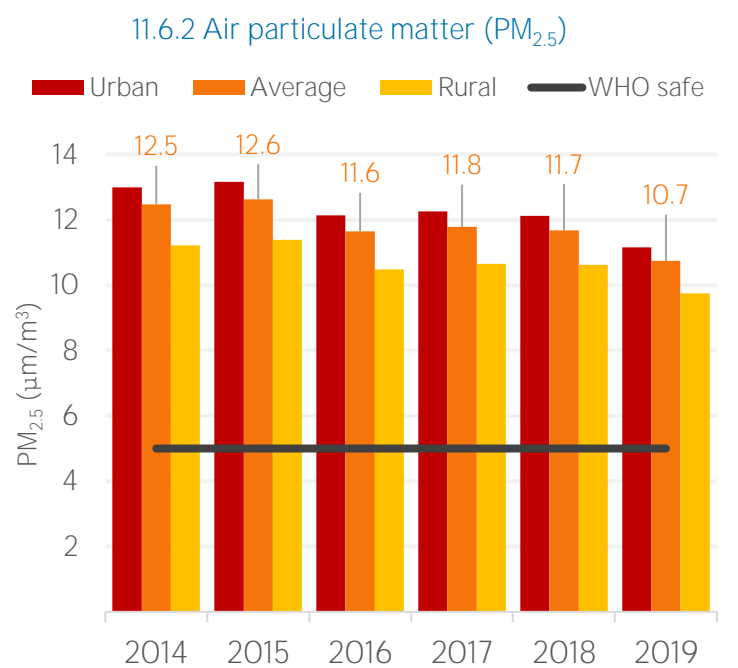
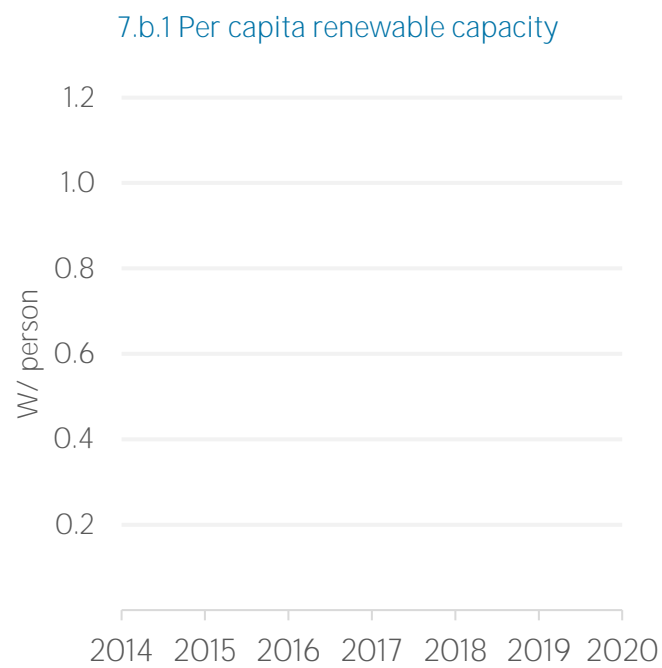
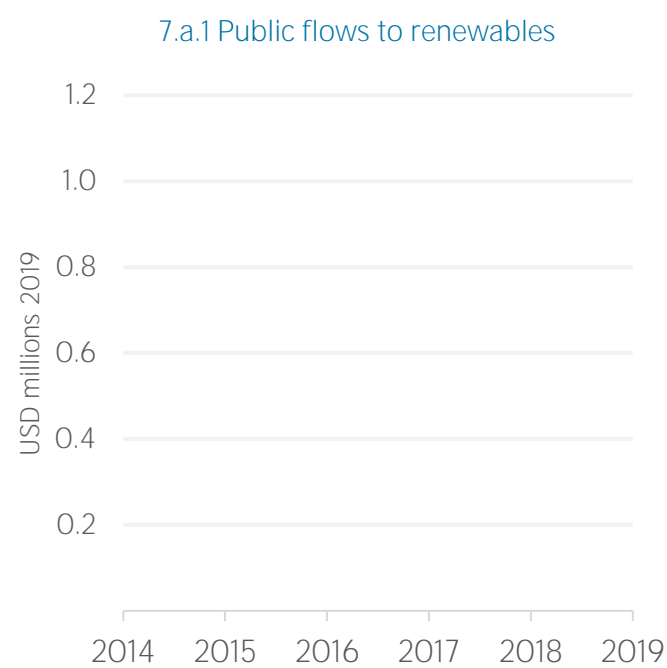
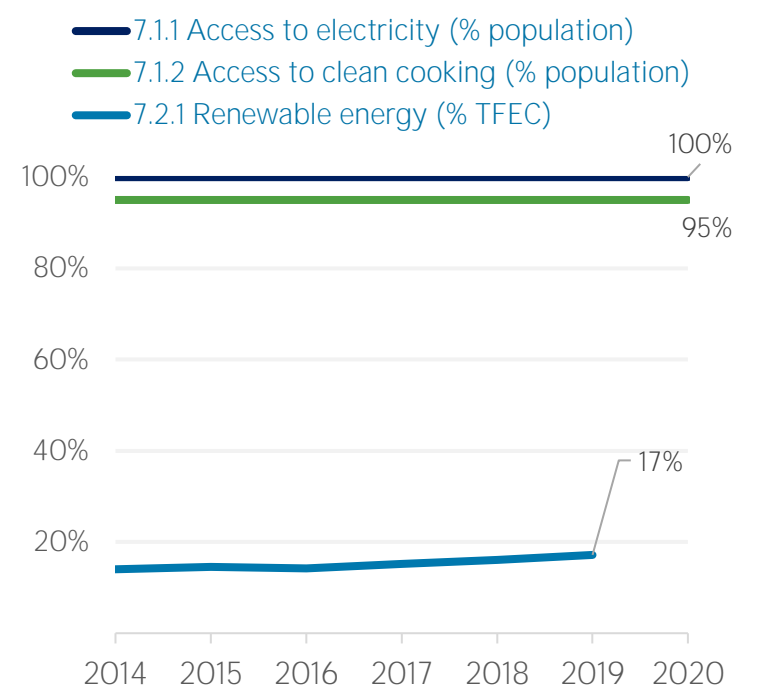
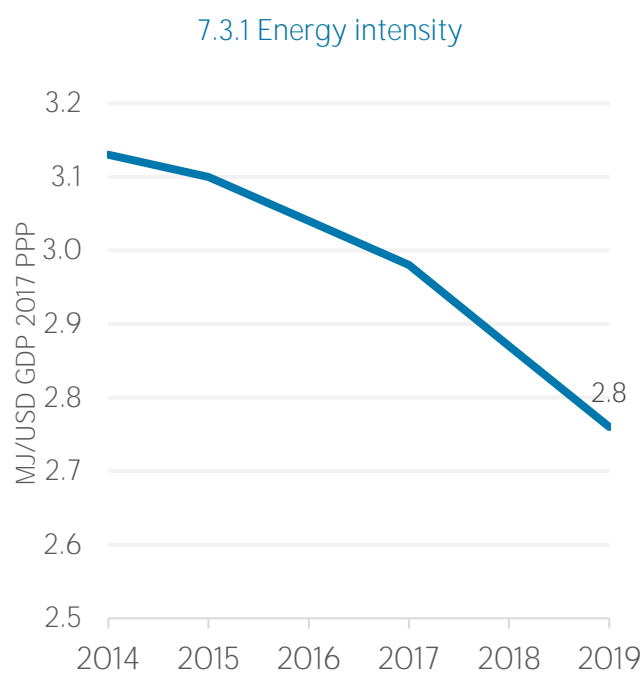
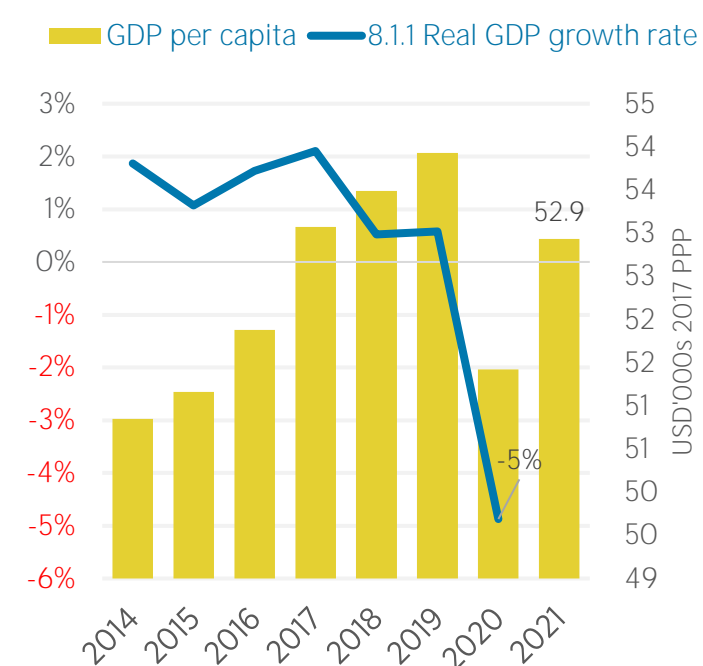


COUNTRY INDICATORS AND SDGS



TOTAL ENERGY SUPPLY (TES)

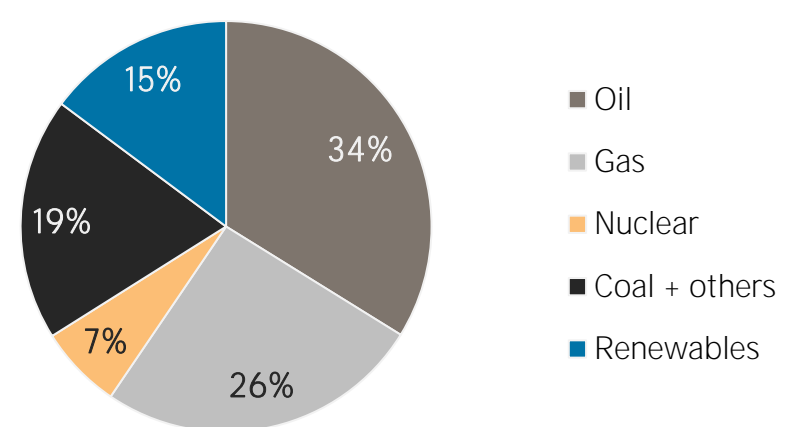
Total Energy Supply (TES)	2014	2019
Non-renewable (TJ)	11 356 604	10 511 036
Renewable (TJ)	1 584 148	1 826 593
Total (TJ)	12 940 752	12 337 629
Renewable share (%)	12	15

Growth in TES	2014-19	2018-19
Non-renewable (%)	-7.4	-4.0
Renewable (%)	+15.3	+2.9
Total (%)	-4.7	-3.1

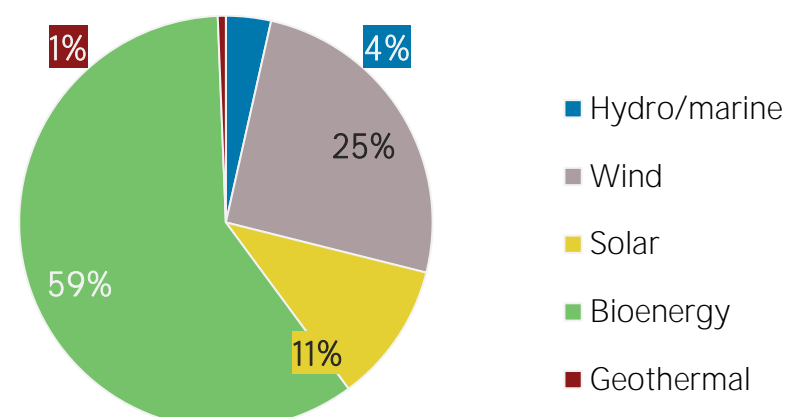
Primary energy trade	2014	2019
Imports (TJ)	10 348 416	10 063 365
Exports (TJ)	2 096 773	1 363 706
Net trade (TJ)	-8 251 643	-8 699 659

Imports (% of supply)	80	82
Exports (% of production)	41	31
Energy self-sufficiency (%)	40	36

Total energy supply in 2019

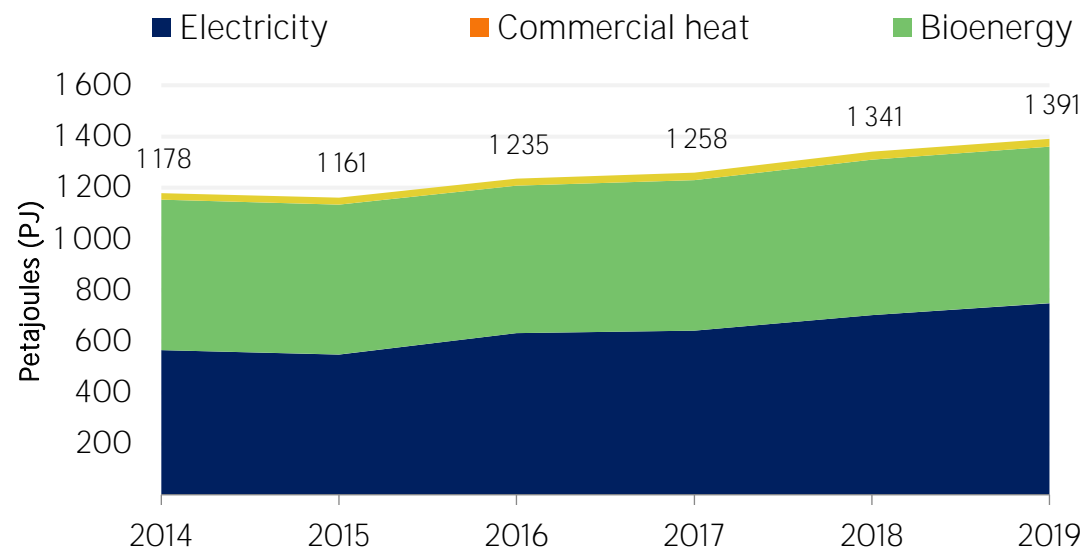


Renewable energy supply in 2019



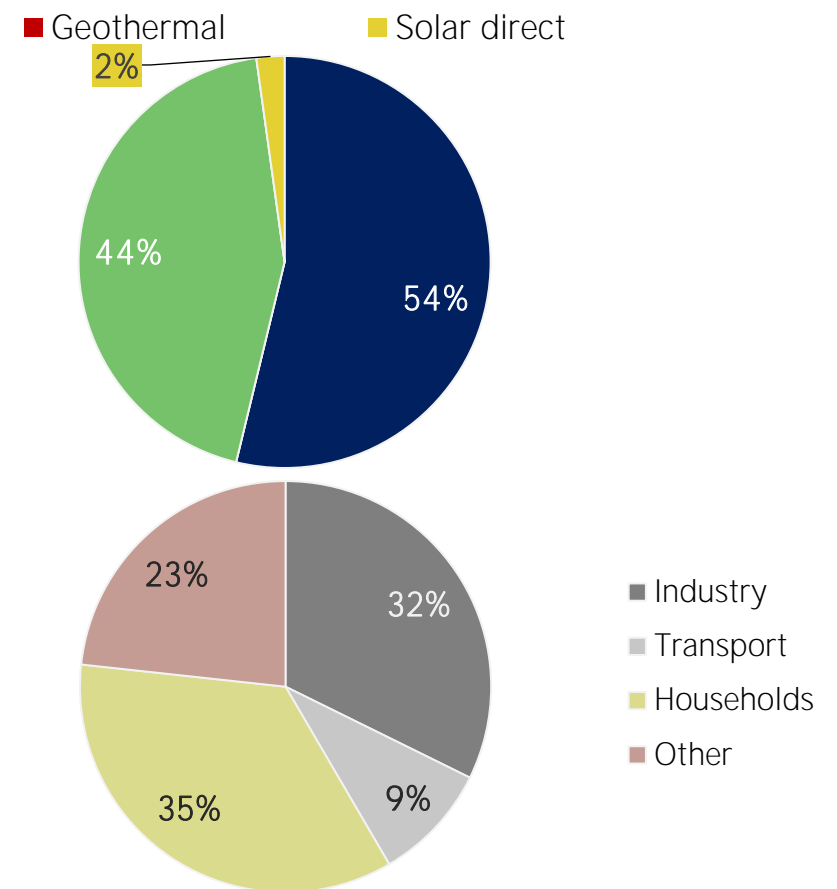
RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend



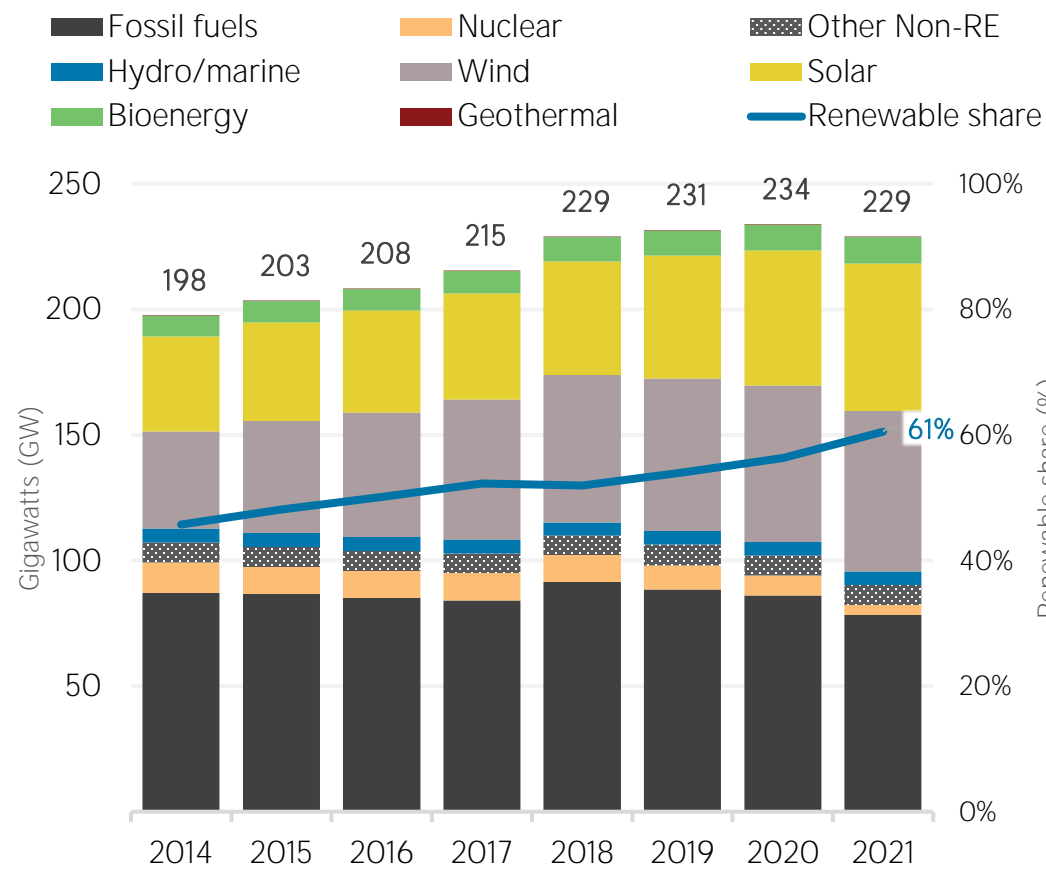
Consumption by sector	2014	2019
Industry (TJ)	370 623	449 074
Transport (TJ)	126 629	129 199
Households (TJ)	430 576	488 625
Other (TJ)	250 477	323 688

Renewable energy consumption in 2019

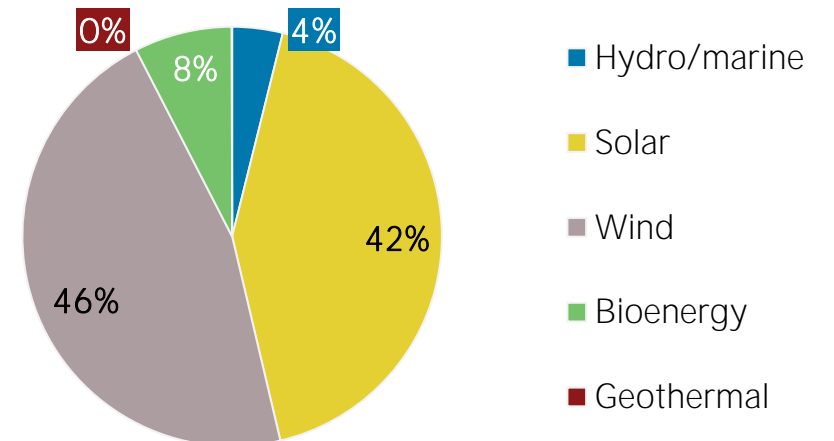


ELECTRICITY CAPACITY

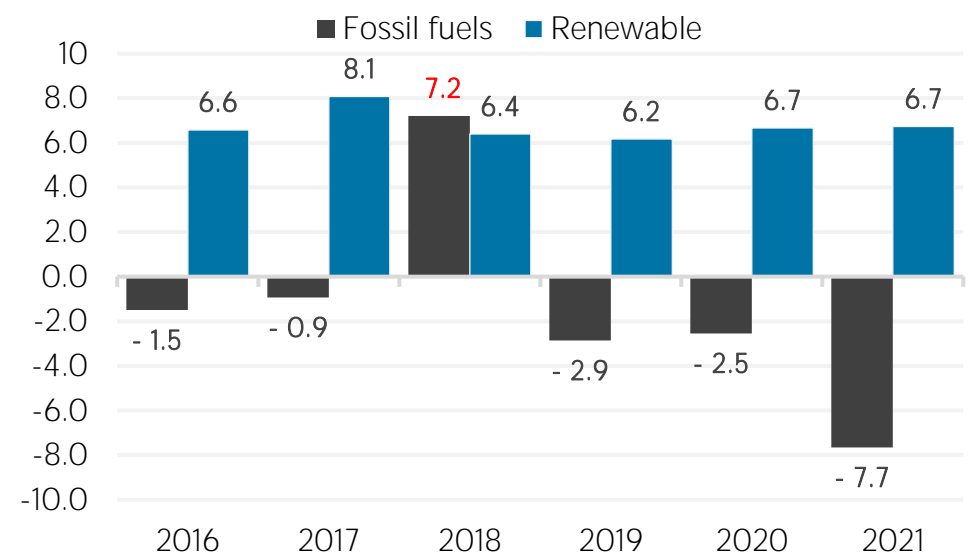
Installed capacity trend



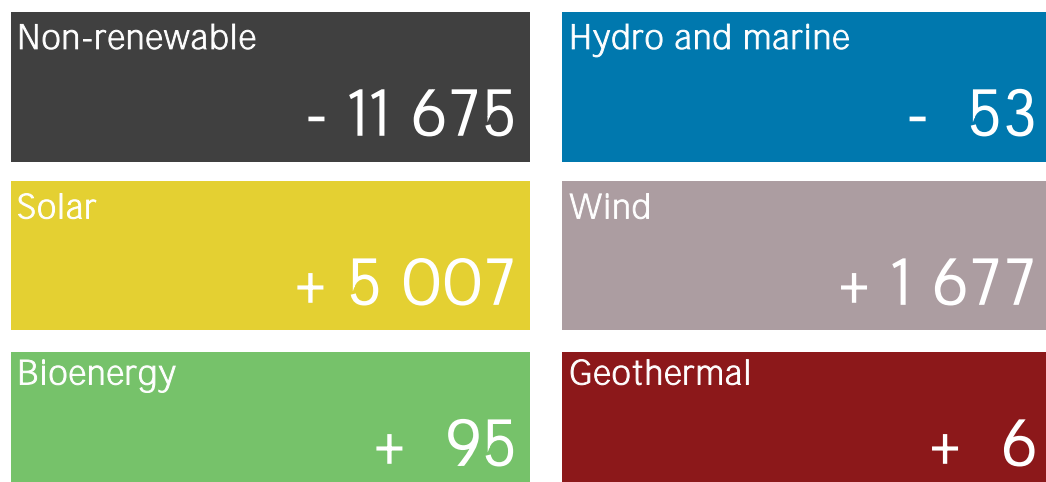
Renewable capacity in 2021



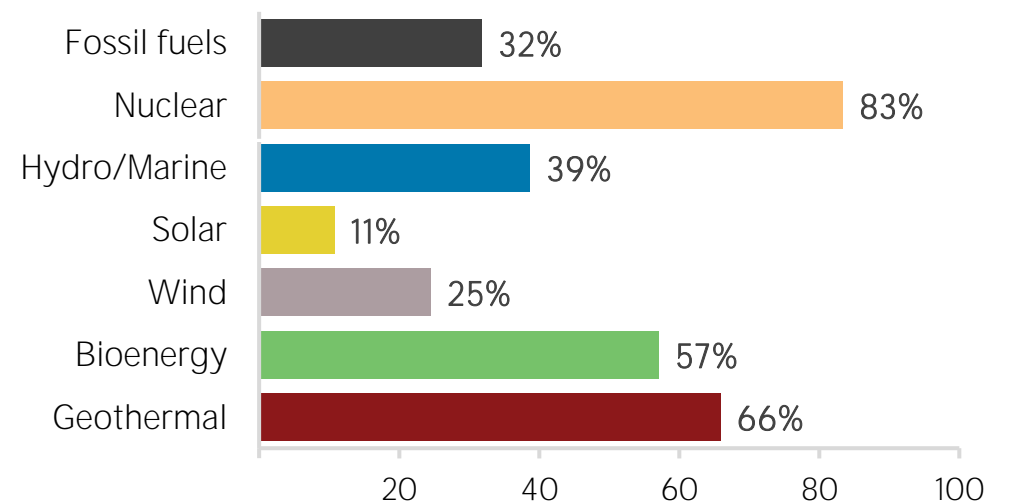
Net capacity change (GW)



Net capacity change in 2021 (MW)

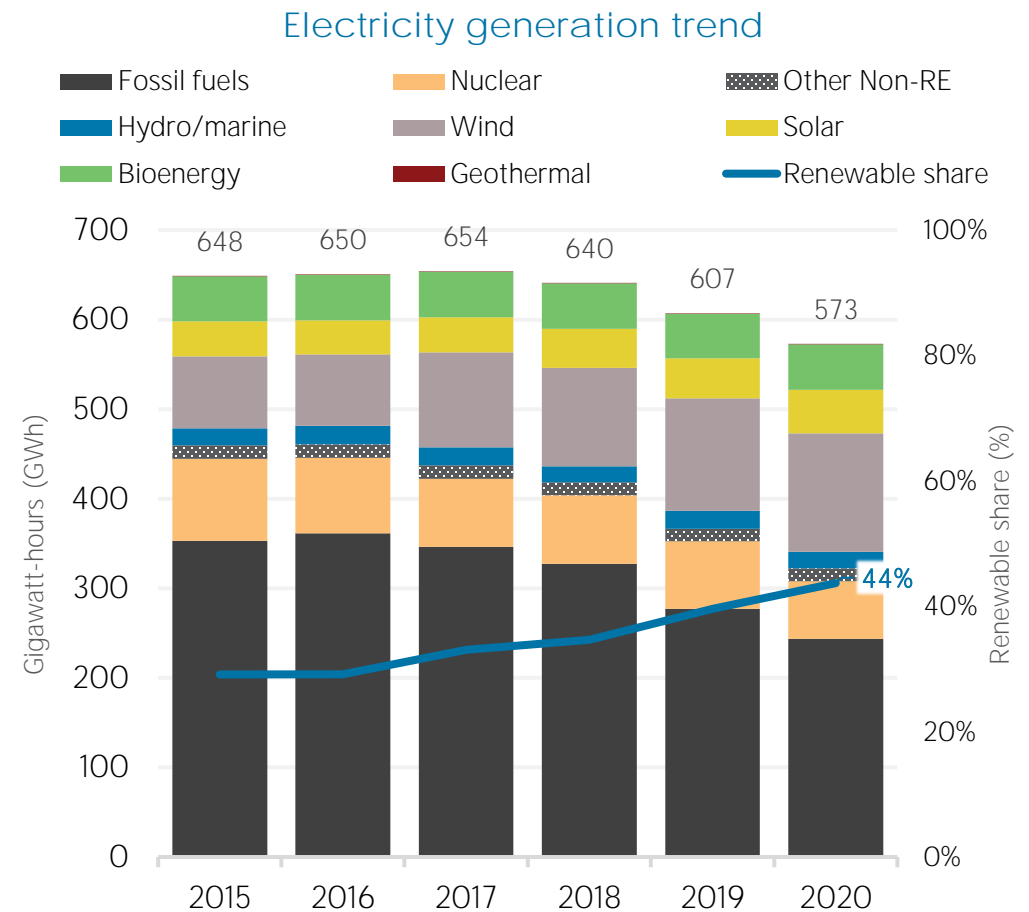
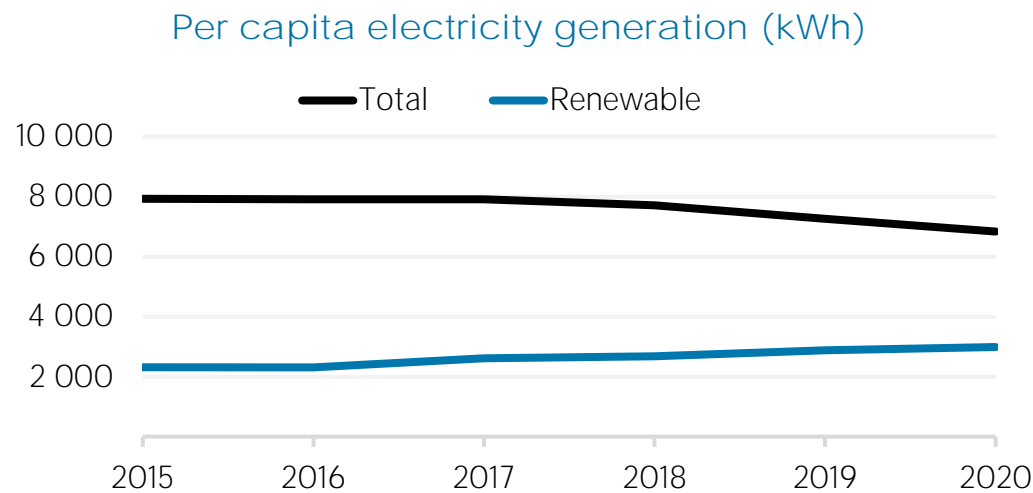


Capacity utilisation in 2020 (%)



ELECTRICITY GENERATION

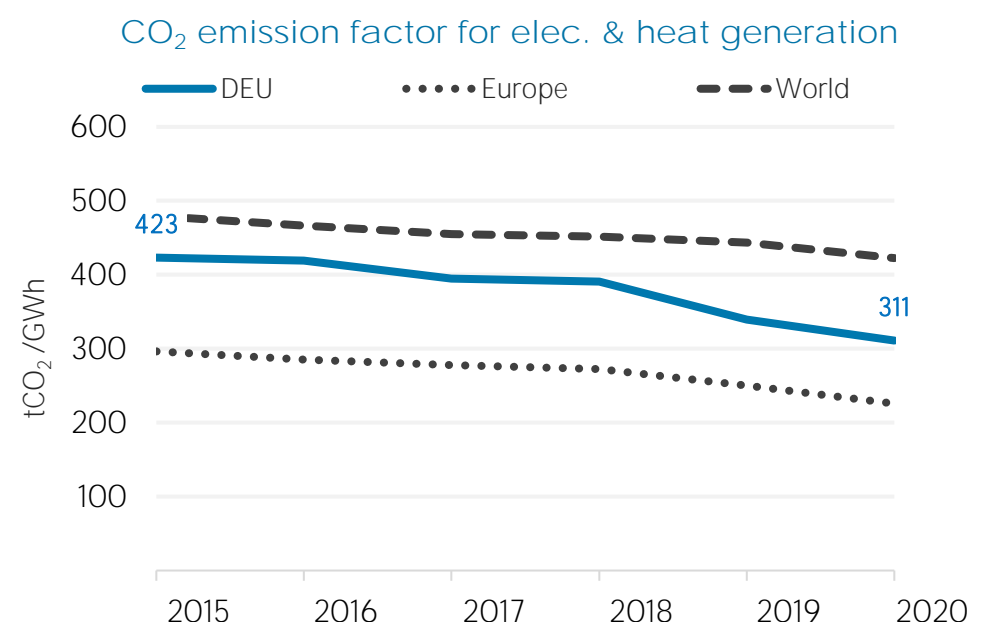
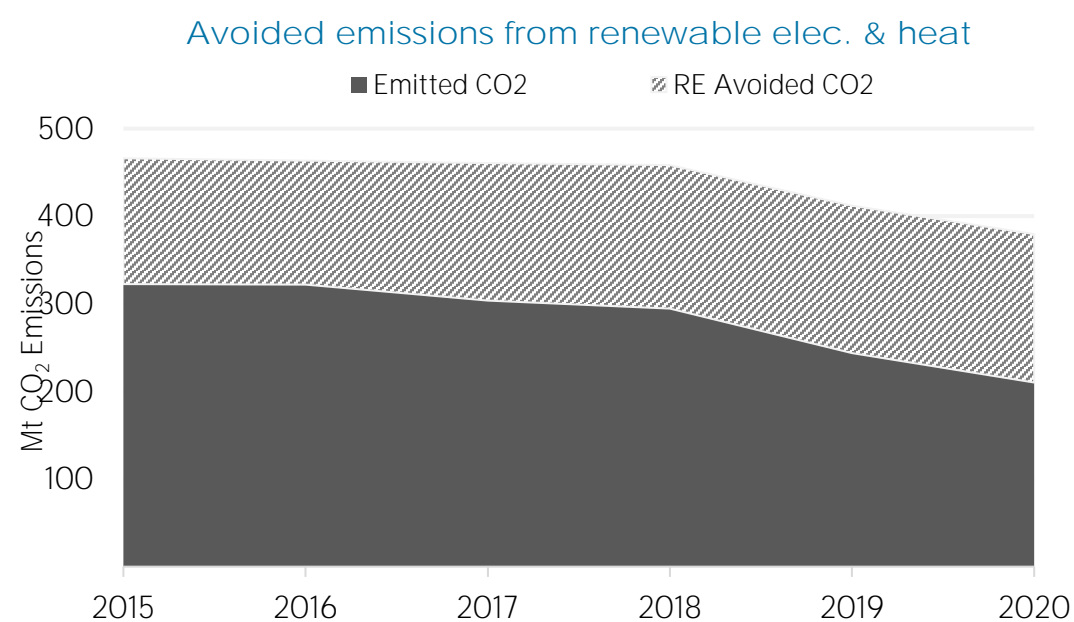
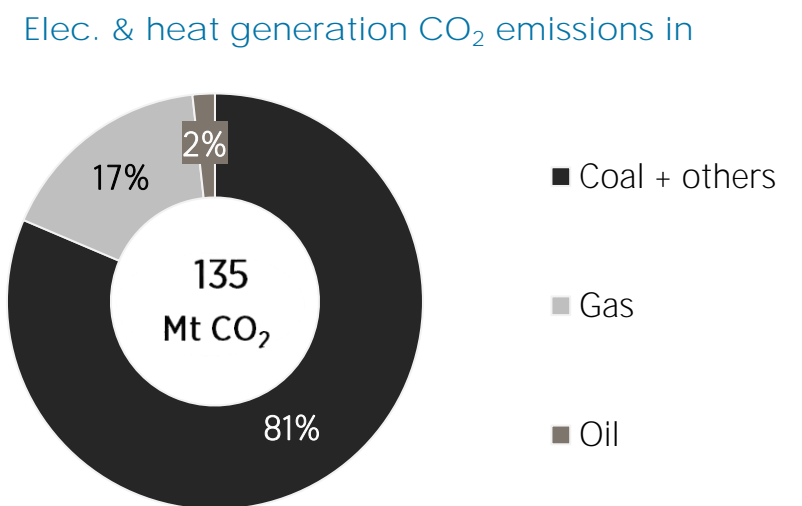
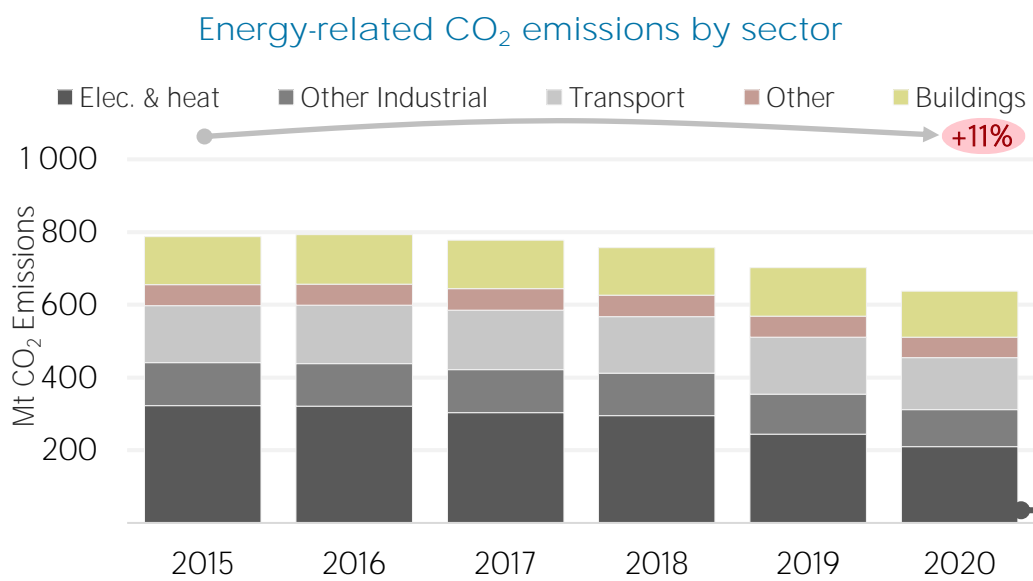
Generation in 2020	GWh	%
Non-renewable	322 512	56
Renewable	250 154	44
Hydro and marine	18 322	3
Solar	48 641	8
Wind	132 102	23
Bioenergy	50 858	9
Geothermal	231	0
Total	572 666	100



LATEST POLICIES, PROGRAMMES AND LEGISLATION

- 1 Act to Reduce and End Coal-Fired Power Generation 2021
- 2 CO2 avoidance and use in raw material industries 2021
- 3 CO2 price for transport and heating 2021
- 4 Economic Stimulus Package - Preventing levy increase 2021
- 5 Federal Climate Change Act 2021 2021

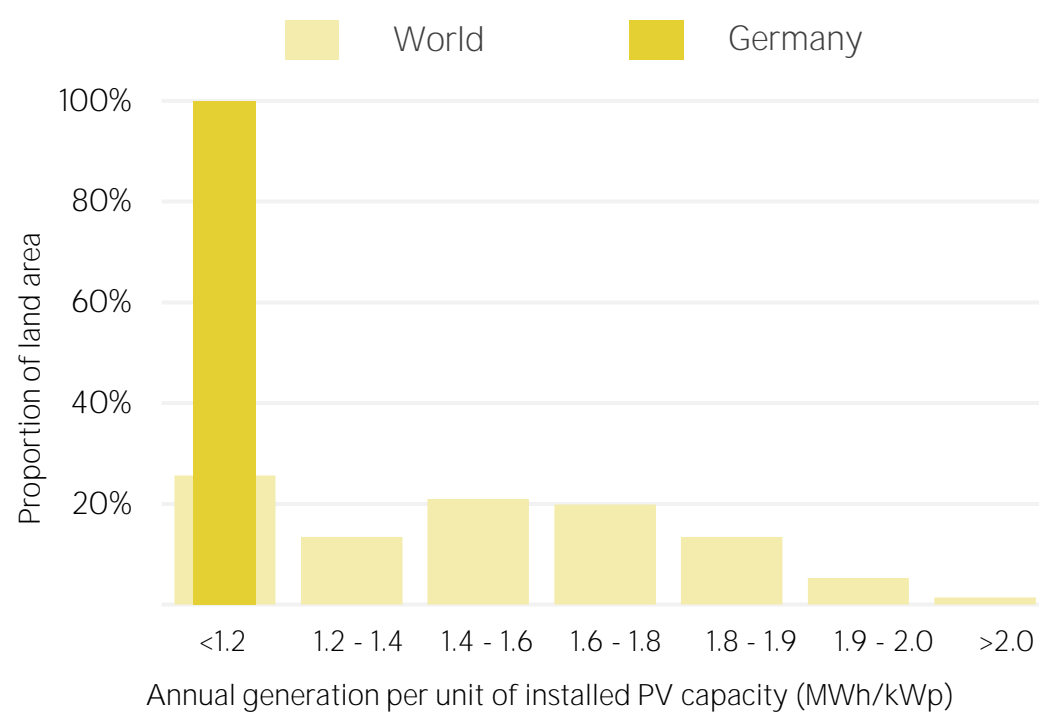
ENERGY AND EMISSIONS



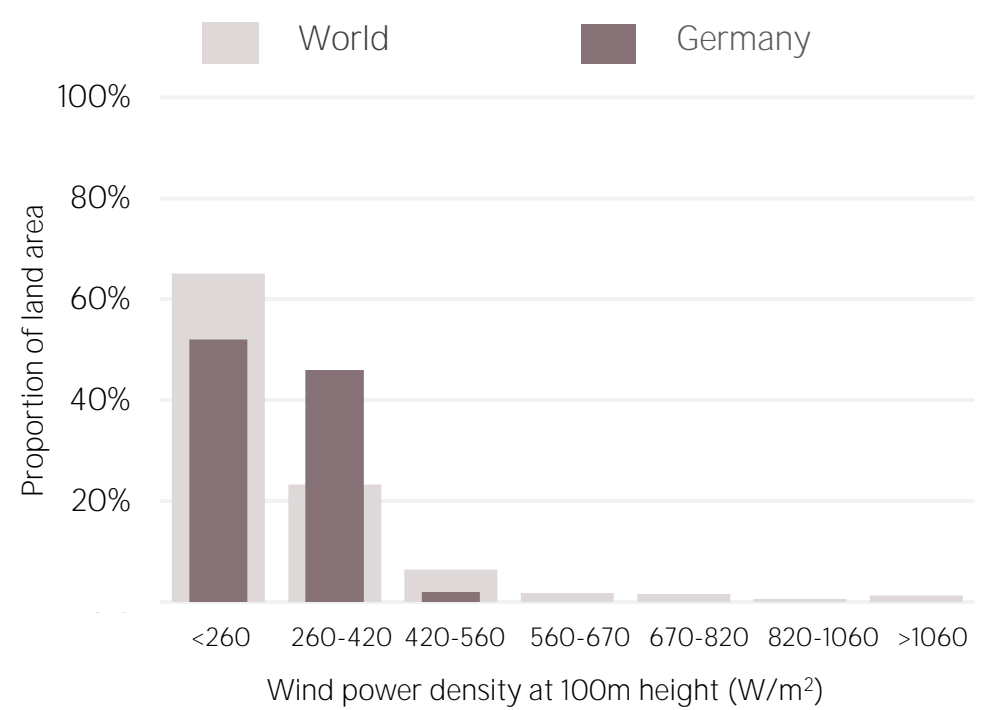
Avoided emissions based on fossil fuel mix used for power

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

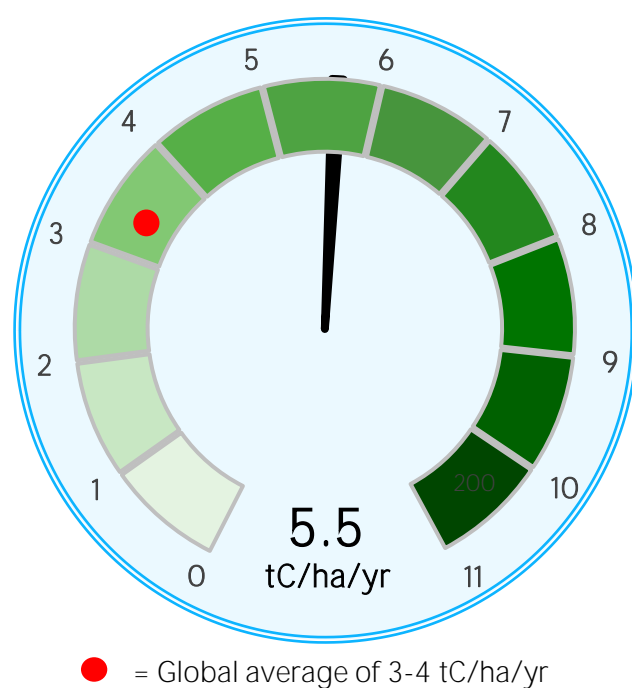
Distribution of solar potential



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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