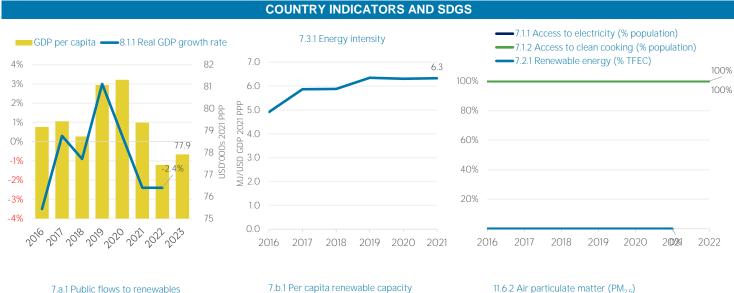
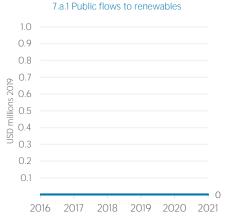
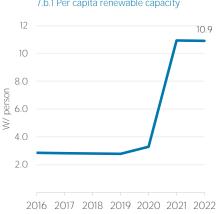
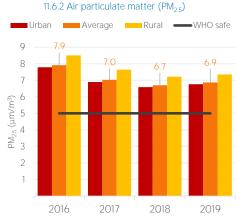
Brunei Darussalam











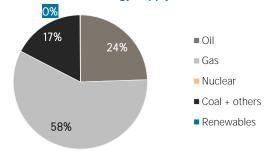
TOTAL ENERGY SUPPLY (TES)

| Total Energy Supply (TES) | 2016 | 2021 |
|---------------------------|---------|---------|
| Non-renewable (TJ) | 123 724 | 167 749 |
| Renewable (TJ) | 114 | 119 |
| Total (TJ) | 123 838 | 167 868 |
| Renewable share (%) | 0 | 0 |

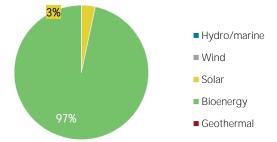
| Growth in TES | 2016-21 | 2020-21 |
|-------------------|---------|---------|
| Non-renewable (%) | +35.6 | +2.8 |
| Renewable (%) | +4.7 | -1.7 |
| Total (%) | +35.6 | +2.8 |

| Primary energy trade | 2016 | 2021 |
|-----------------------------|---------|---------|
| Imports (TJ) | 16 434 | 343 423 |
| Exports (TJ) | 523 154 | 731 331 |
| Net trade (TJ) | 506 720 | 387 908 |
| | | |
| Imports (% of supply) | 13 | 205 |
| Exports (% of production) | 83 | 130 |
| Energy self-sufficiency (%) | 511 | 336 |

Total energy supply in 2021



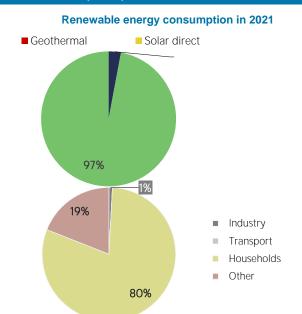
Renewable energy supply in 2021



RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend ■ Electricity ■ Commercial heat ■ Bioenergy Petajoules (PJ) Consumption by sector Industry (TJ) Transport (TJ) Households (TJ)

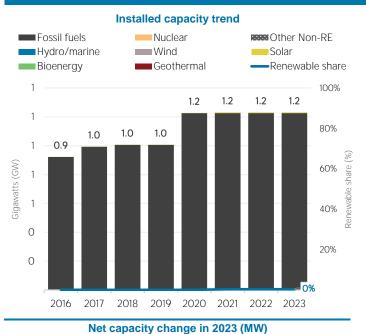
Other (TJ)

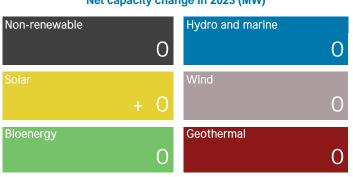


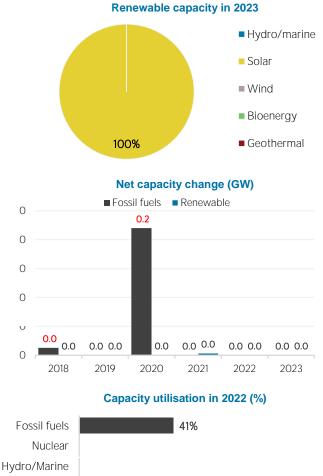
ELECTRICITY CAPACITY

Solar

Wind Bioenergy Geothermal 3%







ELECTRICITY GENERATION

| Generation in 2022 | GWh | % |
|--------------------|-------|-----|
| Non-renewable | 4 389 | 100 |
| Renewable | 1 | 0 |
| Hydro and marine | 0 | 0 |
| Solar | 1 | 0 |
| Wind | 0 | 0 |
| Bioenergy | 0 | 0 |
| Geothermal | 0 | 0 |
| Total | 4 390 | 100 |

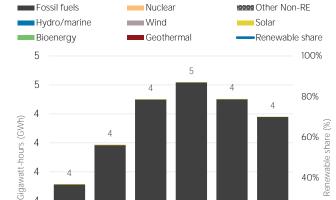


20%

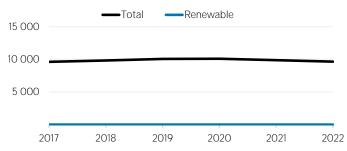
0%

2022

■ Oil







LATEST POLICIES, PROGRAMMES AND LEGISLATION

4

4

2017

2018

2019

2020

2021

1 Energy White Paper and Renewable Energy Target 2014 2 Labelling program for air conditioners 2014

ENERGY AND EMISSIONS

3 MEPS for non inverter type and single phase air conditioners 2014

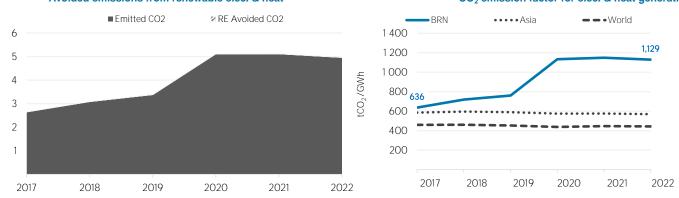
5

2

Mt CO2 Emissions

CO₂ emissions by sector Elec. & heat generation CO₂ emissions in ■ Elec. & heat ■ Industrial Combustion ■ Transport ■ Processes Buildings ■ Fuel Exploitation ■ Agriculture ■Waste 12 +26% ■ Coal + others 10 40% Mt CO2 Emissions 5 8 ■ Gas Mt CO₂ 6 60% 4

2017 2018 2019 2020 2021 2022 Avoided emissions from renewable elec. & heat CO₂ emission factor for elec. & heat generation

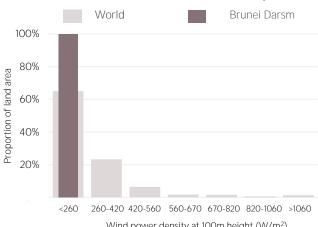


Avoided emissions based on tossil tuel mix used tor power Calculated by dividing power sector emissions by elec. + heat gen.

RENEWABLE RESOURCE POTENTIAL

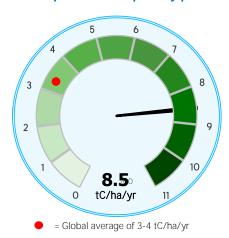
Distribution of solar potential Brunei Darsm World 100% 80% Proportion of land area 60% 40% 20% <12 12 - 14 1.4 - 1.6 1.6 - 1.8 18 - 19 19 - 20 >20 Annual generation per unit of installed PV capacity (MWh/kWp)

Distribution of wind potential



Wind power density at 100m height (W/m²)

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

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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