Scope of Energy Statistics in India

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Structure of the presentation

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Energy mix

Comprises

- Primary sources(coal, crude oil, natural gas, fuel wood),
- Secondary sources(coal gas, coke, petroleum products, charcoal, electricity (thermal, hydro, nuclear)),
- Renewable sources (mini-hydro, wind energy, solar energy, biogas),
- Non-renewable resources (fossil fuels),
- Commercial (coal, oil, petroleum products, natural gas and electricity), and
- Non-commercial sources (fuel wood, dung cake, vegetable waste).

Types of Energy measures

- **Physical units :** energy statistics are compiled in physical units,
- M**onetary units :** are maintained by the producing companies in the form of balance sheet or profit and loss accounts, which are used for computation of value added by these companies.
- Production and consumption of energy statistics are not compiled in monetary terms
- **Energy units:** Production, consumption, stock, import ,export, etc . are not compiled in a common energy unit by the producers and suppliers of energy resources,

- In the compilation of Energy Statistics by CSO, the production of energy from various resources are converted into peta joule by applying standard conversion factors as recommended for Indian resources.

Types of Data Generated

- **The parameters include**: reserve, potential, install capacity, capacity utilization, production, import &export, availability, consumption, wholesale price Index, man days worked, productivity (output per man shift), transmission & distribution, physical capital formation, etc.

- Financial accounts , physical capital formation, infrastructure development, etc. are maintained by the respective energy companies/organizations.

- The Energy Statistics in India brought out by the CSO does not include these information at present.

- Efforts are underway to compile Annual Infrastructure Statistics by the CSO, which will include one chapter on energy infrastructure comprising indicators on availability, affordability, accessibility, acceptability, economic & financial regulation and environmental regulation.

Conformity to International Standards

- ALL energy units and indicators are to be based on internationally accepted standards, concepts and definitions.
- Adherence to international standards on energy statistics facilitates price fixation and international comparison.
- In India, the energy statistics are generated in natural unitd by the respective line departments.
- Only the figures of energy production from various energy sources are expressed in energy unit (peta joule) . This is done at CSO by applying appropriate conversion factors as recommended in respect of Indian energy resources.
- Energy statistics are compiled according to National Industrial Classification, which is based on International Standard Industrial Classification of all Economic Activities (ISIC) and the 8-digit codes of Indian Trade Classification(based on Harmonized Coding System(HS)).

Existing data gaps

- Poor quality of renewable energy data
- Incompleteness of Energy consumption data
- unorganized coal production not fully captured
- Inconsistency between energy consumption data of utilities generated through ASI and suppliers' figures,
- Poor energy balance