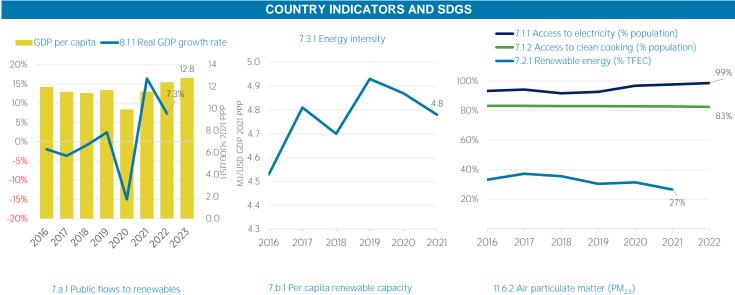
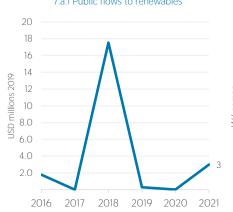
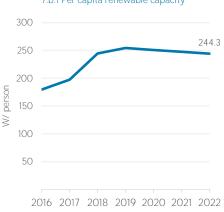
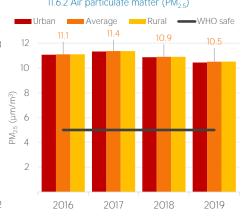
Belize











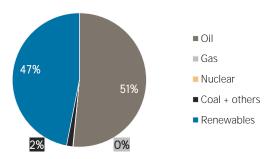
TOTAL ENERGY SUPPLY (TES)

Total Energy Supply (TES)	2016	2021
Non-renewable (TJ)	9 168	9 064
Renewable (TJ)	6 171	8 010
Total (TJ)	15 339	17 074
Renewable share (%)	40	47

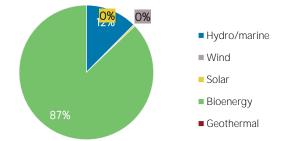
Growth in TES	2016-21	2020-21
Non-renewable (%)	-1.1	+2.2
Renewable (%)	+29.8	+32.2
Total (%)	+11.3	+14.3

Primary energy trade	2016	2021
Imports (TJ)	9 922	10 704
Exports (TJ)	2 075	432
Net trade (TJ)	- 7 847	- 10 272
Imports (% of supply)	65	63
Exports (% of production)	25	5
Energy self-sufficiency (%)	54	47

Total energy supply in 2021



Renewable energy supply in 2021



RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend ■ Electricity ■ Commercial heat ■ Bioenergy 8 7 Petajonles (PJ) 6 5 4 3 2 2016 2017 2018 2019 2020 2021 Consumption by sector 2016 2021 Industry (TJ) 1807 748 Transport (TJ) 0 0

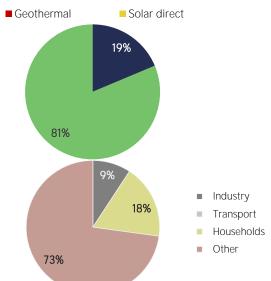
1270

3 713

Households (TJ)

Other (TJ)

Renewable energy consumption in 2021 ■ Solar direct

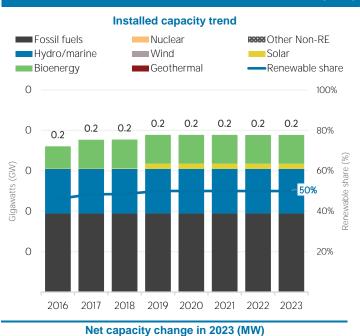


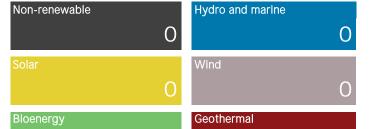
ELECTRICITY CAPACITY

1 453

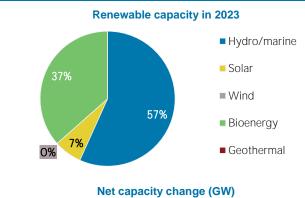
5 901

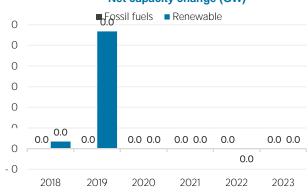
0

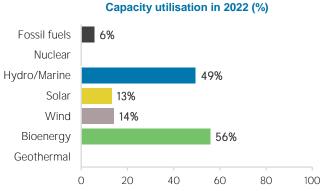




0





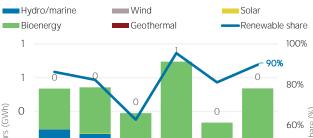


ELECTRICITY GENERATION

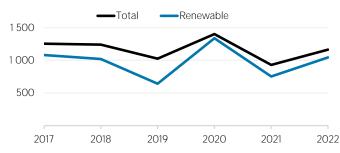
Fossil fuels

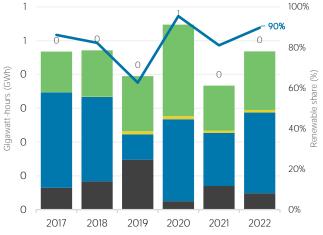
Generation in 2022	GWh	%
Non-renewable	48	10
Renewable	420	90
Hydro and marine	239	51
Solar	8	2
Wind	0	0
Bioenergy	174	37
Geothermal	0	0
Total	468	100





Per capita electricity generation (kWh)



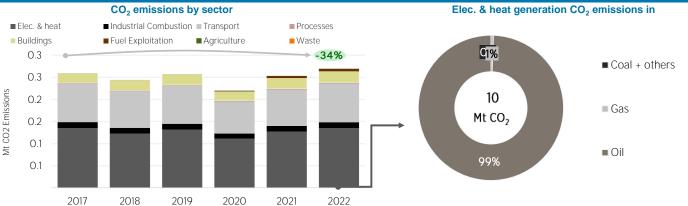


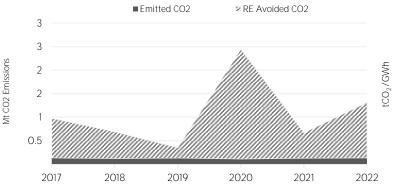
LATEST POLICIES, PROGRAMMES AND LEGISLATION



5

ENERGY AND EMISSIONS





Avoided emissions based on tossil tuel mix used for power

Avoided emissions from renewable elec. & heat

BLZ •••• Central America and the Caribbean 500 400 288 300 200 100 2017 2018 2019 2020 2021 2022

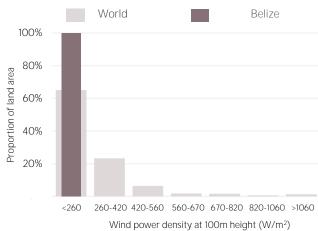
CO₂ emission factor for elec. & heat generation

Calculated by dividing power sector emissions by elec. + heat gen.

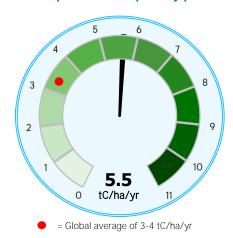
RENEWABLE RESOURCE POTENTIAL

Distribution of solar potential Belize World 100% 80% Proportion of land area 60% 40% 20% <12 12 - 14 1.4 - 1.6 1.6 - 1.8 18 - 19 19 - 20 >20 Annual generation per unit of installed PV capacity (MWh/kWp)

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; REN2I 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.

Last updated on: 31 July, 2024



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