Why data strategies matter? Towards designing a national energy statistics roadmap

Roberta Quadrelli, Head – Data and Indicators for Energy Transitions
IEA Energy Data Centre

Joint AFREC-IEA Workshop
Strengthening National Energy Information Systems
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International Energy Agency

International Energy Agency data work

The International Energy Agency (IEA)

The IEA is at the heart of the global energy dialogue and the transition to a clean energy future.

Founded in 1973

- Core mission: to promote member country energy security
- Has evolved into global energy authority with an ‘all fuels, all technologies’ approach and expertise
- The IEA family includes 31 member countries, 5 accession countries and 13 association countries including Egypt, Kenya, Morocco, Senegal and South Africa from Africa.

Governing Board - IEA decision-making body

- Consists of member country representatives
- Dedicated committees focusing on different policy and technology areas
- Biannual Ministerial Meetings (last in February 2023)

OECD framework

- The IEA is an autonomous agency under the framework of the Organisation for Economic Cooperation and Development (OECD)
- Headquarters are located in Paris, France

Dr Fatih Birol, IEA Executive Director

The IEA provides unbiased analysis, projections and data to support energy policies of its member countries and beyond

Towards greater African participation in the IEA

- IEA Family: **31 Members + 5 Accession + 13 Association countries**; **(**together 87% of global GDP, 75% energy demand)

- Five African countries are Association countries:
  - Morocco (since 2016)
  - South Africa (since 2018)
  - Egypt (since 2022)
  - Kenya (since 2023)
  - Senegal (since 2023)

- The IEA has institutional relations with African governments and regional organisations, notably with the **African Union and AFREC** --very glad to organise this workshop jointly!

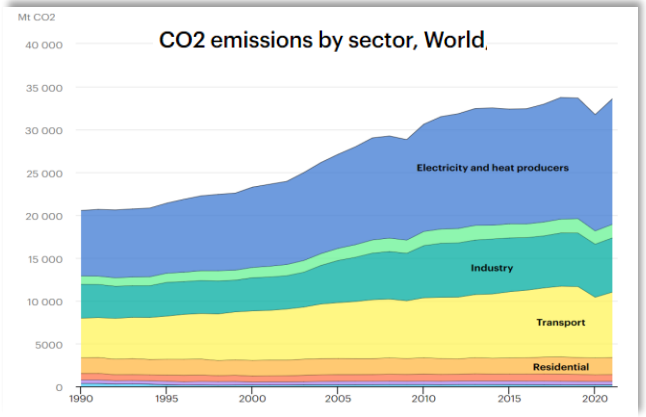
Data at the core of the IEA mission

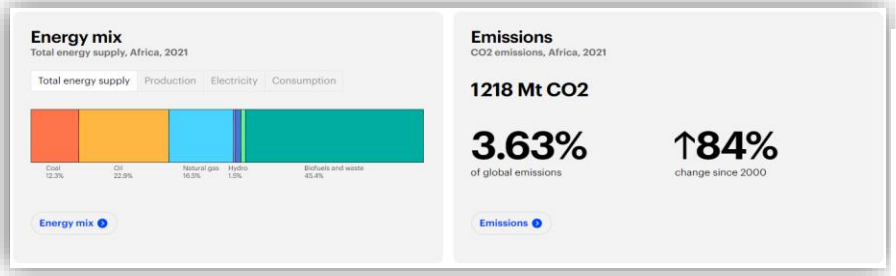
iea 50 Energy system Topics Countries Data

Energy Statistics Data Browser

The most extensive selection of IEA statistics with charts and tables on 16 energy topics for over 170 countries and regions

https://www.iea.org/data-and-statistics/





World Energy Balances

Energy balances for 156 countries and 35 regional aggregates

Greenhouse Gas Emissions from Energy Highlights

Free version of the IEA's annual time series of GHG Emissions fro...

IEA Energy and Carbon Tracker 2023

An interactive product showcasing a wide set of indicators to analy...

Data collected from across over 170 countries include: annual/monthly fuel statistics, balances, emissions, emissions factors, efficiency indicators, prices, energy technology RD&D budgets, energy system projections, real time electricity, weather-related indicators.

IEA has consolidated experience in data capacity development

Online training events and online material/tools

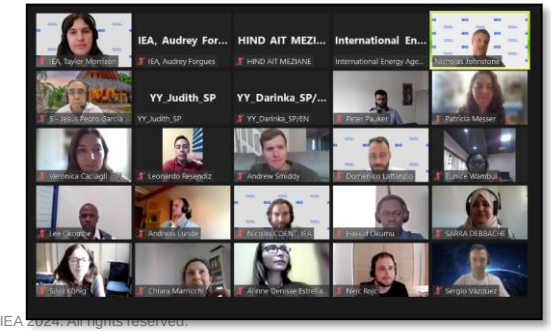
Dedicated webinars / targeted training activities adopting IEA manuals and tools

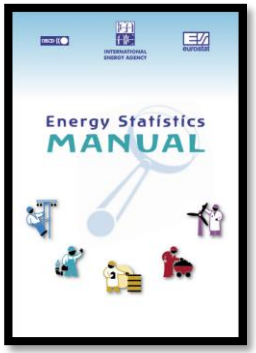
In-person events – e.g. workshops with international partners (e.g. AFREC, UNSD, OLADE…)

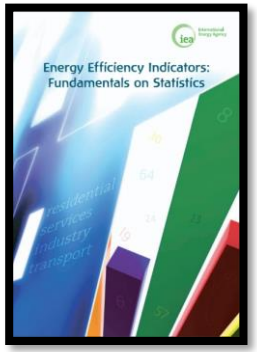
Bilateral work with countries

Country specific training/assessments using IEA tools

Support on national data collection (e.g., data collection through surveys or other mechanisms)

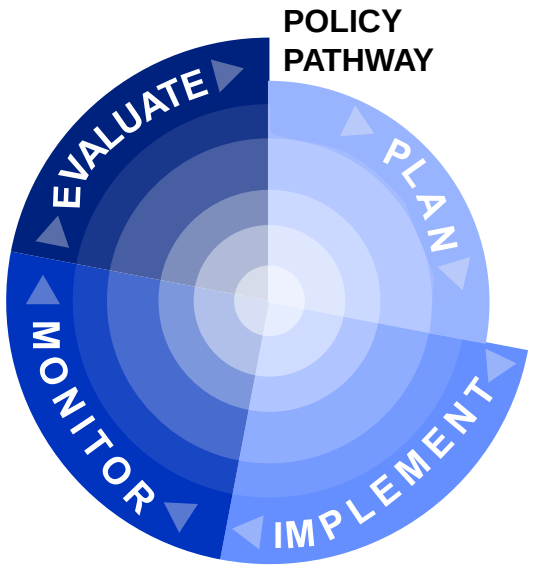






Why data strategies matter?

Energy data are essential at all stages of the policy cycle

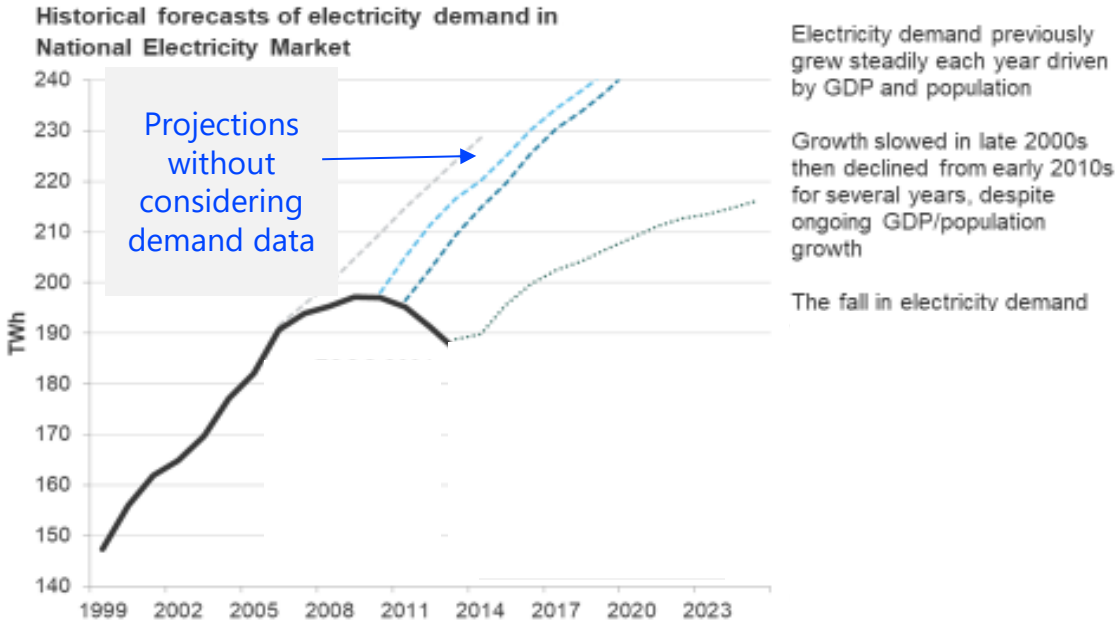


- Provide information to inform policy design
- Estimate potential impact of the policy prior to implementation
- Adapt policy during its implementation
- Assess policy performance
- Evaluate what happened and adapt the policy if necessary

**Data need to be high quality and relevant to each policy –
from high level targets (e.g. SDGs/NDCs) to individual measures**

Developing investment strategies without data can be very costly…

Example from an IEA Member



The cost of not integrating relevant data into planning may be very high – cost of data is lower!

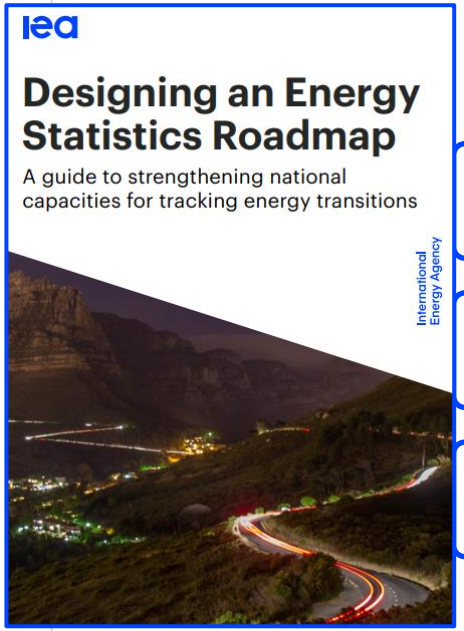
Collaborating towards designing a national energy statistics roadmap

Energy information systems: the engine to produce data

Developing sound energy balances requires work on many aspects…

Consolidating all these elements can be challenging…
the IEA has developed a framework to support a roadmap design

Designing an energy statistics roadmap: IEA framework



PLAN — Strategic aspects of the framework

SETUP — Operational aspects of the framework

TRACK — Data processes of the framework

Data users and needs	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

Long-term enablers

- Political will and awareness
- Staff capacity and stability
- Multilateral collaboration

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

Key questions for workshop discussion (later)

- What are strengths and weaknesses of your country's energy information system?
- Do you have plans for improvement on specific parts of the national energy information system? (e.g., institutional arrangements, legal framework, strategy development, data collection, …)
- What areas of the energy statistics roadmap would be interesting for international collaboration (e.g. with IEA and AFREC)?

Looking forward to a fruitful discussion….