Twitter Thread by Multipie

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In a recent interview with Udayan Mukherjee, the big bull Rakesh Jhunjhunwala made an interesting bold statement - "I think nobody has read the Electricity (Amendment) Bill. Once it passes, it will be bigger than 1991 reforms."

A thread■dissecting the ongoing Power reforms ■



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In summary, the Amendment Bill 2021 says:

■■ Delicensing of state monopoly- open to competition

■■ Consumers can choose discoms (like telcos)

■■ Smart meters to plug leakages

■■ Easy resolution of disputes

■■ Right to 24x7 electricity

■■ Rewarding consumers shifting to solar

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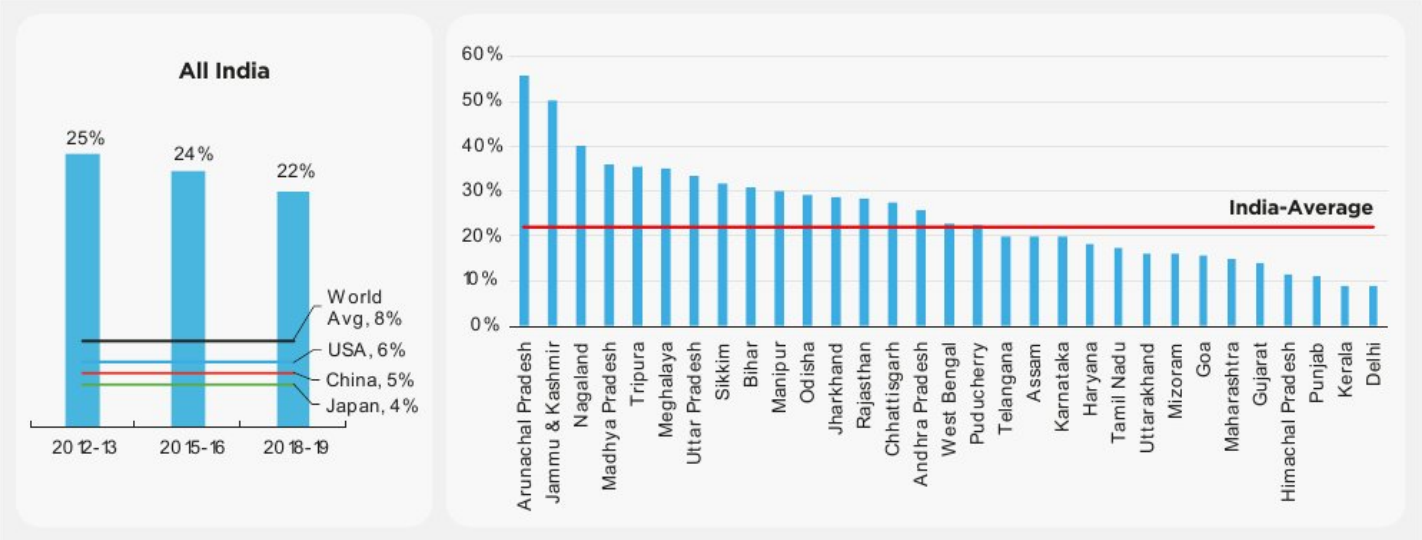
We'll discuss these in detail. But first, some context.

India's is the 3rd largest consumer of electricity. But also one of the most inefficient (measured via AT&C losses - electricity that is generated but does not reach intended customers)
AT&C: 22% vs 8% global. Chart ■



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Currently, only 9% Indians are served by private discoms (Mumbai, Ahmedabad, Delhi).

AT&C loss for Delhi has declined from 55% in 2002 to 9% in 2020 after power distribution was taken over by three private licensees. Makes a strong case for broader delicensing of discoms.

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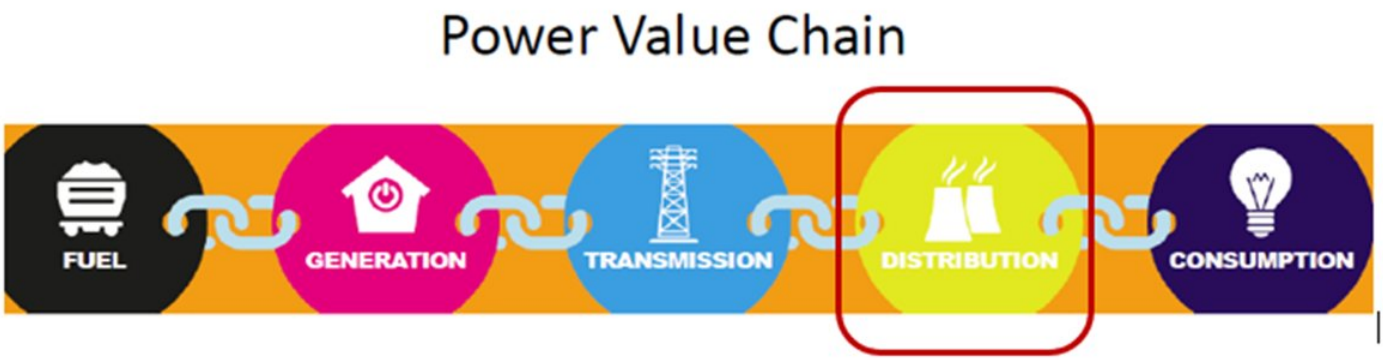
What are discoms?

The Power value chain:
Raw material (Coal, Fuel) --> Generation --> Transmission --> Distribution --> Consumption

In this chain, Distribution companies (or discoms) have been the weakest link for last 3 decades.



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India has over 30 Discoms and they run deep losses each year (loss of ■ 90,000 crore in FY 2021). Thus, the Discoms are unable to pay to Gen-cos on time (dues of ■ 67,917 cr at Mar-21). Which impacts new capacity creation.

Hence discoms are the core focus of new reforms.

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Previously, State govts. have been making big cash infusions into Discoms without any significant impact - a bottomless pit.

As per P Uma Shankar (Former power secretary), & Vinay Chatterjee (Chairman-Feedback Infra), following are key problems have stayed in Discoms:

1. Managerial & operational issues of discoms along with the political influence
2. Power purchase agreements (PPA's- long term agreements to buy power from Genco's at fixed price)
3. Inability to increase the tariffs
4. Increasing Average Technical & commercial losses (AT&C losses)
5. No improvement in Gap between Average cost of service (ACS) & Average revenue realisation (ARR)

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Old problems require new solutions.

The last Budget has proposed to allocate 3.05 lakh crs in next 5 years for the revival of Discoms but this time, the focus is not just to infuse capital for a temporary bailout but on the actual transformation of the way discoms operate.

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Till now there were state monopolies among Discoms but Electricity Amendment Bill '21 has proposed to delicense this (> 1 player can operate in a state).

+You can choose to use the service from the provider who you feel is more efficient, like your telecom service provider.

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Most importantly, to solve the operational issues like revenue collection & billing, private players will now be allowed to work with discoms:
1. Either as a franchisee (just helping state discoms in operations) or
2. License model (ownership of assets as well)

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Further, a Public-private partnership (PPP) will help the industry to cut losses, focus on providing 24*7 electricity and invest in the development of renewables (currently 25% of total power capacity and 10% of generation).

Rough estimates from Tata Power ■

#2 Delicensing (privatizing) distribution has worked

The FY22 Union budget also highlighted a need to provide choice to consumers by promoting competition. A framework will be put in place to give consumers alternatives to choose from among more than one Distribution Company. This is further stressed in the draft National Electricity Policy, 2021. **Tata Power has noted that there is a potential of 45mn+ customers to be acquired via the PPP model in power distribution across** Uttar Pradesh, Rajasthan, Jharkhand, Madhya Pradesh, Bihar, Punjab, Haryana and Maharashtra and Union Territories.

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Private players like #TataPower (Licensee model - Delhi, Odisha) and #TorrentPower (Franchisee model - Bhiwandi) are already winning bids.

#AdaniTransmission is also looking for a license & will be participating in bids with implementation of smart-meter conversion.

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Another key reform is Smart Meters, which will help in plugging leakages and improve billing efficiency.

By December 2023, all existing meters where power loss > 15% have to be placed with prepaid smart meters and in all government buildings.

https://t.co/GVQ8T0eAIG

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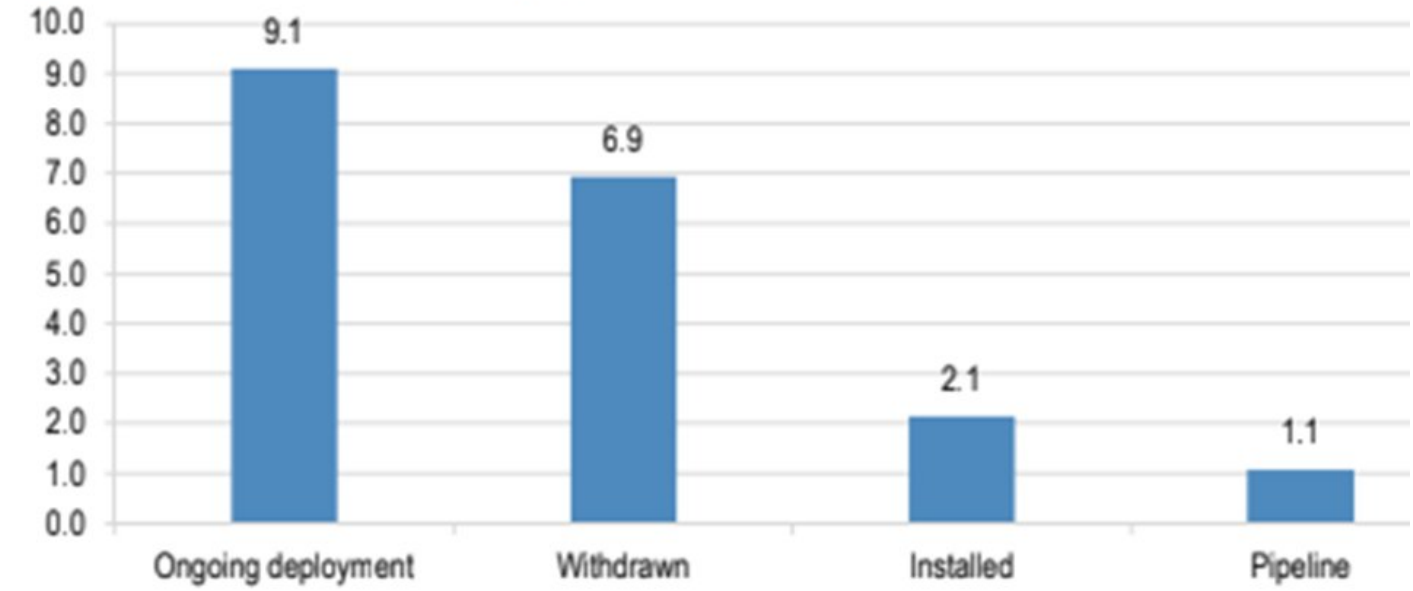
As per Powerline research, Smart meters is helping the discoms to improve the collection efficiency by 95% & also leading to ~15% increase in average revenue.

Figure 60: Status of smart meters (mn)



Source: Powerline.

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Next issue is fixed Power Purchase Agreements. This has changed with companies now able to purchase power from the exchange (#IEX).

Other initiatives: Solar pumps for agriculture, differential tariff based on demand & Direct benefit transfer of subsidies to beneficiaries.

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It will take around a year to get in action and for private players to participate actively and help transform the industry structure.

And the private players are watching keenly. Extract from Tata Power earning call:

Dr. Praveer Sinha: So, let me try to respond to the second question first. So, on the distribution opportunity in Chandigarh bid has been opened. We still have to see how the evaluation takes place and what gets decided. As far as the other opportunities are concerned, we are waiting for the Electricity Amendment Act and we have heard that the Union Power Minister and also the Finance Minister in the Budget speech have mentioned about opening up and delicensing the distribution. From our side, we are getting ready for this opportunity and we are scrutinizing various cities, various locations where we would like to go. It will definitely be a multi-city plan, and not just one city and different states that we will go. So, we are getting ready with all our plans. As soon as the Parliament approves the Electricity Act, and also the regulations for that gets finalized, we will be going to numerous cities and provide the quality service as we have been providing in Delhi, Mumbai and Odisha.

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Conclusion: India has one of the largest and most complex power sectors in the world. Last 2 decades saw gradual evolution - grid electricity, lesser power cuts, increase in renewables.

If the Bill is passed, the next decade can well be a decade of power renaissance.

Addendum: Niti Ayog's detailed report on turning around the Power Distribution sector (some great insights here)

https://t.co/ERUgLNKJWQ

If you found this helpful, please retweet and follow @multipiesocial.

Next up, we are writing some insightful sector notes - Auto, Banking, NBFC, IT in that order.

Link to top of thread
https://t.co/td6tggNqAc

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> A thread\U0001f9f5dissecting the ongoing Power reforms \U0001f447 pic.twitter.com/zk1FcuhtUU
>
> — Multipie (@MultipieSocial) September 28, 2021

Here is a summary of Niti Ayog's recommendations for Power discoms.

Reforms in the power sector

NITI Aayog's recommendations for power distribution

NITI Aayog has made certain recommendations for a turnaround of the power distribution sector. Some of the important recommendations are:

- **Regular tariff revisions:** The state governments should promote autonomy, competence, and transparency of the State Electricity Regulatory Commission (SERC). Tariffs should be regularly revised to ensure that they fairly reflect the actual fixed and variable costs.
- **Direct benefit transfer (DBT):** For consumers who receive subsidized electricity, DBT can help improve efficiency and reduce leakages.
- **Distribution franchisee model:** Encourage private participation though franchisee route, like the model of engaging Torrent Power in Bhiwandi in Maharashtra. Here, the private parties have no ownership over the distribution grid assets. They manage billing and revenue collection mainly
- **Distribution licensee model:** Another way to model private participation is through the licensee route. Here, the private parties hold equity and are part or complete owners of the distribution-grid assets. They manage distribution of power, billing, and revenue-collection services (such as Tata Power, New Delhi).
- **Increasing competition:** Discoms have a monopoly in their area of functioning. Delicensing distribution can introduce competition and enable retail choice for customers. This reform can be challenging, and careful market design should accompany it. The feasibility of competition would depend on market size, nature of demand, efficiency of the incumbent, and potential for growth.
- **Smart metering:** The overall AT&C loss figures in India are as high as almost 25%. Many discoms need to improve their billing efficiency through better metering. They should fully utilize the revamped central government reform scheme to achieve 100% metering using prepaid or smart meters, while being cognizant of cybersecurity threats.
- **Feeder separation for agri and non-agri customers:** Feeder separation (rural households and agricultural) and strengthening of sub-transmission and distribution infrastructure in rural areas. Household can get uninterrupted power supply whereas agri consumers can get power that is adequate for their usage (6-8 hours). This should avoid the misuse of power and reduce subsidy burden on the sates (many states provide subsidized and sometimes free electricity for agriculture, which can lead to leakages and high losses for discoms).
- **Reduce cost of power:** Discoms have locked themselves into long-term, expensive power purchase agreements (PPAs). If the markets continue to provide low-cost power, discoms should not sign new expensive long-term thermal PPAs.