PTC India Limited
PTC India Ltd. ("PTC"), was established in 1999 by Government of India through a Cabinet Decision as a Public-Private Initiative, with objectives of:

- Mitigating Payment risks of Mega Projects
- Initiate & develop a Power Market
- Promoting power trading to optimally utilize existing resources
- Attract investments in the power sector on the strength of multi-buyer model
- Creating a Power Market in India and neighboring countries
PTC: Strategic Intent

Vision
To be a Frontrunner in developing a vibrant Power Market and striving to correct market distortions

Mission
• Promote Power Trading to optimally utilize the existing resources
• Develop Power Market for market based investments into the Indian Power Sector
• Facilitate exchange of power with neighboring countries

Core Values
• Transparency
• The Customer is always right
• Encouraging Individual initiative
• Continuous Learning
• Teamwork
PTC: Shareholding

- Diversified Shareholding
- Professionally managed Board of the Company

Promoters 16.20%
Mutual Funds 13.40%
Insurance Cos. 14.30%
FIIs/Banks 1.80%
Others 27.90%
FIIs 26.40%

- NTPC
  India’s Largest Thermal Power Generator

- POWERGRID
  India’s Central Transmission Utility

- PFC
  Power Sector Focused Development Financial Institution

- NHPC
  India’s Largest Hydroelectric power generator
PTC: Board of Directors

3 Whole Time Directors

Mr. Deepak Amitabh
Chairman and Managing Director

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

Mr. Ajit Kumar
Director (Commercial & Operations)

5 Nominee Directors

Mr. Arun Kumar Verma
Director (Jt. Sec., Ministry of Power)

Mr. Ravi Prakash Singh
Director (Nominee of POWERGRID)

Mr. A. K. Gupta
Director (Nominee of NTPC)

Mr. C. Gangopadhyay
Director (Nominee of PFC)

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

8 Independent Directors

Mr. Jayant Gokhale

Mr. Rakesh Kacker

Ms Sushma Nath

Ms Bharati Prasad

Mr. Sutirtha Bhattacharya

Mr. Devendra Swaroop Saksena

Mr. Ramesh Narain Misra

Dr. Atmanand
Electricity Trading concept introduced by PTC and was first to start trade in 2002. Amongst **first** to get trading license after EA -2003

<table>
<thead>
<tr>
<th>Introduction of Short Term Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tolling agreement with generator</td>
</tr>
<tr>
<td>Co- Promoter of India’s first electricity exchange (IEX)</td>
</tr>
<tr>
<td>Long Term PPA to IPPs – [leading to ~40% of generation capacity owned by Private Sector]</td>
</tr>
<tr>
<td>Long term PPA to Renewable Sector (Wind)</td>
</tr>
<tr>
<td>Cross Border Trade (Nepal, Bhutan &amp; Bangladesh)</td>
</tr>
</tbody>
</table>

**Bellwether in Power Market Development**
PTC: Milestones

1999
- Company got incorporated.
- Cross Border business
- Listing on bourses in 2004

2006
- Creation of Subsidiaries – PFS & PEL
- Coal Trading Business
- Listing of PFS

2012
- Tolling as business started
- Adding Bangladesh as Client
- Hydro power from Bhutan – competitively
- PFS Crossed 10,000 Crores asset mark
- PEL commissioned 288 MW of Renewable capacity
- Renewable Trading of 1050 MW long Term
- 1900 MW thermal Medium Term Trading

2017

2018
Key Metrics - Financials

40%+
Dominant Market Leader with over 40% market share
Total traded power: 57.02 BUs (FY18)

27
Supplying power to 27 States/UTs

3
Cross Border Trading: Trading power with Nepal, Bhutan & Bangladesh,
Total Traded power-6.96 BUs (FY18)

500+
Over 500 Industrial (Retail) Customers
Total Traded power ~10 BUs (FY18)

CAGR of 15% in last 6 years

Volume Mix
Short Term grew at 14% & Long Term at 16%
Key Metrics - Financials

- Marginal (including Surcharge & Rebate)
- Dividend Payout Ratio
- Return on Networth
- PAT

CAGR of 18%
Power Sector - Industry Structure

Ministry of Power

Central Regulator

**Generation**
- State Gencos
- CPSUs
- IPPs
- Captive

**Transmission**
- STUs
- PGCIL
- Licensees

**Distribution**
- Discoms/Private Licensee
- Transformation, Transmission & Distribution Losses including unaccounted Energy

**Consumption**
- Agriculture/Domestic/Commercial/Industries/Others
- Captive

**State Govt.**

**State Regulators**

**Power Trading Companies**

Open Access
## Power Procurement Avenues

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Agreement Duration</th>
<th>Open Access Duration</th>
<th>Contribution to PTC Business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Term</td>
<td>&gt;1 year up to 5 years</td>
<td>&gt;3 months up to 5 years</td>
<td>4%</td>
</tr>
<tr>
<td>Long Term (excluding Hydro)</td>
<td>&gt;7 years up to 25 years</td>
<td>&gt;7 years</td>
<td>41%</td>
</tr>
<tr>
<td>Long Term (Hydro)</td>
<td>&gt;7 years up to 35 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Term – Bilateral</td>
<td>Up to 1 year</td>
<td>Month wise</td>
<td>18%</td>
</tr>
<tr>
<td>Short Term – Power Exchange</td>
<td>Day Ahead Market (1 day)</td>
<td>1 day (corridor left after short term bilateral-advance transactions)</td>
<td>37%</td>
</tr>
<tr>
<td></td>
<td>Term Ahead Market (up to 7 days)</td>
<td>Up to 7 days in advance</td>
<td></td>
</tr>
</tbody>
</table>
PTC: Capability Profile

An Integrated Energy Service Company

Power Trading
- Domestic OTC market;
- Short/Medium & Long-term trades (utilities);
- Retail (Open Access consumers);
- Cross Border trade.

Investments
- Early stage support as Equity Investor / co-developer;
- PTC India Financial Services Ltd.

Renewable Energy
- PTC Energy Limited – Wind Power Projects;
- Trading of 1050 MW, Scheduling and despatch of Solar Power (750 MW-SECI);
- Trading of Solar Power (MOU with SECI).

Advisory Services
- Portfolio Management Services;
- Energy efficiency implementation;
- Transmission Infrastructure based services;
- Outsourcing of O&M from Distribution Licensees.

* - Investment related business primarily through subsidiaries.
The Core Business of PTC is Electricity Trading & Portfolio Mgmt.

Business Model

- Identify Generator / Supplier
- Enter into Power Purchase Agreement (PPA) with Generator
- Identify Demand i.e. Distribution Utilities or Retail
- Enter into Power Sale Agreements (PSA)

- Schedule and dispatch power to Buyer
- Market Making across Demand - Supply mismatches and tenors

Key Features

- 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
- PPAs & PSAs are arranged back-to-back for minimal risk
- Late payments attract a penalty & early payments a rebate - Both contractually specified
- Un-bundle and manage concentration risk both at the supply and demand side
- No unaddressed default in our 19 year operating history
- We take limited credit risk & do not use leverage or mark to market
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. 13,365 cr as of 30th Sep 2018. Cumulative Debt portfolio of Rs 22,403 Cr

Diversified portfolio in the Energy Business

Spread and NIM is maintained around 1.18% and 2.83% respectively
Total Wind Assets of 288.8 MW as on 31st March’2018

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

<table>
<thead>
<tr>
<th>Particular</th>
<th>2017-18</th>
<th>H1-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLF</td>
<td>19.41%</td>
<td>31%</td>
</tr>
<tr>
<td>Revenue</td>
<td>281.75</td>
<td>233.84</td>
</tr>
<tr>
<td>EBITDA</td>
<td>264.05</td>
<td>227.02</td>
</tr>
<tr>
<td>PAT</td>
<td>25.91</td>
<td>70.72</td>
</tr>
</tbody>
</table>
Distribution Network Management: Successfully took over the Operations & Maintenance work of Electrical distribution network at MPAKVN-SEZ (Indore), JNPT, DDUPT

Transmission Connectivity: Providing Bouquet of Services including (Feasibility Studies, Survey & Cost Estimation, Engineering, Bid Process Management) to Refineries

Power Portfolio Management: Providing round the clock services at DNH, REMCL, NDMC, Discoms for power procurement planning, optimization & capacity building

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

Targeting to cater entire ‘Energy Value Chain’
Targeting to cater entire ‘Energy Value Chain’

**Back-End Operations:** Providing round the clock support for commercial and operational functions for power procurement (OA – group captive) to Refineries, GAIL, and SECI

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

**Renewable Energy:** Exploring opportunities for development of RE Projects with several OA consumers

Selected as trader for sale and purchase of **1000MW wind power**
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.
Thank You!

Visit us at www.ptcindia.com