Vinod R. Tanti – Member	Mr. Vinod R. Tanti – Member
Mr. PerHornung Pedersen – Member	Mr. Vinod R. Tanti – Member	Mr. Per Hornung Pedersen – Member	Mr. V. Raghuraman – Member	Mr. V. Raghuraman – Member		Mr. Kirti J Vagadia – Member
		Mr. Girish R Tanti – Member				
		Mrs. Vijaya Sampath – Member				

The Board of Directors are appointed or removed on recommendation given by Nomination and Remuneration Committee in accordance with the criteria laid by the Committee. This Committee develops the criteria for determining qualifications, positive attributes and independence of Directors. One of the key objectives of this Committee is to formulate Board diversity and Remuneration Policy. In accordance to this policy, Nomination and Remuneration Committee evaluates the performance of the Board annually. The evaluation criteria are based on the composition, attendance, participation, quality and value of contributions, knowledge, skills, experience, staying abreast of governmental / regulatory policy developments, developments in industry and market conditions etc.

Remunerations to the Directors

At the 22nd Annual General Meeting (AGM) the shareholders passed special resolution approving re-appointment of Mr. Tulsi R. Tanti, as the Managing Director of the Company for a term of five years with effect from April 1, 2017, i.e. up to March 31, 2022, at a remuneration of Rs. 5 Crores per annum plus incentives and perquisites. Also, at the 21st AGM the shareholders passed special resolution approving the appointment of Mr. Vinod R. Tanti, as the Whole-time Director and Chief Operating Officer of the Company with effect from October 1, 2016, i.e. up to September 30, 2019, at a remuneration of Rs. 3.20 Crores per annum plus incentives and perquisites. However since the Company incurred losses during FY 2017-18, the remuneration paid to Mr. Tulsi R. Tanti and Mr. Vinod R. Tanti has been restricted to Rs.2.63 Crores i.e. the limits prescribed under Schedule V to the Companies Act, 2013, as permitted in terms of shareholders' approval read with applicable provisions of the Companies Act, 2013. The Non-Executive Directors are paid a sitting fee for attending the Board and /or Committee meetings which is allocated as per the Companies Act, 2013.

The Company has formulated a 'Code of Ethics' for the Board of Directors and senior management. It can be viewed on the Company's website www.suzlon.com. The Board members and the senior management conform to the Code of Ethics. The Board of Directors have also approved and adopted the 'Code of Practices and Procedures for Fair Disclosure of Unpublished Price Sensitive Information' and the 'Code of Conduct' to regulate, monitor and report trading by Insiders. These Company codes specifically mention ethics, bribery and corruption and their

applicability to Suzlon. During FY 2017-18, there were no cases reported regarding unfair trade practices or anti-competitive behaviour.

Suzlon has a 'Whistle Blower Policy' and 'Vigil Mechanism' in place, which is available on its website www.suzlon.com. The employees, vendors and customers are free to express their concerns through e-mail, telephone, fax or any other means to the persons as mentioned in the policy. No personnel have been denied access to the Audit Committee. During FY 2017-18, a total of 51 complaints were received related to ethics, transparency and accountability. 80% of the complaints were resolved and 20% are under review of the Company.

At Suzlon the Senior Management personnel including Directors, Key Managerial Personnel and Senior Management all adhere to all the laws, rules and regulations applicable to the business. It is critical for them to update their knowledge pertaining to the legal requirements relating to the business so that they can recognise potential dangers and seek advice from the legal department.

The Company is a member of several Trade and Chamber/ Association and the major ones are mentioned below:

- (a) The Indian Wind Turbines Manufacturers Association (IWTMA)
- (b) Confederation of Indian Industry (CII)
- (c) Federation of Indian Chambers of Commerce & Industry (FICCI)
- (d) American Wind Energy Association (AWEA)
- (e) The Associated Chambers of Commerce and Industry of India (ASSOCHAM)
- (f) European Wind Energy Association (EWEA)
- (g) World Economic Forum (WEF)
- (h) Indian Wind Energy Association (INWEA)
- (i) Indian Wind Power Association (IWPA)

The Company has also established Risk and Misconduct Management Unit which assesses, evaluates, strengthens and institutionalizes integrity as a value, supports ethical business practices and formalizes good corporate governance processes.

Risk Management

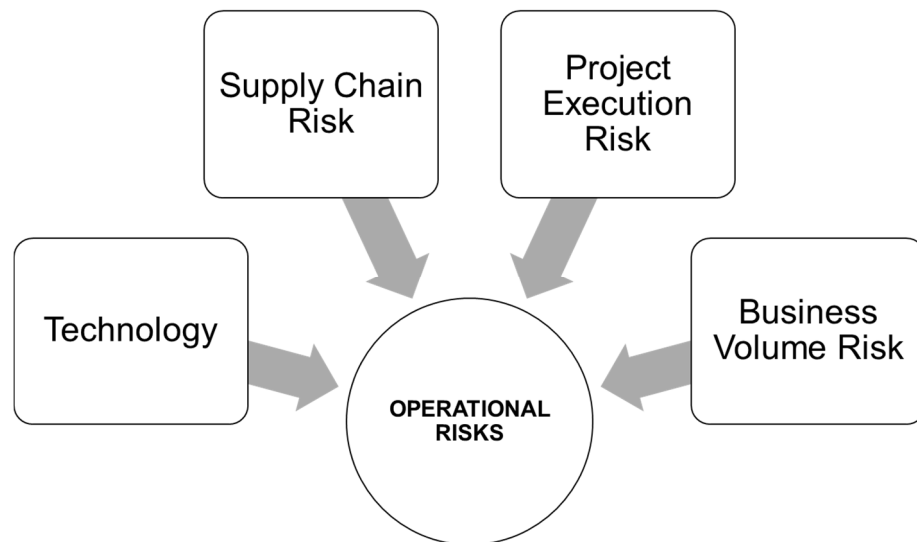
Risk management and sustainability are closely related. The fundamental role of risk management is to bring together various types of risks and prioritize them according to the impact it has on the organisation. This prioritisation enables the organisation to identify the mitigation methods and implement and monitor them, which in turn leads the organisation treading towards being sustainable.

Suzlon operates in the renewable sector and its business activities involve multitudinous risks. Suzlon has instituted a Risk Management Committee to reckon the related risks. The Risk Management Committee comprises of 2 Executive Directors, the Group Chief Executive Officer and the Group Chief Financial Officer. The Board has approved a Risk Management Policy which details out the robust risk management practices and creates a risk-aware culture at Suzlon.

Suzlon has a strong risk management and mitigation strategy which focuses on addressing challenges pertaining to internal and external environment responsible for business.

Company has categorised risk into two types – Operational Risks and Financial Risks.

Operational Risks:



Technology Risk: Development of improved, efficient and cost-effective technology used for wind generation systems has been a constant process at Suzlon. The new products are aimed to open up new sites and market opportunities while providing clean energy.

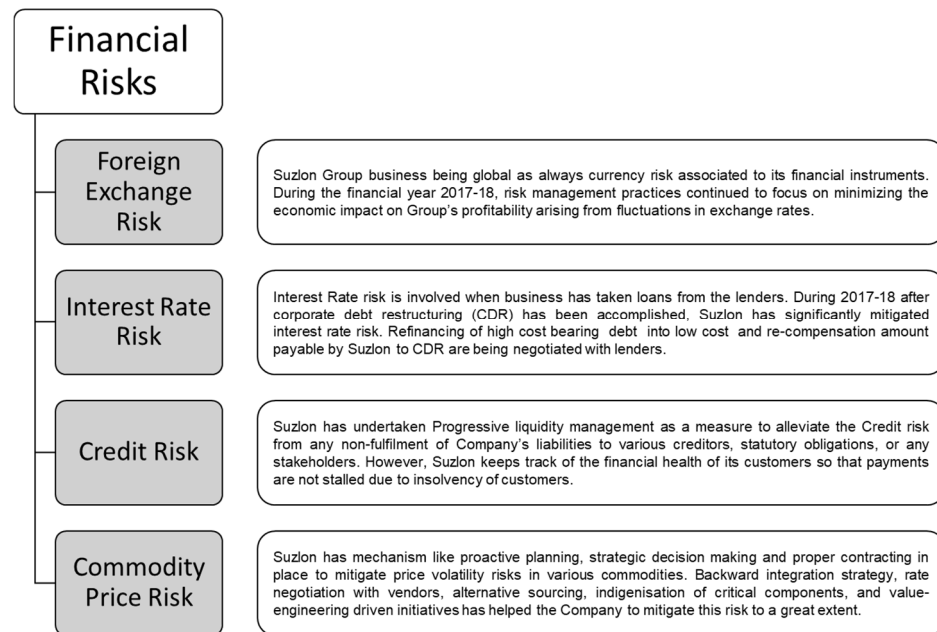
Supply Chain Risk: The critical risks associated to the Company's supply chain process is attempted to be attenuated by expansion of vendor base, localisation and standardisation of components like gearbox, bearings, converters and blades. This helps in keeping cost of procurement under control and as well as ensuring supply security with lesser lead times. The conversion of raw materials into components and thereafter safely & timely shipping them to Execution Site is a risk too. Attempts to attenuate their impact is through developing systems and processes to give manufacturing and shipping reliability from lessons learnt and adopting best practices followed.

Project Execution Risk: During project life cycle there are various type of risks involved such as extreme climatic, environmental conditions, availability of grid, land

resource and project execution of sub-contractors which can cause delay in the implementation of project against the timelines. Thus, Suzlon comprehends these risks by continuously monitoring project progress and incorporates necessary corrective measures for timely completion of the project.

Business Volume Risk: The transition from Feed-in-Tariff to competitive bidding policy has been challenging for Indian wind sector in the FY 2017-18. The adaptation and stabilisation of this new process hampered sales and business volumes. However, Suzlon believes that this situation can be converted to opportunity to expand its market reach and increase share of business volumes.

Financial Risks:



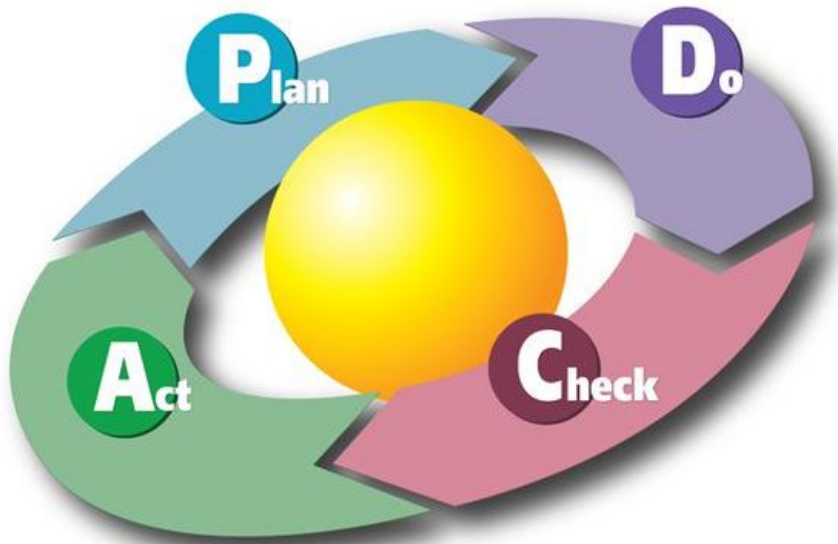
Apart from the operational and the financial risks, risks such as legal, climatic, managing waste, policy related etc. also impact the functioning of Suzlon.

- a. Legal Risk- As per the legal requisite it is mandatory to register the on-going project works which involves contract labourers and sub- contractors for the building and other constructional workers (BOCW) requirements with the Labour department. By virtue of it, 1% of the construction cost is deposited to the labour department. This amount is for its use for the welfare of the labour. It is observed that there are certain gaps in this process which could lead to financial implication and would not benefit labour.
- b. Climate Change Risk – Suzlon has very short period to evaluate the climate change impact which would cause a long-term phenomenon. From last 20 years there has been no major shift in wind patterns, temperature and pressure as observed in 5-7 windy states of India. The average variation in wind observed is +/- 10% which generally differ from site to site even within a state. WRD considers appropriate uncertainties as part of their energy estimations of the project.
- c. Health Risk – It relates to all the risks which could occur while traveling to remote locations as well as climbing the 150m Met-Mast for installation and later for its maintenance. There is a potential health and safety risk to the individual performing these activities. Suzlon has mitigated this risk by using advanced technical solutions available. Remote data transmission & collection as practiced now has reduced the need for physical visits to the site. Further, safety rails are fixed on Mast coupled with Safety harness which have lumbar support, PPEs & resting platform on the mast are installed to minimize the health risks of those climbing the mast.
- d. Managing Waste- Suzlon is in the process of setting up a robust system for its waste management. The Company is planning to identify other alternative methods to dispose the waste other than the methods which are currently being used.

Review of Risk Management Process:

An essential component of a successful Risk Management process is implementing a structured approach for accurate and effective Risk Assessment. A strong risk assessment contributes extensively to the organisational competence to capitalize on potential scenarios. Risk Management workshops are conducted to enhance the effectiveness and efficiency of the Company risk management. The workshop focused on providing guidance on risk identification, risk defining, risk cause, rating the identified risks and the formulating mitigation plans for them. The mitigation plan was further linked the risks to the Plan-Do-Check-Act (PDCA) cycle for their effective monitoring and reporting, which further led to re-rating the risks.

The Management Assurance team of Suzlon closely works with the co-sourced partners for independent reviews of risks, controls, operations and procedures. This exercise also identifies control and process gaps and provides business solution recommendations for risk mitigation. Suzlon also has a 'Risk and Misconduct Management Unit' which supports Board to assess, evaluate and strengthen the established value system to promote ethical business practices. Risk and control meetings are conducted at the beginning of the year with all the stakeholders. Risks are mapped on risk control matrix, which helps in categorizing them as high, medium and low impact risks. High impact risks are addressed on a yearly basis, whereas medium and low impact risks are addressed in every two years and every three years respectively. The mitigation process commences only after the sign off received from the Risk Management Committee.



Approach to Reporting

Stakeholders are the individual or group that may affect or may be affected by the activities of an organisation. They are critical for the organisations as they have the power to influence business. Suzlon is committed to report on its progress towards sustainability in a transparent manner. It intends to address the key impacts (positive and negative) across the value chain, this is reflected in the report as per relevance. Stakeholder engagement provides Suzlon an opportunity to obtain an insight on the stakeholder perspective and share relevant information on the Company's sustainability strategies with them. This exercise helps the Company to establish a transparent and positive relation with the stakeholders.

The approach for Suzlon towards materiality assessment and stakeholder engagement has been initiated in a structured manner, which is deemed for further maturation in the years to come. This approach enables the identification of the key material topics for the Suzlon operations.

The approach for assessment of materiality, is through analysis of the key stakeholder feedbacks. There is a structured process in place to identify key stakeholders and obtain their feedbacks on material aspects relevant for Suzlon. The responses are further used for efficiently and effectively addressing, as that helps in improving the sustainability performance of the Company. Various relevant material topics were enlisted, most important focus areas were selected, and the stakeholder engagement exercise was conducted with the identified key stakeholder groups. The methodology used for stakeholder Engagement is mentioned below:

Identifying Key Stakeholders

One of the initial steps of stakeholder engagement exercise is to identify key stakeholder groups. The key stakeholders are identified from the complete list of stakeholders of an organisation. The criteria on which the identification is done are willingness to engage, ease of access, their impact on the organisation, the Company's impact on them and their knowledge on the context of sustainability. The



key stakeholder groups are identified in consultation with the various vertical heads (HoDs).

Material Topic Prioritisation

A universal list of material aspects was compiled. This compilation was done with the reference to the study of primary and secondary sources. The primary sources

include business performance and strategy, risk management approach, and other internal documents. The secondary sources consulted are material topics of peer organisations, GRI aspects, regulatory bodies, government missions, media reports

and press releases. From this universal list 45 material aspects were prioritized after discussion with various internal stakeholders. The prioritised 45 material aspects were considered for the stakeholder engagement exercise.

Stakeholder Engagement

Stakeholder engagement exercises is a method to capture the perspective of the stakeholders. The stakeholder engagement exercise helped imparting awareness about the sustainability initiatives of Suzlon, initialization of the process of sustainability reporting and obtaining stakeholder responses. The below mentioned are the prioritised stakeholder groups:

Reponses were obtained from the stakeholder groups namely investors/shareholder, customers, vendors/suppliers, regulatory bodies, civil society/NGOs, employees and communities through various interaction modes (direct and indirect) of consultation on the specific questionnaires formulated for them. The number of material aspects picked was 45 and the responses were received on a scale of 1 to 5, where 1 was equal to very high importance and 5 was not important.



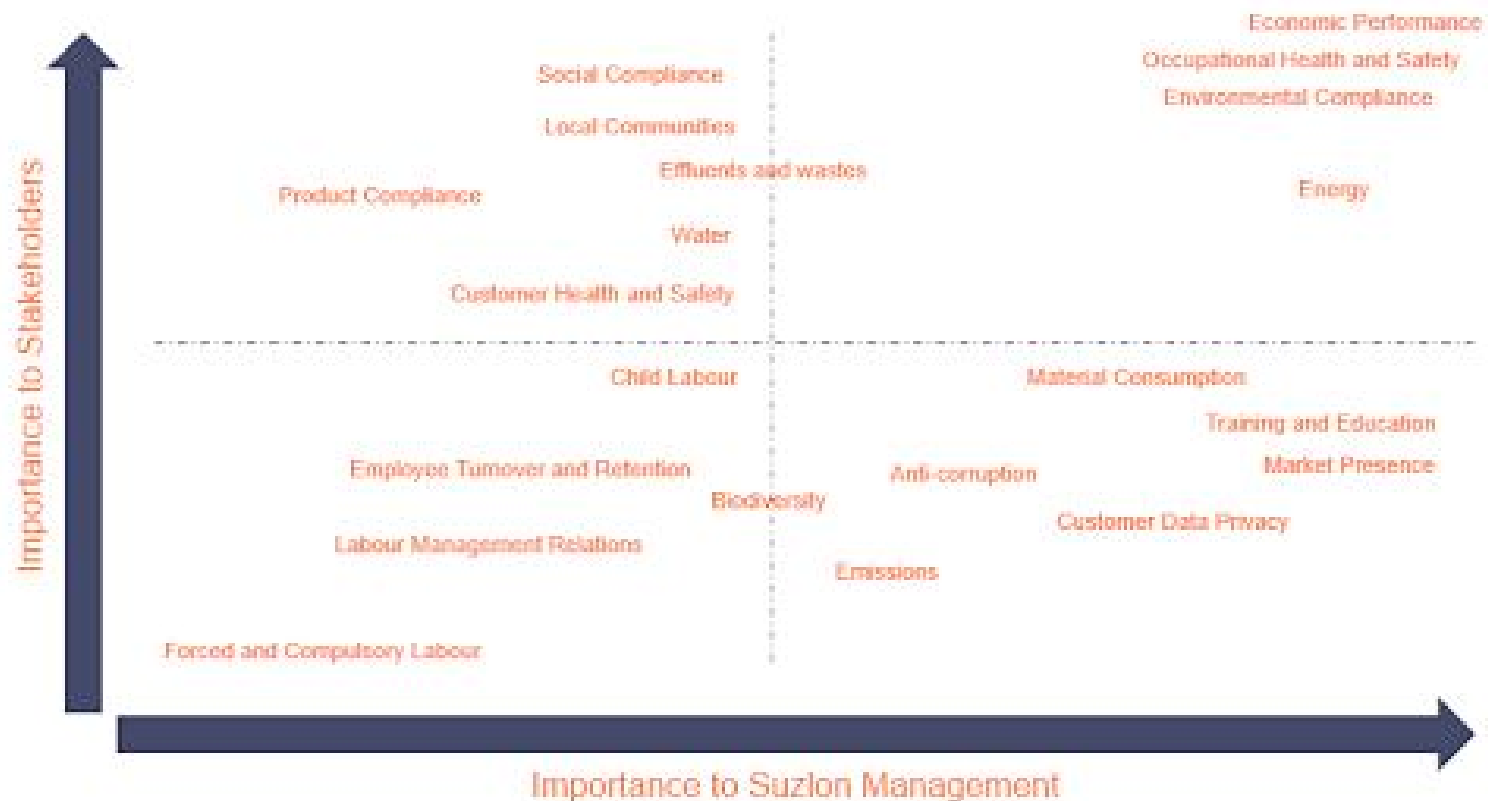
Materiality

Material issues for sustainability reporting are the ones having the potential to significantly affect sustainability performance of the Company. The principle of materiality in GRI Standards articulates that the report should comprise of the topics which reflect the organisation's significant economic, environmental and social impacts; or substantively influence the assessments and decisions of stakeholders.

The responses of the stakeholder engagement exercise were collated and analysed. This analysis was further used to plot the materiality matrix for Suzlon. Responses from this exercise help as inputs for effective decision making and further treading on the path of sustainability in a more efficient manner.

Materiality Matrix

Materiality Matrix for Suzlon



GRI Standards	Material Topics	GRI Topics	Boundary
Economic	Economic Performance	Economic Performance	Internal
	Governance and Ethics	Anti-competitive Behaviour	Internal
	Market Presence	Market Presence	External
	Anti-corruption	Anti-corruption	Internal
Social	Child Labour	Child Labour	Internal
	Forced and compulsory labor	Forced and compulsory labor	Internal and External
	Labor management relations	Labor management relations	Internal and External
	Training and Education	Training and Education	Internal
	Employment Turnover and retention	Employment	Internal
	Occupational Health and Safety	Occupational Health and Safety	Internal and External
	Local Communities	Local Communities	Internal and External
	Customer Health and Safety	Customer Health and Safety	Internal and External
	Customer Data Privacy	Customer Privacy	Internal and External
	Product Compliance	Marketing and Labeling	Internal and External
	Social Compliance	Socio-economic Compliance	Internal and External
Environment	Emission Management	Emissions	Internal and External
	Energy	Energy	Internal and External
	Material Consumption	Materials	Internal
	Effluents and Wastes	Effluents and Waste	Internal and External
	Water	Water	Internal and External
	Environmental Compliance	Environmental Compliance	Internal and External
	Biodiversity	Biodiversity	Internal and External

Sustainability at Work

Sustainability at Suzlon is driven in a structured fashion. The philosophy of Sustainability is being institutionalised in a top to bottom approach i.e., from the Group Sustainability Management Committee which is responsible for Sustainability Policy formulation and implementation to the Sustainability warriors responsible for providing data on monthly basis. The committee met once in FY 2017-18 and is chaired by the Vice President & Head - BRC (Business Review Committee, Chairman's Office) and the other members are the Whole Time Director & Group CEO, COO, Group CFO & Senior President India Business and IPD Corporate. The Sustainability Committee reports into the Group Sustainability Management Committee. This committee focuses on the strategic direction of the company in terms of sustainability. This committee comprises of Chief Quality Officer, VP-Management Assurance, Vice President & Company Secretary, Head Corporate Communications, CHRO and Operations Controller. The Secretariat/Office anchors sustainability across the organisation, it comprises of Head - CSR, Sustainability & OHS and GM-Operational Excellence.

The Sustainability Managers are responsible to steer the process across the organisation, obtain monthly inputs and the committee comprises of the CSR State-in-Charges. Suzlon deploys Sustainability Consultants for compiling the sustainability related data and formulating the Sustainability Report on an annual basis.

The approach for the collation of data for the Sustainability Report is also done in a structured manner. The Vertical Heads are the Sustainability Sponsor/Mentors. They meet once in a year and focus on the analytical decision making. As the process is being institutionalized, the Head of Departments and the State Heads are the Sustainability Owners are to meet on a quarterly basis and provide guidance for the process. The departmental SPOCs are termed as the Sustainability Champions. They help in departmental navigation and the meetings are to be held on requirement basis. The personnel from the departments, owners of the data are termed as Sustainability Warriors. The data collected by is collated and shared with the external consultants and used for the development of the Sustainability Report.



Not only data collation but also sustainability consultation is an integral part of the process. There is a defined approach for seek consultation as well. Representatives from all departments known as the Sustainability Ambassadors are to meet once in a year. The meet would be a sustainability workshop, where aspects like material topics, critical stakeholders, materiality etc. would be discussed. There is a Sustainability Advisory Group which helps in organizing the workshops, creating

awareness about sustainability across the organisation. Sustainability Technical working group helps Suzlon with technical issue mitigation and Sustainability Supporter extend their help as and when required.

There were a number of meetings conducted in FY 2017-18, the discussion further led to the outcome which stated that Suzlon should come out with their first Sustainability Report based on the GRI Standards.



Economic Performance

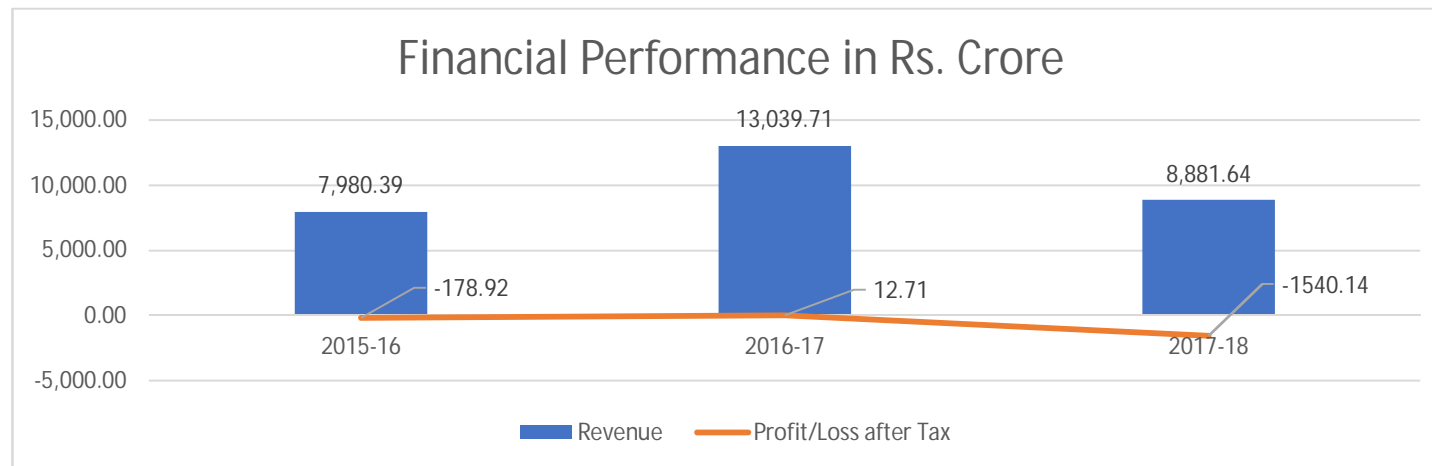
Sustained growth is very critical for long term sustainability of a business. Suzlon stands as a vital contributor to attain India's ambitious target of 175 GW of renewable energy till 2020, with 67 GW exclusively from wind energy. The rapidly technological development has boosted renewable energy's contribution into India's total energy basket to 20%. The share of renewables has helped in securing country's long-term energy requirements along with optimal utilisation of electricity infrastructure available. Presently 34 GW of energy comes from wind only. In last three years the renewable energy capacity in India has increased from 32 GW to 63 GW. However, last year due to change in tariff policy from Feed in Tariff to auction based pricing, wind industry has witnessed a steep drop from 5.4 GW installation in FY 2016-17 to 1.7 GW installation in FY 2017-18.

In India Suzlon continues to remain the market leader despite of overall crash in the wind industry installations. Suzlon has over 11.9 GW of installed capacity and global installation of around 17.9 GW spread across 17 countries in Asia, Australia, Europe, Africa and Americas. This fact is reflected in Suzlon gaining a market share of 35% in FY 2017-18, which is the largest by any Original Equipment Manufacturer (OEM) in India. Even in such difficult market conditions, Suzlon alone installed 626 MW of

wind energy capacity infrastructure and retained its number one position of Original Equipment Manufacturer (OEM).

Suzlon has positively accepted the shift in the pricing model in wind industry to competitive bidding as an opportunity for its business expansion. This has been possible since the Company has tightened all its operations, took steps for cost optimisation with focus on reducing fixed cost, and to improve operational efficiency and lower the cost of goods with improved technology. All these efforts have eventually resulted in better order book in the auctions conducted in FY 2017-18.

Suzlon reported Rs.8,881.64 Crores revenue in FY 2017-18 from all its India operations against Rs. 13,039.71 Crores in FY 2016-17 and incurred a net loss of Rs. 1,540.14 Crores as compared to the net profit of Rs. 12.71 Crores in the previous year mainly because of the transition from feed in tariff to competitive bidding. Therefore, the Board of Directors have not recommended any dividend on equity shares for FY 2017-18.



In FY 2017-18, Suzlon did not receive any financial assistance from Government. The direct values generated, distributed and retained are shown in the below table considering the consolidated financial performance of Suzlon in the FY 2017-18.

Direct Value Generated, Distributed and Retained(in Rs. Crore)*			
	2017-18	2016-17	2015-16
Direct Economic Value Generated	8,881.64	13,039.71	7,980.39
Revenue	8,881.64	1,3039.71	7,980.39
Direct Economic Value Distributed	4,828.14	8,937.69	5,380
Operating cost	4,350.32	8,292.41	4,957.92
Employee wages and benefits	462.52	630.34	403.11
Payments to provider of capital	-	-	0.10
Payments to government	1.40	-0.05	0.07
Community Investment	13.90	16.31	18.80
Direct Economic Value Retained	4,053.50	4,102.02	2,600.39

**Note: The table above is a consolidation of financial numbers from 5 companies namely, Suzlon Energy Limited (SEL), Suzlon Gujarat Wind Park Limited (SGWPL), Suzlon Global Services Limited (SGSL), Suzlon Generators Ltd (SGL) and Suzlon Power Infrastructure Limited (SPIL)*

Suzlon is well-equipped to capitalise on the inevitable growth of renewables, both in the domestic and international markets. The growth strategy of Suzlon is based on strengthening its leadership position in select profitable markets globally. The global trend of moving towards renewables will help Suzlon to seize any and every possible growth.



Operating Safely

Environment, Health and Safety (EHS) at Suzlon is maintained to the highest

Suzlon Group HSE Certification							
Verticals	MB U	IB Projects	IB OMS	Power Evacuation	Wind Resources	Sales & Marketing	TG
ISO 14001:2015 (E)	13	8	8	7	7	7	4
OHSAS 18001:2007 (HS)	13	8	8	7	7	7	0



standards with a dedicated approach and the Company's commitment. Suzlon

ensures that all its Stakeholders from employees to customers, suppliers, contractors, etc. are kept safe and all the projects are completed with a focus on Health and Safety excellence. The Company also ensures to comply with all applicable laws, industry standards and the Company's strong policies and procedures related to workplace safety. The group is OHSAS 18001 certified.

It is a business requirement to have all the products to be approved and the sites to be certified with ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007.

Suzlon Group HSE Certification table:

Regular internal audits are done in around 1,200 non-compliances are registered, amongst which more than 400 have been made by DNV. All the non-compliances are worked upon as closed as per the timelines mentioned. There is a dedicated MIS drawn for the internal audits. HSE legal compliance – all the applicable legal requirements are identified and enlisted. There are 29 applicable laws and 310 legal requirements under them. They are reviewed periodically and basis the evidence and the requirement.

Year wise HSE Legal Compliance Status				
Vertical	2014	2015	2016	2017
Nacelle	100	97	99.36	99.52
Blade	99	99	95.58	98.13
Electrical	99	100	99.83	99.83
Tower	100	100	99.92	99.83
Projects	98	99	95.33	99.67
OMS	98	98.53	98.67	98.58
WR	72	100	98.67	98.89
PE			98	98.63

**Source for the data: C QES Cell MIS data, HSE Legal compliance evaluation done at locations as well as monitoring by C QES Cell.*

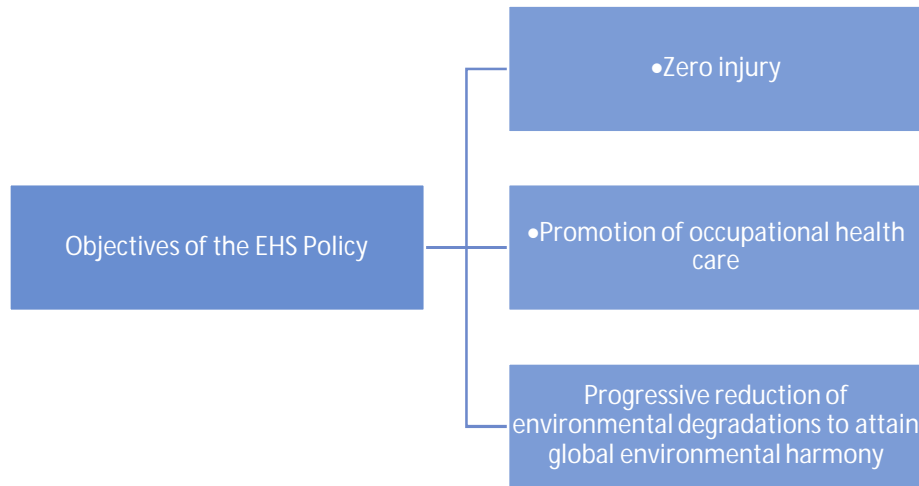
Suzlon also have Improvement Projects to enhance the HSE and Quality Compliance, are taken up at the organisational level. For example: Drinking water to made available for all the Suzlon employees, direct or contract across geographies. This initiative was carried out and even in exceptional geographies like Rajasthan and Daman water was made available. Though it took a bit more effort, information was sought from the employees & people and alternative arrangements were made other than having RO installed. At Mumbai office the installation of RO machines for drinking water have reduced the usage of bottled water, aiding to reduction of plastic waste. It has brought down the monthly consumption from 1,000 bottles to 70 bottles.

In order to ensure that Suzlon can get from its current state to the desired state a collective foresight and a defined roadmap is required. Therefore, Suzlon ensures the alignment of its people, decisions, innovations and process improvements across the global.

Suzlon believes will enable the obstacles to be overcome and dependencies to be addressed.

As a guideline Suzlon has EHS Policy in place which focuses on the safeguarding of occupational health and safety of people, property and environment, in conformance to statutory requirement and government legislation. The EHS Policy is communicated to all Suzlon employees, contractors, business associates, customers and it is also available to other stakeholders.





HSE Policy Principles

Suzlon expects its employees to abide by the following principles to achieve the HSE objectives and sustain HSE Policy.

- **HSE is non-negotiable:** HSE's commitment should be recognized and observed through HSE process. HSE is a condition of employment
- **"HSE starts with me" and "I am responsible for HSE":** This is the spirit which all employees need to perform their tasks. They should also propagate the same to their entire team. Each employee is required to play his/her role in HSE, so that every employee becomes an HSE Ambassador.
- **HSE is a core value:** To develop and sustain a strong HSE culture, where HSE policies are strictly adhered to in all our work, with no exception.
- **Developing HSE competency by training:** Each employee, along with their team, should take the initiative to get themselves trained as well as provide the necessary support to train the contractors and others engaged, in Suzlon HSE requirements, as applicable.
- **Completing work in a safe way, stop unsafe work:** To ensure all employees (beginning from oneself), should stop unsafe work, refuse to perform any activity which is not in compliance with HSE requirements and execute all measures to complete work in a safe way. To attain HSE compliance, each one

of us needs to take efforts to prevent defects, pollution injuries and occupational diseases through HSE processes.

Global HSE Vision, Mission & Values

HSE Vision

Suzlon is committed to achieve zero harm to employees, environment, contractors, communities & property and demonstrate sustainable leadership for effective and enhanced occupational health, safety and environment practices.

HSE Mission

- Effectively and efficiently leverage leadership commitment and stakeholder involvement in executing Suzlon HSE business plan.
- Measurably improve HSE leadership capability.
- Initiate employee driven HSE initiatives.
- Integrate HSE performance measures and goals.
- Ensure 100% compliance with all legal and other requirements.

Training has been given to all employees irrespective of Permanent/ Casual / Temporary / Contractual Employees/ Employees with disabilities, as the case may be, who are engaged in safety relevant roles or tasks. The Company imparts Safety induction training for all new joiners including contractors' employees before commencement of work activity at site. Similarly, all employees and contract workforce who are engaged in work activity or tasks at plants and work sites, are also covered under the Company's training program at regular intervals. Personnel with disability are not hired for safety reasons in critical jobs.

Annually, from past 8 years Suzlon has been organising Excellence Awards. There is advanced planning and risk assessment done for the event. The dates are fixed well in advance and simultaneously it is communicated. The teams or individuals with significant contributions are appreciated and acknowledged by the CEO.

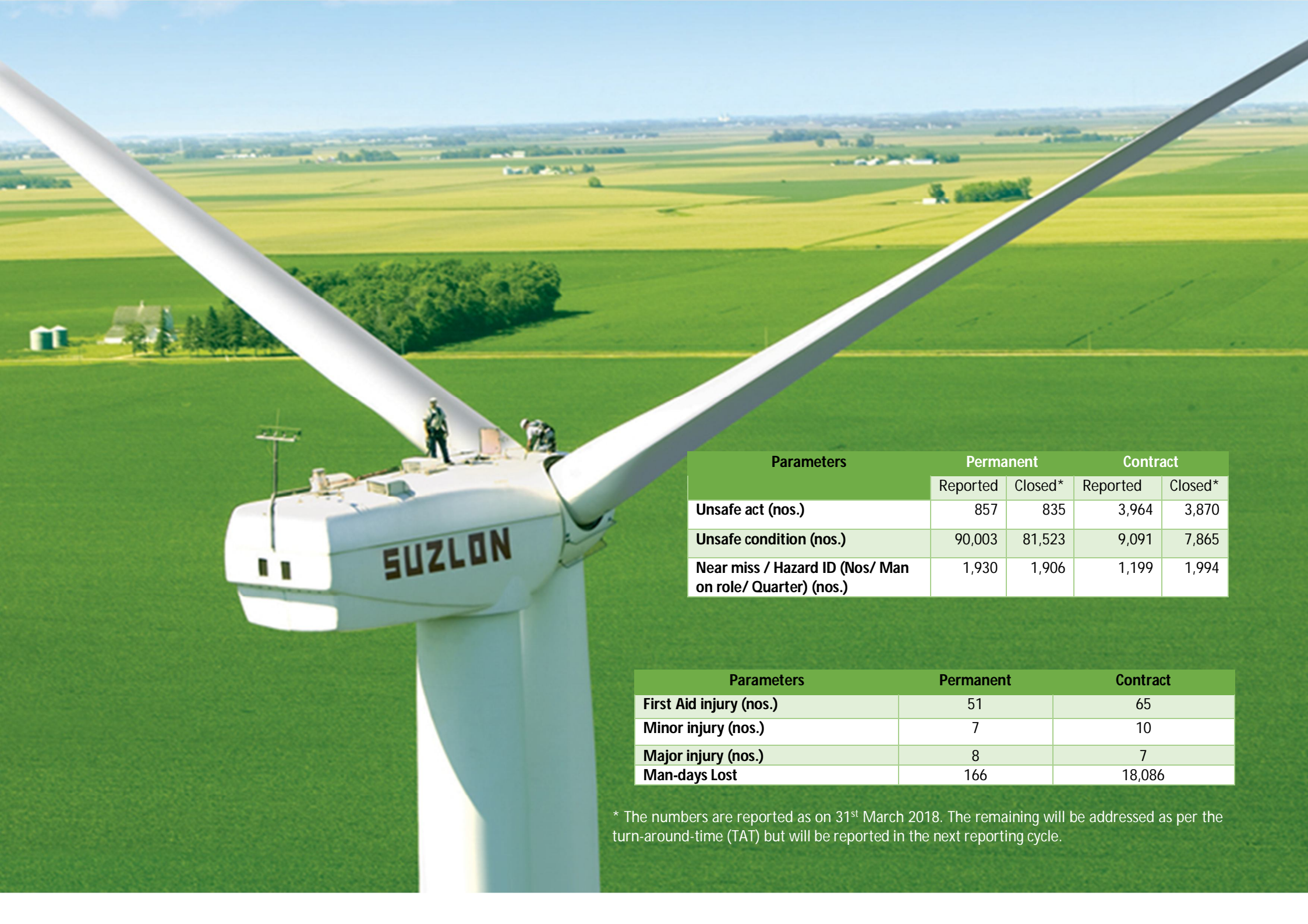
Kaizen are a systematic approach and problem-solving tool. They are aimed at swift implementation and cost-effective improvements which will result in measurable impact. Traditionally kaizens are focused on production and efficiency numbers, but they can effectively be shifted to improving safety and ergonomics. At Suzlon they are used to enhance the production performance, efficiency numbers and safety

program effectiveness. There were 34 kaizens implemented for the production performance.

Kaizens in HSE are characterized as short bursts of intense activity driven toward resolving a specific safety issue in a short period of time. The table below has a list of HSE kaizens implemented in FY 2017-18:



Sr. No.	Vertical	State	Kaizen Title
1	OMS	MH	Discharge resistor kit for capacitor.
2	OMS	RJ	Shell LOTO system
3	OMS	AP+TEL	Gear Box Brake Calliper Holding
4	OMS	KN	Nacelle Fan Bearing Fixing Fixture
5	OMS	TN	Self-descending from turbine
6	C2C	KA	Color coding on D-shackles and bow shackles for ease of selection
7	C2C	GJ	Effective barrication of excavated pit
8	C2C	GJ	Stand for overhead Wires and lights
9	C2C	GJ	Lamp Stand (Tripod) Development From Scrap for Cost Saving
10	MBU	Blade	Prevention of Fall - Mould Platform: Provision to restrict man entry on the main mould platform when the flaps are open at the time of mould closing activity
11	MBU	Blade	Carbon dust suction set up
12	MBU	Blade	Heat protection cover for Halozen light
13	MBU	Blade	Trolley for unloading light weight bulky material
14	MBU	Nacelle	Design of Yaw base tilting Jig.
15	MBU	Nacelle	Yaw drive oil drain system with pump
16	MBU	NCU	Industrial electrical extension board
17	MBU	NCU	Protective cover for chamfering machine to collect brown foam dust
18	MBU	Generator	Rotor Banding Machine Chuck Locking Improved
19	MBU	Generator	Operator fatigue reduction in terminal bar sub-assembly process
20	MBU	Panel	Din rail cutting machine modified from manual operation to hydraulic with guide.
21	MBU	Tower	Enhancing the Facility - Blasting booth capacity Enhancement.
22	MBU	Blade	Prevent major Fire Incidences by preventing spark



Parameters	Permanent		Contract	
	Reported	Closed*	Reported	Closed*
Unsafe act (nos.)	857	835	3,964	3,870
Unsafe condition (nos.)	90,003	81,523	9,091	7,865
Near miss / Hazard ID (Nos/ Man on role/ Quarter) (nos.)	1,930	1,906	1,199	1,994

Parameters	Permanent	Contract
First Aid injury (nos.)	51	65
Minor injury (nos.)	7	10
Major injury (nos.)	8	7
Man-days Lost	166	18,086

* The numbers are reported as on 31st March 2018. The remaining will be addressed as per the turn-around-time (TAT) but will be reported in the next reporting cycle.

Suzlon One Earth

'Suzlon One Earth' - the headquarters of Suzlon nestles in one of the fastest growing cities of Western Ghats, Pune. It is a unique corporate campus created to make working a pleasure, it brings the concept of One Earth to life. The campus represents a blend of functionality and aesthetics this campus is an entity built on the principles of sustainability and adheres to the principle of Vaastu. This in turn makes the campus buzz with positive energy.

The campus is one of the greenest corporate campuses across the globe and is spread over a sprawling area of approx. 10 acres. It comprises of 2 prominent functions – Office space housing Suzlon's work force along with required functionalities and the Suzlon Excellence Academy, its global learning centre imparting training and workshops to enhance skills of its employees and promote continuous learning. The Suzlon Excellence Academy houses the most and one of its kind – A WIND GALLERY which showcases the history of wind as to how mankind has adapted this powerful natural resource and how Suzlon has developed the technology in-house. The Gallery is open for public and it regularly conducts visits of schools and scholars interested in this field. Suzlon is welcome for all learners to its unique campus and it allows students of engineering, architecture and related fields to conduct case studies for which it receives regular requests.

The campus is self-sufficient in terms its requirement of energy, water and waste management which is deployed with efficient controls at its on-site Building Management System (BMS) to create minimum disturbance to the natural ecology of the site and control usage depending on occupancy. It comprises of approx. 6,00,000 sq. ft. of built up office space and has a capacity of housing 2,300 people. It has been awarded with the highest possible green building rating of LEED India Platinum and GRIHA 5-star certifications. Some of the salient features of the campus are:



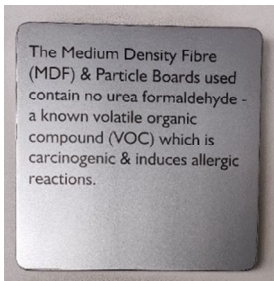
1. Sleek and comfortable interiors with abundant natural light enhance the workplace experience and help in reduction of power consumption, 90% of the occupants have access to natural lighting in the campus at their work place.
2. State-of-the-art learning aids, classroom equipment, large business halls and a global knowledge resource center enhance the process of acquiring knowledge at its on-site Suzlon Excellence Academy.
3. It is a 100% renewable energy consumption campus with both onsite and off-site renewable energy installations. It draws around 5% of the power from hybrid system of wind and solar system installed at site with a total capacity of 155 KW and rest from off-site installations.
4. Smart solutions like motion/occupancy sensors, Low-E glass for the buildings, energy efficient LED lighting has been utilised. Also, there are aluminum louvres providing shade to interiors which help reduce the load on the ACs which leads to energy consumption optimisation.
5. It has an on-site water treatment and recycling facility which makes it a zero-discharge water recycling campus. This treated water is then used for flushing, air-conditioning (in cooling towers of water cooled VRV system) and landscaping systems. Water fixtures include low flow fixtures that reduce in-building water consumption by 65% and touch less urinals with hydronic sensors, these all help in reducing water consumption and make it water efficient.
6. Reduction of approximately 35% in operating cost due to energy and water cost savings, a benefit that is transferred to customers through increased investment in technology.
7. There is an on-site organic waste converter which produces manure from all on site generated bio-degradable waste material from offices and cafeteria. This waste is converted to bio manure used in the garden area of the





campus and freely distributed to employees promoting use of organic manure.

8. Composite wood containing low volatile organic compounds (VOC), Medium Density Fiber (MDF) and Particulate Boards which contain no urea formaldehyde are used to construct the office space. The usage of these is to ensure that no carcinogenic material and allergy causing material around.
9. Use of low VOC paint with VOC content of less than 50gm/liter enhances indoor air quality by minimizing sick building syndrome and other building related sickness to the occupants.



Capturing Positive Energy –

- The Identity – ‘my place’, pride, loyalty*
- The Memory – brand image – eternal thoughts*
- The Focused mind & the Wondering mind*
- The Seeing Eye – light – perception*
- The Focal point – deep stambh*
- The Context – comfortable – catalyzing*

There are various types of wastes which are generated from Suzlon One Earth campus. The disposal is done in a distinctive manner, wherein some of it is handed over to the selected NGO partners for reuse and recycling. Details about them are mentioned below:

Drive	Description	Approx. Market Value of the Project in Rs.
Insulation sheets	Collected by Unnati Foundation for making Dust bins for distribution to villagers	40,000
Paper recycled	Collected by Swach Newspapers, magazines, plain papers and registers for recycle purpose	12,400
World Environment Day Celebrations	Free distribution of manure (it gets distributed all through the year as well)	1,500
Plastic Waste recycled	Collected by RUDRA Environmental Solutions (India) Ltd. For recycle purpose	1,400
Working CFL bulbs and tubes for donation	Donated to Vigyan Ashram and Deep Griha NGO	80,240

Organic Waste Containers



Workforce Management

Suzlon aspires to inculcate values where employees and the Company work in tandem to deliver optimum performance of the business. Employees are considered indispensable part of the ecosystem and act as brand ambassadors for the Company.

As on 31st March 2018, Suzlon has 6,373* permanent employees and 1,32,924 contractual employees. Out of the 3,023 permanent employees of Suzlon Energy Limited (SEL), 22.63% are members of employee association recognised by Suzlon management. The Company with the help of SAP based system ensure that no child labour is interviewed or employed. Suzlon signs proper agreement with labour contractors to ensure no child labour is being engaged in operations and activities. This is not commercial agreement but is a Health, Safety, Security and Environment (HSSE) agreement which encompasses HR laws, HSSE and related legal terms etc. In case of non-adherence to this agreement the Company is liable to charge penalties to the Sub Contractors.

Also, additional measure to avoid any incidence of child labour is put in place, which is that each employee is issued an identity card by Suzlon, which happens only after the verification of all the other government identities of the employees. The Company has formulated a Whistle Blower Policy to provide vigil mechanism for employees including Directors of the Company to report genuine concerns. This policy is available on the Company's website (www.suzlon.com).

Suzlon Human Resource Excellence (SHRE) is a holistic HR excellence model that thrives on the Company's Human Resource (HR) strategy. To motivate workforce for continuous improvement this model combines employees' excellence in performance with rewards and recognition. SHRE provides a platform to measure, access and analyse workforce performance on predefined criteria resulting in constant improvement in Suzlon Human Resource. Benchmarking best practices and internal learning aids to elevate the overall standard of HR functioning. Along with

this recognising and rewarding the outstanding Business Units empowers Suzlon for future readiness and constancy of purpose.



*Note: This figure is a consolidation of financial numbers from 5 companies namely, Suzlon Energy Limited (SEL), Suzlon Gujarat Wind Park Limited (SGWPL), Suzlon Global Services Limited (SGSL), Suzlon Generators Ltd (SGL) and Suzlon Power Infrastructure Limited (SPIL).

Suzlon believes in empowering its employees by understanding their needs and expectations, motivating workforce through various employee development programs and supporting them to achieve professional excellence. In FY 2017-18, Suzlon continues to engage and empower its employees through various initiatives like 'Connect', 'Dialogue for Change', 'WindChimes', 'Die Hard Suzlonians' and 'Employee Engagement Survey 2018'. In order to identify the areas of improvement Suzlon annually conducts Employee Engagement Survey.

Further, Suzlon also offers 'Skill and Competency Enhancement Program' which is driven by Suzlon Quality Academy (SQA) under Quality Management Organisation (QMO) across all its plants and sites. The focus of the program is to reduce any human error and improve overall efficiency and functionality of various departments. The aim of this Program is to build a skill and competency of individuals, so they can take up plants and sites challenges at Suzlon.



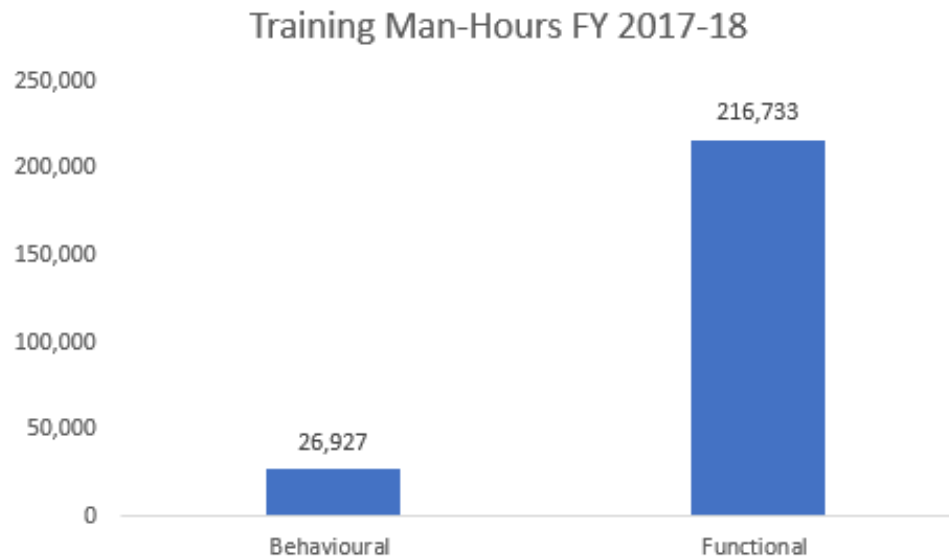
Training and Development

Suzlon has a global Learning and Development Cell. Learning and development is an ISO 9001 certified process and there are plans to implement Learning Management System. Kirkpatrick model does determination of training effectiveness. Suzlon is at its level 4 and is able to track effectiveness till level 3.

Suzlon also has a training calendar which is published on monthly basis across organisation / verticals / grades. The trainings are conducted accordingly this no trainings are conducted beyond that until special permission taken. There is a central MIS available for this.

In FY 2017-18, Suzlon has trained all the employees who are involved in safety relevant roles. Induction training is provided to all the new joiners at regular intervals. Suzlon also provides training to all the contractual staff who are hired for safety related roles.

No survey was carried out to account the number/kind of differently abled employees working in the Company. Although, self-declaration of disability is a part of the onboarding process. In the reporting period the Company registered a self-declaration from 6 permanent employees with disabilities. However, personnel with disability are not hired for safety critical jobs. The number of man-hours utilized for the functional and behavioural trainings depicted below are for Suzlon Group.



Capability Building Initiatives

The Company provides intensive and continuous training for its wind farm technicians to help them excel in service, maintenance and monitoring of turbine. They are trained in and out of field to enhance their capabilities by inviting reputed industry training consultants to train the technicians and technical support engineers. "Gifts- Growth Initiative for Talented Suzlonians" is a talent management initiative to provide lateral growth to the employees. The Training Need Identification (TNI) – Leadership competency framework is being worked upon and will be introduced before the end of this financial year.

Managerial Development Program

Succession planning involves identification of Key Critical Roles and availability of successors for these identified roles. Suzlon has in place a Senior level development program called 'Evolve' for succession planning. Designing Competency Framework,



carrying out a Development Centre to assess current competencies of identified successors vis-à-vis required competencies for higher level role. IDP preparation for each identified successor once they go through Development Centre process. Further, Suzlon is in process of designing formal procedures that will be introduced in upcoming years. There is no formal Programs for skills management managing career endings and related support for employees in Suzlon but at informal level the practice prevails. Further, retirement age has been formally put as 65.

Employee Benefits

The Company provides various retirement benefits in form of provident fund, employee state insurance and superannuation fund. Other retirement benefits like gratuity is provided on the basis of an actuarial valuation calculated by using projected unit credit method as at each balance sheet date.

Benefits for permanent employees include the following:

- Mediclaim Insurance to self and Family
- Accidental Insurance to Self



- Term Life Insurance to self
- Leave Encashment (*leave encashment at the time of exit*)
- Performance Linked Incentive
- Wedding Gift
- Children Education Support
- Children Education Award
- Employee Education Award
- Annual Health Check up

- Emergency Loan Policy
- Employee Appreciation policy
- Leave and Holiday Policy
- Annual employee engagement survey
- In-depth analysis and robust action planning thereof
- Periodic communication with employees globally through various channels e.g. Connect, Skip level meetings etc.
- Focus is on employee engagement and not just Fun@Work activities
- Strong RnR processes e.g. Suzlon Appreciates, Excellence Awards etc.
- Avenues for employees to connect with Management viz. CEO connect, Ideas4More, Dialogue for Change etc. initiatives
- Annual health check-ups
- Availability of doctors at critical Suzlon offices, sites, plants
- Frequent health talks
- Recreation room for all employees
- ATMs within big campus
- Subsidized bus facilities for all employees
- Café' to provide wholesome nourishment
- Crèche as per need

**Note: The above complaints for FY 2017-18 are for Suzlon Energy Limited.*

Category	No. of complaints filed during FY 2017-18	No. of complaints pending as on As on 31 st March 2018
Child labour/forced labour/involuntary	Nil	Nil
Sexual harassment	Nil	Nil
Discriminatory employment	Nil	Nil

Supply Chain Management

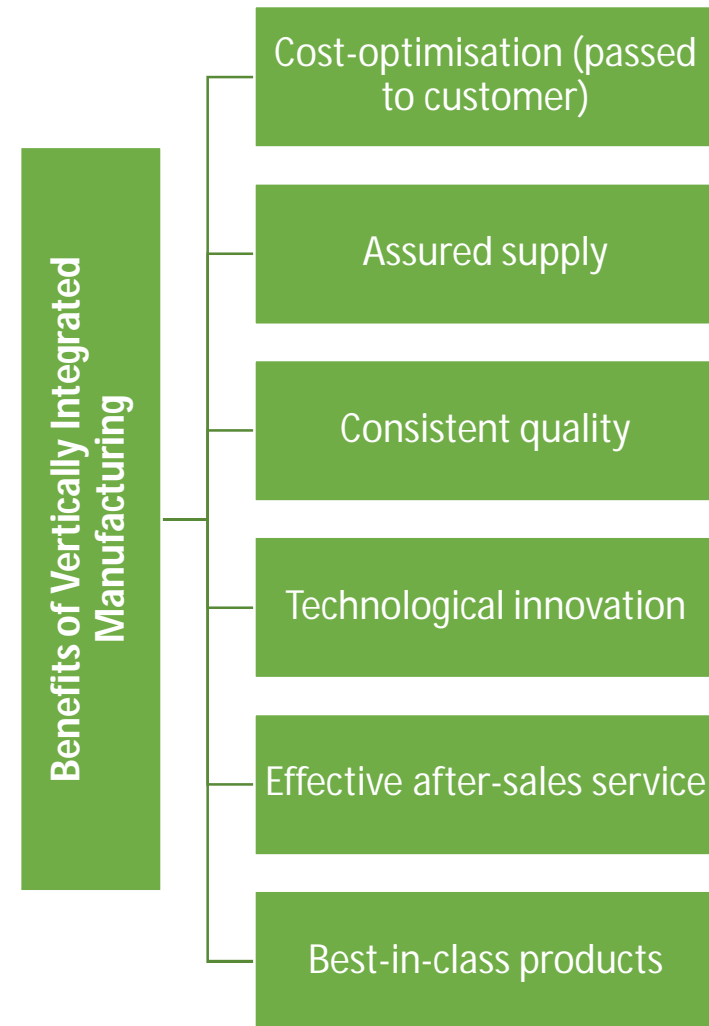
Suzlon's Supply Chain Management (SCM) is an interwoven system of independent functions working together to ensure that each function complements the other. It encompasses integrated planning and execution of processes, required to optimise the flow of materials, information and financial capital in the areas that include demand planning, sourcing, production, inventory management, storage, logistics and returnable products. These integrated processes ably support Suzlon to manage supply chain efficiently. Suzlon has a world class vendor base with a number of overseas vendors partnering with Suzlon and their geographic spread.

Suzlon is one of the few players in the market that has manufacturing capabilities for almost all key components of a wind turbine generator in-house like blades, nacelles, control panels, hubs, generators, tubular towers, transformers and package sub-stations. The Company has production facilities in all across the wherewithal to cater to global markets. The manufacturing capacity of 4.2 GW is spread across 12 facilities in India which are strategically placed across key windy states. All functions of the supply chain are either carried out in-house or outsourced to vendors/suppliers.

Vendor/ Suppliers

Suzlon have procedures in place for sustainable sourcing within supply chain. Vendors/ supplier are carefully screened and analysed on numerous criteria's and must meet the quality standards, strategic goals and vision of the Company. Suzlon' has an approved vendor evaluation checklist which have parameters on HSE, environment and energy efficiency. Vendors/Suppliers are classified in line with component / product classification to meet WTG – Product certification requirements (E.G. GL Guidelines). Vendors / Suppliers are needed and recommended to obtain IMS certifications to verify their practices including:

All vendors and suppliers are screened and only those vendors and suppliers that are compliant with social and environmental standards, as may be applicable, are considered. Vendors are also required and recommended to obtain industry



certifications to verify their practices, in order to ensure quality and excellence in

ISO 9001:2015	OHSAS 18001:2007	ISO 14001:2015
<ul style="list-style-type: none"> • Quality Management System standard for quality and excellence in production 	<ul style="list-style-type: none"> □ Occupational Health and Safety Management System standard for maintaining a high standard of employee health and safety 	<ul style="list-style-type: none"> • Environmental Management System standard for maintaining the Suzlon promise of a minimised carbon footprint

production, maintain a high standard of employee health and safety and adhere to Suzlon's promise of a minimising carbon footprint.

The Company has also taken steps to procure goods and services from local and small vendors/suppliers. The infrastructure facilities for its workforce are created at these locations. Suzlon promotes local vendors/suppliers in the vicinity, to supply necessary, services and labour force required to complete projects and to operate the assets created for customers. It also creates job opportunities for the localities in which it operates.

Suzlon aims at consistency in practices and quality in products, both of which are ensured through a rigorous vendor development process. Suzlon has created alternative sources, through expansion of the vendor base, localisation and standardisation of certain components to keep the cost of procurement under control.

Currently with the advent unprecedented policy change in the wind energy sector viz; the shift from Feed-in-Tariff (FIT) to the competitive bidding regime there has been instability in the wind sector. Therefore, optimisation of Supply Chain Management will play a key role in maintaining price competitiveness, launching new products with reduced time of product development cycle and reducing the overall Levelised Cost of Energy (LCOE). Since last 3 years vendors/suppliers have started to diversify rather solely trusting the wind market. There are no bankers discount to exclusive wind vendors. Small vendors will not be able to cope up until rate ratification happens.

Customers

Customer satisfaction is an integral part which can be attained only through proper Supply Chain Management. Suzlon's logistics team ensures smooth functioning of SCM by taking care of the distribution of materials at the right place and on right time. The SCM team focuses on ensuring completion of projects on time, adherence to quality and safety without cost over-runs. It also plays a crucial role in new product development by working out the Cost of Goods Sold (CoGS) and reducing the time of product development cycle. For customer safety Suzlon displays product information mandated as per laws. At the end of FY 2017-18, 8.08% of customer complaints (SEL) are pending to be resolved.

Suzlon as a group having some restriction, formal customer satisfaction measurement is not carried out due to various obligations and other measures. However, there are plenty of mechanisms deployed to measure customer satisfaction and engagement. Suzlon has a differentiating factor compared to other competitor by providing single window concept for entire lifecycle of WTG: right from wind resource analysis to manufacturing to erection, commissioning, OMS till handling end of lifecycle. The biggest measure of customer engagement is SGSL has not lost a single customer since inception of its services. Even after the initial 20 years of contract lifecycle (which was supposed to be technical life of WTG), customers have renewed the contract for another term. There is 100% retention of customers for lifecycle period of 20 years. This itself calls for higher level of customer management and engagement. Secondly measure of customer satisfaction and engagement is repeat business in terms of WTGs. With time, customer has grown their installation base with Suzlon leading to repeat business. Installation has grown immense fold and becomes strong indicator of customer engagement. Thirdly, repeat order from existing customer for Value Added Products (VAP) / Value Added Services (VAS) also becomes measure for evaluating customer satisfaction and engagement. Lastly the effective measure for evaluating customer satisfaction and engagement is through program of Multi-make OMS. Existing / new customers having other OEMs (non-Suzlon WTGs) opting for OMS services from SGSL. In additional higher market growth and business growth, this also become an indicator of how satisfied / engaged customer is. On the experience of SGSL O&M services, customers are more than happy OMS services of other turbines to SGSL.

To protect customer privacy, Suzlon has a proper Data Leak Protection system in place and has the critical documents identified under this. No critical information goes out of the Company. There is also a central repository for the documents which has limited access right where all the Company's knowledge and data is archived. Breaches across the Company are monitored by the IT team whereas Customer Relationship Management (CRM) Team monitors the ethical breaches and takes

needful actions (if required). Internally, there is a stringent control on data breach. There is a track on all departments. The IT functions are ISO 27001:2013 certified and goes through surveillance audits and re-certification. Suzlon's SCM process contributes to helping customers earn profits in a sustainable manner, while powering a greener tomorrow.



Connecting with Communities

In FY 2017-18 Suzlon celebrated the “Decade of Difference” as the Company completed 10 glorious years of making difference in the lives of communities. Suzlon’s business model is envisioned on the ideology that it will serve the communities of today and future by providing sustainable solutions to prevent climate change. The Company believes that serving communities through Corporate Social Responsibility (CSR) is an indispensable part of their business. This can be clearly seen from the CSR spent of Rs. 4.49 Crores which the Company has voluntarily spent even though it has incurred loss in FY 2017-18.

Suzlon has an established CSR committee which is in accordance with the Section 135(1) Company’s Act, 2013. It comprises of Mr. Tulsi R. Tanti as the Chairman, Mr.

Girish R. Tanti and Mr. V. Raghuraman as Committee members. The ultimate responsibility for Suzlon CSR rests with the CSR Committee. In the Board level CSR Committee meeting the functional CSR head receives directions and innovative inputs to integrate CSR more closely with business strategy. The Company has an approved CSR policy in place, which governs all the CSR programs.

Till date Suzlon has reached to over 800 villages across India through its various CSR projects. This has empowered communities and provided them with a sustainable source of livelihood. This integrated development approach and collaborations with multi- stakeholders, has created a self-sustaining ecosystem for communities across the value chain.

Key Highlights of last 10 years of Achievements



Suzlon's CSR motto 'Sustainable Development for Sustainable Economy' strives to strengthen the Company's vision of 'Powering A Greener Tomorrow'. The CSR model Suz-Tain, has an entrenched view of conceiving sustainability and integrating it in the designs of CSR programmes.

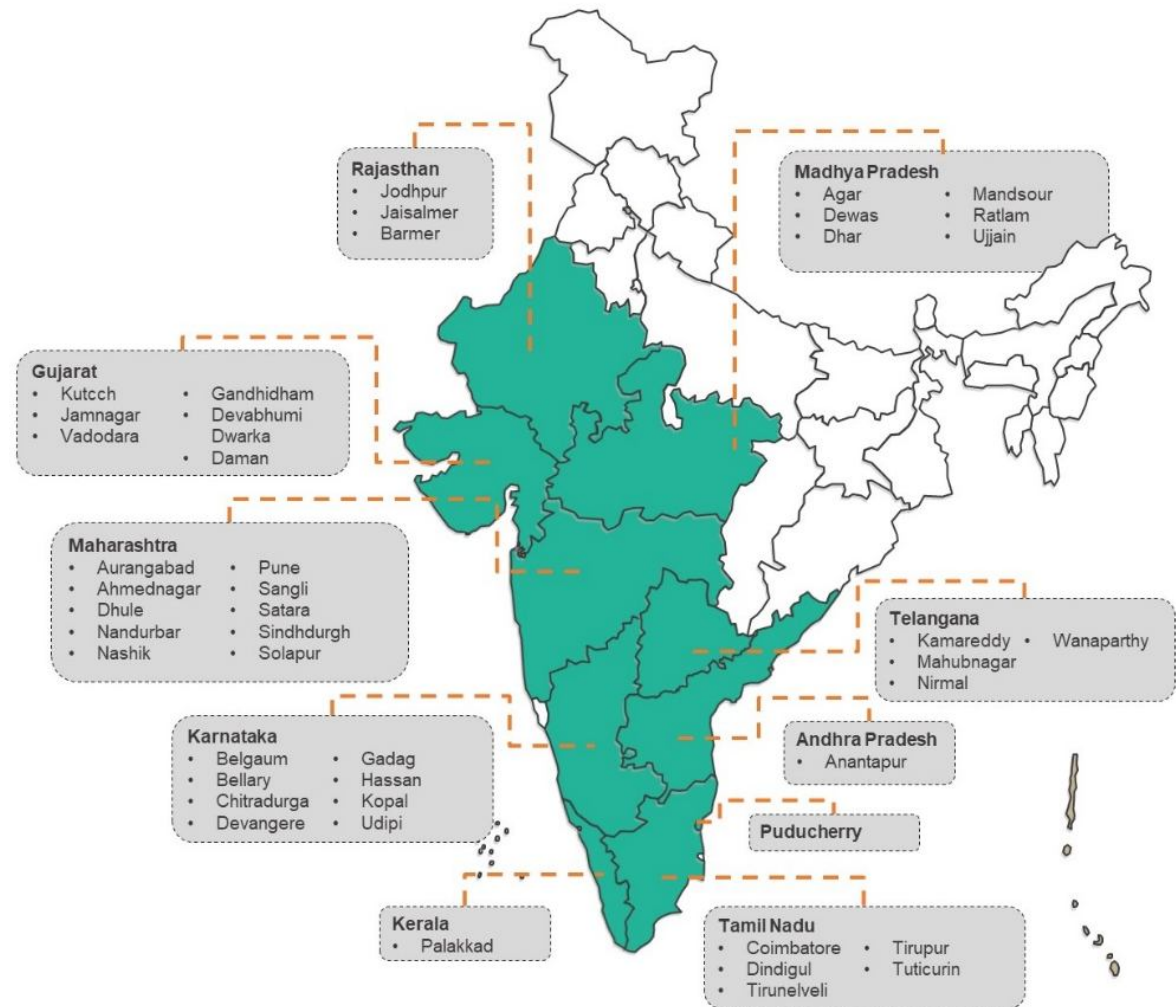
These programmes are categorised into six thematic areas i.e., Environment, Empowerment, Health, Livelihood, Education and Civic Amenities. The activities in these thematic programmes are further classified into five capitals – Financial, Natural, Social, Human and Physical.

The focus areas for Suzlon CSR are clearly identified and are based on the strategic importance index that includes four indicators namely, degree of business presence, stage of wind energy production cycle, community development index and status of community engagement to select and prioritize the development areas and geographical areas.

The CSR programmes are presently implemented in 8 states of India partnering with 32 implementing agencies.

Suzlon has devised strategy of creating win-win situation for communities, environment and other stakeholders and has mandated to implement its CSR programs with gender neutral approach in accordance with its CSR policy. At Suzlon CSR means living corporate values with goals, so that everyone collectively contributes towards creating a better tomorrow.

Suzlon with its integrated approach of Suz-Tain model for value creation, which overlaps various initiatives in the same geographical area. The achievements of each of the initiatives can be further consolidated and lead towards long term sustainable development of the community and environment





- Having minimal impact on the natural environment

- Enabling local communities to develop their potential



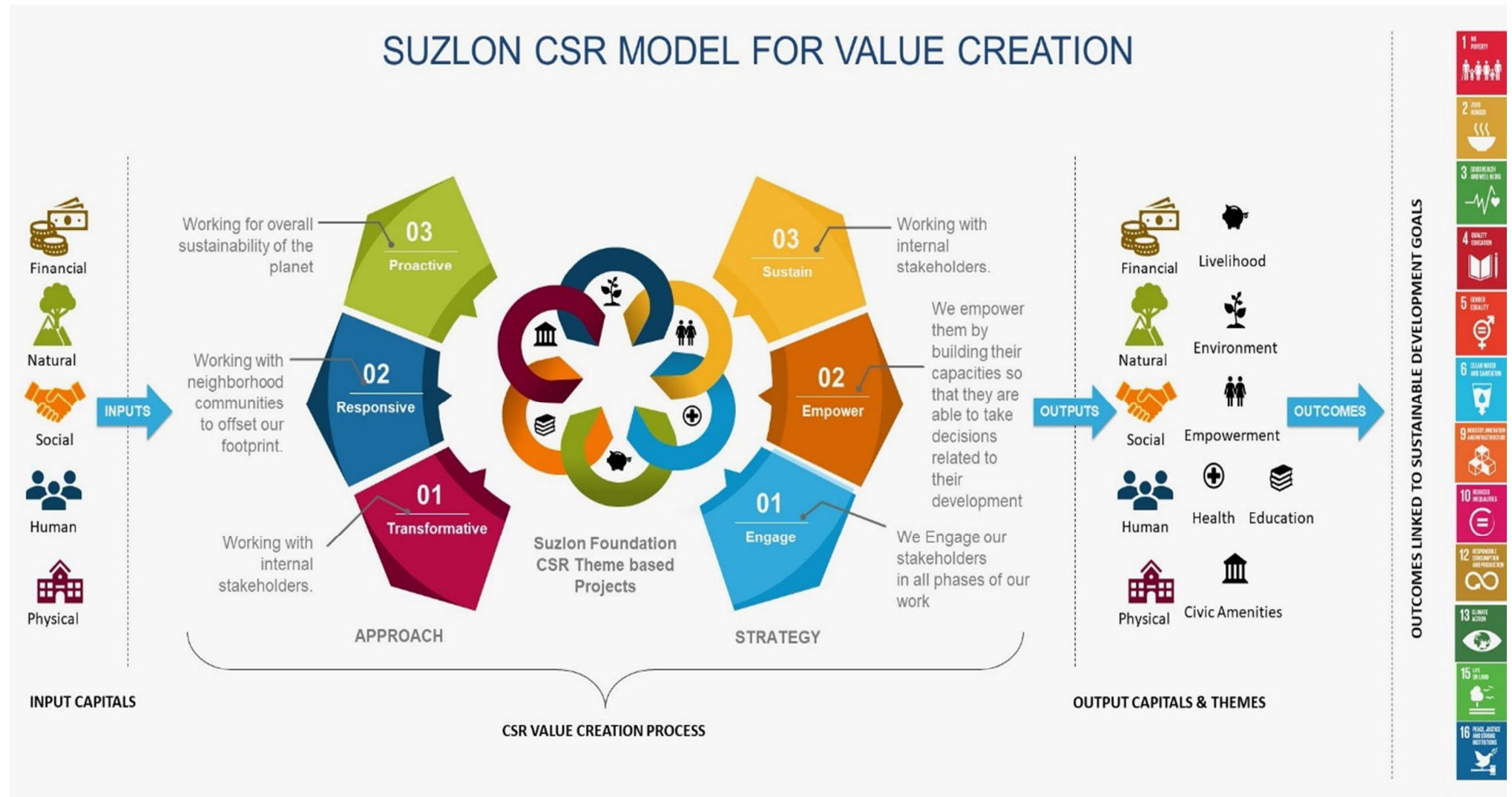
- Empowering employees to be responsible civil society members

- Committing ourselves to ethical business practices that are fair to all the stakeholders



The Suz-Tain model empowers Village Development Committees (VDC). Further, it leads to VDC engagement in community development activities, that results in their well-being. The main objective of formation of VDCs is to tackle the needs of the villages prioritised by communities by customising interventions as per the

requirements. VDC consultations are held annually and a monthly VDC meeting brings out the satisfaction levels that are then shared by the NGOs in their annual presentation before the Suzlon CSR council.



The theory of change has been used for the stages of Village Development Committee (VDC) maturation. It is a comprehensive description of the logic behind how and why a change is expected to happen in a determined context. This approach helps in elevating understanding of the mechanism used to empower and make the rural communities sustainable.

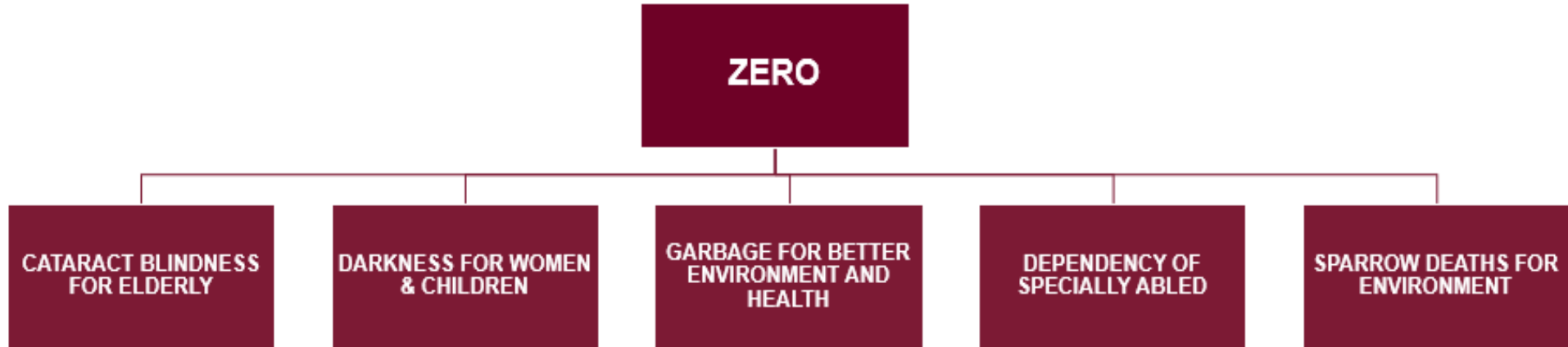
Suzlon chooses the focus areas based on the immediate, mid-term and long term needs of each village community and matching it with available internal company monetary and material resources, skills of Suzlonians, skills of implementing NGO partners and aligning it with the national strategy (like Swachh Bharat, national blindness control program, energy security for the nation and the local community etc.) and the global Sustainable Development Goals.

The process of Suzlon CSR initiatives involves the consultation with the Business Units who provides Suzlon the details for each village on the three strategic indicators, the CSR managers and NGO partner determines the forth strategic

indicator of development status of the villages and the specific needs through community consultations and looking at available resources prioritized the CSR actions ensuring community contribution of each and every intervention.

By 2020, Suzlon aims to focus on other significant needs - 'Zero initiatives' of the communities. These are not the immediate needs and are also not asserted by the people. These Zero needs are also the ones which needs of the powerless stakeholders who are neglected from the development process.

In last 10 years Suzlon has impacted livelihood of 1,83,308 households across India, restored eye sight of 5,654 senior citizens through Zero Cataract Blindness Program and illuminated remote households by distributing more than 8,047 Solar Lighting System under the initiatives Zero Darkness Program. Being the market leader in renewable energy, Suzlon endeavours to light every needy household even though they may be off grid. Employees at Suzlon have also shown immense participation in CSR activities in these 10 years.



Thematic Achievements

Environment: Tree plantations, agricultural activities like provision of improved variety of seeds to farmers, capacity building of farmers on organic agriculture practices, and water conservation activities like de-siltation of ponds, creating concentric contour trenches in the drought prone areas of Maharashtra and Rajasthan are undertaken in environment theme.

Shajapur wells gush with water

In Maharashtra at Shajapur village (supa -site), people relied mostly on tanker water for their daily usage. Suzlon Foundation realized the issue and de-silted two common village ponds. This activity resulted in an increase in water storage capacity of the ponds and now villagers can avail water for a longer period. The impacted was witness through increased water level of surrounding wells and bores thus affecting the groundwater positively. This will help villagers to solve drinking water problem for them as well as their livestock in summer.



A remarkable technology alternative innovation 'Suz-Hook' to collect household plastic under 'Zero-Garbage' program brought in behaviour change in 219 rural households. The Suz-Hook is made of a simple metal wire twisted in the shape of hook and tied to a string which costs even less than a rupee.

59,174

TREES PLANTED

444 Million Liters

WATER CONSERVED

251 kg

SEEDS BROADCASTED

Empowerment: It is very critical for sustainability of any development program to empower community and develop a sense of ownership amongst the them. In view of this Suzlon has empowered Village Development Committees (VDCs) through a systematic 7-stage process. This included frequent monthly meetings, 607 training and 287 exposure visits to other successful VDCs. Eventually the matured village development committees would plan to fund the development activities in their villages with the income earned from their social business.

Suzlon in the past 10 years has strived to strengthen rural women financially by creating Self Help Groups and has worked towards making them socially independent too.

Other initiatives which empowered communities includes 'Zero Dependency Programme' for specially-abled persons and organising awareness camps on government schemes.

"Petty shop provides her with dignity"

Mrs. Radhamma Gowda wife of Manje Gowda is resident of Aladahalli village in Karnataka. She is almost 75 years old and has severe back ache problem and hearing impairment. She lives alone with her old aged husband and earnings little income from a small petty shop within their hut. Village Development Committee selected Radhamma for supporting her efforts and had provided monetary help through a cheque of Rs. 3000/- to purchase materials for her small petty shop. She has purchased materials from a wholesale shop and earns a small profit which is more than her past earnings. She is happy that she is being taken care of by VDCs.

550

VILLAGE DEVELOPMENT COMMITTEES
STRENGTHEN

595

WOMEN SUPPORTED THROUGH SHGs

2,635

SPECIALLY ABLED SUPPORTED FROM 488
VILLAGES

141

AWARENESS CAMPS ON GOVERNMENT
SCHEMES

Health: Suzlon believes health and well-being are pre-conditions and outcomes for sustainable development. Under Health thematic area initiatives like health camp which included eye screening, women health, camps for adolescents/ general/ specialist health camps, cataract surgery, health screening kit supports etc. were executed. The 'Janani Express Scheme' was facilitated in 12 villages of Anantapur district of Andhra Pradesh benefiting almost 201 pregnant women. Initiatives like Kitchen garden, testing of water quality and supporting villages in becoming open defecation free has witness an immense response from community.



30,117

PATEINTS VISITED IN HEALTH CAMPS

766

HEALTH CAMPS

412

EYE SCREENING CAMPS

1,784

CATARACT EYE SURGERY CONDUCTED

Livelihood: Suzlon endeavours to enhance financial empowerment of the communities. Initiatives like skill development, vocational courses and agriculture-based trainings, establishment of bio input centers to support farmers, artificial insemination centers were undertaken within the livelihood theme.

Financial Help for Livelihood Improvement

Mrs. Alice Mary lives in Nakkneri village, Tamil Nadu with her husband and 2 children. Her husband is a daily-wage labourer and has irregular labour work due to the uncertain monsoon. The single income from her husband is not enough to maintain their family needs. As an active member of the village development committee, she gained motivation to engage in some income generation activities. Motivation was gained by attending the VDC meetings. With the financial and technical support of AIRD and Suzlon Foundation, she started her sewing work again. Gradually she got some customers within the village and surrounding areas. Now, she is earning around Rs.5000/- per month, from the tailoring work. She says, "I am gradually getting more work and earning more, and I am able to meet my family needs. I am grateful to Suzlon Foundation and AIRD for enabling me to engage in income generating activity".

2,691 FARMERS

TRAINED IN AGRICULTURE

483 YOUTH

TRAINED IN VARIOUS SKILLS

188 WOMEN

TRAINED IN VOCATIONAL COURSES

15

FARMER PRODUCER COMPANYS FORMED

2,48,859

ANIMALS VACCINATED

Education: Providing quality education to children and youth is a mandate to Indian schools. Thus, Suzlon understands the importance of education and supports youth in grooming to become responsible citizens. Suzlon supported interventions like introduction to basic technology (IBT) training, providing learning kits and enrolment in tuition centres.



663

SCHOOLS SUPPORTED

12,892

STUDENTS BENEFITED

27

CHILDREN SCHOOL CLUBS

8

MINI-LIBRARIES OPENED

150

ENVIRONMENT & SOCIAL AWARENESS PROGRAMS

Civic amenities: Under this thematic area Suzlon provides infrastructural support to villages.

ZERO DARKNESS PROGRAM

218 Households

Received Electricity Connections

1,038 Households

With Solar Home UPS & Laterns

INFRASTRUCTURE DEVELOPMENT

49 Schools

Provides with school furniture

22 Anaganwadis

Supported with Assets to improve furniture

TOILET CONSTRUCTION PROGRAM

747 Households Toilets

In Tamil Nadu and Madhya Pradesh

5 Community Toilets

For Women constructed out of scrap material



Disaster response: As a socially responsible citizen, Suzlon has always tried to reach out to those affected by natural catastrophes. We believe in taking sustainable actions in such perilous situation not just to save community from existing problem but also to ensure that initiatives will benefit community in long term.

GUJARAT FLOODS RELIEF

In November 2017, floods wreaked havoc in rural Gujarat. Suzlon provided immediate relief supplies to the affected villages.

659 employees contributed Rs. 5.70 Lakhs for re-establishing livelihood of flood affected communities.

Initiatives taken:

- Provided improved cumin seeds
- Training for agriculture and mineral mixture for the milch animal

Benefits:

215 farmers benefited from cumin seeds. Agriculture training helped to increasing their awareness about seed quality, treatment, and crop-disease prevention. This resulted in 15% increase in farmer's agriculture production.

300 animal keepers realized the importance of about mineral mixture supplement for their milch animals. An increase of approximately 0.5-1 litre yield of milk and also 0.5% to 1% improvement in fat content per milch animal was observed.



Employee volunteering and employee giving: Suzlon encourages employees and contract staff to participate in all the CSR activities. This creates sense of social commitment and gives chance to employees to use their same skills and resources which they use in professional world in community activities as well. Employee participation in CSR activities has increased over the years.



It has evolved from mere donation of time and money to actively led CSR projects and ever-increasing pay roll donations and skill inputs. Employee volunteering in CSR is now a structured and integrated into the business excellence awards. CSR provides scores to business which help them win awards as part of the annual departmental and geographical excellence competition amongst business units. There are 9 parameters with indicators, measures, scores and trackers. Some business teams have included CSR as a KRA for their key business personnel's as well. Suzlon has a written policy stating 2 working days equivalent is available to all employees for participation in CSR during business hours. Some of the ideas shared by Suzlon

7,974

EMPLOYEES PARTICIPATED

50,083

PERSON HOURS

INR 22.14 Lakhs

DONATED

1,841

DONATION INSTANCES

volunteers have been converted to CSR projects. Responsible purchasing from needy NGOs and groups have increased. The outcome of donations and volunteering efforts are shared as an inspiration for all the other employees of the company. Every year employee satisfaction survey is conducted, and the inputs are incorporated in the following year. The employee volunteering data is used to confer volunteering awards to the highest scoring volunteers and the work of the others is appreciated.

The result of employee participation has been motivating factor and inspired others to join, volunteers enjoy their work at Suzlon and bring their families to join at the CSR activity sites.

Multi Stakeholder 360-degree review

Communities are important stakeholders of any organization irrespective of their business or sector. Suzlon understands this and therefore, engagement with them is the first thing done under Suzlon CSR for planning. In order to determine the satisfaction levels 4 parameters are used to measure it namely; relevance, adequacy, efficiency and sustainability of CSR initiatives.

Since 2009 Suzlon Foundation conducts an annual elaborate multi-stakeholder 360-degree evaluation in every location in 8 states. It is a platform for sharing, learning and receiving feedback from stakeholders. The participants include representatives from Suzlon CSR council members, local Suzlon volunteers, community, sarpanch,

government departments, other institutions, Vendors, VDCs, SHGs and a developmental expert. Feedback of the participant's perception is encouraged and received, which is based on beneficiary interactions during the field-visits or direct testimonials obtained during meetings from invited beneficiaries.

Villagers near the Suzlon CSR neighborhood has asked Suzlon to plan initiatives in their villages as well. Even though those are not the Suzlon focus area some initiatives that can jointly benefit those villages as well have been organized like Zero cataract blindness cataract screening camps. The requests from other "non-Suzlon villages" speaks volumes of the positive visible difference made.

SROI as a methodology to measure the impact of CSR initiatives - A case study of a taanka in Govindpura village

Social Return on Investment (SROI) was undertaken in 2009 in Govindpura village of Rajasthan for a community rainwater harvesting 'Taanka' (tank). It has improved self-reliance of rural people and ensured availability of quality water, thus preventing waterborne disease. The SROI ratio of total benefits to total input is 29:1. Although, it has not been replicated or expanded due to paucity of resources. Outcomes:

Stakeholder	Outcome	Value
Suzlon	Increased reputation	15363 INR
Environment	Increased CO2 emissions into the atmosphere	-444 INR
Mason and laborers	Salary received for constructing the taanka	2008 INR
Government school	Children attending school	- 9194 INR

The sustainability of CSR initiatives is ensured through

1. Having targets in partner plans for the financial contribution in kind and cash that must be generated for each activity from the community.
2. Forming village development committee/SHGs as institutions for collective action
3. Building sustainable relationship between business and community through employee volunteering
4. Incorporating sustainability scores as one of the parameters on which we review all the programs.
5. Encouraging partnerships and collaborations with various agencies are developed to enhance outreach and impact
6. Converging resources from within and externally through employee donations, customer donations and government, national and international interns and other corporate resources
7. Using the equipment resources of the company
8. Using business waste that are scrapped to make useful educational tools like benches, cupboards and paly material
9. Using local knowledge in planning and implementation and creating tangible verifiable milestones for the VDC as an institution to sustain with a clear exit strategy



Environmental Management

The economic progress of the developing countries has a heavy impetus on industrialization, which further impacts the ecosystem in a negative manner. In order to mitigate the adverse effect of climate change several countries have adopted mitigation strategies including carbon neutrality goals, reducing greenhouse gas emissions, optimum utilisation of natural resources, conserving forest covers, bringing in enhanced energy efficiency and harnessing renewable energy amongst others.

Suzlon is cognizant with the fact that while creating solutions to harness wind power, a minimal negative impact is inflicted up on the environment. Thus, the Company treads on the path of reducing its impact by giving back to the environment. Together with its suppliers and customers, Suzlon has committed on minimising this impact to the greatest extent possible.

Technology and Innovation

Suzlon has been acknowledged for developing one the Asia's largest wind farms in Rajasthan and Gujarat. The Jaisalmer wind farm has about 1.6 GW of installed capacity and Kutch wind farm has over 1.4 GW of installed capacity. Suzlon is working on developing Wind-Solar hybrid solutions upon entering solar projects domain.

Energy

Energy plays an eminent role in the economic growth of an organisation. Competitive economies require well-functioning infrastructure with access to modern energy services. These areas are cardinal to eradicate poverty and to ensure prosperity. The seventh Sustainable Development Goal articulates about the necessity of access to energy for all, but still energy is one of the leading contributors to climate change. There is a direct correlation with a beneficial impact on cost saving with respect to increased energy efficiency and decreased energy

consumption. Thus, Suzlon promotes the adoption of progressive technologies and application of renewable energy resources.

Suzlon has adopted numerous initiatives for energy consumption in the past years. It had taken initiatives in this reporting periods as well to minimise the consumption of energy and to increase energy efficiency in its corporate office and its manufacturing sites by installing hi-tech energy monitor and conservation systems to monitor usage, minimise wastage and increase overall efficiency at every stage of power consumption. The Company highly promotes the usage of natural source of energy instead of electricity. Fuels used by the Company for its various operations are given below:

Direct Energy consumed is 3,58,316.14 GJ, this encompasses the following fuel types and their quantities consumed.

Fuel	Quantity	Units	Direct Energy (GJ)
Diesel	84,03,020	Litres	3,10,071.4
Petrol	3,702.37	Litres	124.77
Coal	20	Kg	0.58
LPG Cylinder	10,697	Kg	486.71

Total indirect energy consumed is 1,00,977.23 GJ.

Some of the measures contributing to optimisation in energy consumption, reduction in energy cost and environment protection taken up by Suzlon are mentioned below:

● **Reduce Heavy Cranes Usage**

Reduced heavy cranes usage to lift light weight components resulting into lower power consumption at the Daman facility.

● **Low KW Air Compressor**

Usage of FRP transparent sheets to allow sunlight and selected optimised low KW air compressor for small operations at the tower manufacturing facility at Gandhidham.



● **Induction Heating System**

Replaced large size oven heaters with Induction Heating System for heating of Slip Rings at the Chakan Generator facility

● **Installation of LED Bulbs**

Installation of LED bulbs instead of CFL and MHL lights at various production facilities.

Waste Management

At Suzlon the waste is managed in the best possible way and the efforts are channelized towards minimum waste generation. The waste which is generated is disposed in a manner which would lead to minimal environmental impact. The process of segregation of hazardous wastes from non-hazardous wastes is carried out and the generated waste is handed over to an authorized waste collection agency or hazardous waste management agency for safe disposal.

The segregated non-hazardous waste is further categorized into reusable, recyclable and waste for disposal. Suzlon follows the concept of triple 'R – Reduce, Reuse and Recycle' to manage its waste. Scrap of Blades which is made of reinforced fibres is treated by disposing it responsibly after its completion of useful life. Hazardous waste generated by Suzlon which can be reused as an energy generation source is sold to energy intensive industry like Cement manufacturing for their consumption.

Type of Waste	Generated in FY 2017-18	Disposed in FY 2017-18
Non-Hazardous	14,193 Tons	44,829 Tons*
Hazardous	4,865 Tons	3,936 Tons

* This includes the wastes from the previous years as well which was disposed in FY 2017-1.8

The Company has taken an initiative to reduce plastic waste generated due to bottled water consumption by installing RO water machines for providing drinking water to the employees at 'One Earth'. This initiative has reduced the usage of bottled water substantially from 1000 bottles to 70 bottles. Suzlon complies with all the waste management requisites. The amount of total paper consumed is 16,094 kgs. Some measures taken for waste management are as follows:

Water Management

Suzlon One Earth has undertaken sustainable initiatives such as rainwater harvesting, on-site waste conservation and an 'Office in Garden' design to increase daylight use and has succeeded in decreasing its operating cost by 35%. Suzlon has 340 MW solar projects and the requirement of water for cleaning the module is high.

Inspect	Alternate	Practice
<ul style="list-style-type: none"> Inspect waste receptacles to check materials are segregated and recycled as appropriate 	<ul style="list-style-type: none"> Alternate use of waste materials are explored prior to disposal on continuous basis to avoid disposal at minimum level 	<ul style="list-style-type: none"> Inspection of site waste management is practiced into regular site Health, Safety and Environmental audits.

Methods for offsetting the water consumed should be sought. In the reporting period Suzlon consumed 4,77,158 KL of water through various sources.

Emissions Measurement

Every year Suzlon's Global wind installation helps in mitigating around 38 million tonnes of CO2 emissions. The Company takes efforts to avoid emissions arising from disposing off scrap of blades by sending it to the co-processing facility in India, where the facility further reduces emissions by using coal produced from disposal of blades as fuel in their cement kilns.

Scope 1	24,098.01 MTCO2e
Scope 2	23,000.36 MTCO2e

Indicator	CO ₂ e	Units
Indirect emissions from electricity consumption	20,575	metric tonnes
Emissions avoided by renewable energy generation (by Group owned turbines in India) in the year	19.71	million metric tonnes
Emissions of blade waste disposal by combustion avoided due to co-processing	20,290	metric tonnes
Emissions avoided at blade waste co-processor's facility	5,629	metric tonnes



Tulsi R. Tanti- Founder, Chairman and Managing Director



Mr. Tulsi R Tanti is the Founder, Chairman and Managing Director of Suzlon Group, an Indian MNC and a prominent entity in the global renewable energy sector. He is a visionary and a true believer in creating sustainable businesses and economies through energy independence and security. The strategic growth initiatives of the businesses of Suzlon Group, which provides a full spectrum of green power solutions are led by him.

Before spearheading the wind revolution in India, Mr. Tanti managed a textile company back in early 1990's. The cost of electricity at that time often offset any profits made by his textile company. Mr. Tanti moved into wind energy production and founded Suzlon Energy in 1995.

He had read a report on global warming which predicted that without a radical decrease in the world's carbon emissions, some of the coastal places like Maldives, would be under water by 2050. He got a clear vision and said "If Indians start consuming power like the Americans, the world will run out of resources. Either you stop India from developing, or you find some alternate solution."

In the times when the global wind energy market was dominated by international players and characterized by expensive and complicated technologies that were largely unviable for traditional businesses, he envisioned the opportunity in the Indian renewable energy industry.

This led to Suzlon selling of its textile manufacturing unit and plunging completely into the relatively new field of wind-turbine generators. Instituting a new business model, he conceptualized the end-to-end solution to create realistic avenues for businesses to 'Go Green' and thus emerged as a strategic partner in developing sustainable businesses. Today Suzlon has factories on four continents and wind farms across Asia. It is the fourth largest wind-turbine maker in the world. Mr. Tanti was entirely convinced that wind is the energy of the future, and that Suzlon will help launch the industry into the mainstream in times with raising oil prices. He says "Yes, green business is good business,". "But it's not just about making money. It's about being responsible". Since the establishment of Suzlon, Mr. Tanti has driven the Company with the aim to pursue sustainable social, economic and ecological development. Under his able leadership, the company established and went beyond benchmarks, emerging as a prominent player in the global renewable energy market. His vision has led to Suzlon setting up its R&D centres in Germany, Netherlands, Denmark and India.

Recently in January 2018, Indian Wind Turbine Manufacturers Association (IWTMA) announced the appointment of Mr. Tanti as the Chairman of the association. Mr. Tanti leads the development of public policy for energy usage and provides advise on

policy issues with active participation from various industry bodies. He is regarded as the 'Wind Man of India' and a pivotal part of the global renewable energy industry.

Prominently present in the global energy landscape for several years, he is a strong voice on global leadership forums such as the Annual Meeting of the World Economic Forum (WEF), Clinton Global Initiative (CGI), Clean Energy Ministerial (CEM), Conference of Parties (COP) and Wall Street Journal "ECO:nomics". He also serves on the Committee of Energy Shapers, which is a dedicated group of highly influential individuals focused on improving the global energy framework under the leadership of Klaus Schwab, renowned economist, founder and executive chairman of the World Economic Forum. He is also Chairman of industry forums like Indian Wind Turbine Manufacturers Association (IWTMA), CII National Committee on Make in India – Renewables, and Co-chair of India-Spain CEOs Forum. He is also a Board Director of US-India Business Council (USIBC). He serves as a member of the Board of Management of TERI University, Governing Council of National Institute of Wind

Energy (NIWE) and Coordination Committee, Ministry of New & Renewable Energy (MNRE).

He was born in Rajkot, Gujrat, India and holds a degree in Commerce and a diploma in Mechanical Engineering. He has over twenty-five years of experience in various technical and commercial areas. He had become the tenth-richest person in the country by 2007, with a \$10 billion fortune. With Suzlon becoming the world's most valuable wind-turbine maker.

Mr. Tanti doesn't leave his mission at the office when he goes home at night. In his words, he said, "I could have a mansion and afford to leave the lights on all day long if I wanted. But it's not about saving money anymore for me. I just want to do what I can to fix the problem." He is a leader in every sense, his passion can be seen in all aspects of the Suzlon Group, motivating all stakeholders with his vision, through various business and philanthropic initiatives, he works to alleviate the effects of climate change to enable a greener future for the planet.

Awards and Recognitions

Suzlon is selected amongst the top five leading vendors in the Global Windturbine Generator Market 2017 2021 report by Technavio

2017



2018

Suzlon Global Services Ltd. (SGSL) won the runner-up trophy at the 29th QualTech Awards 2017 under 'Service Improvement' category

Suzlon received the CSR excellence award and Suzlon foundation received the best corporate foundation award

GRI content index

GRI Content Index			
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	102-2 Activities, brands, products, and services	11,14,16	this disclosure cannot be omitted
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102-24 Nominating and selecting the highest governance body	32	this disclosure cannot be omitted
102-25 Conflicts of interest	31	this disclosure cannot be omitted
102-26 Role of highest governance body in setting purpose, values, and strategy	31	this disclosure cannot be omitted
102- 27 Collective knowledge of highest governance body	31	this disclosure cannot be omitted
102-28 Evaluating the highest governance body's performance	31,32	this disclosure cannot be omitted
102-29 Identifying and managing economic, environmental, and social impacts	31	this disclosure cannot be omitted
102-30 Effectiveness of risk management processes	31,33	this disclosure cannot be omitted
102-31 Review of economic, environmental, and social topics	31	this disclosure cannot be omitted
102-32 Highest governance body's role in sustainability reporting	31	this disclosure cannot be omitted
102-33 Communicating critical concerns	32	this disclosure cannot be omitted
102-34 Nature and total number of critical concerns	32	this disclosure cannot be omitted
102-35 Remuneration policies	32	this disclosure cannot be omitted
102-36 Process for determining remuneration	32	this disclosure cannot be omitted
102-37 Stakeholders' involvement in remuneration	32	this disclosure cannot be omitted
102-38 Annual total compensation ratio	32	this disclosure cannot be omitted
102-39 Percentage increase in annual total compensation ratio	32	this disclosure cannot be omitted
102-40 List of stakeholder groups	37	this disclosure cannot be omitted
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102-45 Entities included in the consolidated financial statements	2	this disclosure cannot be omitted
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102-49 Changes in reporting	2	this disclosure cannot be omitted
102-50 Reporting period	2	this disclosure cannot be omitted
102-51 Date of most recent report	2	this disclosure cannot be omitted
102-52 Reporting cycle	2	this disclosure cannot be omitted

	102-53 Contact point for questions regarding the report	2	this disclosure cannot be omitted
	102-54 Claims of reporting in accordance with the GRI Standards	2	this disclosure cannot be omitted
	102-55 GRI content index	83	this disclosure cannot be omitted
	102-56 External assurance	Not Assured	this disclosure cannot be omitted
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