Introduction to the IEA Energy Statistics Roadmap

IEA Energy Data Centre

Strengthening National Energy Information System in Africa
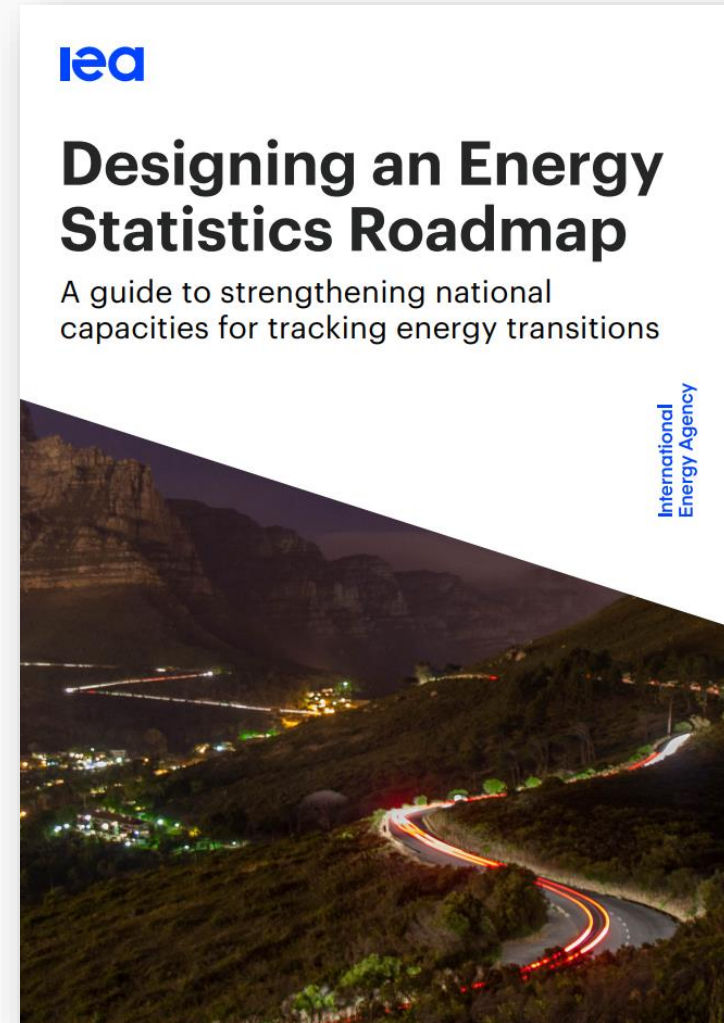
Joint AFREC-IEA webinar on National Energy Statistics Strategies

10 October 2024
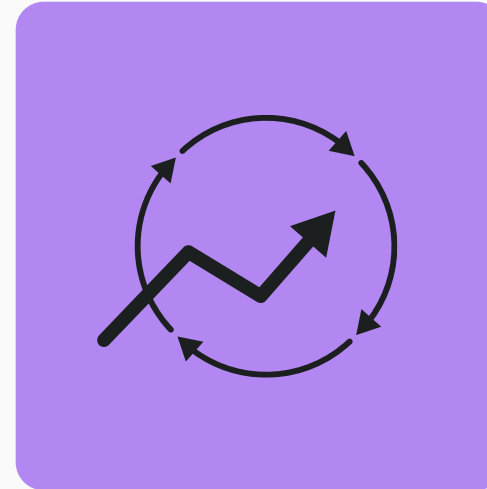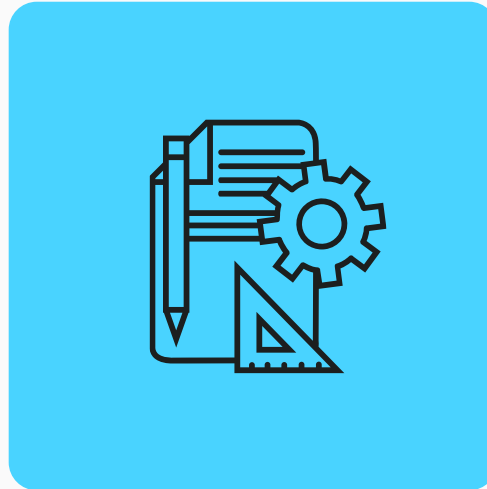
International
Energy Agency

New IEA guidebook – released

Based on IEA's **international collaborative experience**, including energy statistics capacity building programs

Designing an Energy Statistics Roadmap

A guide to strengthening national capacities for tracking energy transitions

International Energy Agency

https://www.iea.org/reports/designing-an-energy-statistics-roadmap

What the IEA guide offers

A comprehensive assessment framework for national institutions to assess existing national energy information systems

A guide for the development of national energy statistics

The proposed framework helps understand strengths, weaknesses, and action priorities, based on experiences from across countries globally

Identifying long-term enablers
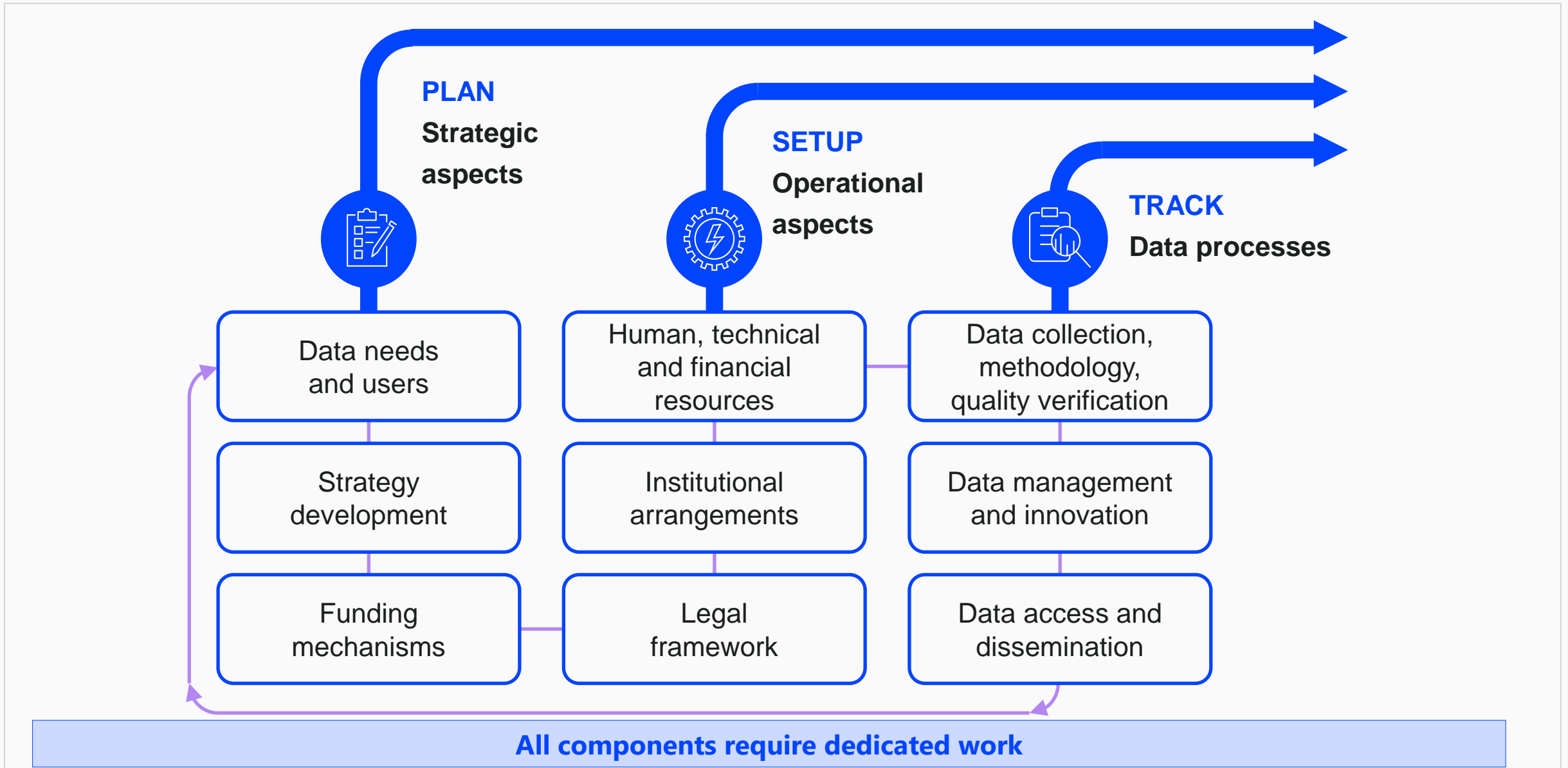
Political will
and awareness

Staff capacity
and stability

Multilateral
collaboration

The IEA framework for developing national energy statistics

PLAN
Strategic aspects

SETUP
Operational aspects

TRACK
Data processes

Data needs and users	Human, technical and financial resources	Data collection, methodology, quality verification
Strategy development	Institutional arrangements	Data management and innovation
Funding mechanisms	Legal framework	Data access and dissemination

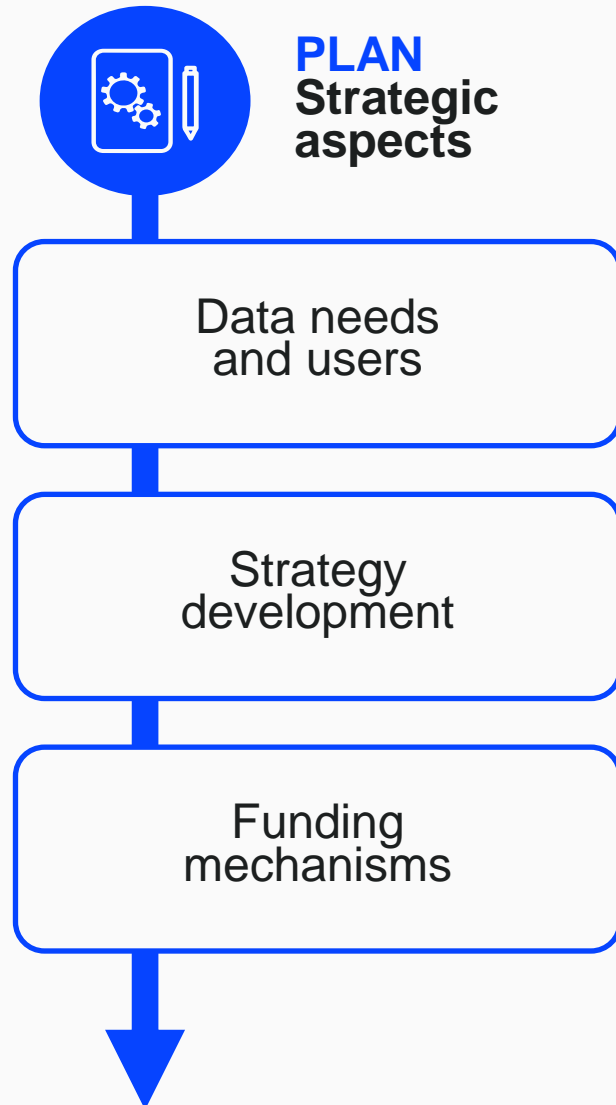**All components require dedicated work**

Using the assessment framework

- Framework structured into three key pillars: **PLAN**, **SETUP**, and **TRACK**

- Each unfolds into three steps, for a total of nine

- **Each section includes:**
  - ✓ Relevant questions
  - ✓ Definition and explanation
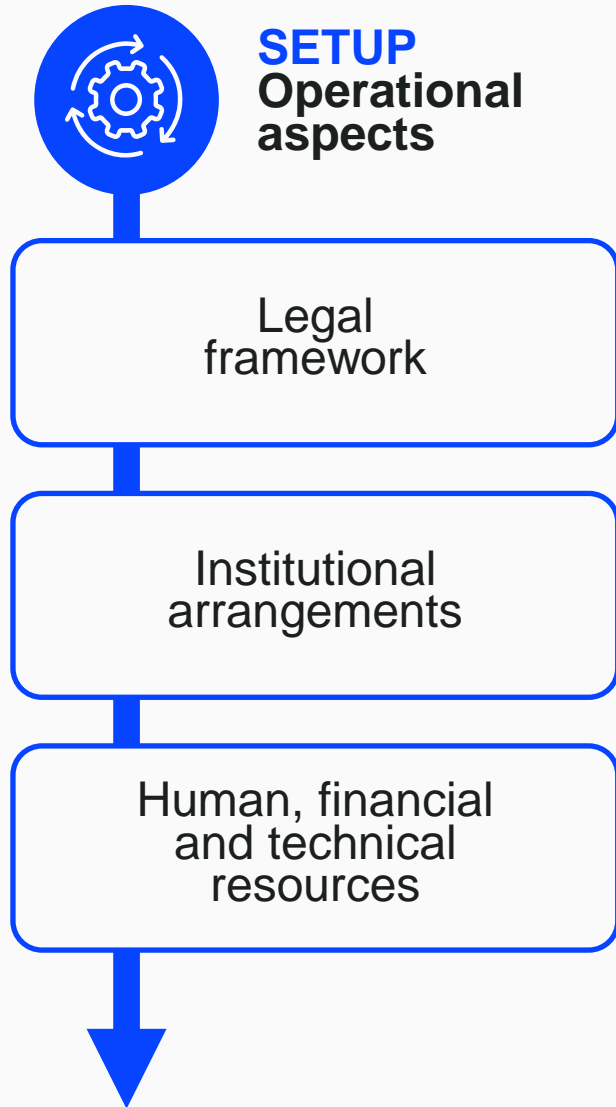 - ✓ Cases and examples
  - ✓ Good practices

IEA regional workshop on strengthening national energy information systems for sub-Saharan African countries, 6-8 May 2024

PLAN: Strategic dimension

PLAN
Strategic aspects

Data needs and users

Strategy development

Funding mechanisms

- **Strategic preparedness** of national energy statistics system to address current and future data needs

- **Ability to map data needs:** identifying key data producers and users, short-term and long-term planning ability

- **Overarching strategy development** and identification of potential funding mechanisms

SETUP: Operational dimension

SETUP
Operational aspects

- Legal framework
- Institutional arrangements
- Human, financial and technical resources

- Assesses operating environment of national energy statistics system

- Includes underlying legal framework, existing institutional arrangements, and resources

- Limitations will impact tasks related to the data processes further down the chain

TRACK: Data processes

TRACK
Data processes

Data collection, methodology and quality

Data management and innovation

Data access and dissemination

- Considers overall data flows from the primary collection (e.g. surveys), to dissemination and use

- Considers appropriate methodologies and alternative/innovative data sources

- Open and user-friendly access to final information for diverse users

The roadmap is complemented by an assessment tool

IEA

Designing an energy statistics roadmap
Assessment tool

QuestionnaireVersion 2024_09_16

Link to the guidebook:
Designing an Energy Statistics Roadmap

Tool description
This tool is designed based on the IEA's "Designing an energy statistics roadmap: A guide to strengthening national capacities for tracking energy transitions". It allows the national stakeholders responsible for the development of energy statistics to document and quantify the status of the current capacities to produce energy information.

Use:
The user should first carefully read the guide before answering the questionnaire sections. The questionnaire can be used independently, or it can be filled together with external experts (e.g. IEA energy data experts) through computer-assisted phone interview (CAPI). The results can be extracted in a PDF-format using the in-built feature button (printed to the user desktop)

Filling instructions by sheet

I_Cover	This sheet.
II_PLAN	Covers the Section 'PLAN' of the guidebook (see document, pp. 27-36). Please fill in blue cells.
III_SETUP	Covers the Section 'SETUP' of the guidebook (see document, pp. 37-49). Please fill in blue cells.
IV_TRACK	Covers the Section 'TRACK' of the guidebook (see document, pp. 50-77). Please fill in blue cells.
V_Country_info	Collects background information on the national context.
VI_Enablers	Contains the user assessment of the key enablers. Please fill in blue cells.
'VII_Data_availability'	Includes an energy data availability assessment. Please fill in the blue cells. Note that this can also be filled independently from the other sections.

For any enquiries, please write to:
DataCapacities@iea.org

Insert country name:

After providing answers, click the button to generate a report of the results (PDF will appear on the user desktop)

Generate report!

VII) Data availability assessment

Notes:
• see 'Designing an energy statistics roadmap', Section 'Key energy data', pp. 12-14.
• indicate the data availability in the blue cells: Yes = Available, No = Not available ('Partial' is also an option)
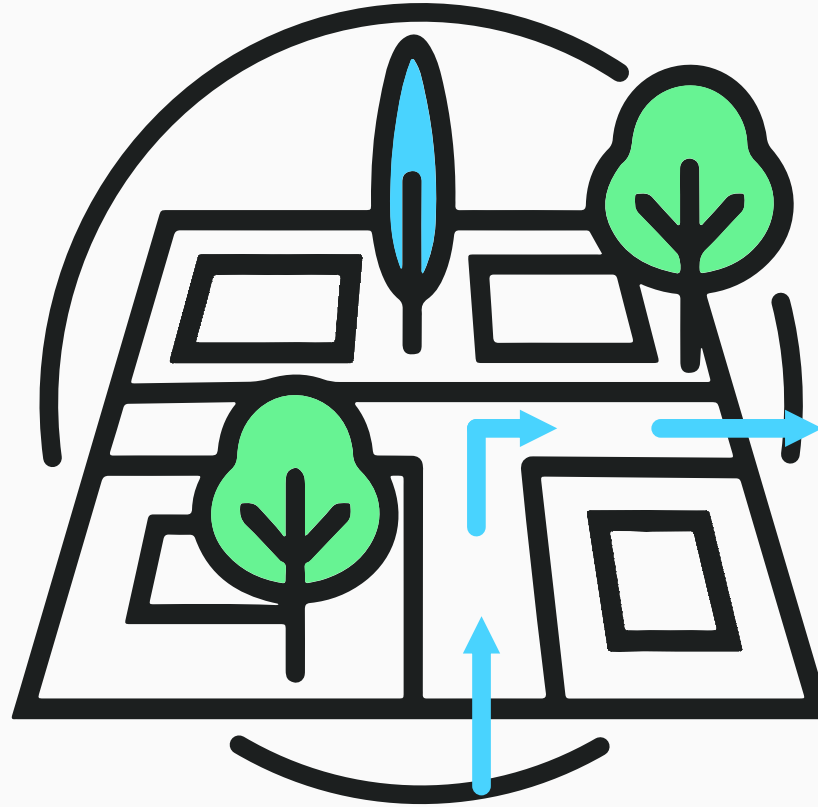• if a product/flow is not relevant in the national context, insert 'Yes'.

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		Main energy products						
		Coal	Oil & oil products	Natural gas	Solid biofuels	Electricity	Heat	Total
Energy supply								
	Production							..
	Trade							..
	Stocks					x	x	..
	domestic supply							..
Energy demand								
	Inputs: electricity/heat							..
	Inputs: other transformation							..
	Industry							
	Iron and steel							..
	Chemical and petrochemical							..
	Non-ferrous metals							..
	Non-metallic minerals (cement)							..
	Other							..
	Transport							
	Road transport							..
	Aviation							..
	Maritime							..
	Rail							..
	Other							..
	Residential/households							
	Space heating							..
	Space cooling							..
	Cooking							..
	Lighting and appliances							..
	Other final consumption sectors							
	Commercial and public services							..
	Agriculture							..
	Forestry							..
	Other							..

Main energy flows

A user-friendly excel tool to provide a good understanding of the national context

Potential benefits of national energy statistics roadmaps

Sound energy data strategies are a key tool in discussions with potential funders – boost your fundraising efforts!

Reliable energy data enables well-informed decisions on energy policies and investments, with a strong base in evidence

This translates into more efficient resource allocation

Understanding strengths and weaknesses helps prioritize workstreams in institutions with a stake in energy data

Conclusion and ways forward

© Unsplash / Marius George Oprea

- This guidebook supports professionals and decision-makers, describing strategic pathways for improving national energy statistics
  - Assessment framework helps identify strengths, weaknesses, and action priorities
  - Facilitates development of strategic action plans and resource allocation

- Through this guidebook, the IEA aims at assisting countries to develop national energy information systems, regardless of their current status

Countries wishing to pilot and apply this framework, partly or in full, are warmly invited to get in touch!