

# **Power Sector in India**

## **Opportunities & Challenges in the State**

Presented By

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# Maharashtra Discom | State Demography & Challenges



**3.08** Lakh square km Area



**35** Million Consumers



**4.5** Million Agri Consumers

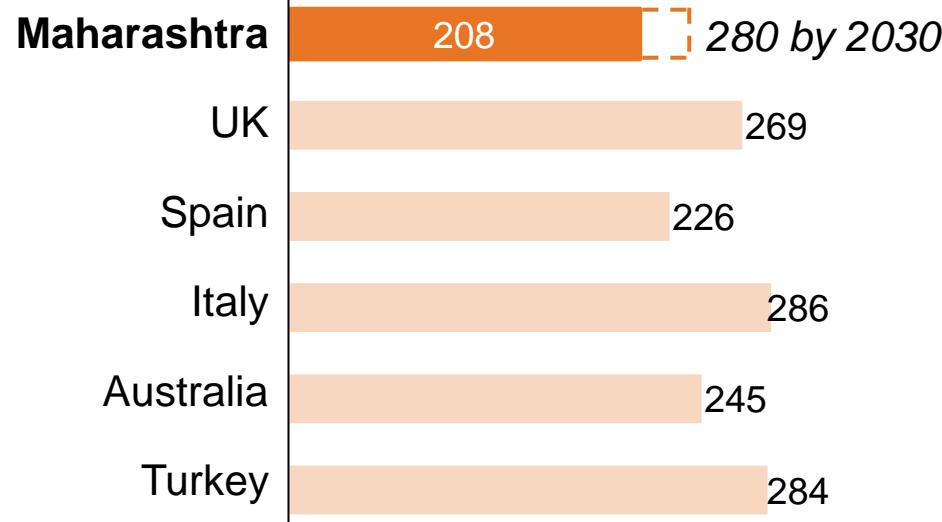


**30.7 GW** Peak Demand



**\$ 14.77** Billion Annual Revenue

Aggregated Demand (GW) comparable to global utilities at country scale



## Key Challenges

- Escalating Power Purchase Cost
- 30% share of energy consumption by Agriculture sector
- Significant capital investment requirements for network expansion
- Rising debt levels & increasing subsidy liability
- Limitations within the transmission network

## 5 key aspects of Maharashtra's Energy Transition Vision



**1** India's leader in energy transition planning and implementation



**2** Fastest acceleration in capacity between 2023-30



**3** Innovation leader in agri-solarization, storage and green hydrogen



**4** Leader in facilitation of INR 3 lakh Cr.+ investment by 2030; 1/3<sup>rd</sup> by state utilities



**5** Turn-around/ transformation & potential listing of the distribution company

# Meticulous Planning | Driving Energy Transition

Driven by Maharashtra's **aspirations of economic progress**, long-term GDP considered to grow at **8%** for planning purposes. Consequently, **aggregate and peak** considered to grow at **6.3% & 6.5%** respectively.

Maharashtra's **aggregate demand** considered to grow up to **280K MUs** and **peak demand** up to **45GW** by 2030

- Flagship initiative, plans to solarize **16 GW** – 100% agricultural feeders.
- 1 GW Solar under LIS

- **8 Lakh off grid solar pumps** (highest in India) installed.
- **Guinness World Record** for the **highest installation** of off grid solar pumps, viz.,**45,911** in a month.

- **10-12 GW** of RTS by 2030
- Empower consumers,
- Reduce grid dependency
- Support net metering and P2P

## Resource Adequacy Plan

- Strategically planned capacity addition by 2030
  - Solar **25.5 GW**
  - Thermal **2.2 GW**
  - Hybrid **4 GW**
  - FDRE **1.5 GW**;
  - Hydro **0.8 GW**

## MSKVY 2.0

## Energy Storage System

- To complement intermittent renewables, **33.5 GWh of storage capacity planned**
- Managing peak demand

## MTSKPY

## Hybrid & RTC Projects

- Promoting hybrid projects (**solar + wind + storage**) to deliver RTC power

## RTS & Behind the Meter Solar

# Strategic Gain | Strong Performance & Value Creation



**Curtailing Power Purchase Cost** – Saving in Power Purchase cost is estimated to be **~\$9.3 billion** over the next five years



**Reduced ACoS** – RE procurement (MUs) to increase from **13% to 52%**, resulting in reduced ACoS which in BAU would have increased by CAGR of **9.19%**.



**Daytime electricity supply** for farmers to boost their production & support state economy. Initiated process for a **separate AG Company**.

## Socializing the reduction in Cost through rationalization of tariff

26% reduction in Residential (0-100) unit tariff, as against BAU increase at 6.81%

Rebate introduced for residential consumers @ *0.9 cents/unit* (FY 2025-26) during solar hours

Industrial tariff reducing at 1.73% CAGR as against BAU increase at 8.04%.

Government subsidy burden reduced ~ \$ 7.42 billion over the next five years

Cross-subsidy burden removed from Industries

Solar hour tariff will be lower than open access tariff



# Thank You