Getting it Right
Smart metering of electricity consumers in India

A snapshot of analysis and recommendations by Prayas (Energy Group)

India targets to install **250 million** smart meters for consumers by 2022. **0.8%** of this target has been met by December 2020. According to the National Smart Meter Program (NSMP) Dashboard, till date, major installations have been in the following states:

■ 59K, Delhi   ■ 2 L, Haryana   ■ 11 L, Uttar Pradesh

■ 1 L, Bihar

Need for better data reporting: Utilities in Uttar Pradesh have claimed installation of **24 lakh** smart meters at the end of FY21, but NSMP shows only **11 lakh** installations.

Metering is a crucial interface between utility and consumers. Hence, it requires focused effort to retain trust, reliability, accuracy and convenience in the metering and billing systems.

Transparent, accountable, and participatory mechanisms are needed to ensure effective implementation of large scale smart meter programmes.

What can utilities do?
- Conduct extensive pilot projects.
- Carry out detailed cost benefit analysis (CBA).
- Improve DT/ feeder metering for better loss tracking.
- Share data on progress, challenges in public domain.

How to ensure a consumer centric approach?
- Resolve challenges for remote temporary disconnections, ease of recharging.
- Ensure access to smart meter data for understanding own consumption patterns.

What can electricity regulators do?
- Mandate regulatory approval of smart metering roll-out plans, based on detailed CBA and lessons from pilot projects. Also, conduct similar mid-term evaluations.
- Mandate submission of quarterly update reports of roll-outs.
- Revise tariff regulations to include cost-sharing mechanisms between utilities and consumers.
- Issue clear regulations for remote disconnection criteria for pre-paid smart meter use.
- Improve performance indicators and compensation criteria.
- Mandate submission of energy audits.

Smart meter data is **personal data.** At high resolutions it can reveal personal information.

How to ensure data privacy and consumer protection?
- Ahead of the personal data protection legislation, Ministry of Power should evolve a framework for handling smart meter data, and finalize it in consultation with stakeholders.
- Regulators should include aspects of data-sharing protocols, purposes, grievance redressal, security etc.
- Utilities could appoint a data protection officer to get various aspects of privacy right.

Detailed analyses available at: http://bit.ly/SmartMeteringGetItRight and http://bit.ly/smartmeterprivacy