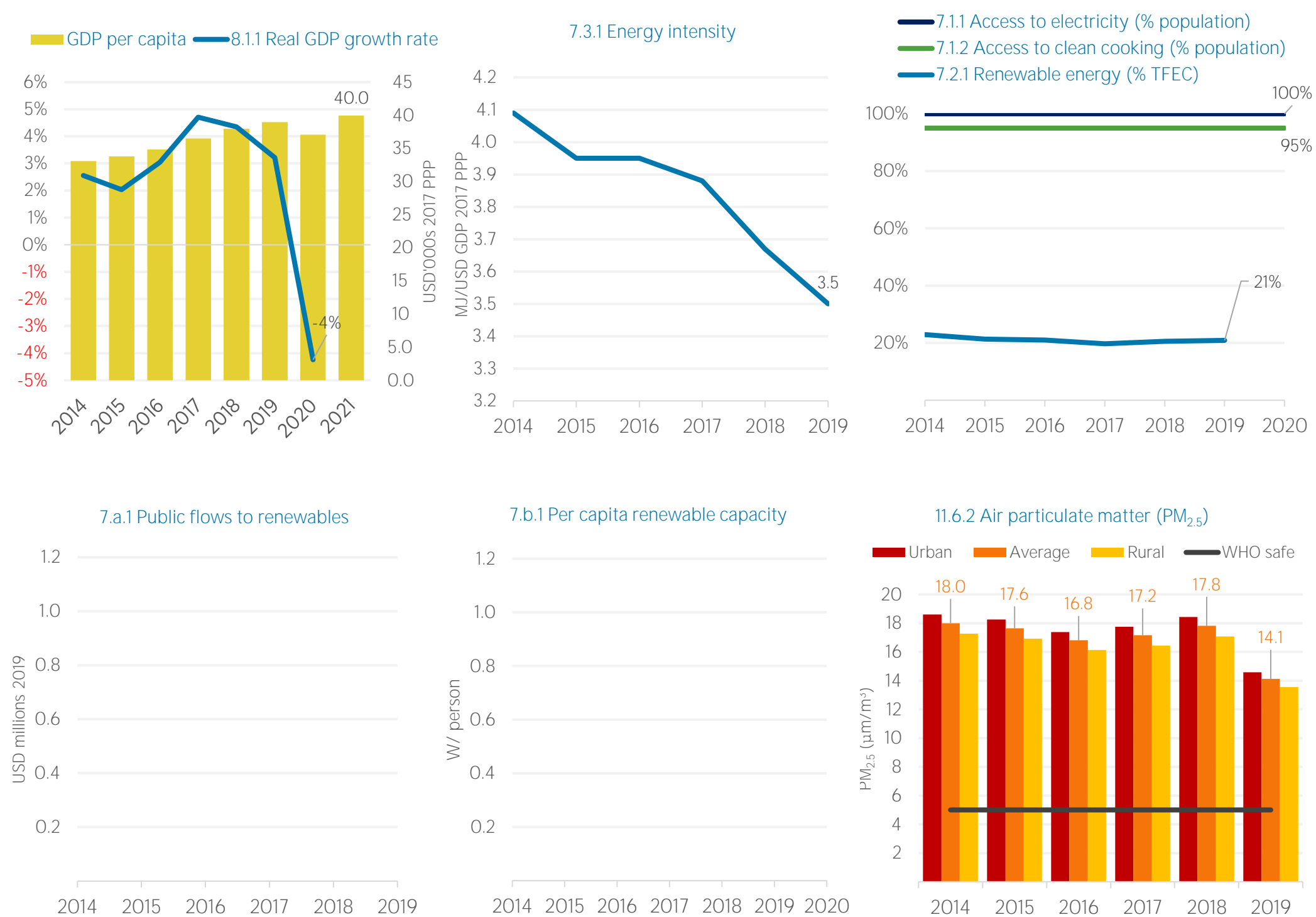


COUNTRY INDICATORS AND SDGS



TOTAL ENERGY SUPPLY (TES)

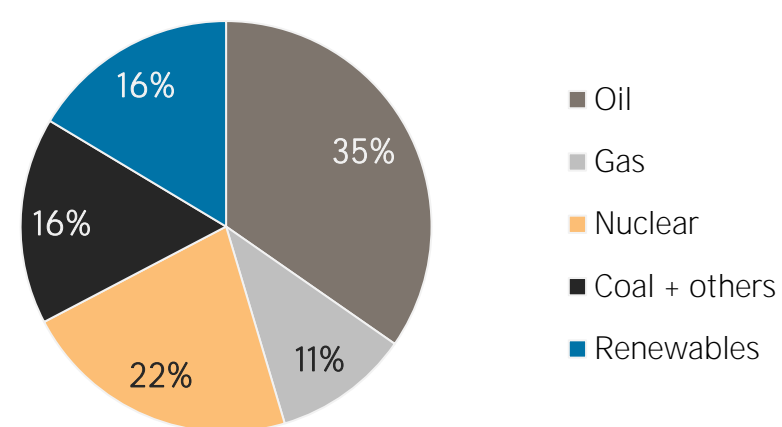
Total Energy Supply (TES)	2014	2019
Non-renewable (TJ)	232 283	239 735
Renewable (TJ)	39 085	47 030
Total (TJ)	271 368	286 764
Renewable share (%)	14	16

Growth in TES	2014-19	2018-19
Non-renewable (%)	+3.2	-1.7
Renewable (%)	+20.3	+5.1
Total (%)	+5.7	-0.6

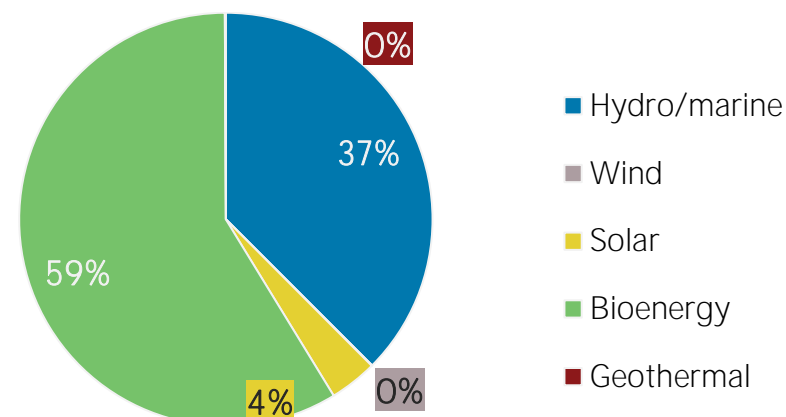
Primary energy trade	2014	2019
Imports (TJ)	222 449	285 390
Exports (TJ)	96 137	133 053
Net trade (TJ)	- 126 312	- 152 337

Imports (% of supply)	82	100
Exports (% of production)	66	91
Energy self-sufficiency (%)	54	51

Total energy supply in 2019

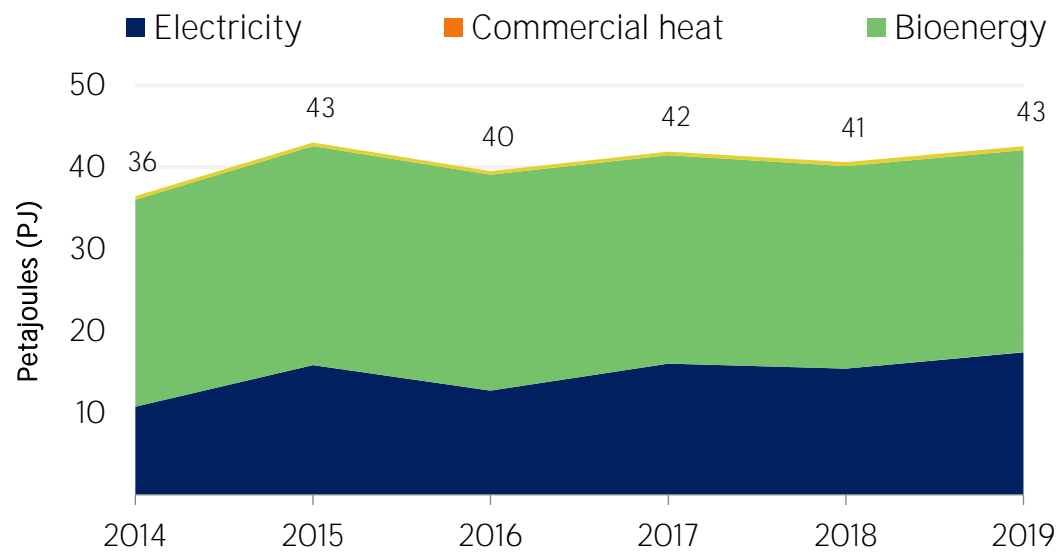


Renewable energy supply in 2019

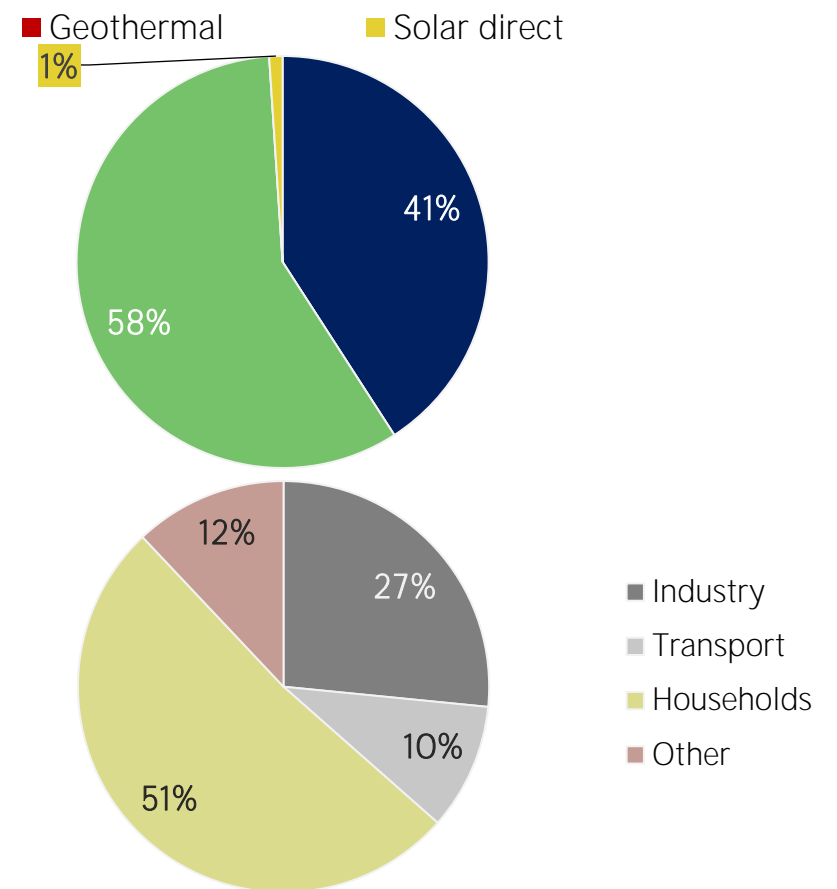


RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFE trend



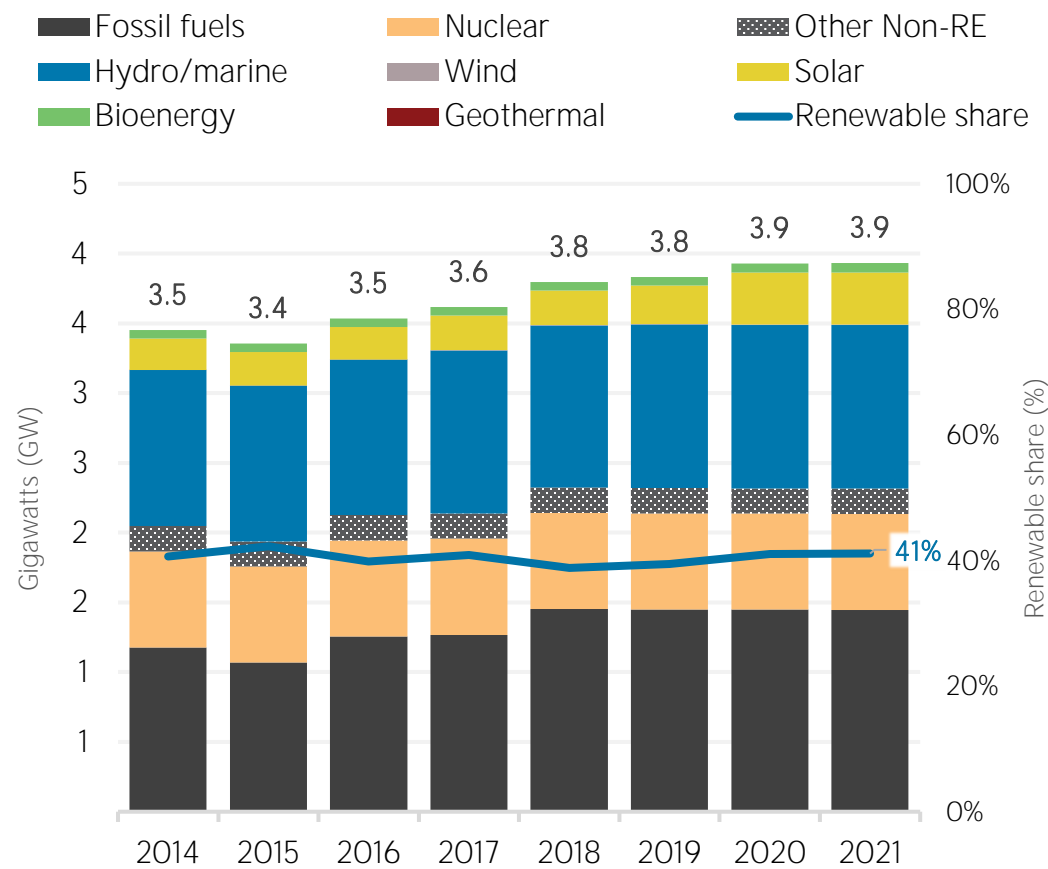
Renewable energy consumption in 2019



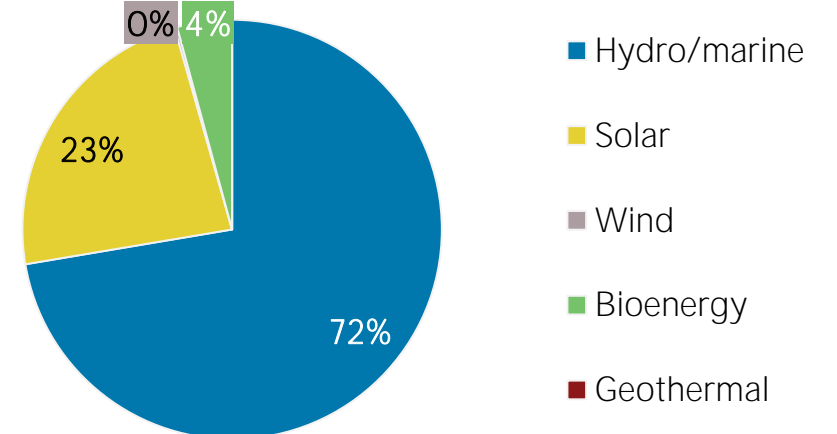
Consumption by sector	2014	2019
Industry (TJ)	8 924	11 301
Transport (TJ)	1 867	4 230
Households (TJ)	22 245	21 889
Other (TJ)	3 400	5 116

ELECTRICITY CAPACITY

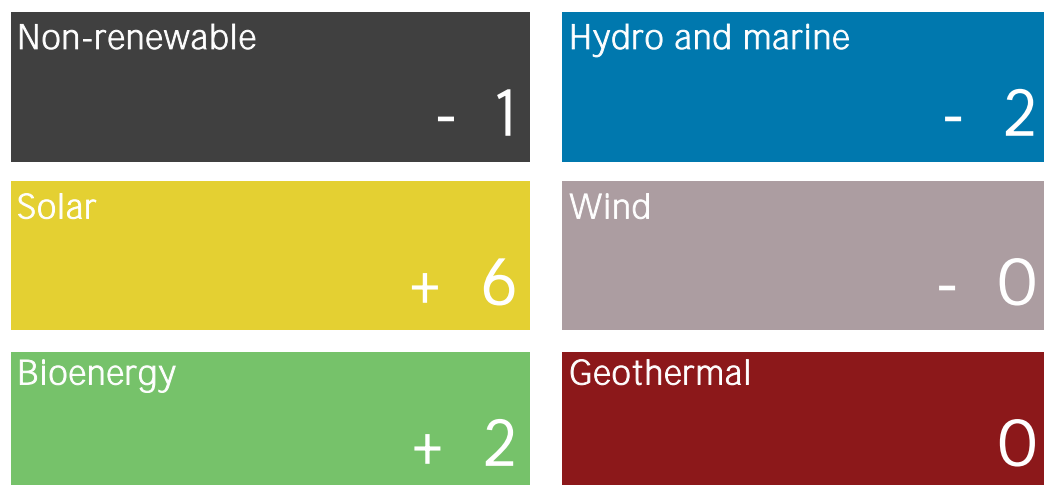
Installed capacity trend



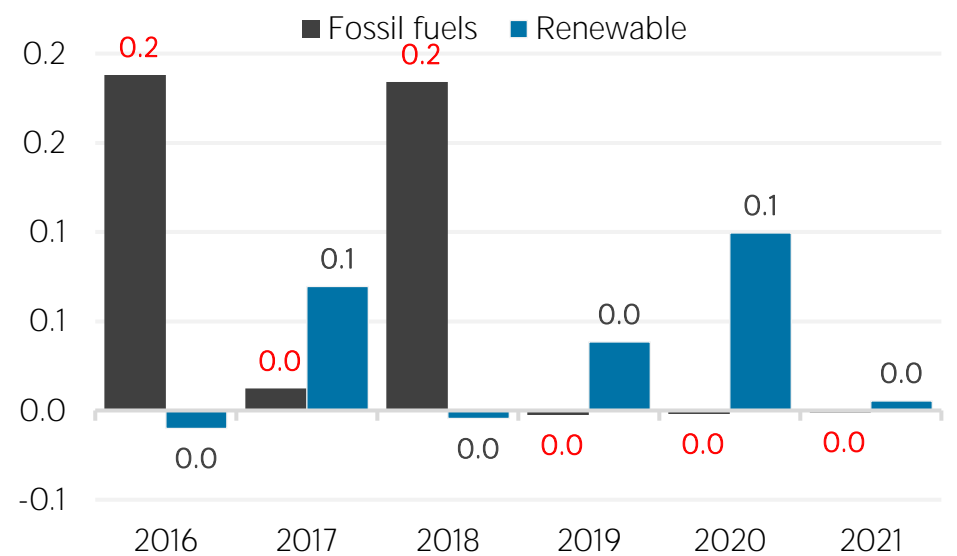
Renewable capacity in 2021



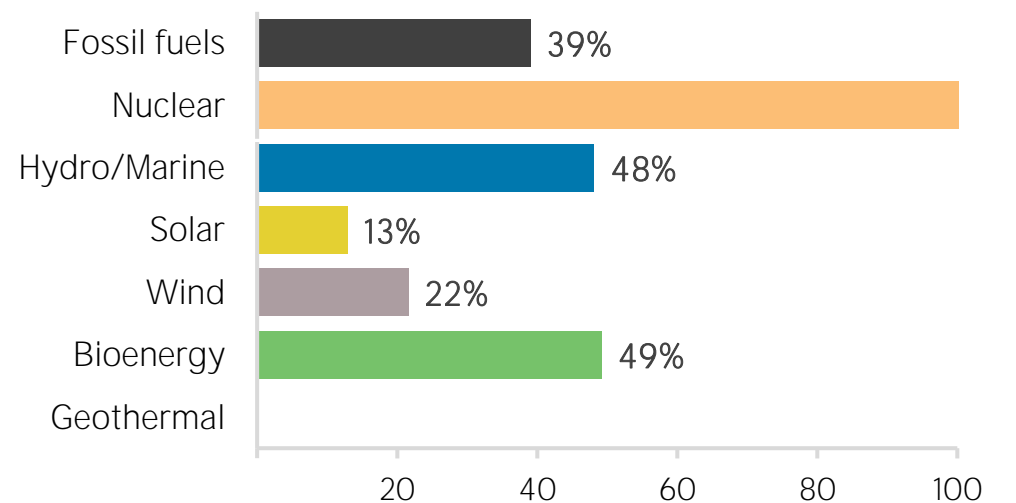
Net capacity change in 2021 (MW)



Net capacity change (GW)

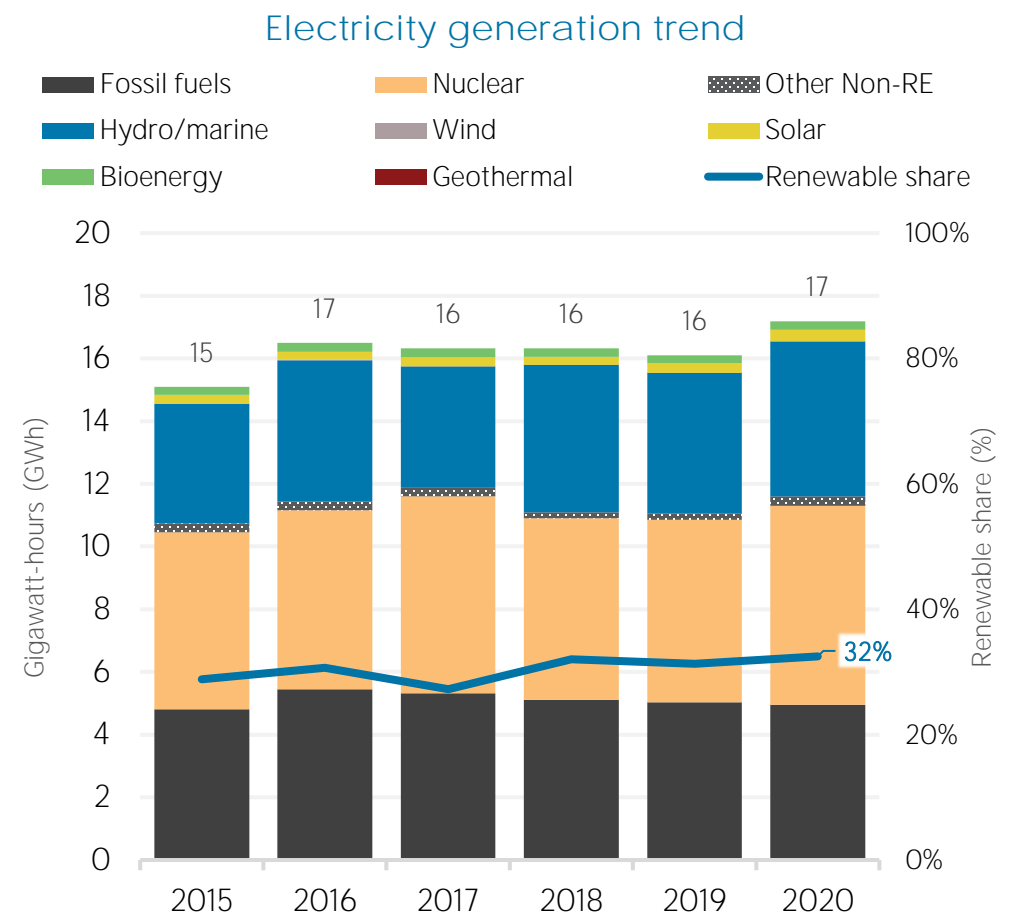
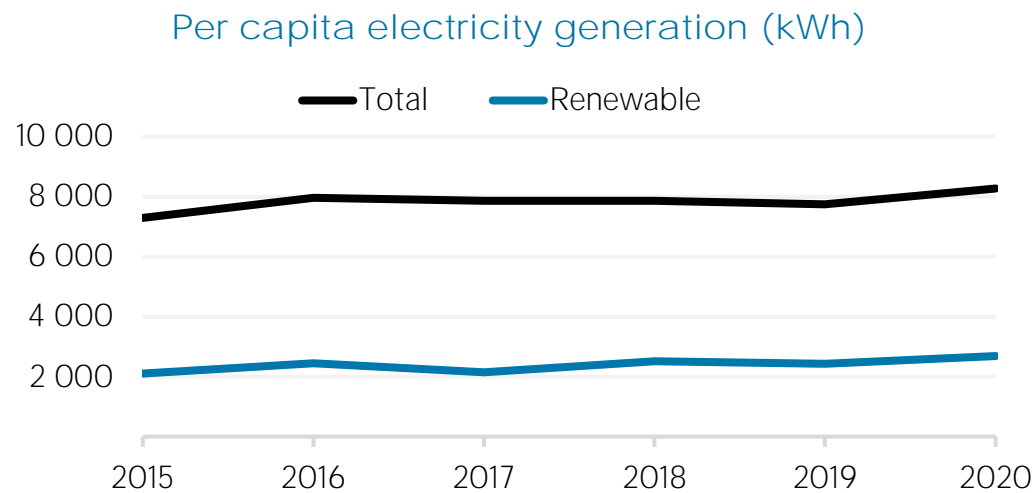


Capacity utilisation in 2020 (%)



ELECTRICITY GENERATION

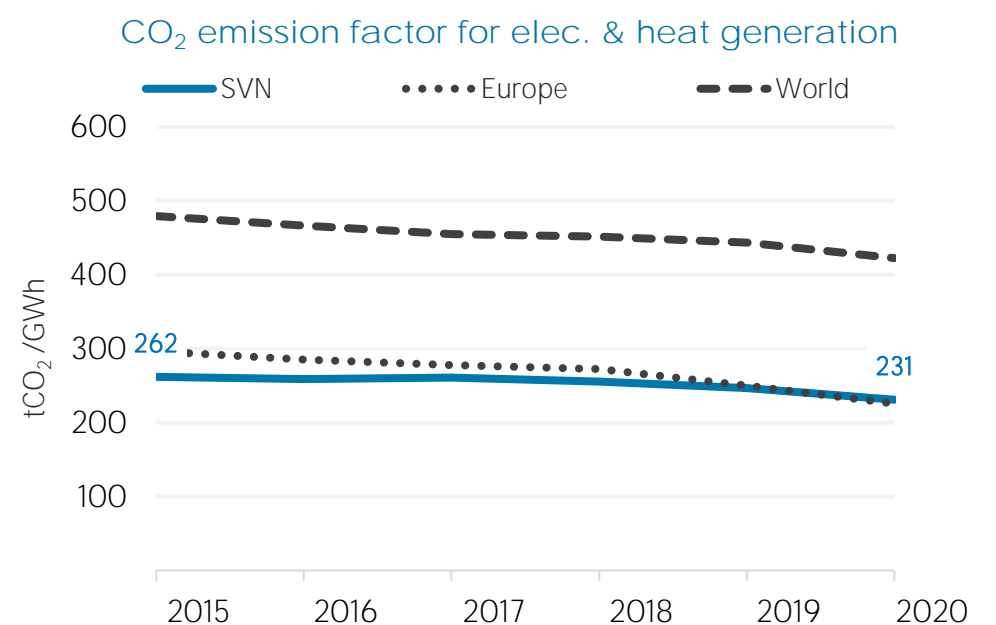
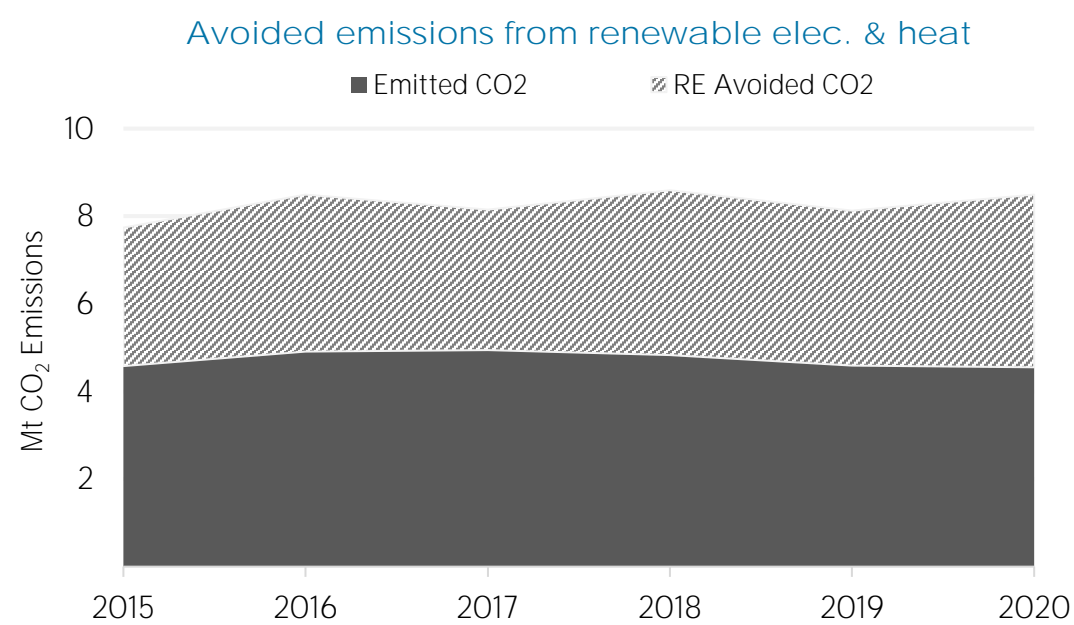
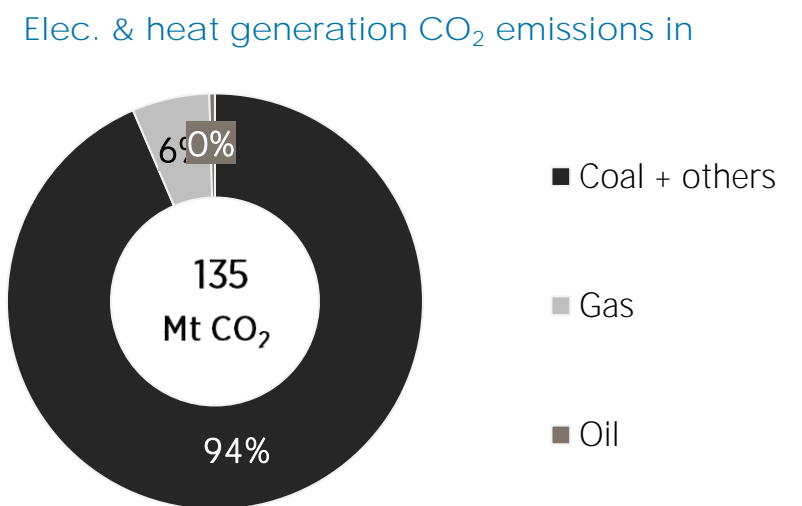
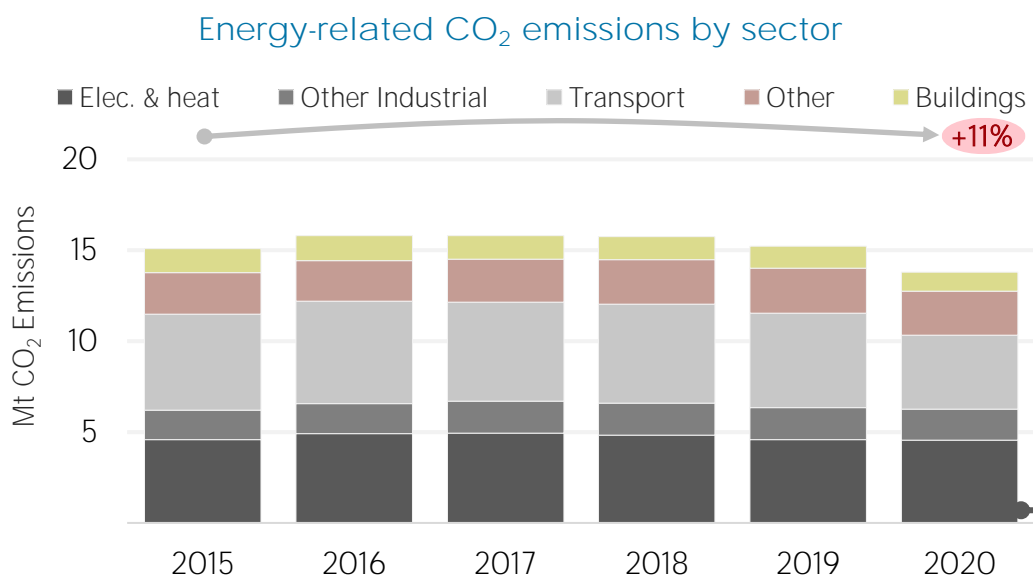
Generation in 2020	GWh	%
Non-renewable	11 608	68
Renewable	5 583	32
Hydro and marine	4 934	29
Solar	368	2
Wind	6	0
Bioenergy	274	2
Geothermal	0	0
Total	17 191	100



LATEST POLICIES, PROGRAMMES AND LEGISLATION

- 1 Recovery and Resilience Plan / 1. Green transition / Renewable energy sources and energy efficiency in the economy 2021
- 2 Recovery and Resilience Plan / 1. Green transition / Sustainable building renovation 2021
- 3 Recovery and Resilience Plan / 1. Green transition / Sustainable mobility 2021
- 4 Recovery and Resiliency Plan 2021
- 5 Long-Term Strategy for Mobilising Investments in the Energy Renovation of Buildings 2017

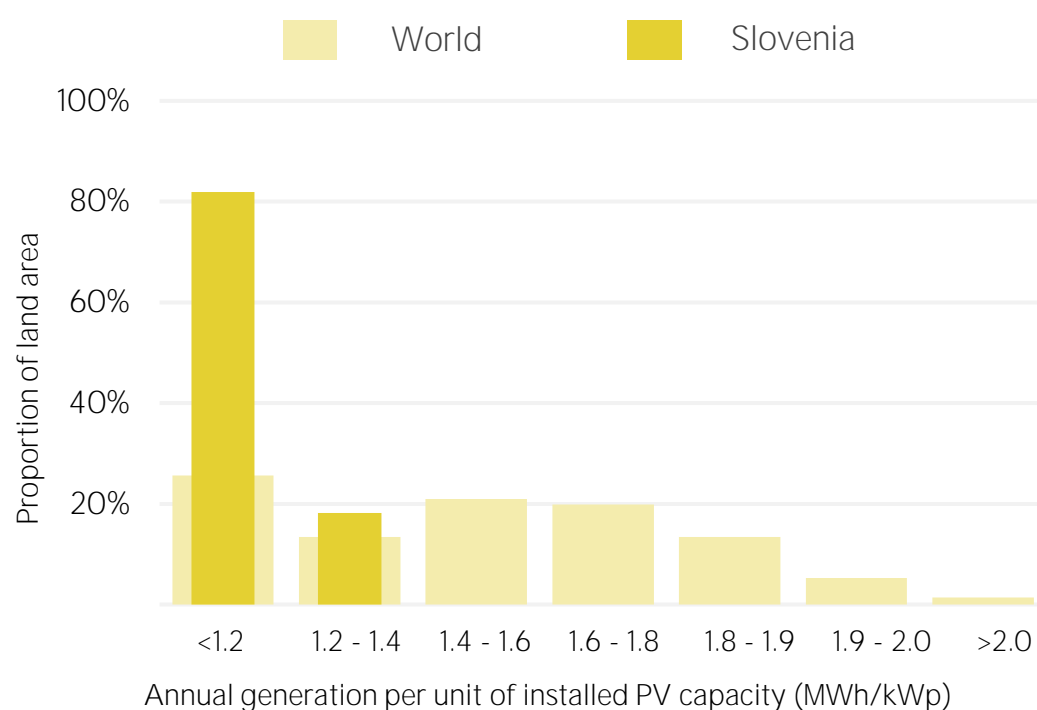
ENERGY AND EMISSIONS



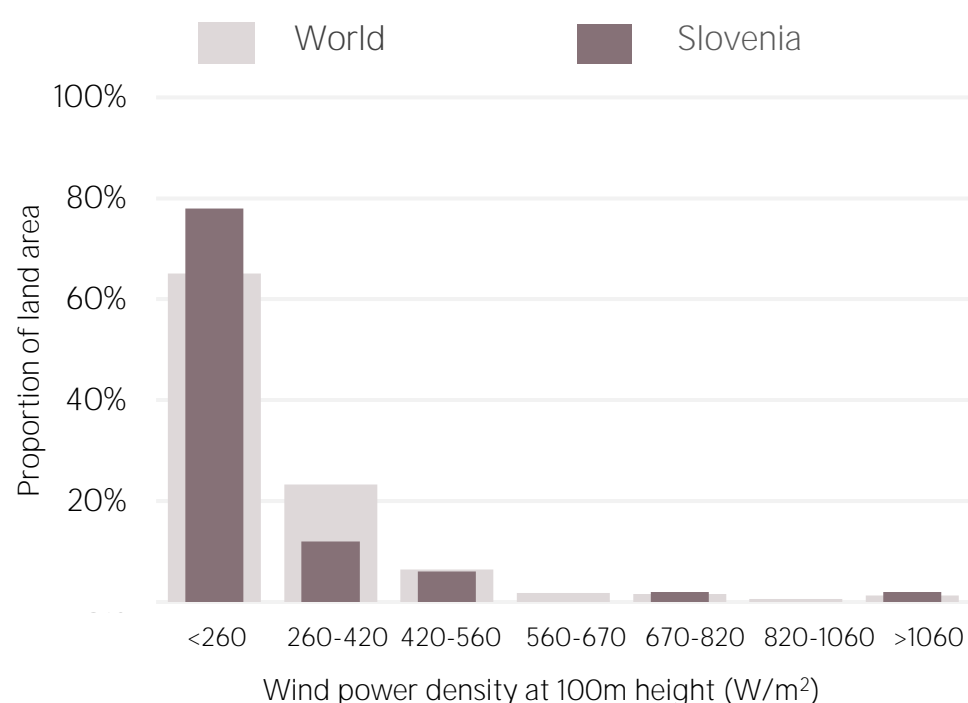
Avoided emissions based on fossil fuel mix used for power

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

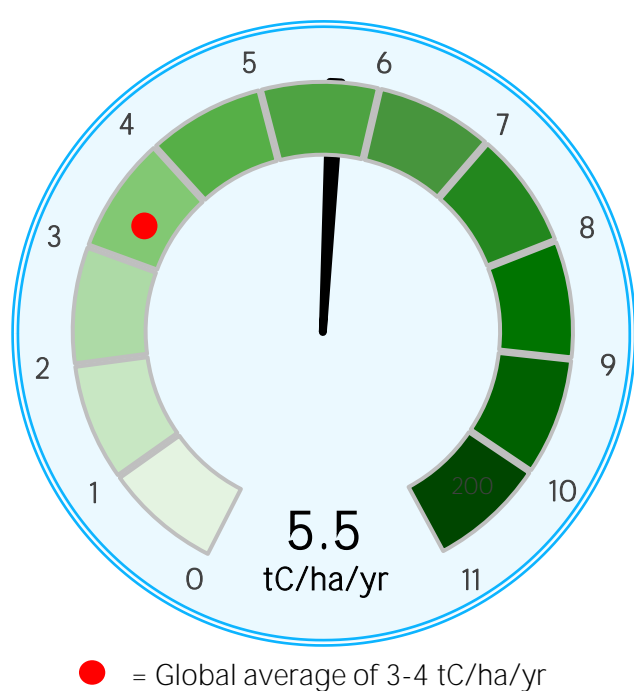
Distribution of solar potential



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.

Last updated on: 24th August, 2022