ENERGY PROFILE

International Renewable Energy Agency

Philippines

COUNTRY INDICATORS AND SDGS



















TOTAL ENERGY SUPPLY (TES)

Total Energy Supply (TES)	2014	2019
Non-renewable (TJ)	1 207 121	1 714 604
Renewable (TJ)	778 968	802 764
Total (TJ)	1 986 089	2 517 368
Renewable share (%)	39	32
Growth in TES	2014-19	2018-19
Non-renewable (%)	+42.0	+0.8





Renewable (%)	+3.1	+0.6
Total (%)	+26.8	+0.7

Primary energy trade	2014	2019
Imports (TJ)	1 115 003	1 571 636
Exports (TJ)	190 645	286 293
Net trade (TJ)	- 924 358	-1 285 343
Imports (% of supply)	56	62
Exports (% of production)	17	23
Energy self-sufficiency (%)	55	50

Renewable energy supply in 2019



RENEWABLE ENERGY CONSUMPTION (TFEC)



Renewable TFEC trend



ELECTRICITY CAPACITY



Installed capacity trend

Renewable capacity in 2021









Capacity utilisation in 2020 (%)





LATEST POLICIES, PROGRAMMES AND LEGISLATION

1 Act 11245: The Energy Efficiency and Conservation Act	2019
2 Republic Act 10963-Senate Bill 1592-Excise tax	2018
3 DC2016: Philippine Standards and Labelling Program	2016
4 DOE DC2016-04-0005 PPR 01: air conditioners labelling	2016
5 Accelerating Household Electrification through Regulated Solar Home Systems	2014



ENERGY AND EMISSIONS

Elec. & heat generation CO₂ emissions in

■ Coal + others

Gas

🔳 Oil



Avoided emissions from renewable elec. & heat

CO₂ emission factor for elec. & heat generation

RENEWABLE RESOURCE POTENTIAL



Distribution of wind potential



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.

Biomass: 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 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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