# Enhancing energy data for robust SDG related policies and beyond
## *Insights from Eastern Africa*

**15th IAEG-SDG Meeting plenary sessions**

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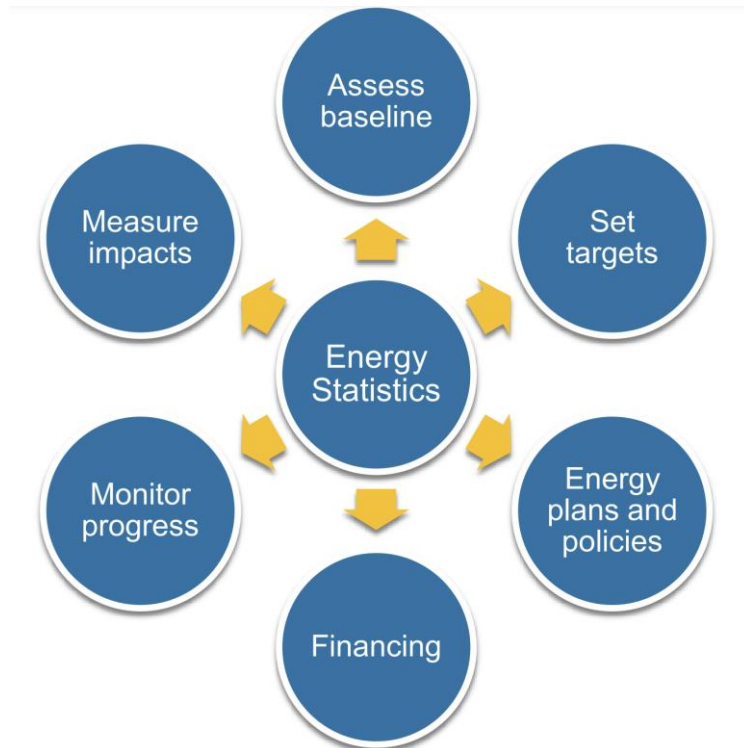
International Renewable Energy Agency (IRENA)

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# Accurate data is required for formulation and tracking of SDG 7 *"ensure access to affordable, reliable, sustainable and modern energy" related targets and beyond*

## Energy statistics is at the centre of energy policies and targets

- SDGs, NDCs, other development goals and investment plans.



## Define renewable energy data collection needs based on:

- National objectives for renewable energy data collection e.g. RE% of TFEC, NDCs..
- The current and future relevance of renewable products

**SDG 7.2.1**

| Objective | Required data |
|---|---|
| To measure progress towards a renewable energy target (as a share of final energy consumption) | Annual energy balance showing renewable energy consumption, including its share of heat and electricity consumption |
| To monitor short-term trends in the markets for renewable energy | Quarterly renewable capacity statistics, investment statistics, cost and price statistics |
| To monitor and adjust a feed-in-tariff programme for rooftop solar photovoltaic installations | Monthly statistics on new rooftop solar photovoltaic installations, electricity prices and solar panel costs |
| To monitor energy access, measured as the share of the population with an electricity supply | Annual statistics on the number of households connected to the national electricity grid and sales of solar home systems |
| To measure energy security | Annual energy balance showing net imports of energy as a share of final consumption, by sector |

# Renewable Energy Data Collection Challenges

**Data collection challenges:**

1. Institutional and human resource capacity

2. Technical challenges

3. Timeliness of data collection

Challenges are numerous - need to be targeted and systematic about the data collected and the processes used

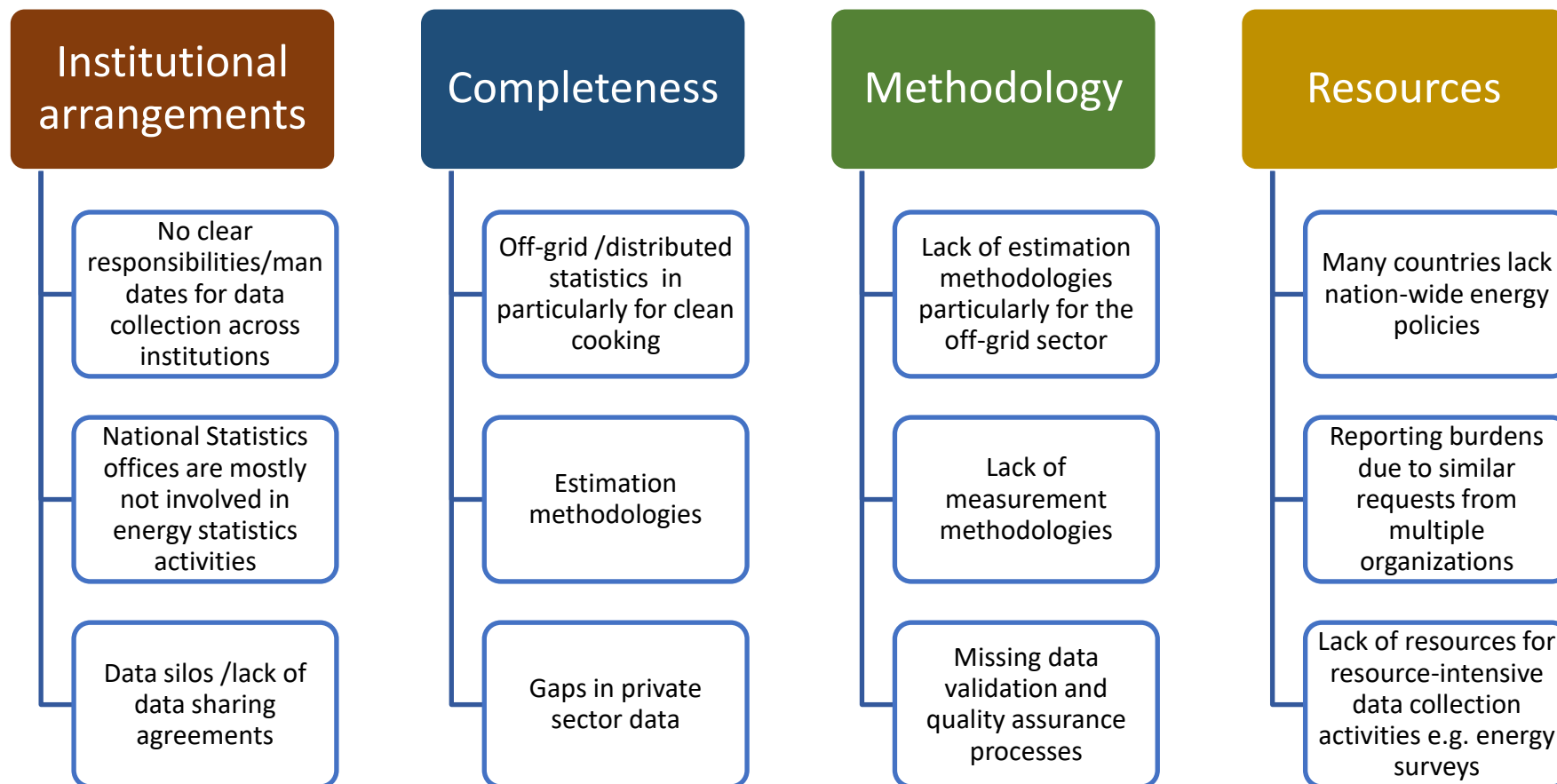| Define data needs | Conduct data audit | Develop reporting templates | Strengthen institutional frameworks | Develop data collection methods | Review and validate data | Disseminate data | Identify and implement improvements and build capacity |
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# Renewable Energy Data Collection Challenges: a focus on Eastern African countries*

**IRENA**
International Renewable Energy Agency

## Institutional arrangements

- No clear responsibilities/mandates for data collection across institutions
- National Statistics offices are mostly not involved in energy statistics activities
- Data silos /lack of data sharing agreements

## Completeness

- Off-grid /distributed statistics in particularly for clean cooking
- Estimation methodologies
- Gaps in private sector data

## Methodology

- Lack of estimation methodologies particularly for the off-grid sector
- Lack of measurement methodologies
- Missing data validation and quality assurance processes

## Resources

- Many countries lack nation-wide energy policies
- Reporting burdens due to similar requests from multiple organizations
- Lack of resources for resource-intensive data collection activities e.g. energy surveys

**Data challenges need to be addressed for robust evidence-based policy making in the energy sector and beyond**

*key insights extracted from the East Africa Renewable Energy Statistics Workshop conducted by IRENA in collaboration with EACREEE in October 2024 supported by the Government of Germany