



# INDIAN POWER SECTOR

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**Smart metering installations  
expected to witness a sharp increase  
over the next two years**

**JANUARY 2024**



## 1 Highlights



## 2 Need for Smart Metering Infrastructure



## 3 DBFOOT Model for Smart Metering Projects



## 4 Progress In Smart Meter Installations



## 5 Viability Analysis and Key Risks





## Highlights

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*Adoption of DBFOOT model would enable the discoms to replace conventional meters with smart meters without any upfront capex*

*Demonstration of direct debit payment mechanism for AMISPs is expected to mitigate the counterparty credit risk associated with discoms to a large extent*



- The Government of India (GoI) launched the Revamped Distribution Sector Scheme (RDSS) in July 2021 with the objective to improve the operating efficiency of state distribution utilities (discoms) by bringing down the aggregate technical and commercial (AT&C) losses to 12-15% by 2025 and reducing the gap between the cost of supply and tariff to zero. The replacement of conventional meters with smart meters remains a key initiative of this scheme, with a target to replace 250 million conventional meters at the all-India level.



- The RDSS scheme adopted the design, build, finance, own, operate and transfer (DBFOOT) model for the installation of smart meters. Under this model, advanced metering infrastructure service providers (AMISPs) will be contracted for supplying, financing, installing and operating the meters along with the associated communication and IT infrastructure. This will enable the discoms to set up smart meters without the burden of upfront investment and take over these assets at no cost at the end of the contract tenure.



- The projects are being awarded to the AMISPs through the bidding route, with the service charge per month per meter being the key bidding parameter. Of the 222.3 million meters sanctioned by the GoI as of December 2023, 98.7 million meters have been awarded. However, the progress in installations remains low, with only 8.0 million smart meters installed as of December 2023.



- ICRA expects the pace of installations to witness a significant jump over the next two years, supported by the progress in tendering and the Government's focus on improving discom finances. The move is expected to improve the billing and collection efficiency of the discoms. While choosing customers for replacing the meters, the discoms must be mindful of their consumption potential to achieve net positive savings, post the replacement with smart meters.



- The viability for the winning bidders remains largely linked with the capital cost of setting up the smart meters along with the associated infrastructure. Further, the availability of direct debit payment mechanism, wherein online payments received from the consumers are to be routed from the payment gateway to the AMISPs, is likely to mitigate the counterparty credit risk associated with the discoms to a large extent. However, demonstration of this mechanism remains to be seen.



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