



# Energy Efficiency Training Week

## Indicators and Evaluation

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Session 8: Developing monitoring and evaluation plans

Charles Michaelis and Mafalda Silva

Bangkok 3 April 2019

 IEA #energyefficientworld

- Working in groups
- Things to consider:
  - What policy will you monitor and evaluate
  - What is the purpose of the evaluation
  - Who will use the results, what will they use them for
  - What is the policy theory of change
  - What else might have an effect on the outputs, outcomes and impacts?
  - What evaluation questions will help you to understand progress and impacts?
  - What indicators are needed?
  - What are the data sources /Where will the evidence come from?
  - What challenges you expect?
  - What will you do next?
- Prepare a 10 minute presentation





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Session 10: Review and close

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[www.betterevaluation.org](http://www.betterevaluation.org)

<https://www.gov.uk/government/publications/the-magenta-book>

[www.energy-evaluation.org](http://www.energy-evaluation.org)

# **2<sup>nd</sup> Energy Evaluation Asia Pacific Conference**

**30–31 October 2019**

**Amari Watergate Hotel Bangkok, Thailand**

**Conference topics include:**

- **Evaluating energy policies and programs for the energy transition**
  - **Assessing energy efficiency technologies and practices**
  - **Monitoring Nationally Determined Contributions (NDCs)**
- **Measuring progress towards Sustainable Development Goals**
  - **Evaluating renewable energy potential and results**
  - **Evaluating non-energy impacts (multiple benefits)**

**Who should attend?**

- **Energy evaluators**
- **Policy makers**
- **Program managers**
- **Academics**
- **Energy professionals**



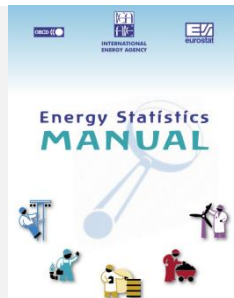
**For more information and to register your interest visit**  
**[www.energy-evaluation.org](http://www.energy-evaluation.org)**

# Resources on Energy Statistics

The IEA produced a comprehensive Energy Statistics Manual covering most of our data collection methodologies, consistently with the IRES framework.

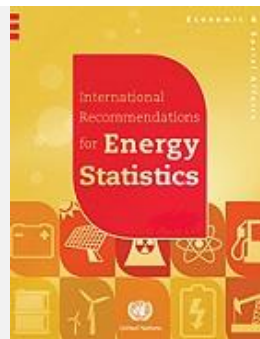
**A comprehensive Energy Statistics Manual available in 10 languages.**

*Click on the manual to download it free of charge!*

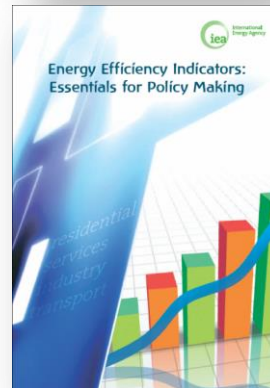
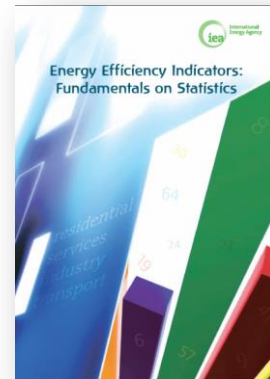


Visit the **IEA's Statistics website** to access additional resources, including our questionnaires, glossary and documentation related to our data collection methodologies.

To learn more about the international framework for energy statistics, please refer to the United Nations' International Recommendations for Energy Statistics (IRES).



- 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://goo.gl/Y8QD1G>
  
- Essentials for policy makers:
  - to provide guidance to develop and interpret energy efficiency indicators
  - <https://goo.gl/agcNg2>



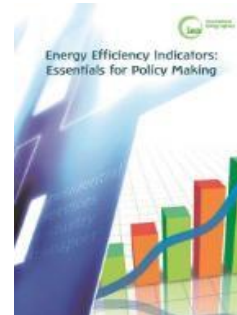


- **Energy Efficiency Indicators: Fundamentals on Statistics**

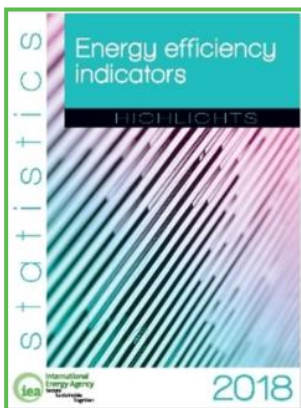
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- **Energy Efficiency Indicators: Essentials for Policy Making**

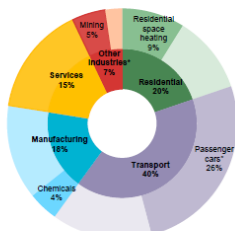


# Energy Efficiency Indicators Highlights

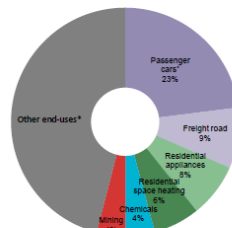


## Cross-sectoral overview

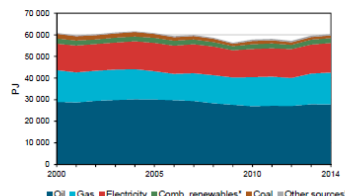
Largest end-uses by sector, 2014



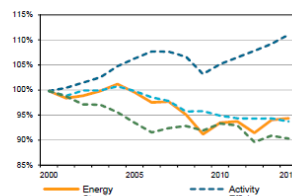
Top-6 CO<sub>2</sub> emitting end-uses, 2014\*\*



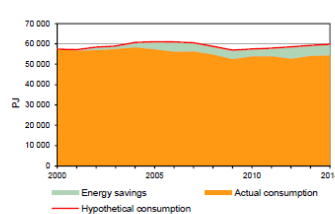
Final energy consumption by source



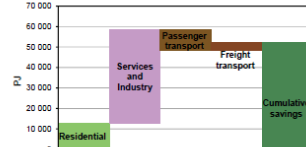
Drivers of final energy consumption\*\*\*



Estimated energy savings from efficiency\*\*\*\*



Estimated cumulative energy savings by sector, 2000-14\*\*\*\*

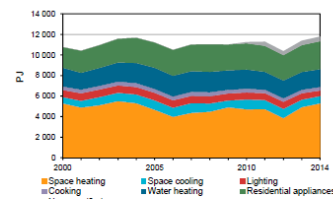


\*Other industries includes agriculture, mining and construction; passenger cars includes cars, sport utility vehicles and personal trucks; end-uses includes the remaining part of emissions beyond the top-6; comb. renewables includes combustible renewables and wastes; other sources includes heat and other energy sources.

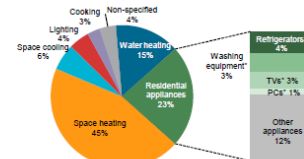
## Residential sector

	Residential consumption (PJ)	Share of fossil fuels* in space heating (%)	Population (million)	Consumption per capita (GJ/pers)	Average dwelling surface (m <sup>2</sup> )	Average dwelling occupancy (pers/dw)
2000	10 772	84	282	38	196	2.5
2014	11 792	79	319	37	181	2.8

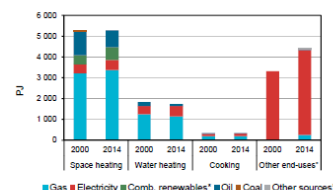
Residential energy consumption by end-use



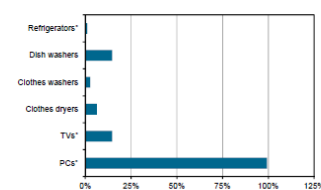
Residential energy consumption by end-use, 2014



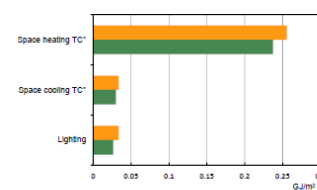
Residential energy consumption by source



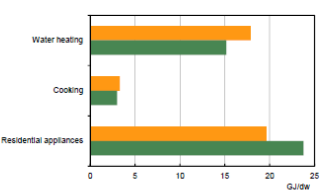
Appliances per dwelling, 2000-14 % change



Energy Intensities by end-use per floor area



Energy intensities by end-use per dwelling



<https://webstore.iea.org/energy-efficiency-indicators-2018-highlights>

- What have you learned?
- Did you get what you wanted?
- Will you use it in your work?
- Any suggestions for future courses?



ASEAN  
THAILAND 2019

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