

# CREATING GREEN PATH – FUTURE OF RENEWABLE ENERGY INDUSTRY IN INDIA

In recent times, renewable energy has emerged as a big source of clean energy across the globe. The reason behind this transformation is the extreme climatic change that the world is facing.

Renewable energy is naturally replenished on a human timescale namely sun (solar), wind and water. They are present in abundance, hence playing on our strengths and leveraging these natural resources will position India as a world leader in affordable renewable energy.

India as a country has the largest production of energy from renewable sources. The total potential of solar itself in India is 748 GW. Taking this potential and merging it with Tata Power's strength of engineering, procurement, manufacturing, project execution and operations and maintenance, we are looking at a clean, green and brighter tomorrow.

The renewable energy industry's potential for growth is generating tremendous optimism, given the government of India's announcement of a target for installing 175 GW of renewable energy by 2022, out of which 100 GW would come from solar power, 60 GW from wind, and the remaining from hydro and biomass. We intend to achieve multiple time growth in solar segment by 2025.

In last few years, Indian renewable energy industry has progressed tremendously. In January 2021, a total of 1489 MW of solar and wind capacity was added, taking the cumulative RE capacity to 92.6 GW as on January 31, 2021. A lot of prominent projects have been commissioned that have maintained the growth momentum for the industry with a promise of further growth. Indian government has been instrumental in giving the much-needed aggressive push to the sector at all important levels.

India is committed toward the adoption and development of renewable energy and the coming year will see a significant growth in the same. This is mainly due to technology advancement in renewable energy, which

enables its cost being competitive with fossil fuels. I believe with new technologies, better efficiency and new storage solutions, Renewable will play a very big role in future energy demands of India, as well as world.

New hybrid systems, collaging fossil fuel solutions with renewable power at grid level and storage with renewable energy at distributed energy level will be the primary source of energy.

Tata Power Renewables has established a significant renewable energy footprint over the years, with a multi-GW project portfolio in solar and wind energy, and ambitious growth plans in the segments. A leading player in the industry, the company has a presence in solar manufacturing, project development as well as engineering, procurement and construction (EPC).

Under the solar arm of Tata Power, we have 1100 MW of cells and modules manufacturing capacity, EPC and third party arrangements. Tata Power Solar has been doing well as an EPC provider with an order book of 2.5 GW. In terms of solar pump installations, we installed thrice as many pumps as our nearest competitor in the past one year. As a developer, Tata Power Renewable has 2.65 GW of operational

capacity, of which 1.1 GW is based on wind power while solar makes up the remaining 1.55 GW. There is almost 1.5 GW of capacity in the pipeline. We are aiming for an aggressive growth in the future and are expecting our capacity to increase by four to five times the current amount over the next five years. In the utility-scale segment, we should be at a capacity of 10-15 GW by 2025.

Renewable energy is need of the hour and I urge everyone to adopt renewable source of energy. This is good for the planet and people. Once we have adequate manufacturing capacity in the country we can look towards exporting our products and services to the world. From a growth perspective, I see renewable energy as the next IT.

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ASHISH KHANNA  
President – Renewables,  
Tata Power

