ENERGY PROFILE

Dominican Republic

COUNTRY INDICATORS AND SDGS

2.1

2021

2020





International Renewable Energy Agency









TOTAL ENERGY SUPPLY (TES)

Total energy supply in 2021



Renewable energy supply in 2021



Total Energy Supply (TES)20162021Non-renewable (TJ)323 174385 386Renewable (TJ)29 97049 303Total (TJ)353 144434 689Renewable share (%)811

Growth in TES	2016-21	2020-21
Non-renewable (%)	+19.3	+28.5
Renewable (%)	+64.5	+4.3
Total (%)	+23.1	+25.2

Primary energy trade	2016	2021
Imports (TJ)	345 120	401 196
Exports (TJ)	56	120
Net trade (TJ)	- 345 064	- 401 076
Imports (% of supply)	98	92
Exports (% of production)	0	0
Energy self-sufficiency (%)	9	11

RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable energy consumption in 2021





ELECTRICITY CAPACITY



Net capacity change in 2023 (MW)



Renewable capacity in 2023



Net capacity change (GW)







ELECTRICITY GENERATION



1 Decree 430-18 by which the Province of "Pedernales" is declared as "Avila" Mining Fiscal Reserve, for the exploration and evaluation of possible "rare earth" deposits developed directly by the State or through contracts	2018
2 Law No. 1-12 that establishes the National Development Strategy 2030	2012
3 Dominican Republic Net-Metering Regulation 2011	2011
4 Law 57-07 on Incentives for Development of Renewable Energy Sources and its Special Regimes	2007

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RENEWABLE RESOURCE POTENTIAL



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

Biomass potential: net primary production





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 (H5). 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 fuels. 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.

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