



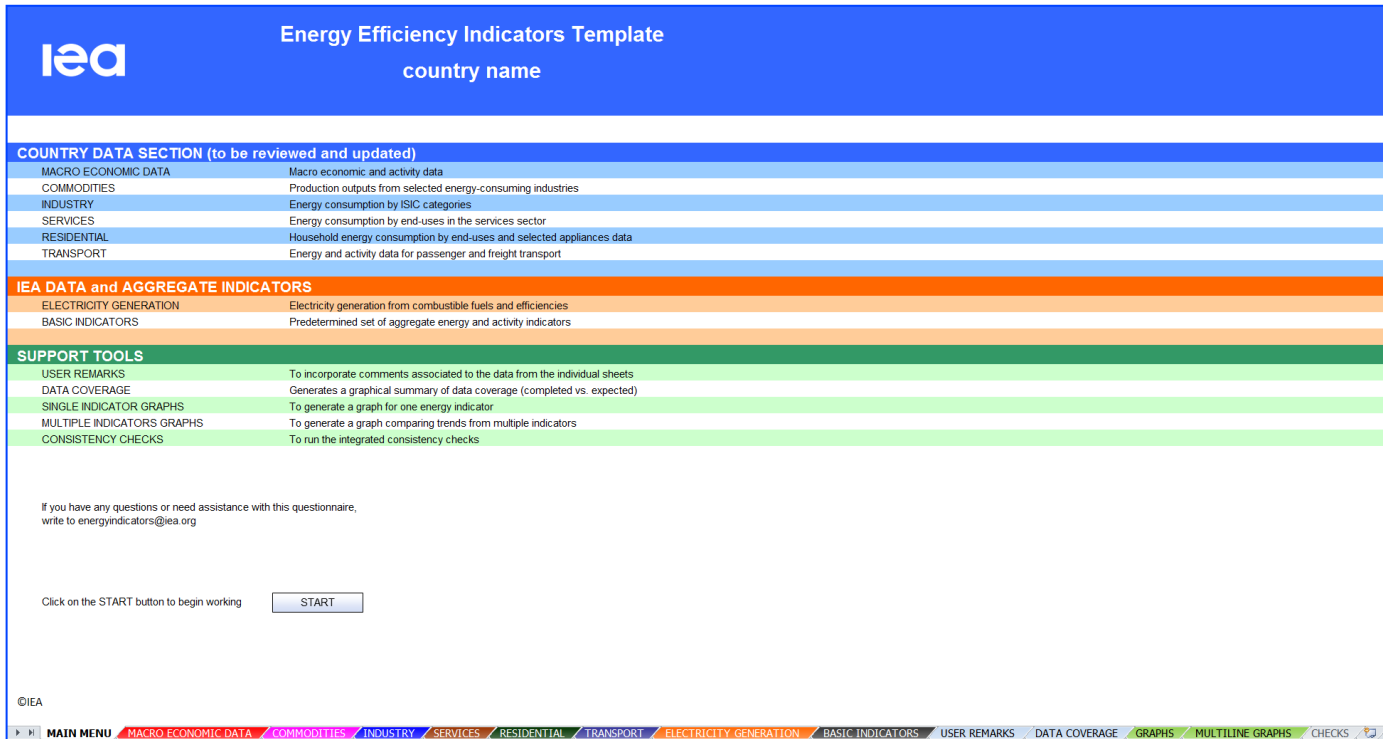
# Online tools to support country work

JunGyu PARK, Matthieu PRIN | International Energy Agency

Joint APEC-IEA Training Workshop on End-use Energy Consumption Data, June 30<sup>th</sup> 2021

# Part I: available IEA tools

# The IEA energy efficiency indicators template



The screenshot shows the IEA Energy Efficiency Indicators Template interface. At the top, there is a blue header with the IEA logo on the left and the text "Energy Efficiency Indicators Template" and "country name" on the right. Below the header, the interface is divided into several sections:

- COUNTRY DATA SECTION (to be reviewed and updated)**: A table with two columns: indicator name and description. The indicators listed are MACRO ECONOMIC DATA, COMMODITIES, INDUSTRY, SERVICES, RESIDENTIAL, and TRANSPORT.
- IEA DATA and AGGREGATE INDICATORS**: A table with two columns: indicator name and description. The indicators listed are ELECTRICITY GENERATION and BASIC INDICATORS.
- SUPPORT TOOLS**: A table with two columns: tool name and description. The tools listed are USER REMARKS, DATA COVERAGE, SINGLE INDICATOR GRAPHS, MULTIPLE INDICATORS GRAPHS, and CONSISTENCY CHECKS.

Below the tables, there is a text box that says: "If you have any questions or need assistance with this questionnaire, write to [energyindicators@iea.org](mailto:energyindicators@iea.org)".

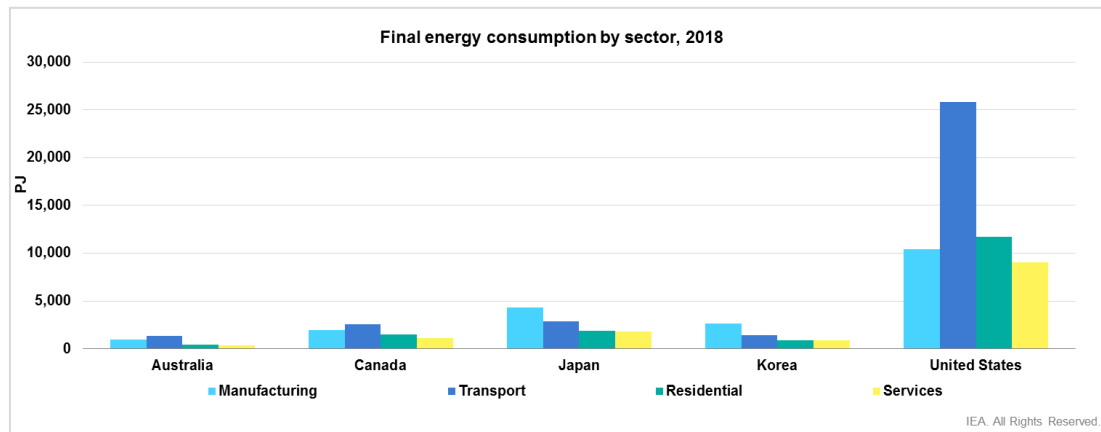
Below the text box, there is a button labeled "START" and a text box that says: "Click on the START button to begin working".

At the bottom of the interface, there is a footer with the text "©IEA" and a navigation bar with the following items: MAIN MENU, MACRO ECONOMIC DATA, COMMODITIES, INDUSTRY, SERVICES, RESIDENTIAL, TRANSPORT, ELECTRICITY GENERATION, BASIC INDICATORS, USER REMARKS, DATA COVERAGE, GRAPHS, MULTILINE GRAPHS, and CHECKS.

- Available at: <https://www.iea.org/areas-of-work/data-and-statistics/questionnaires>

# The IEA energy efficiency indicators highlights

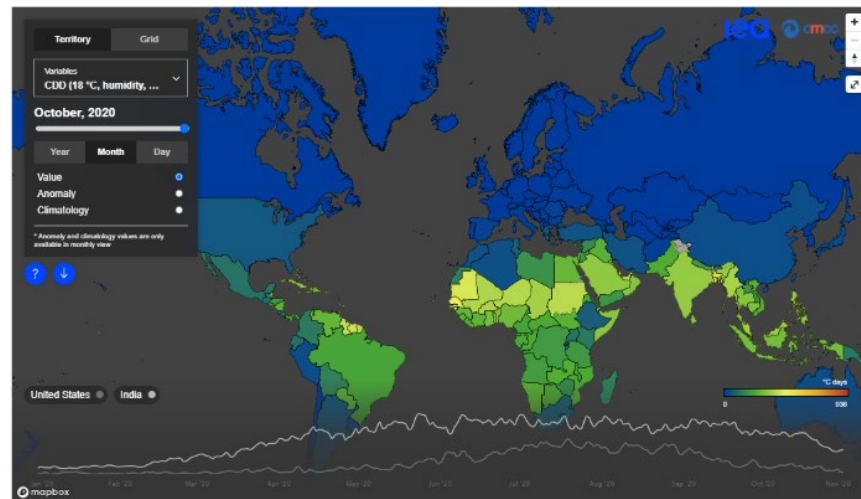
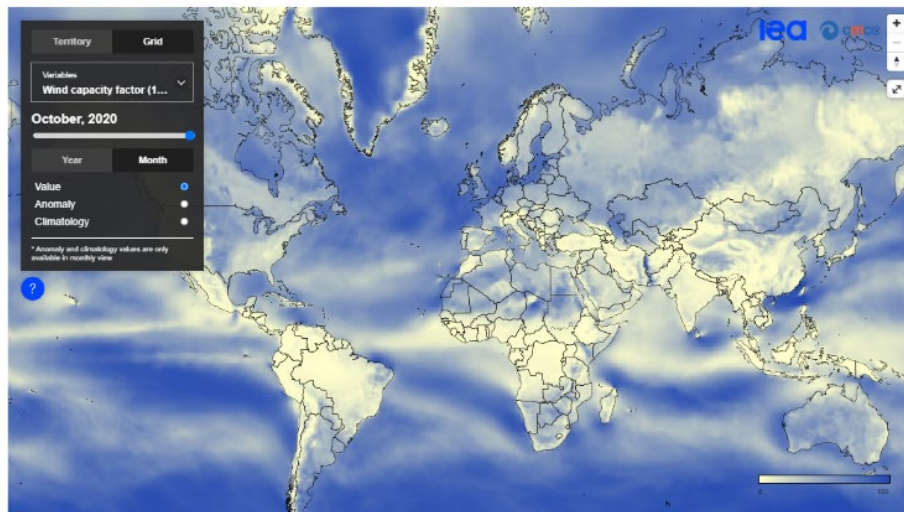
- Selection of data from the energy efficiency indicators database, displaying information in graphical and data formats.
- Available at: <https://www.iea.org/data-and-statistics/data-product/energy-efficiency-indicators-highlights>



Country	End use	Product	2000	2005	2010	2015	2016	2017	2018	2019
Australia	Total Residential	Total final energy (PJ)	378.37	396.52	428.77	438.93	443.46	440.95	440.95	443.18
Australia	Residential space heating	Total final energy (PJ)	167.28	160.99	159.63	162.72	163.29	161.61	160.06	160.25
Australia	Residential space cooling	Total final energy (PJ)	10.27	13.30	18.13	20.29	20.75	20.90	21.08	20.93
Australia	Residential lighting	Total final energy (PJ)	27.32	34.94	29.92	26.48	25.24	23.67	22.14	20.72
Australia	Residential appliances	Total final energy (PJ)	72.28	82.33	100.44	99.76	100.30	100.48	101.04	101.28

## Weather for Energy Tracker Comprehensive weather data for energy modeling & analysis

- Collaboration with research institution (*CMCC*)
- Large portfolio of variables (*HDDs, CDDs, precipitation, wind...*)
- National and gridded data available in different formats
- Free data under creative commons license



This Weather for Energy Tracker and its database (the Tracker) is the result of a collaborative effort among the International Energy Agency (IEA) and the Fondazione Euro-Mediterraneo sui Cambiamenti Climatici (CMCC). The Tracker reflects the views of the IEA Secretariat and CMCC but does not necessarily reflect those of their respective individual Member countries. The Tracker does not constitute professional advice on any specific issue or situation. CMCC and the IEA make no representation or warranty, express or implied, in respect of the database (including its completeness or accuracy) and shall not be responsible for any use of or reliance on, the Tracker. Furthermore, neither the European Commission nor ECMMG is responsible for any use that may be made of the Copernicus information or data contained in the Tracker. For further information, please contact: [emissions@iea.org](mailto:emissions@iea.org).

- Available at: <https://www.iea.org/articles/weather-for-energy-tracker>

## Energy Efficiency Indicators Statistics: Country Practices Database

A supplement to the publication [Energy Efficiency Indicators: Fundamentals on Statistics](#), this database presents practices on collection of data for developing efficiency indicators from a variety of OECD Members and non-Members.

Practices are searchable by country and territory, sector, methodology and type of available documentation. By sharing these experiences, we hope to help countries and organisations to develop their own energy efficiency indicators programmes.

### Countries, territories and economies

- Albania
- Australia
- Austria
- Belarus
- Belgium
- Bosnia and Herzegovina
- Brazil
- Bulgaria
- Canada

### Sector

- Industry
- Residential
- Services
- Transport

### Methodology

- Administrative sources
- Measuring
- Modelling
- Surveying

### Available content

- methodology
- project web site
- questionnaire
- report
- results

### Search by keywords

- Available at: <https://delegates.iea.org/delegates/eeindicatorsmanual>
  - Country practices database presents practices on collection of data for developing efficiency indicators from a variety of OECD Members and non-Members.
  - Practices are searchable by country and territory, sector, methodology and type of available documentation.
  - By sharing these experiences, we hope to help countries and organisations to develop their own energy efficiency indicators programs.
  - Please contact [energyindicators@iea.org](mailto:energyindicators@iea.org) if you are willing to provide practices to be added in the database.

- **Fundamentals on statistics:**  
to provide guidance on how to collect the data needed for indicators
  - Includes a compilation of existing practices from across the world
  - <https://www.iea.org/reports/energy-efficiency-indicators-fundamentals-on-statistics>
- **Essentials for policy makers:**
  - To provide guidance to develop and interpret indicators
  - <https://webstore.iea.org/energy-efficiency-indicators-essentials-for-policy-making>

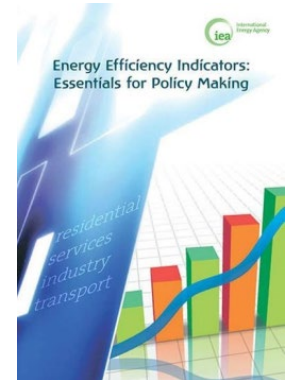
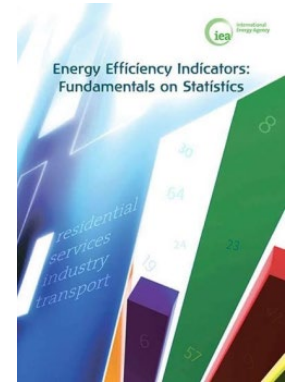
**Both available also in:**

*Spanish*

*Russian*

*Chinese*

*French (New!)*



**International guidelines are key to ensure comparability of data and indicators across countries**



# **Part 2: focus on the online efficiency indicator e-learning platform**



International Energy Agency

Energy Efficiency Indicators: Fundamentals on Statistics



International Energy Agency

Energy Efficiency in Buildings



International Energy Agency

Energy Efficiency Indicators: Essentials for Policy Making



International Energy Agency

Sustainable Energy Policies for Smart Cities

- Available in **English**, Chinese, **Bahasa**, Spanish, Portuguese
- Adapted from IEA's energy efficiency indicators manuals: 'Energy Efficiency Indicators: Fundamentals on Statistics' and 'Energy Efficiency Indicators: Essentials for Policy Making' (2014)
- Fundamentals on Statistics target audience: statistical officers, energy statisticians and analysts, and anybody engaged in data related processes (researchers, academics, consultants, environmental managers, civil society representatives)
- Essential for Policy Making target audience: high- and mid-level policy makers, experts, and statistical officers from Ministries of Economy, Energy, Industry, Infrastructure, Transport, Building and Construction



International Energy Agency

Energy Efficiency Indicators: Fundamentals on Statistics



International Energy Agency

Energy Efficiency Indicators: Essentials for Policy Making

# What do the courses cover?

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1. Why indicators? A methodological framework
2. Data & indicators for the **residential** sector
3. Data & indicators for the **services** sector
4. Data & indicators for the **industry** sector
5. Data & indicators for the **transport** sector



International Energy Agency

Energy Efficiency Indicators: Fundamentals on Statistics



International Energy Agency

Energy Efficiency Indicators: Essentials for Policy Making



International Energy Agency  
Energy Efficiency Indicators: Fundamentals on  
Statistics

## Statistics

- Identify the set of indicators that can be developed across sectors
- Clarify the role of detailed data collection for effective EE indicators and policies
- Explain the process of formulating disaggregated EE indicators
- Define available approaches for EE surveying, metering and modelling



International Energy Agency  
Energy Efficiency Indicators: Essentials for  
Policy Making

## Policy

- Explain the importance of data for effective energy efficiency policies
- Discuss the role of energy efficiency indicators at various levels for prioritising sector-specific energy efficiency policies
- Identify suitable energy efficiency policies in key sectors based on available data and indicators

- Based on the MOOC model: open and massive online course, available 24/7
- 10 hours, for 2 to 4 weeks
- Classes:
  - Videos, reading, slides
  - Discussion fora to reflect on own experience
  - One evaluation per module
- Questions to instructors through the [IEA Energy Efficiency Policy in Emerging Economies](#) LinkedIn Group
- Help desk

In order to successfully complete the course, participants need to:

- Pass all 5 Module assessment tests (with a minimum score of 70%).
- Make a minimum of 2 contributions to the discussion fora;
- Complete the course evaluation survey.
- Participants who successfully complete the course will receive an IEA certificate, which can be linked to LinkedIn profiles.

<https://elearning.iea.org>

# iea



Energy Working Group

**EGEDA**  
under EWG-APEC