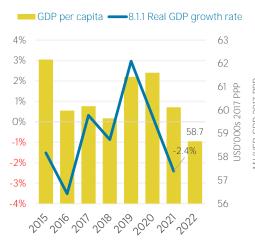
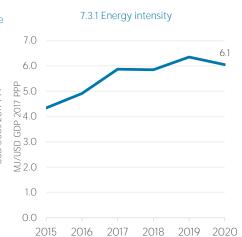
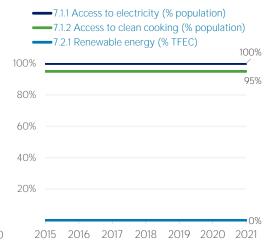
Brunei Darussalam



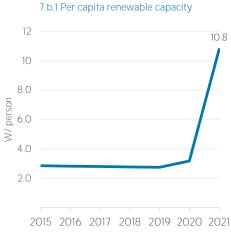
COUNTRY INDICATORS AND SDGS

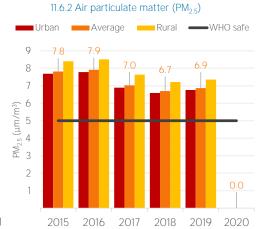






7.a.1 Public flows to renewables 1.0 0.9 0.8 0.7 USD millions 2019 0.6 0.5 0.4 0.3 0.2 0.1 0 2015 2016 2017 2018 2019 2020





TOTAL ENERGY SUPPLY (TES)

Total Energy Supply (TES)	2015	2020
Non-renewable (TJ)	113 677	163 166
Renewable (TJ)	118	121
Total (TJ)	113 795	163 287
Renewable share (%)	0	0

Growth in TES	2015-20	2019-20
Non-renewable (%)	+43.5	-3.3
Renewable (%)	+2.7	+2.6
Total (%)	+43.5	-3.3

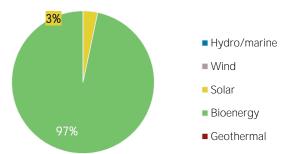
Primary energy trade	2015	2020
Imports (TJ)	13 902	347 334
Exports (TJ)	565 508	775 639
Net trade (TJ)	551 606	428 305
Imports (% of supply)	12	213
Exports (% of production)	84	129
Energy self-sufficiency (%)	591	369

Total energy supply in 2020 0% 14% © Oil Gas Nuclear Coal + others

■ Renewables

Renewable energy supply in 2020

60%

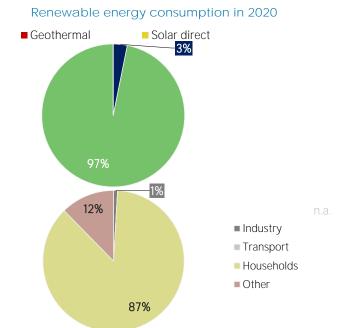


RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend ■ Electricity ■ Commercial heat ■ Bioenergy 0 0 0 0 0 Petajoules (PJ) 0 0 0 0 2015 2016 2017 2018 2019 2020 Consumption by sector 2020 2015 Industry (TJ) 0 1 Transport (TJ) 0 0 Households (TJ) 115 110

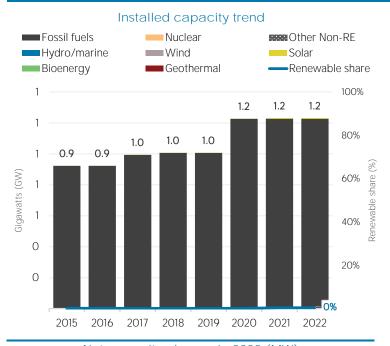
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Other (TJ)



ELECTRICITY CAPACITY

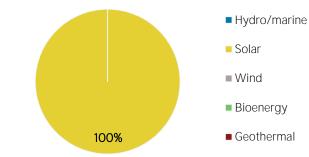
16



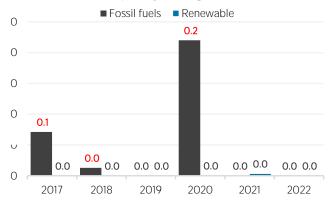
Net capacity change in 2022 (MW)



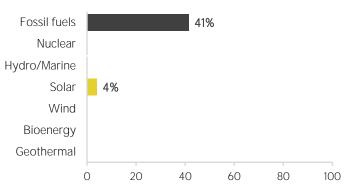
Renewable capacity in 2022



Net capacity change (GW)



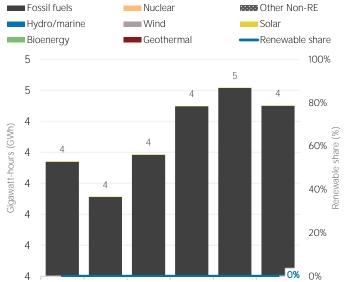
Capacity utilisation in 2021 (%)



ELECTRICITY GENERATION

Generation in 2021	GWh	%
Non-renewable	4 450	100
Renewable	1	0
Hydro and marine	0	0
Solar	1	0
Wind	0	0
Bioenergy	0	0
Geothermal	0	0
Total	4 452	100





2017

2016

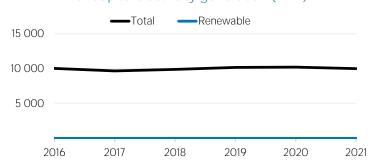
2018

2019

2020

2021

Per capita electricity generation (kWh)

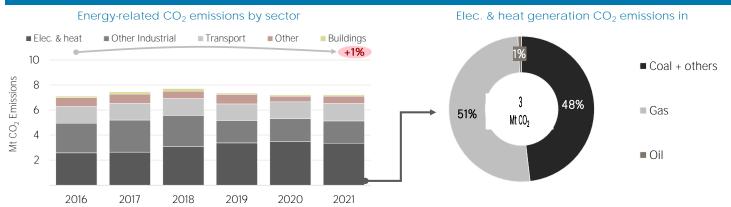


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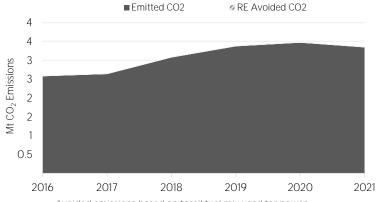
LATEST POLICIES, PROGRAMMES AND LEGISLATION

1 Energy White Paper and Renewable Energy Target	2014
2 Labelling program for air conditioners	2014
3 MEPS for non inverter type and single phase air conditioners	2014
4	

ENERGY AND EMISSIONS

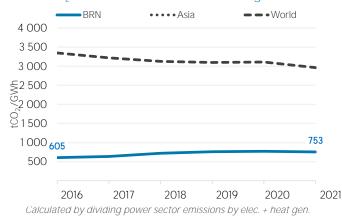


Avoided emissions from renewable elec. & heat

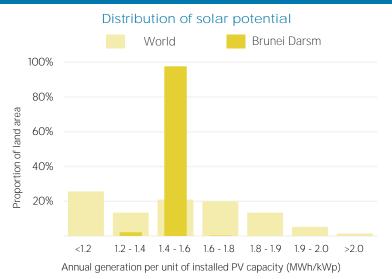


Avoided emissions based on tossil fuel mix used for power

CO₂ emission factor for elec. & heat generation



RENEWABLE RESOURCE POTENTIAL



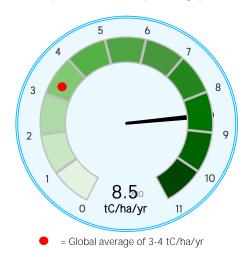
World Brunei Darsm 100% 80% 60% 40% 20%

260-420 420-560 560-670 670-820 820-1060 >1060

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

Distribution of wind potential

Biomass potential: net primary production



Indicators of renewable resource potential

< 260

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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