

# ENERGY HUB FOR LATIN AMERICA AND THE CARIBBEAN

## **Energy Balance**

Metadata for database

September 2023

#### 1 CONTACT

#### 1.1 CONTACT ORGANIZATION

Energy HUB for Latin America and the Caribbean.

#### 1.2 CONTACT ORGANIZATION UNIT

Energy Knowledge team INE/ENE. IDB Headquarters 1300 New York Avenue, N.W. Washington, D.C. 20577, USA.

#### 1.3 CONTACT EMAIL ADDRESS

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### 2 METADATA UPDATE

#### 2.1 METADATA LAST UPDATE

September 11, 2023.

#### 3 ENERGY BALANCE

#### 3.1 INDICATOR

Energy balance in Latin America and the Caribbean.

#### 3.2 Long definition

An energy balance quantifies the energy flow across every stage of the energy chain and describes the balance between supply and demand by which energy is produced, traded abroad, transformed, and consumed. The field of analysis typically focuses on a specific country or region over a defined period, commonly a year.

#### 3.3 SOURCE

Elaboration of the Energy Hub, with data from Olade SieLAC: https://sielac.olade.org/

Topic on OLADE: Supply and demand.

OLADE Database: Energy Balance Matrix.

#### **3.4** Unit of measure

Thousands of Barrels of Equivalent ( $10^3 BOE$ )

#### 3.5 PERIODICITY

Annual. Data from 1970 to 2021.

#### **3.6** GEOGRAPHIC COVERAGE

National and regional coverage.

Countries: Argentina, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad & Tobago, Uruguay, Venezuela.

Regions: Andean Zone, Caribbean, Central America, Latin America and Caribbean, South America, Southern Cone, Southern Cone without Brazil.

#### 3.7 STATISTICAL CONCEPT AND METHODOLOGY

#### 3.7.1 **Primary Energy Sources**

Primary energy is understood to be energy sources in their natural state, that is, they have not undergone any type of physical or chemical transformation through human intervention. They can be obtained from nature, either directly as is the case with hydraulic, solar, firewood, and other plant fuels; or after an extraction process such as oil, coal, geothermal, etc. Primary energy sources are subdivided into two groups:

- Non-renewable energy sources such as those from fossil resources that are exhaustible over time or nuclear energy.
- Renewable energy sources such as hydropower, geothermal energy, wind energy, solar energy, and biomass, among others.

#### 3.7.2 Secondary Energy Sources

Secondary energy sources are obtained by processing primary sources or other secondary sources. The sources and forms of secondary energy considered for energy balance are classified according to the primary source from which they were obtained such as:

- Electricity
- Petroleum Products and Natural Gas
- Coal Products
- Biomass Products
- Other Secondary Energy sources
- Non-Energy Petroleum Products

#### 3.7.3 Supply-Side Activities

These are activities or events used to calculate the amount of energy available within a country, either for direct final consumption or for transformation into other energy sources. This group includes the following activities:

- Primary production
- Reinjection or recirculation
- Imports
- Exports
- Inventory variations
- Unused energy
- Transfers
- Bunker

#### 3.7.4. Transformation activities

Transformation activities are processes in which both primary and secondary energy sources are modified in facilities called transformation centers, which make physical or chemical changes to those sources and whose outputs have properties that enable their use as energy sources.

#### 3.7.5. Final energy consumption

This is all energy delivered to consumption sectors as usable energy in the form of electricity or heat. Sources used as input or raw material to produce other energy products are excluded from this concept since they are considered as "transformation activities."

The end-use sectors are classified according to the traditional division of economic sectors and the International Standard Industrial Classification (ISIC) in its third revision. Additionally, the residential sector is considered, which does not correspond to an economic activity.

For more information visit: <a href="https://www.olade.org/en/publicaciones/energy-statistics-manual-2017/">https://www.olade.org/en/publicaciones/energy-statistics-manual-2017/</a>

#### 3.8. GENERAL COMMENTS

Some additional definitions:

- T.S. (Total Supply) = Production + Imports Exports  $\pm$  Stock chance Unused
- Other primaries include biogas, solar, wind, plant waste.

#### 3.9. DOWNLOAD SOURCE URL

https://sielac.olade.org/

#### 3.10. VISUALIZATION AND DATASET URL