



ENERGY HUB FOR LATIN AMERICA AND THE CARIBBEAN

Primary generation with renewable energies

Metadata for database

June 2023

1 CONTACT

1.1 CONTACT ORGANIZATION

Energy HUB for Latin America and the Caribbean.

1.2 CONTACT ORGANIZATION UNIT

Inter-American Development Bank (INE/ENE). 1300 New York Avenue, N.W. Washington, D.C. 20577, USA.

1.3 CONTACT EMAIL ADDRESS

HUB-Energia@iadb.org

2 METADATA UPDATE

2.1 METADATA LAST UPDATE

June 26, 2023.

3 TOTAL SUPPLY (10³ BOE)

3.1 INDICATOR

Total supply (10³ BOE).

3.2 LONG DEFINITION

The total supply refers to the total amount of energy available for internal use in (10³ BOE).

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: Total supply.

3.4 UNIT OF MEASURE

10³ BOE (Barrel of oil equivalent).

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

The total supply is the quantity of each source available for internal use, whether it is input for transformation, for consumption within the energy sector, or for final consumption. Part of this item also covers the losses that occur in the different stages of the energy chain.

Sugarcane and products: They include sugar cane products that have energy purposes. Among them are bagasse, cane juice, and molasses. These last two constitute the main raw material for obtaining ethanol.

Firewood: Energy obtained directly from forest resources. It includes tree trunks and branches but excludes waste from logging activity, which is included in the definition of “plant waste” used



for energy purposes. The energy harnessed from firewood is known as wood fuel.

Geothermal: It is the energy stored under the surface of the Earth in the form of heat, which can be transmitted to the surface by a fluid that is in contact the hot rock. The mentioned fluid is made up of liquid water, vapor, or a mixture of both. This energy is used for the generation of electricity – the first category of renewable energy – and in some cases the residual heat from electricity generation is used for industrial processes (cogeneration).

Hydro energy: Energy contained in a water flow. When water is allowed to flow through a turbine that is connected to an electrical generator, the energy in the water is converted into electricity. The water can be taken from a reservoir generally associated with large generation plants or from the flow of rivers.

Other primary sources: Any primary energy source that cannot be placed within the primary source categories is considered here.

Total Primary (total supply): Sum of the total supply of renewable and non-renewable primary energy sources:

***Total Primary (total supply):** TS oil + TS natural gas+ TS mineral coal + TS hydro energy + TS geothermal+ TS nuclear+ TS firewood+ TS sugar cane and derivatives+ TS other primaries.*

Where:

- TS = Total Supply

For more information visit: <https://www.olade.org/publicaciones/manual-estadistica-energetica-2017/>

3.8 LIMITATIONS AND EXCEPTIONS

Total electricity supply data varies in availability across years, countries, and regions.



3.9 GENERAL COMMENTS

The total electricity supply data is used for the visualization *Primary generation with renewable energies* at the Energy Hub Website.

3.10 DOWNLOAD SOURCE URL

<https://sielac.olade.org/>

3.11 VISUALIZATION AND DATASET URL

<https://hubenergia.org/en/indicators/primary-generation-renewable-energies>

4 PROPORTION OF TOTAL PRIMARY ENERGY SUPPLY

4.1 INDICATOR

Proportion of total primary energy supply.

4.2 LONG DEFINITION

The proportion of the total primary energy supply refers to the relationship between the supply of each renewable source and the overall supply of primary energy.

4.3 SOURCE

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

Topic on OLADE: Supply and demand.

OLADE Database: Total supply.

4.4 UNIT OF MEASURE

Percentage (%).



4.5 PERIODICITY

Annual. Data from 1970 to 2021.

4.6 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.

4.7 STATISTICAL CONCEPT AND METHODOLOGY

The proportion of the total primary energy supply is calculated as follows:

$$PTPES_f = \frac{TES_f}{TES_{tp}} \times 100$$

Where:

- $PTPES_f$ = Proportion of the total primary energy supply for the source f.
- TES_f = Total energy supply from source f (primary renewable.)
- TES_{tp} = Total energy supply (Total primary)

For more information, visit: <https://www.olade.org/publicaciones/manual-estadistica-energetica-2017/>

4.8 LIMITATIONS AND EXCEPTIONS

The proportion of total primary energy supply data varies in availability across years, countries, and regions.



4.9 GENERAL COMMENTS

The total electricity supply data is used for the visualization *Primary generation with renewable energies* at the Energy Hub Website.

4.10 DOWNLOAD SOURCE URL

<https://sielac.olade.org/>

4.11 VISUALIZATION AND DATASET URL

<https://hubenergia.org/en/indicators/primary-generation-renewable-energies>

5 PROPORTION OF TOTAL PRIMARY RENEWABLE ENERGY

5.1 INDICATOR

Proportion of total primary renewable energy.

5.2 LONG DEFINITION

The proportion of total primary renewable energy refers to the relationship between the supply of each of the renewable sources by the total supply of primary renewable energy.

5.3 SOURCE

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

Topic on OLADE: Supply and demand.

OLADE Database: Total supply.

5.4 UNIT OF MEASURE

Percentage (%).



5.5 PERIODICITY

Annual. Data from 1970 to 2021.

5.6 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.

5.7 STATISTICAL CONCEPT AND METHODOLOGY

The proportion of the total primary energy supply is calculated as follows:

$$PTPRES_f = \frac{TES_f}{TES_{trp}} \times 100$$

Where:

- $PTPRES_f$ = Proportion of total primary renewable energy for source f.
- TES_f = Total energy supply from source f (primary renewable).
- TES_{trp} = Total energy supply (Total renewable primary).

For more information, visit: <https://www.olade.org/publicaciones/manual-estadistica-energetica-2017/>

5.8 LIMITATIONS AND EXCEPTIONS

The proportion of total primary renewable energy data varies in availability across years, countries, and regions.



5.9 GENERAL COMMENTS

The total electricity supply data is used for the visualization *Primary generation with renewable energies* at the Energy Hub Website.

5.10 DOWNLOAD SOURCE URL

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