Peru

15%

10%

5%

0%

-5%

-10%

-15%

COUNTRY INDICATORS AND SDGS









Total Energy Supply (TES)



7.b.1 Per capita renewable capacity





TOTAL ENERGY SUPPLY (TES)

2021

Total energy supply in 2021







Non-renewable (TJ)	750 607	716 723
Renewable (TJ)	231 623	238 078
Total (TJ)	982 230	954 801
Renewable share (%)	24	25
Growth in TES	2016-21	2020-21
Non-renewable (%)	-4.5	+10.0
Renewable (%)	+2.8	+0.8
Total (%)	-2.8	+7.6

2016

Primary energy trade	2016	2021
Imports (TJ)	464 318	377 783
Exports (TJ)	441 159	344 630
Net trade (TJ)	- 23 159	- 33 153
Imports (% of supply)	47	40
Exports (% of production)	45	38
Energy self-sufficiency (%)	100	95

International Renewable Energy Agency

RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable energy consumption in 2021





ELECTRICITY CAPACITY

Net capacity change in 2023 (MW)

Non-renewable		Hydro and marine	
	0		0
Solar		Wind	
	0	+	166
Bloenergy		Geothermal	
	0		0

Net capacity change (GW)

Capacity utilisation in 2022 (%)

ELECTRICITY GENERATION

1 90% temporary decrease in transport fuel taxes	2022
2 Enhancement of NGV conversion programme	2022
3 Exceptional provision of capital to Petroperú	2022
4 Peru National Action Plan on Business and Human Rights	2022
5 Law 31.283 by which the exploration, exploitation and industrialisation of lithium and its derivates are determined as public	2021

5 Law 31.283 by which the exploration, exploitation and industrialisation of lithium and its derivates are determined as public necessity, national interest, and strategic resources for the country

RENEWABLE RESOURCE POTENTIAL

Annual generation per unit of installed PV capacity (MWh/kWp)

Biomass potential: net primary production

 World
 Peru

 80%
 90%

 60%
 90%

 40%
 90%

 20%
 20%

 <260</td>
 260-420

 40%
 40%

 20%
 20%

Indicators of renewable resource potential

Solar PV: Solar resource potential has been divided into seven classes, each representing a range of annual PV output per unit of capacity (kWh/kWp/yr). The bar chart shows the proportion of a country's land area in each of these classes and the global distribution of land area across the classes (for comparison).

Onshore wind: Potential wind power density (W/m²) is shown in the seven classes used by NREL, measured at a height of 100m. The bar chart shows the distribution of the country's land area in each of these classes compared to the global distribution of wind resources. Areas in the third class or above are considered to be a good wind resource.

Blomass: Net primary production (NPP) is the amount of carbon fixed by plants and accumulated as biomass each year. It is a basic measure of biomass productivity. The chart shows the average NPP in the country (tC/ha/yr), compared to the global average NPP of 3-4 tonnes of carbon

Sources: IRENA statistics, plus data from the following sources: UN SDG Database (original sources: WHO; World Bank; IEA; IRENA; and UNSD); UN World Population Prospects: UNSD Energy Balances: UN COMTRADE; World Bank World Development Indicators; EDGAR; REN21 Global Status Report; IEA-IRENA Joint Policies and Measures Database; IRENA Global Atlas; and World Bank Global Solar Atlas and Global Wind Atlas.

Additional notes: Capacity per capita and public investments SDGs only apply to developing areas. Energy self-sufficiency has been defined as total primary energy production divided by total primary energy supply. Energy trade includes all commodities in Chapter 27 of the Harmonised System (HS). Capacity utilisation is calculated as annual generation divided by year-end capacity x 8,760h/year. Avoided emissions from renewable power is calculated as renewable generation divided by fossil fuel generation multiplied by reported emissions from the power sector. This assumes that, if renewable power did not exist, fossil fuels would be used in its place to generate the same amount of power and using the same mix of fossil fuel. In countries and years where no fossil fuel generation occurs, an average fossil fuel emission factor has been used to calculate the avoided emissions.

These profiles have been produced to provide an overview of developments in renewable energy in different countries and areas. The IRENA statistics team would welcome comments and feedback on its structure and content, which can be sent to statistics@irena.org.

Last updated on: 31 July, 2024

IRENA Headquarters Masdar City P.O. Box 236, Abu Dhabi United Arab Emirates www.irena.org