

## A Policy Strategy for Building Energy Data Management in India

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**Abstract :** The energy consumption data plays a vital role in energy efficiency policy design, implementation, and impact assessment. Any demand-side energy management intervention's success relies on the availability of accurate, comprehensive, granular, and up-to-date data on energy consumption. The Building sector, including residential and commercial, is one of the largest consumers of energy in India after the Industrial sector. With economic growth and increasing urbanization, the building sector is projected to grow at an unprecedented rate, resulting in a 5.6 times escalation in energy consumption till 2047 compared to 2017. Therefore, energy efficiency interventions will play a vital role in decoupling the floor area growth and associated energy demand, thereby increasing the need for robust data. In India, multiple institutions are involved in the collection and dissemination of data. This paper focuses on energy consumption data management in the building sector in India for both residential and commercial segments. It evaluates the robustness of data available through administrative and survey routes to estimate the key performance indicators and identify critical data gaps for making informed decisions. The paper explores several issues in the data, such as lack of comprehensiveness, non-availability of disaggregated data, the discrepancy in different data sources, inconsistent building categorization, and others. The identified data gaps are justified with appropriate examples. Moreover, the paper prioritizes required data in order of relevance to policymaking and groups it into "available," "easy to get," and "hard to get" categories. The paper concludes with recommendations to address the data gaps by leveraging digital initiatives, strengthening institutional capacity, institutionalizing exclusive building energy surveys, and standardization of building categorization, among others, to strengthen the management of building sector energy consumption data.

**Keywords :** energy data, energy policy, energy efficiency, buildings

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