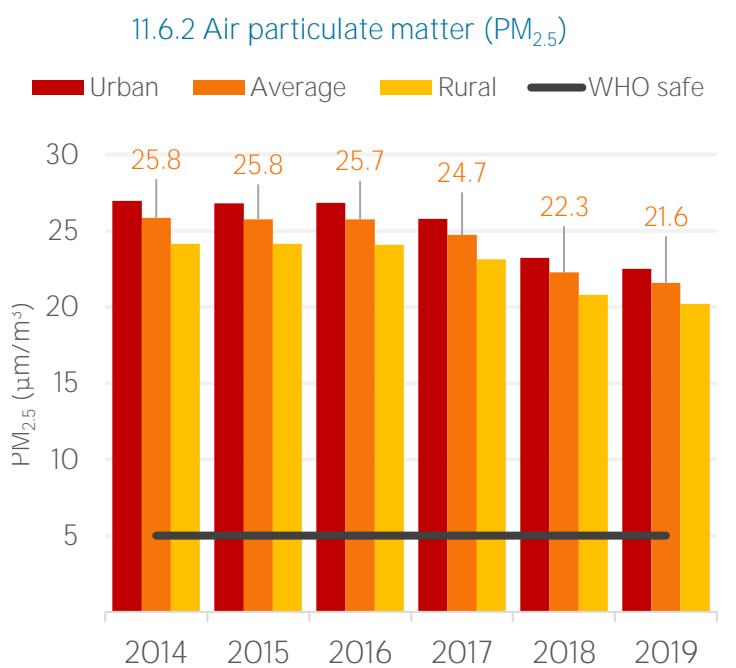
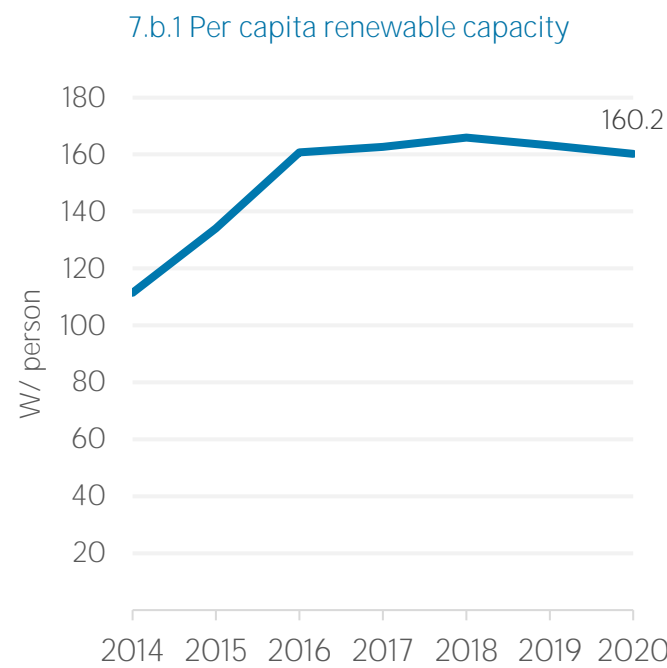
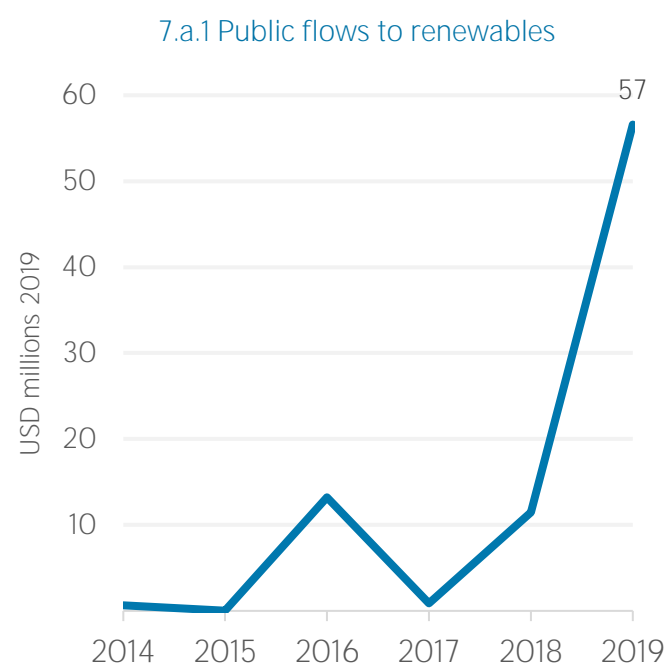
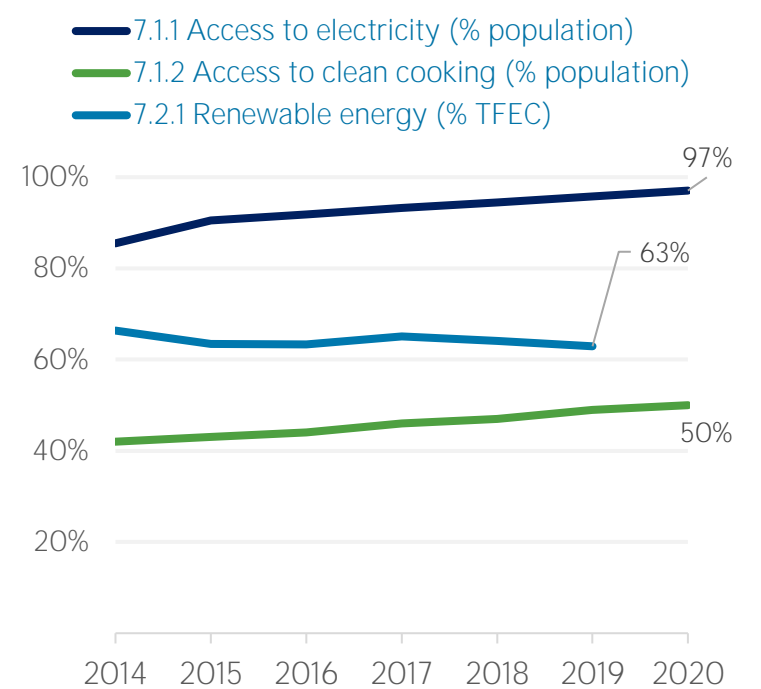
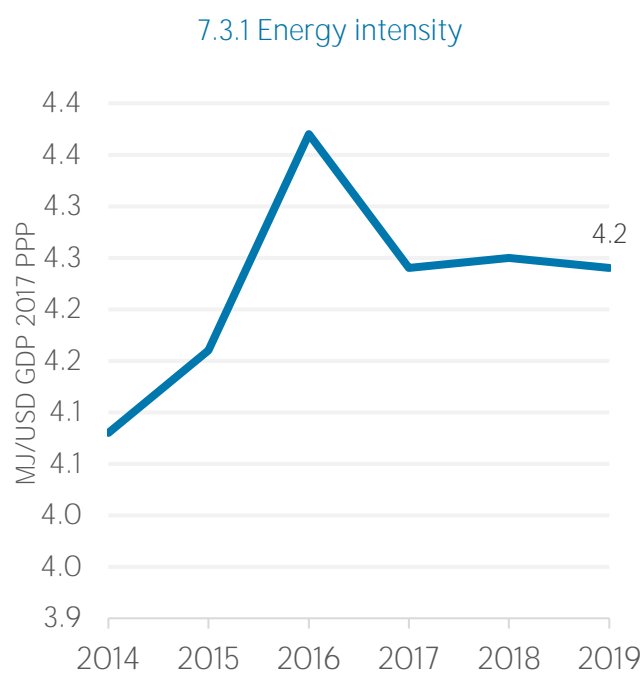
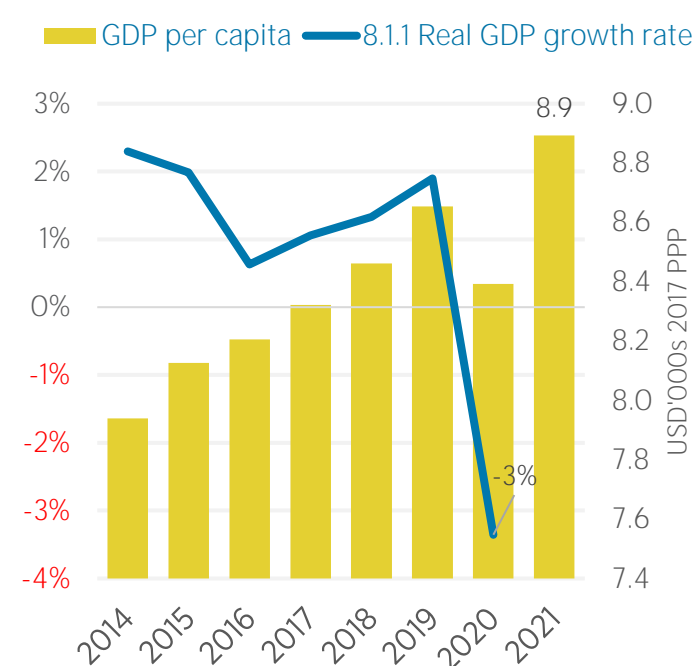


COUNTRY INDICATORS AND SDGS



TOTAL ENERGY SUPPLY (TES)

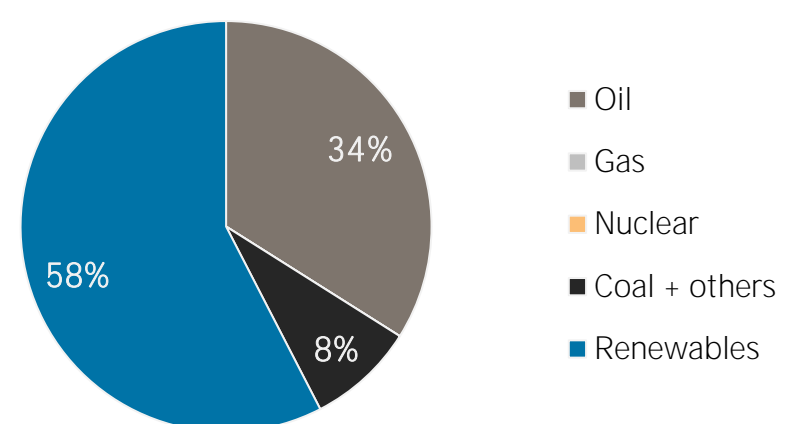
Total Energy Supply (TES)	2014	2019
Non-renewable (TJ)	165 797	243 929
Renewable (TJ)	285 424	331 130
Total (TJ)	451 221	575 059
Renewable share (%)	63	58

Growth in TES	2014-19	2018-19
Non-renewable (%)	+47.1	+7.4
Renewable (%)	+16.0	+4.4
Total (%)	+27.4	+5.7

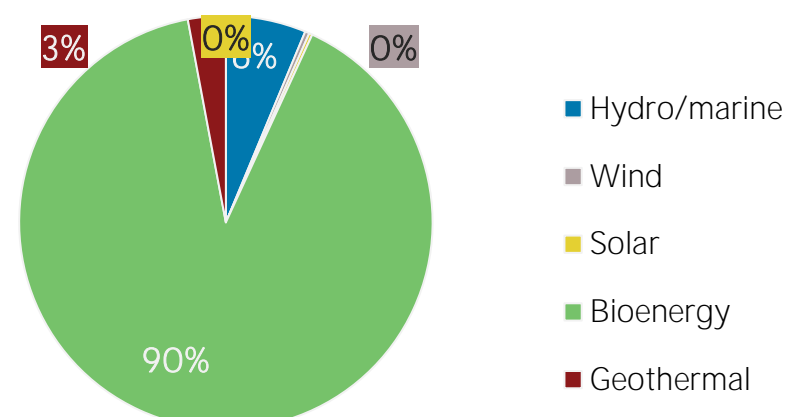
Primary energy trade	2014	2019
Imports (TJ)	207 177	302 682
Exports (TJ)	33 579	30 258
Net trade (TJ)	- 173 598	- 272 424

Imports (% of supply)	46	53
Exports (% of production)	11	9
Energy self-sufficiency (%)	68	62

Total energy supply in 2019

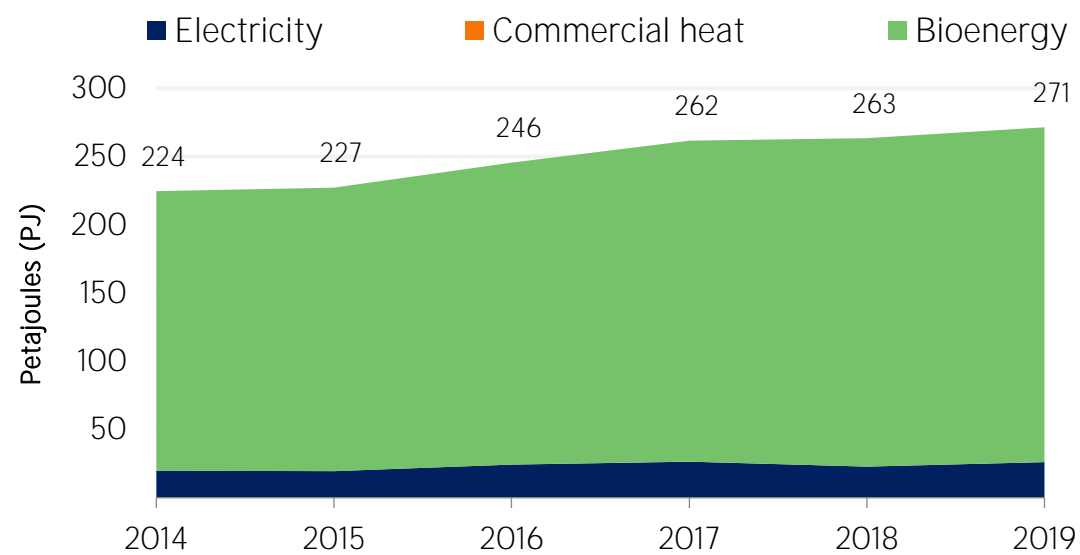


Renewable energy supply in 2019



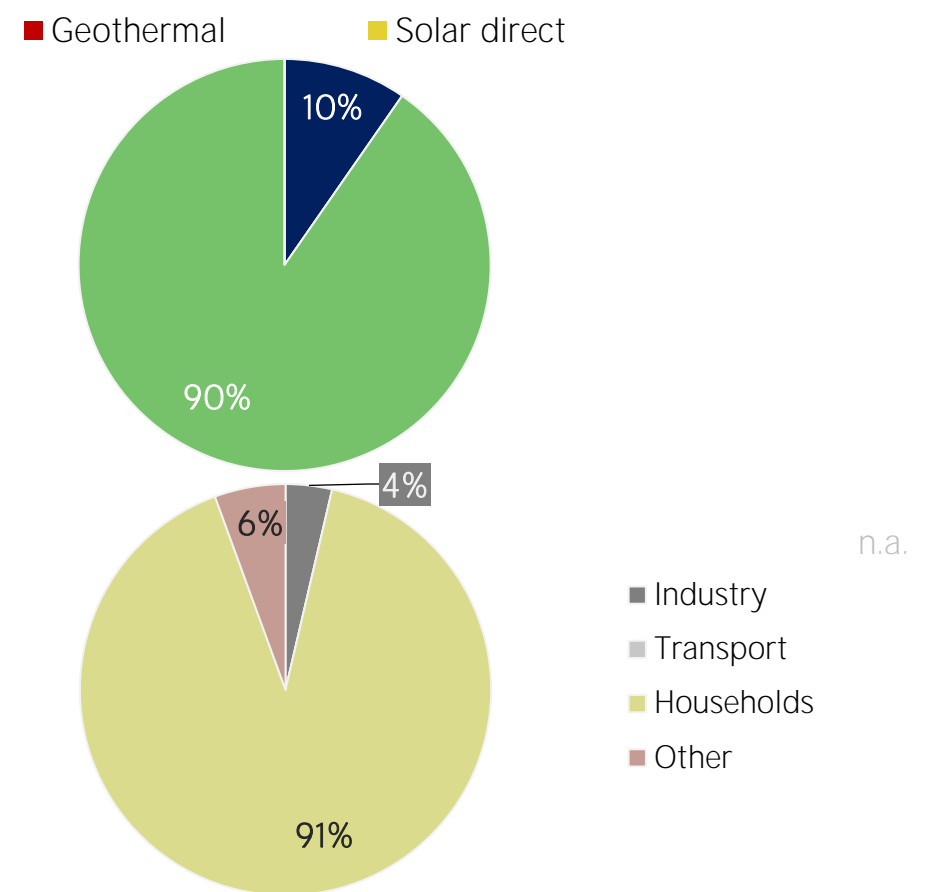
RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend



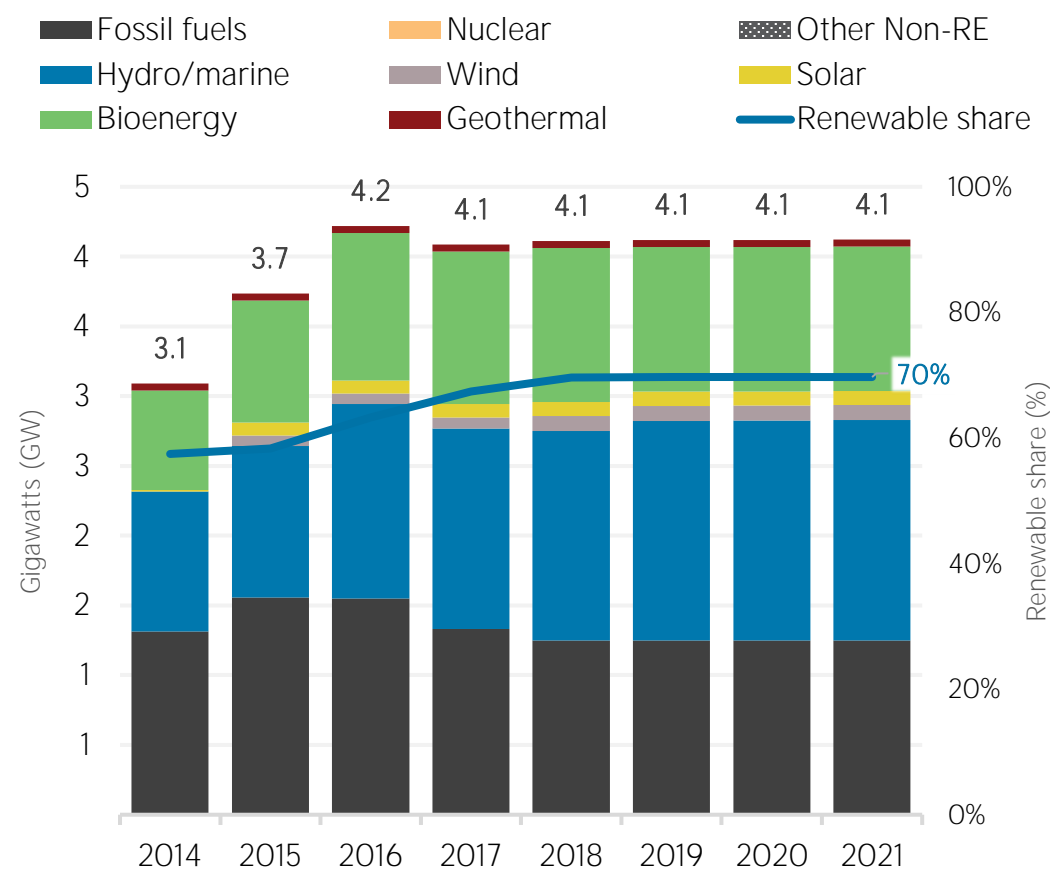
Consumption by sector	2014	2019
Industry (TJ)	7 413	9 887
Transport (TJ)	0	0
Households (TJ)	205 262	246 387
Other (TJ)	11 821	15 136

Renewable energy consumption in 2019

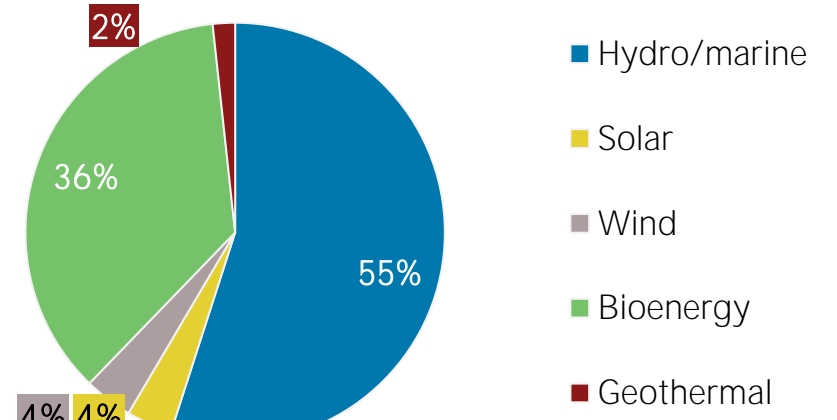


ELECTRICITY CAPACITY

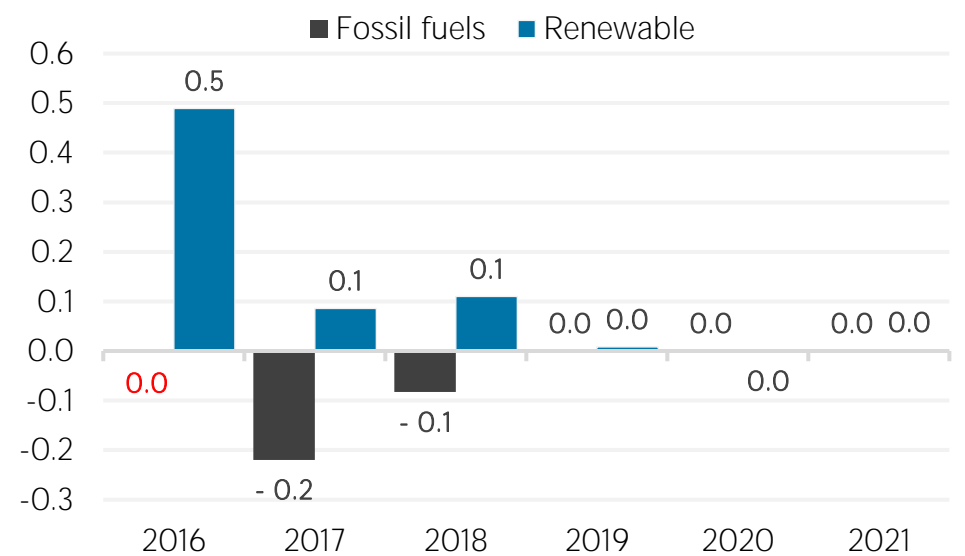
Installed capacity trend



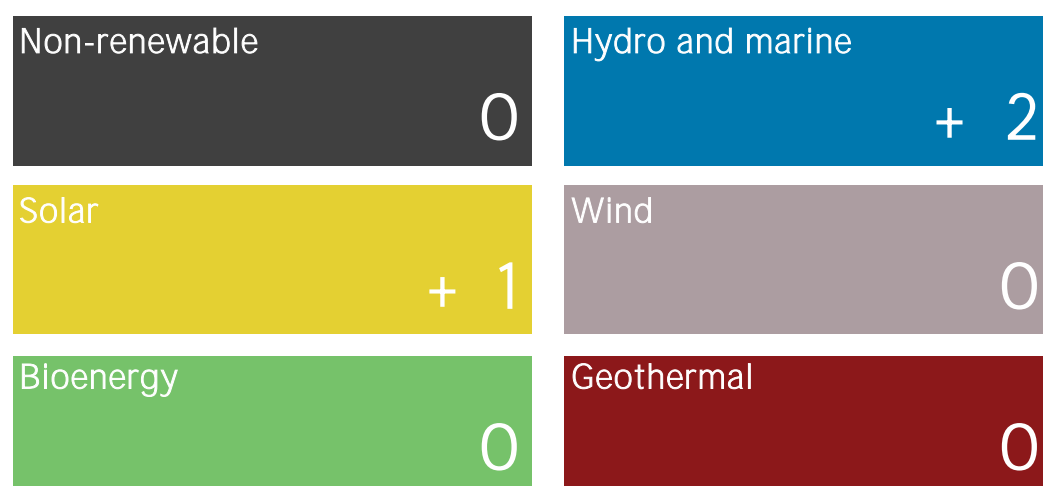
Renewable capacity in 2021



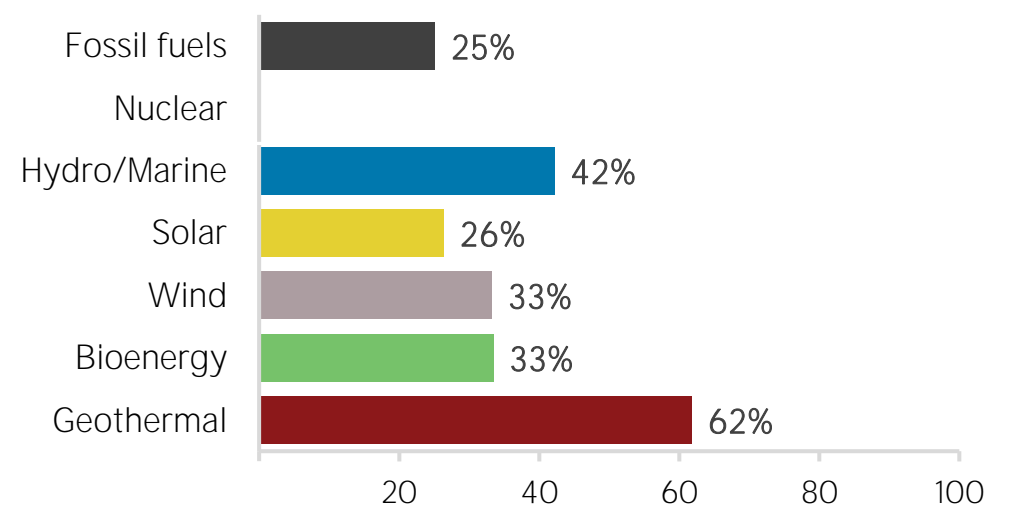
Net capacity change (GW)



Net capacity change in 2021 (MW)



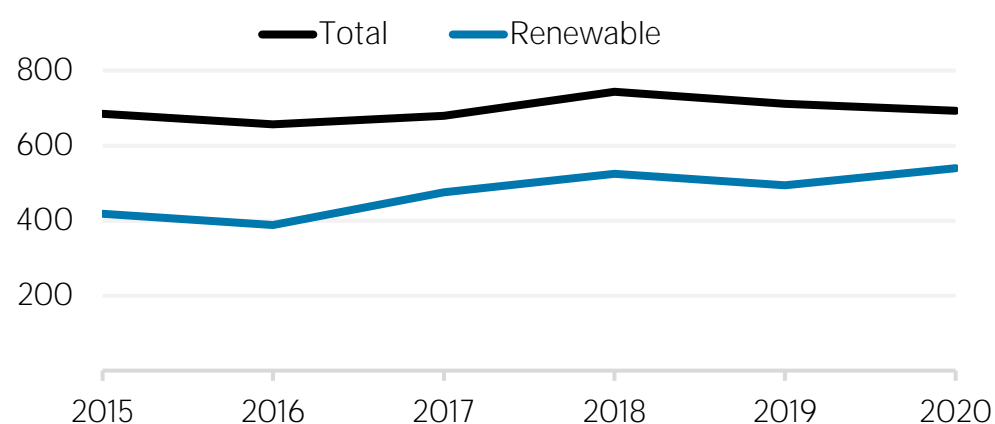
Capacity utilisation in 2020 (%)



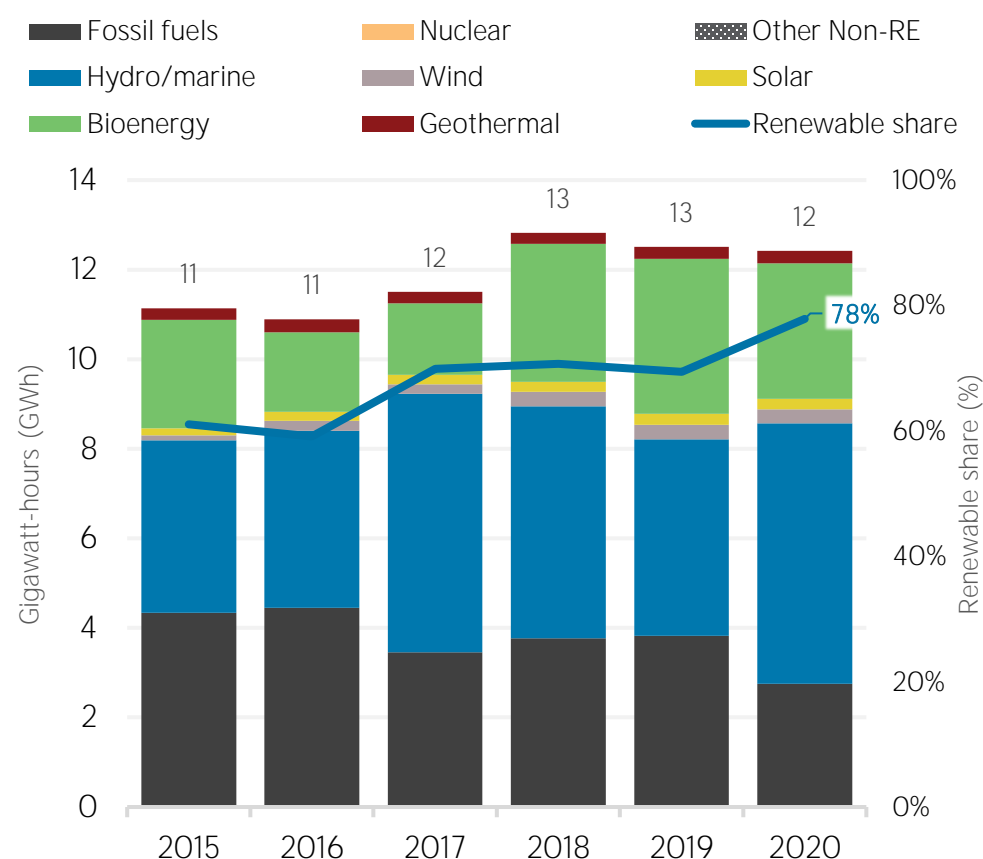
ELECTRICITY GENERATION

Generation in 2020	GWh	%
Non-renewable	2 750	22
Renewable	9 669	78
Hydro and marine	5 817	47
Solar	233	2
Wind	313	3
Bioenergy	3 033	24
Geothermal	274	2
Total	12 419	100

Per capita electricity generation (kWh)



Electricity generation trend

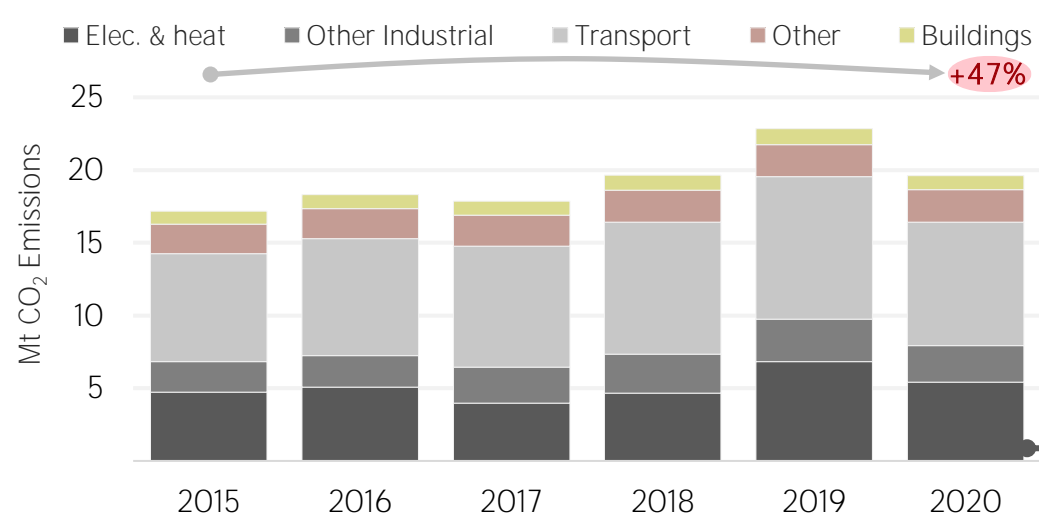


LATEST POLICIES, PROGRAMMES AND LEGISLATION

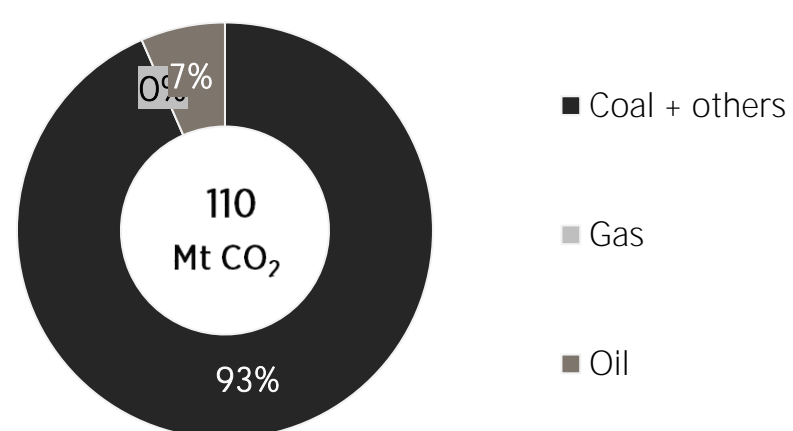
- 1 Indicative Plans of Generation and Transmission (Planes Indicativos de Generación y Transmisión) 2016
- 2 Technical Standard for Renewable Distributed Generation and Auto Producers with Excess of Energy - Net Metering (Norma técnica de generación distribuida renovable y usuarios autoprodutores con excedentes de energía) 2014
- 3 National Energy Policy 2013-2027 (Política Energetica 2013-2027) 2013
- 4 National Strategic Plan for the Use of Firewood (Plan Estratégico Nacional Para El Uso Sostenible De La Leña) 2013
- 5 NTG 11008 2011 - Energy efficiency labelling for room air conditioners up to 10548 W 2011

ENERGY AND EMISSIONS

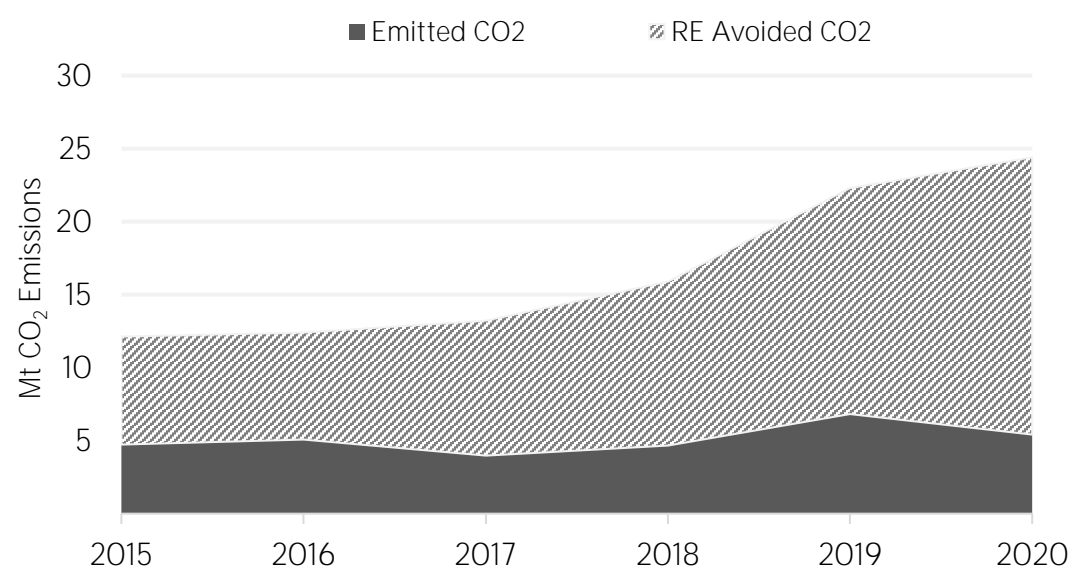
Energy-related CO₂ emissions by sector



Elec. & heat generation CO₂ emissions in

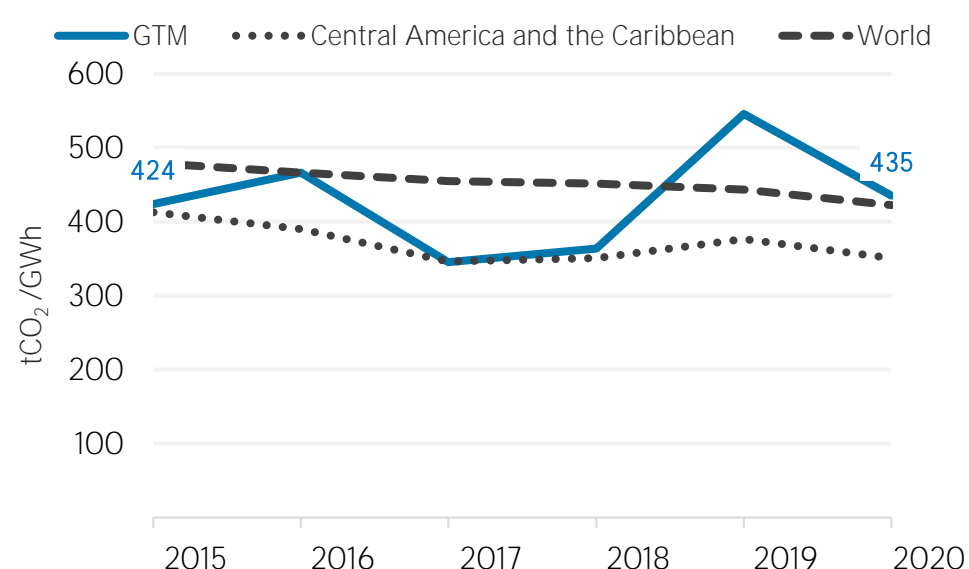


Avoided emissions from renewable elec. & heat



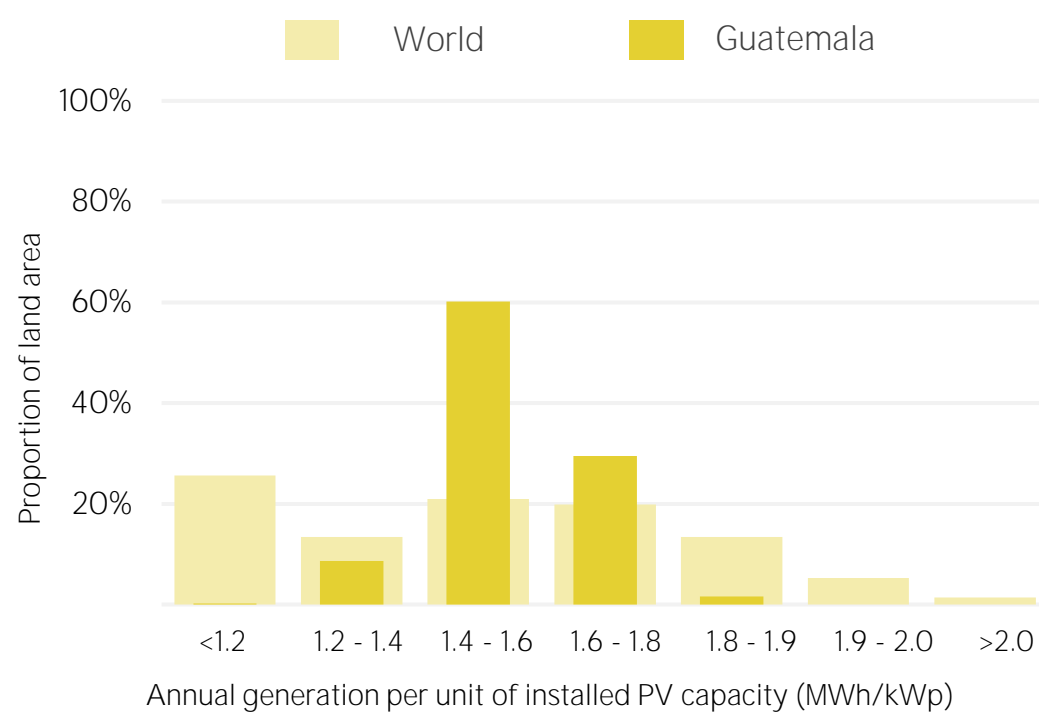
Avoided emissions based on fossil fuel mix used for power

CO₂ emission factor for elec. & heat generation

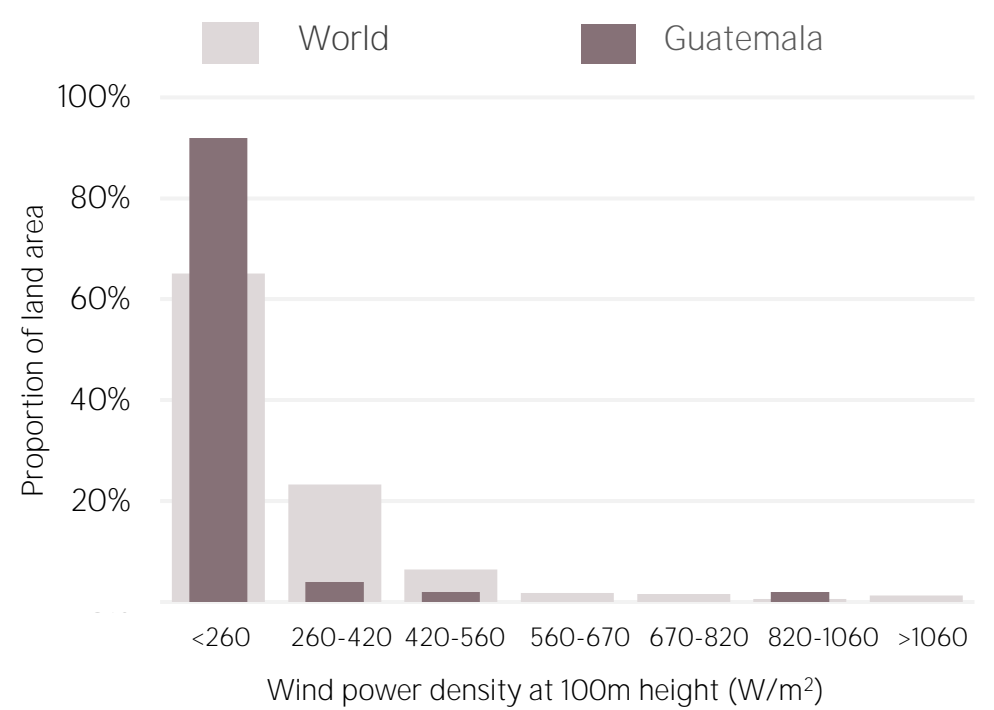


Calculated by dividing power sector emissions by elec. + heat gen.

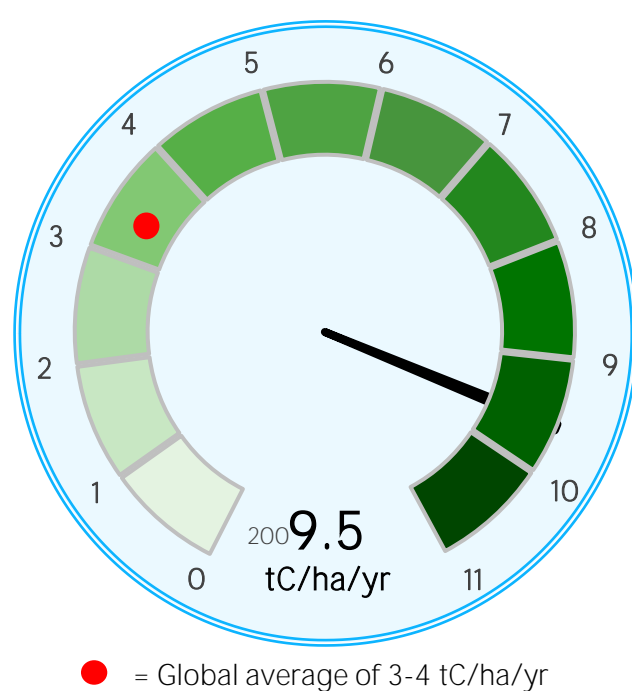
Distribution of solar potential



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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