



Power Market Development and PTC's Role

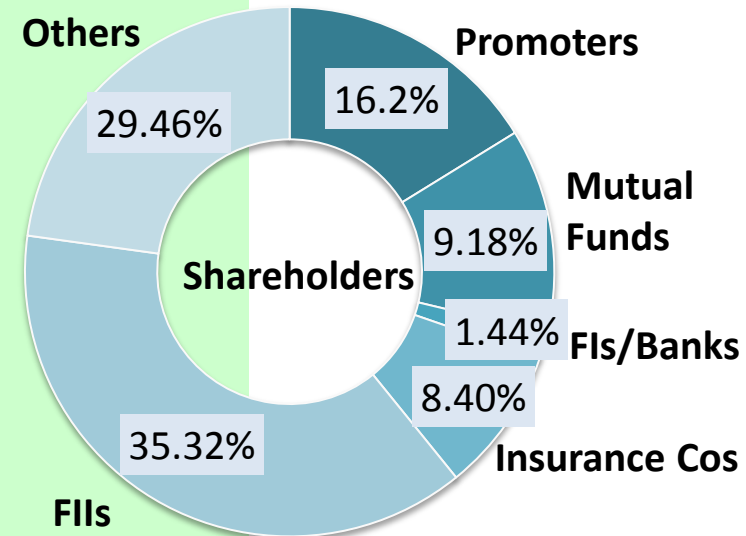
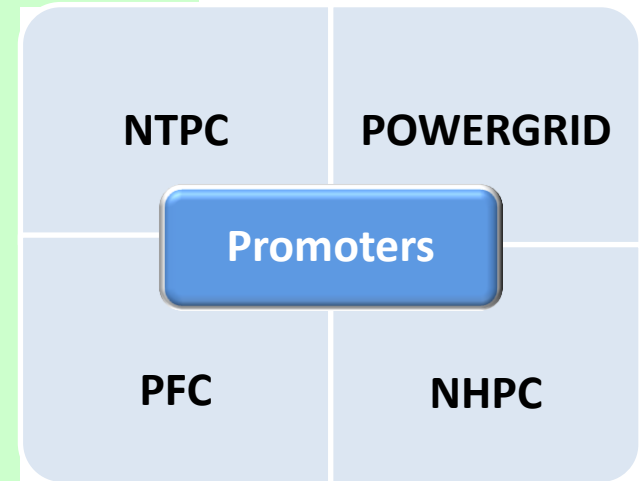


Formation of PTC: Initiation of Power Market

- Established in 1999 by Government of India through a Cabinet Decision as a Public-Private Initiative

Objectives:

- Promoting power trading to optimally utilize existing resources
- Attract investments in the power sector on the strength of multi-buyer model
- Mitigating payment risks of mega projects
- Creating a Power Market in India and neighboring countries
- Professionally managed Board of the company
- Stock listed on BSE and NSE since 2004; widely held by institutions



PTC: Board of Directors



3

Whole Time Directors

Mr. Deepak Amitabh
Chairman and Managing Director

Dr. Rajib K. Mishra
Director (Marketing and Business
Development)

Dr. Ajit Kumar
Director (Commercial &
Operations)

5

Nominee Directors

Mr. M. K. Narayan, JS
Director (Nominee of MoP)

Mr. R. K. Chauhan
Director (Nominee of POWERGRID)
(Nominee of NTPC)

Mr. M.K. Mittal
Director (Nominee of NHPC)

Ms. Parminder Chopra
Director (Nominee of PFC)

8

Independent Directors

Mr. Jayant Gokhale

Mr. Rakesh Kacker

Ms. Sushma Nath

Ms. Bharati Prasad

Mr. D. S. Saksena

Mr. Ramesh Narain Misra

Mr.S.S.Mundra

Ms. Preeti Saran

PTC's Role in Market Development

Formation of PTC pre-dates Electricity Act 2003 (Trading recognized as a licensed activity)

- PTC developed the concept of short term market (upto 1 year)
 - Effective mechanism to unwind rigid contractual positions of Utilities
- Initiated the market for long term power tie-ups and facilitated new generation capacity
- Initiated the evolution of power market for medium term

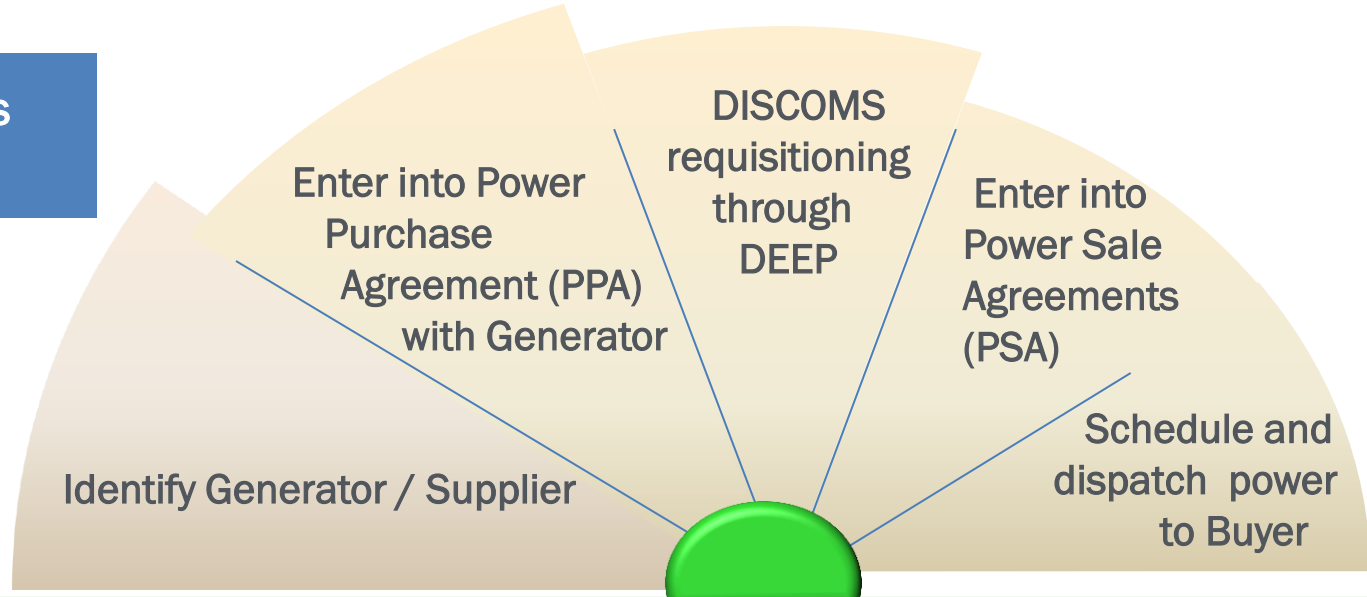
Contractual Structure

- “Purchase of electricity for Resale” – Two contracts with Principal-to-Principal relation for Purchase & On-sale
- Positions on both sides with inherent respective risks
- Creating transactions by matching these positions
- Residual risks are internalized; risk increases with **‘Open’** positions on any credit, market and operational aspects

PTC: What We Do?

The Core Business of PTC is Electricity Trading

Business Model



Key Features

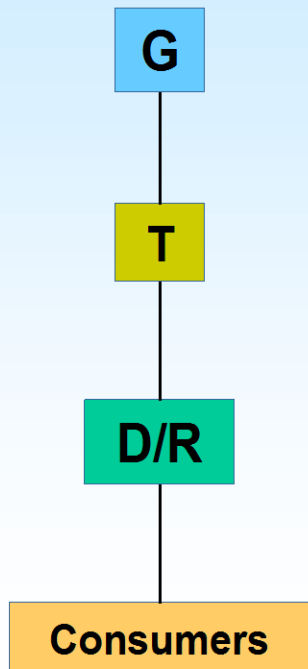
Market Making across Demand – Supply mismatches and tenors

- We are a pure play electricity trader with a balanced business portfolio
- Earnings are an aggregate of spreads (margin) between the sale and purchase price of electricity
- Un-bundle and manage concentration risk both at the supply and demand side
- Late payments attract a penalty & early payments a rebate
- No unaddressed default in our 20 year operating history

Finding the right Power Market Design

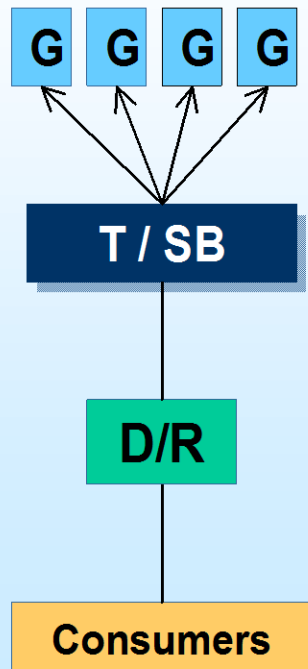
No Competition

- No choice
- Government makes decision



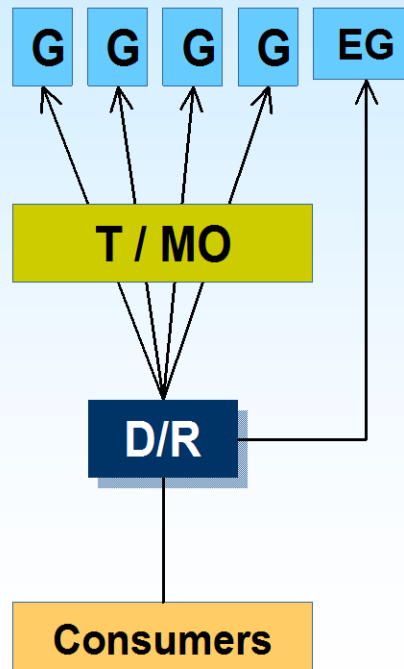
Generation Competition

- Single buyer has choice



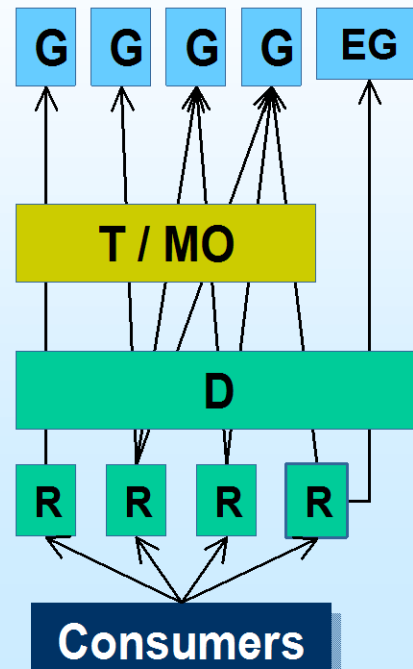
Wholesale Competition


- Distribution/retail companies have choice



Retail Competition

- Consumers have choice



 = Who has choice
 MO = Market Operator
 EG = Embedded Generator

Indian market is here

PTC's value creation over the years: “**First**” in Trading Market



Electricity Trading concept introduced by PTC and was first to start trade in 2001
Amongst **first** to get trading license after EA -2003

Introduction of Short Term Market

Tolling agreement with generator

Co-Promoter of India's first electricity exchange (IEX)

Long Term PPAs to IPPs (leading to more than ~45% of generation capacity owned by Private Sector)

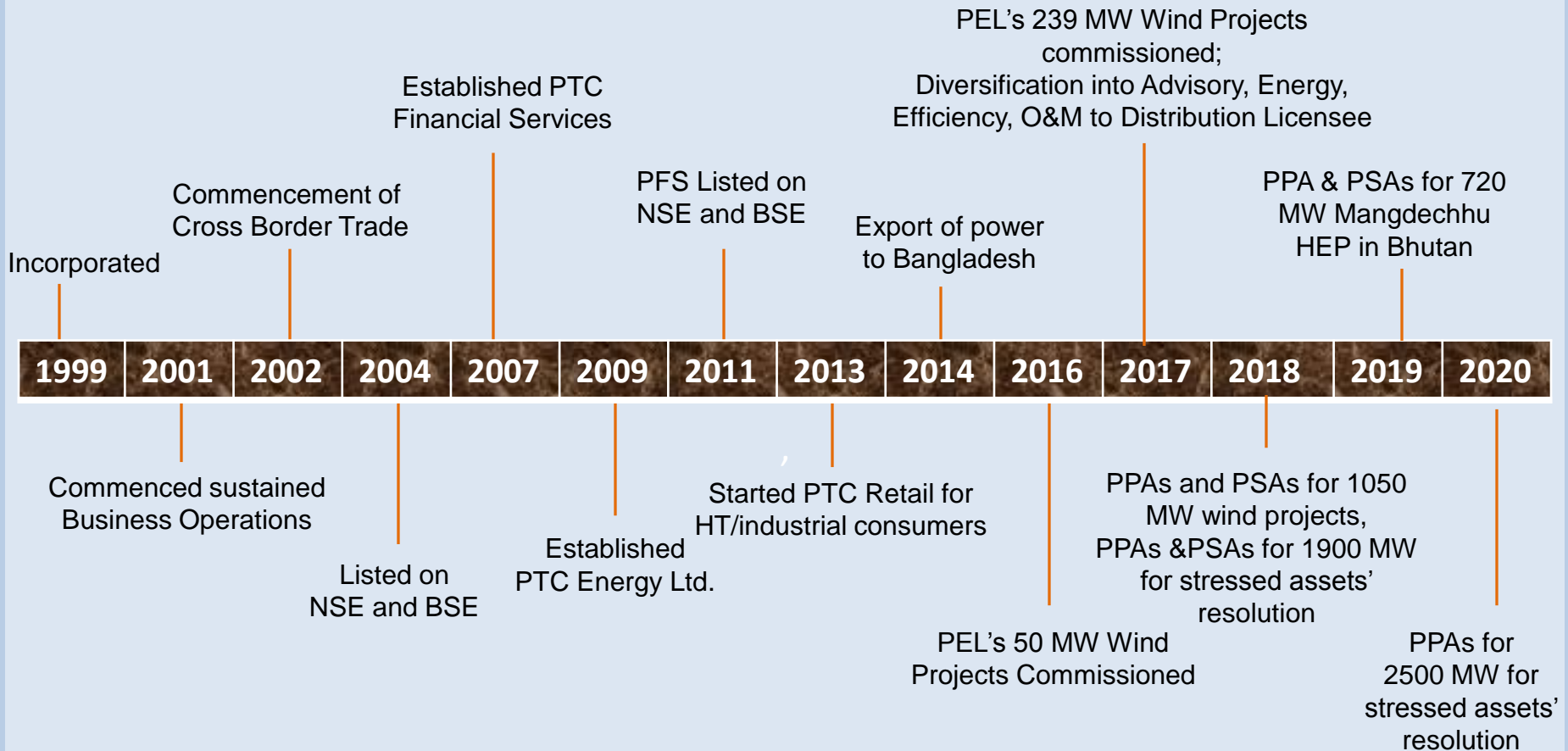
Long term PPAs to Renewable Sector (Wind)

Signed PPAs and PSAs for 1900 MW for Stressed Assets Resolution

Cross Border Trade (Nepal, Bhutan & Bangladesh)

Bellwether in Power Market Development

PTC: Milestones



PTC: Key Metrics



46%+ Dominant Market Leader with over 46% market share
Total traded power: 66.33 BUs (FY20)

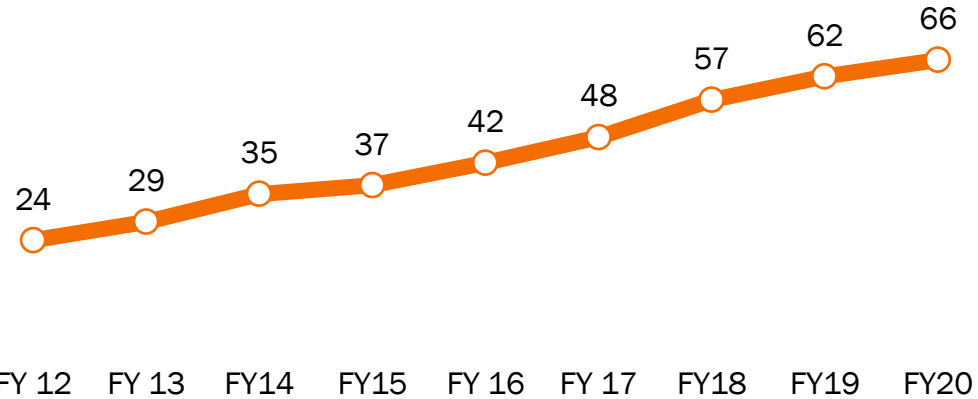
28 Supplying power to all States/UTs

3 Cross Border Trading: Trading power with Nepal, Bhutan & Bangladesh,
Total Traded power-6 BUs (FY-20)

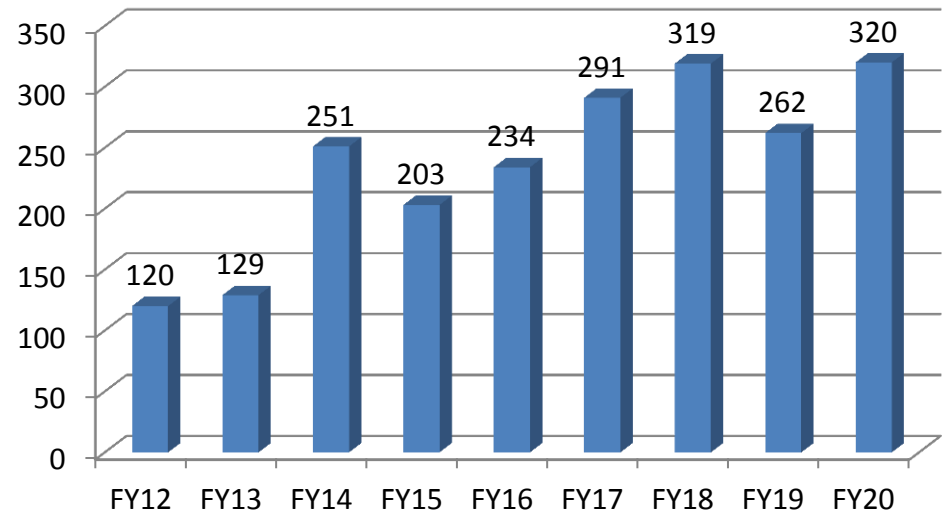
700+ Over 700 Industrial (Retail) Customers

Vol

CAGR of 13.3% in last 8 years



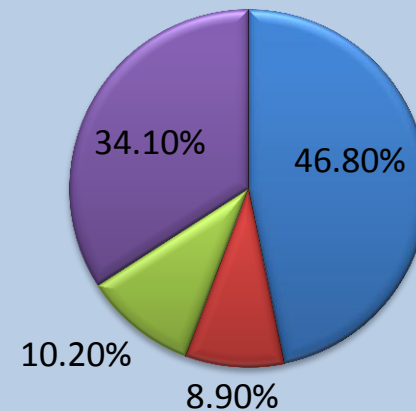
PAT



Major segments of power trading by volume

Segments	Traded Volume in FY20, MUs	% of total traded volume
Long Term and Medium Term	31,028	46.8%
Cross Border	5,938	8.9%
Short Term: Bilateral	6,735	10.2%
Short Term: Power Exchange	22,618	34.1%
Total	66,332	

Total Traded Volume (%)



- Long & Medium Term
- Cross Border
- Short Term: Bilateral
- Short Term: Power Exchange

Cross Border Trading

Bhutan:

- Long-term PPAs with Chukha (336 MW), Kurichhu (60 MW), Tala (1020 MW), Nikachhu (118 MW) and Mangdechhu (720 MW) HEPs
- Annual Revenue for Bhutan ~ INR 2200 Crore (~USD 300 Mn at INR/USD conversion ratio of 75)

Nepal:

- India-Nepal power trade is at a moderate level of 40 MW through PTC in FY-20
- PSA with NEA for export of 150 MW on long term basis

Bangladesh:

- Supplying 200 MW power to Bangladesh on Medium and Long Term basis

PTC uniquely placed to contribute more to cross-border power trade

New Business Models & Way Ahead

Targeting to cater entire 'Energy Supply Chain'

Successfully took over the O&M of Electrical distribution network at MPAKVN-SEZ (Indore), Mumbai Port and Deendayal Port Trust(Kandla) in management of power distribution business

Power Distribution Management

Providing Bouquet of Services including Feasibility Studies, Survey & Cost Estimation, Engineering, Bid Process Management to Refineries

Transmission Connectivity

Providing round the clock services at Bihar, REMCL, NDMC, DNH for power procurement planning, optimization & capacity building

Renewable Energy

- Selected as trader for sale and purchase of **1050 MW wind power**
- Product development for **bundling** of conventional and renewable energy

Power Portfolio Management

Conducted Energy Audits at SEEPZ SEZ, EESL Programs (Agriculture Feeders and Railway Stations), Industries and Commercial Establishments

Energy Audit

Providing round the clock support for commercial and operational functions for power procurement (OA – group captive) to Refineries, GAIL, and SECI

Back-End Operations

In association with ICICI Bank and Bombay stock exchange, PTC has filed petition to obtain license for running and operating electronic exchange platform

Exchange Platform

PTC India Financial Services Ltd (PFSL)



Systemically Important Non
Deposit Taking NBFC

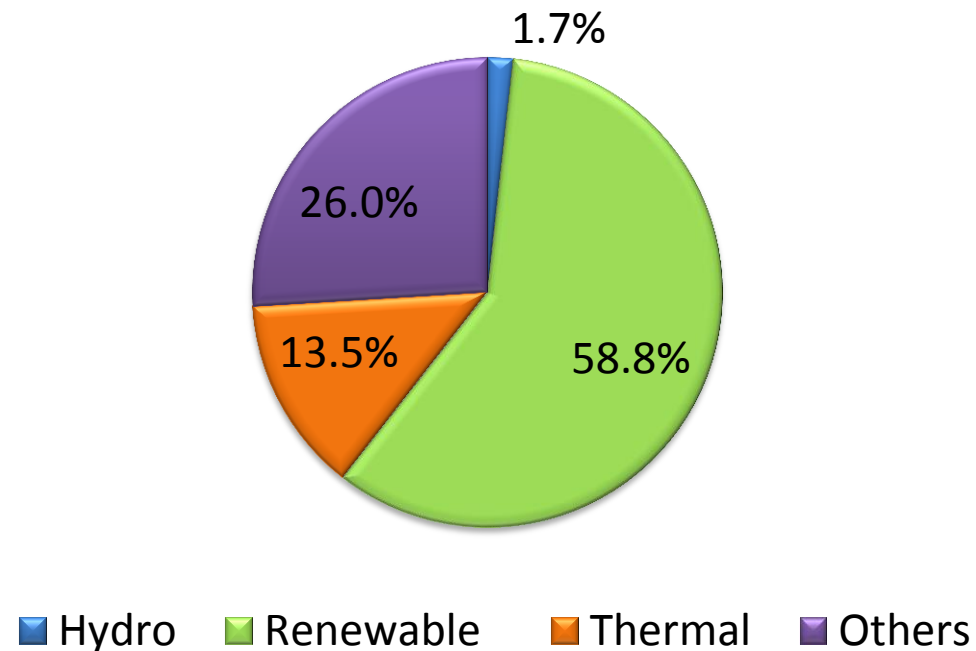
Classified as Infrastructure
Finance Company (IFC) by RBI in
2010

Current fund based debt portfolio
of Rs. 11,005 cr as of 31st March
2020.

Diversified portfolio in the
Energy/Infra Business

Spread and NIM is maintained
around 2.61% and 3.31%
respectively

FY 2019-20



PTC Energy Ltd (PEL)



Total Wind Assets of 288.8 MW as on 31st March'2020

Assets in 3 states: Madhya Pradesh, Karnataka and Andhra Pradesh

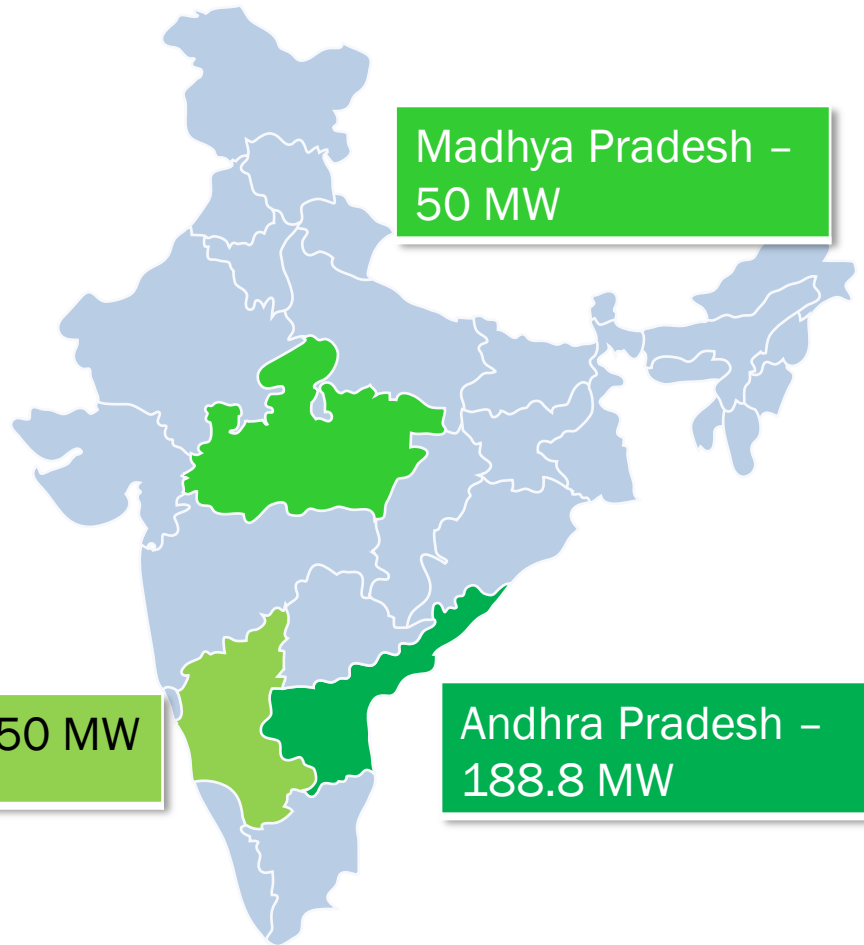
Snapshot (Amount in Cr)

Particular	2018-19	2019-20
REVENUE	331.47	304.63
EBITDA	323.34	280.36
PAT	51.62	09.39

Karnataka - 50 MW

Madhya Pradesh - 50 MW

Andhra Pradesh - 188.8 MW



PTC: A Responsible Corporate Citizen

- As a Responsible Corporate, PTC has always contributed towards the welfare of the Society
- Creation of **PTC Foundation Trust** to carry out CSR initiatives for PTC Group

Major thrust areas:

- Sanitation / cleanliness
- Skill development & Women's Empowerment
- Environmental sustainability



CSR Initiatives:

- Ongoing "Sanitation Work" at Bhikaji Cama Place
- Partner in women's "**Journey in Transformation**" to empower individual, family and society through education, health and enablement.
- "Skill Development" project - Initiative gives employment of more than 100 across all scheme work.
- COVID Response – Reaching to 5 states with PPEs and Other Safety accessories

Thank You!

Visit us at www.ptcindia.com
