

# RENEWABLE ENERGY SECTOR IN INDIA

**EDITED BY** 

SALONI ANGRAS NATALIA OPERTI



The evolving 21st century is witnessing India as an economic powerhouse. The clean energy transition in India will have a trickle-down effect on the rest of the world. The global community can reap huge benefits from investment in India, especially with the incentives introduced by the government, which intends to develop green cities running on renewable energy.

#### **Reasons to invest**

### **Competitive edge**

India is emerging globally with the most significant renewable energy (RE) expansion plan. It is the third most attractive RE market in the world and the third-largest power-consuming nation. It stands at the fourth position for installed RE capacity, fourth for installed wind energy capacity, and fifth for installed solar energy capacity.

#### Market size and demand

As of June 2021, India has a total installed renewable capacity of 96.95 GW. The Asian country is set to achieve a target of 175 GW of RE capacity by the end of 2022, and 450 GW by 2030, around 60% of which is expected from solar. India is especially being labelled a "red hot investment destination" for the solar sector because of its geographical location. It has already secured 100 GW of RE capacity and set an example for the other developing countries.

At present, there are around 485 RE projects with an investment opportunity of **Eur 198,22 billion** (**app.**). Metals and mining, real estate, and transport sectors, among others, offer opportunities to foreign investors.

The power-consuming demand in the country is considerably high. However, it faces three issues:

- 1. Secure and affordable power access for the customers and fiscal stability for the distribution companies.
- 2. Secure assimilation of shares of renewable energy.
- 3. Decrease in emissions to meet climate change goals

Thus, the Indian RE market is ripe for foreign businesses to secure early profitable investments by providing sustainable and innovative technology and innovative financing.

# Policy Support and government initiatives

First of all, up to 100% FDI is allowed under the automatic route for RE generation and distribution projects. This has enabled Eur 62 billion (app.) investment in India's RE in the last seven years.

Several other schemes of the government have also given a substantial boost to the RE initiative in India. These include the **Rooftop solar (RTS) programme**, **solar parks**, **green energy corridors**, **green islands**, distributed renewable energy (DRE) model and energy storage.



Some of the recent initiatives taken by the Government of India in the year 2021 to boost India's renewable energy sector include the following:

- Reduction in financial stress for stakeholders.
- Safeguarding timely cost recovery in electricity generation.
- New rules for purchase and consumption of renewable energy.
- Subsidy provision for RTS Indian Renewable Energy Development Agency Ltd. invited bids for setting-up manufacturing units under the central government's Eur 546,18 million Production Linked Incentive Scheme. The scheme incentivises the domestic manufacturing of solar PV cells over five years.
- State Bank of India financed 752 renewable energy projects as of March 2021.
- The Competition Commission of India allowed reverse triangular mergers.
- Launch of *Indian Renewables Dashboard*, which provides operational information on RE projects in India.
- Plan to add 30 GW of renewable energy capacity along a desert on the western border in the states of Gujarat and Rajasthan.
- Plans to implement a Eur 210,81 million National Mission on advanced ultra-supercritical technologies for **cleaner coal utilisation**.
- Indian Railways uses sustained energy efficient measures and clean fuel to reduce emission levels by 33% by 2030.
- The Union Budget allocated Eur 698,30 million and Eur 36,41 million for the 'Green Energy Corridor' scheme to the Ministry for New and Renewable Energy.
- Capital infusion of Eur 121,33 million to Solar Energy Corporation of India (SECI) and Eur 182,04 million to Indian Renewable Energy Development Agency.

Apart from this, the Indian government is also providing Central Finance Assistance for various green projects:

- Under the Biogas based Power Generation and Thermal Application Programme (BPGTP): Eur 292,79 per kW to Eur 468,39 per kW for power generation, and Eur 146,37 per kW to Eur 234,38 per kW for thermal applications.
- Under the 'Programme on Energy from Urban, Industrial and Agricultural Waste/Residues' Scheme: a capital subsidy to the promoters, or grant-in-aid for other activities, as given below:
- o Biogas generation: Eur 117.134,29 per 12000 cum/day (Max. Eur 1.171.531,09/project) o BioCNG generation: Eur 468.686,40 for 4800 Kg/day (Max. Eur 1.171.531,09/project)



o Power generation based on Biogas: Eur 396.831 per MW (Max. Eur 1.171.531,09/project)

• Under the 'Development of Solar Parks and Ultra Mega Solar Power Projects' scheme: up to Eur 29.283,55 per solar park for preparation of Detailed Project Report, up to Eur 23.426,83 per MW or 30% of the project cost, including grid-connectivity cost, whichever is lower.

## **Growing investment**

Despite the Covid-19 Iull, India has seen an increase in the RE sector investments in the year 2021. Between the months of April and July 2021, the country saw RE investments of Eur 5.8 billion.

The world's largest renewable energy park of 30 GW capacity solar-wind hybrid project is under installation in Gujarat.

By 2023, the government will likely set up around 5,000 Compressed Biogas plants. By 2028, India is expected to attract around Eur 442 billion RE investments. By 2040, 49% of the electricity is expected to be generated by renewable energy.

It is anticipated that the rise in demand and commitment from major banks and financial institutions, such as the State Bank of India and Power Finance Corporation, to exit from fossil fuel financing and shift towards RE financing will drive RE sector investments.

If you are interested in this topic, please contact our Indian Desk RLVT@RLVT.IT

# CONTACTS



SALONI ANGRAS
SALONI.ANGRAS@RLVT.IT



NATALIA OPERTI NATALIA.OPERTI@RLVT.IT



RLVT - ASSOCIAZIONE PROFESSIONALE
VIA AVOGADRO, 12/A - 10121 TORINO - ITALIA T. +39 011 55 67 222 - INFO@RLVT.IT