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# SDG 7 indicators in LACs: data collection and dissemination

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# Status of data collection

# Objective: updating and expansion of the BIEE data base

- A data base is useful for policy makers only if it is **regularly updated** ➔ the first objective of this task was to provide data and indicators up to **2018**.

- As the scope of the project is not only to monitor energy efficiency, but also the three dimensions of SDG7/OSD7, the previous BIEE indicators have been extended to include energy access and renewables ➔ the list of indicators developed is available in Annex

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# Data collection strategy

- As countries had different previous experiences with the BIEE project and to alleviate the work for national teams, the updating has been organized as follows.

- For countries that participated in the previous phases of the BIEE project and have continued to update the BIEE database: Argentina, Brazil, Mexico, Uruguay, (Republic Dominican, Guyana*) → all data directly collected from national sources by national teams.

- For all the other countries:
  – Aggregate data collected from OLADE and CEPALSTAT by Enerdata;
  – Separate data collection for more disaggregated data necessary for the calculation of advanced energy efficiency indicators.

  *For Republic Dominican and Guyana, the update is still in progress
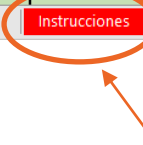
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# Collection process of more detailed data

- For detailed data that are only available from national sources → we asked national teams to collect such data in a new simplified template.

- Such data include data on equipment and consumption by end-use for households, by mode and vehicle type in transport, or by branch in industry.

- The new template has been pre-filled by Enerdata with previous data and should be updated until 2018 (or the last year available)

- We also asked national teams to provide studies or surveys concerning transport and/or households sectors, so that Enerdata can try to estimate energy consumption split by end-use for households and by type of vehicle in transport if enough information is available

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# New template on detailed data

Data to be collected organized by sector: transport, households, services, industry

In green: data to be collected in priority
In red: data to be collected if available

| Series code | English title | Título en español | Country code | Unit | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | Source |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Transport** | | | | | | | | | | | | | | | |
| | Consumption by mode | Consumo por modo | | | | | | | | | | | | | | |
| | Rail | | | | | | | | | | | | | | | |
| toccffer | Total rail transport consumption | Total de consumo ferroviario | | ktoe | 39 | 40 | 40 | 49 | | | | | | | | |
| | Water | | | | | | | | | | | | | | | |
| toccfmar | Total domestic water transport consumption | Total de consumo de transporte acuativo domestico | | ktoe | 656 | 669 | 672 | 836 | | | | | | | | BEN, 2012 |
| | Domestic air | | | | | | | | | | | | | | | |
| carcfado | Jet fuels consumption in domestic air transport (incl aviation g | Consumo total de combustible en transporte aereo doméstico | | ktoe | 710 | 737 | 852 | 920 | | | | | | | | BEN, 2012 |
| | Road consumption by type of vehicle | | | | | | | | | | | | | | | |
| | Cars | | | | | | | | | | | | | | | |
| esscfvpc | Gasoline consumption of cars | Consumo de gasolina en autos | | ktoe | | | | | | | | | | | | |
| gzlcfvpc | Diesel consumption of cars | Consumo de diésel en autos | | | | | | | | | | | | | | |
| | Light duty vehicles | | | | | | | | | | | | | | | |
| esscfvlr | Gasoline consumption of light vehicles | Consumo de gasolina en vehiculos industriales ligeros | | | | | | | | | | | | | | |
| gzlcfvlr | Diesel consumption of light vehicles | Consumo de diésel en vehículos industriales ligeros | | | | | | | | | | | | | | |
| | Trucks | | | | | | | | | | | | | | | |
| gzlcfcam | Diesel consumption of trucks | Consumo de diésel en camiones | | | | | | | | | | | | | | |
| | Buses | | | | | | | | | | | | | | | |
| esscfbus | Gasoline consumption of buses | Consumo de gasolina de buses | | | | | | | | | | | | | | |
| gzlcfvpc | Diesel consumption of buses | Consumo de diésel en buses | | ktoe | | | | | | | | | | | | |
| | Motorcycles | | | | | | | | | | | | | | | |
| esscfmot | Gasoline consumption of two-wheels | Consumo de gasolina en motos | | ktoe | | | | | | | | | | | | |
| | Vehicle stock by type | Stock de vehículos por tipo | | | | | | | | | | | | | | |
| nbrvpc | Stock of cars | Stock de autos | | k | 2121 | 2249 | 2365 | 2562 | | | | | | | | |
| nbrvpcess | Stock of motor spirit cars | Stock de autos a gasolina | | k | 1788 | 1896 | 1995 | 2160 | | | | | | | | Cálculos propios |
| nbrvpcgzl | Stock of diesel oil cars | Stock de autos a diesel | | k | 226 | 240 | 250 | 272 | | | | | | | | Cálculos propios |
| nbrmot | Stock of motorcycles | Stock de motocicletas | | k | 2587 | 2909 | 3201 | 3600 | | | | | | | | RUNT, 2012 |
| nbrvlr | Stock of light vehicles | Stock de vehículos ligeros | | k | 433 | 456 | 475 | 504 | | | | | | | | RUNT, 2012 |
| nbrvlress | Stock of motor spirit light vehicles | Stock de vehículos ligeros a gasolina | | k | 251 | 264 | 275 | 292 | | | | | | | | Cálculos propios |
| nbrvlrgzl | Stock of diesel oil light vehicles | Stock de vehículos ligeros a diesel | | k | 158 | 166 | 173 | 183 | | | | | | | | Cálculos propios |
| nbrcam | Stock of trucks | Stock de camiones | | k | 246 | 256 | 261 | 273 | | | | | | | | RUNT, 2012 |
| nbrcamess | Stock of motor spirit trucks | Stock de camiones a gasolina | | k | 60 | 62 | 64 | 66 | | | | | | | | Cálculos propios |
| nbrcamgzl | Stock of diesel oil trucks | Stock de camiones a diesel | | k | 171 | 177 | 181 | 189 | | | | | | | | Cálculos propios |
| nbrbus | Stock of buses | Stock de buses | | k | 167 | 173 | 178 | 183 | | | | | | | | RUNT, 2012 |

Instrucciones | Data | Classification

Guidelines are given in the first sheet

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# Status of data collection – as of mid June 2021

| Country | All data updated by National team | Macro data updated by Enerdata | Detailed data updated by national team |
|---|---|---|---|
| Argentina | X | | |
| Bolivia | | X | No focal point |
| Brasil | X | | |
| Chile | | X | Work in progress |
| Colombia | | X | Waiting for answer |
| Costa Rica | | X | X |
| Ecuador | | X | Work in progress |
| El Salvador | | X | Work in progress |
| Guyana | Work in progress | | |
| Mexico | X | | |
| Nicaragua | | X | No focal point |
| Panama | | X | X |
| Paraguay | | X | |
| Peru | | X | No focal point |
| Rep. Dominicana | Work in progress | | |
| Uruguay | X | | |

*For Caribbean countries, updated not initiated*

# Data mapper

https://biee-cepal.enerdata.net/datamapper/

SDG7 indicators: data collection & dissemination

# BIEE data mapper: main features

- The BIEE data mapper gives access to a selection of indicators showing both the range of values by country on a map and a ranking of countries (bar charts).

- Both levels and trends are available.

- Open access

- Key messages and a short analysis is available for each indicator in English and Spanish

- Possibility to access to some additional indicators to explain the trends observed ("Analysis")

# BIEE data mapper: main features

Language selection



Level or trend

Export of data or map

Short analysis

Additional indicators and analysis

# BIEE data mapper: enhancements

- The data mapper has been completely re-designed → more powerful technology, more user-friendly and more attractive

- The documentation of sources and glossary has been added in the website

# BIEE data mapper: enhancements

- New indicators on renewables (SDG 7.1) and energy access (SDG 7.2) have been added in the data mapper
- Users have 2 different entries to consult the data mapper :
  - By **sector**: overall, power, industry, transport, households, services, agriculture
  - By **SDG 7 topic**: energy efficiency, renewables, energy access

| Sector | Topic |
|---|---|
| Global indicators ⌄ | |
| Power sector ⌄ | |
| Industry ⌄ | |
| Transport ⌄ | |
| Households ⌄ | |
| Services ⌄ | |
| Agriculture ⌄ | |

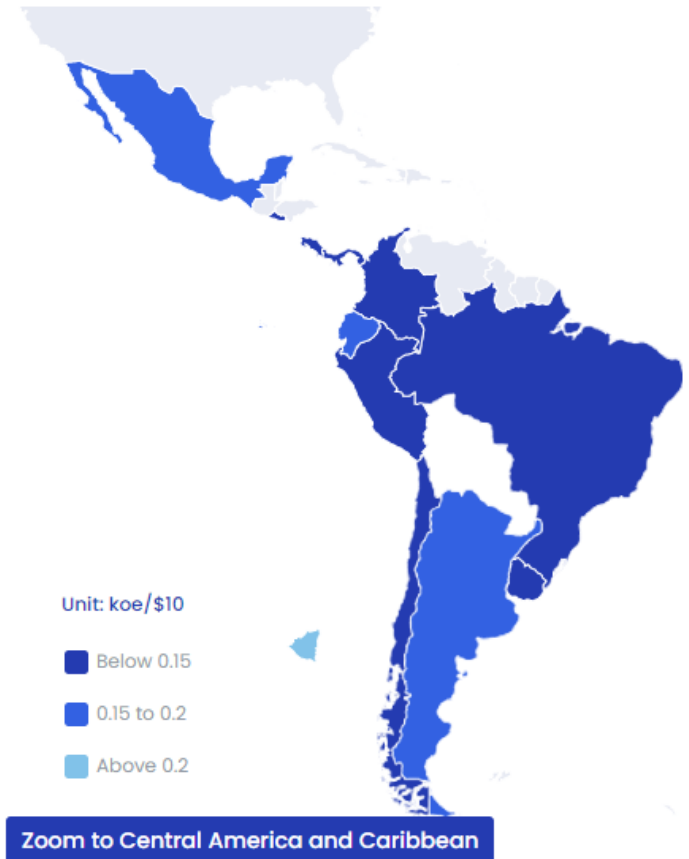| Sector | Topic |
|---|---|
| | Energy efficiency overview ⌄ |
| | Energy efficiency by sector ⌄ |
| | Renewables ⌄ |
| | Energy access ⌄ |

# BIEE data mapper: enhancements

- Data mappers of Latin America and Caribbean have been merged in one data mapper

→ Possibility to zoom on Central America and Caribbean countries in the map



**Primary energy intensity at exchange rate**

2018  2010–2018  Map  Excel

Unit: koe/$10

- Below 0.15
- 0.15 to 0.2
- Above 0.2

Zoom to Central America and Caribbean

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Online demonstration

https://biee-cepal.enerdata.net/datamapper

Annex: SDG 7 indicators by topic

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# Indicators calculated for energy access (7.1)

% of households with access to clean cooking technologies

% of clean fuels in households consumption

% of households with access to electricity

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# Indicators calculated for renewables (7.2)

### Four types of indicators were proposed

Share of renewables in TPES (in oferta total)

Share of renewables in power*

Share of renewables in final energy consumption**

Share of renewables by end-use sector*

\* See Annex for more details
**\*\*Indicator implicitly proposed for monitoring OSD 7.2; indicator also used in Europe to set targets on renewables.**

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# Indicators calculated to monitor the energy efficiency dimension (7.3)

Primary energy intensity at purchasing power parities

Final energy intensity at purchasing power parities

Efficiency of power generation

Efficiency of thermal power plants

Rate of electricity T&D losses

Energy intensity of industry at purchasing power parities

Energy intensity of transport to GDP at purchasing power parities

Unit consumption of road transport per vehicle

Energy consumption of households per household

Electricity consumption per electrified households

Energy intensity of services at purchasing power parities

Electricity intensity of services at purchasing power parities

Electricity consumption for public lighting per capita

Energy intensity of agriculture at purchasing power parities