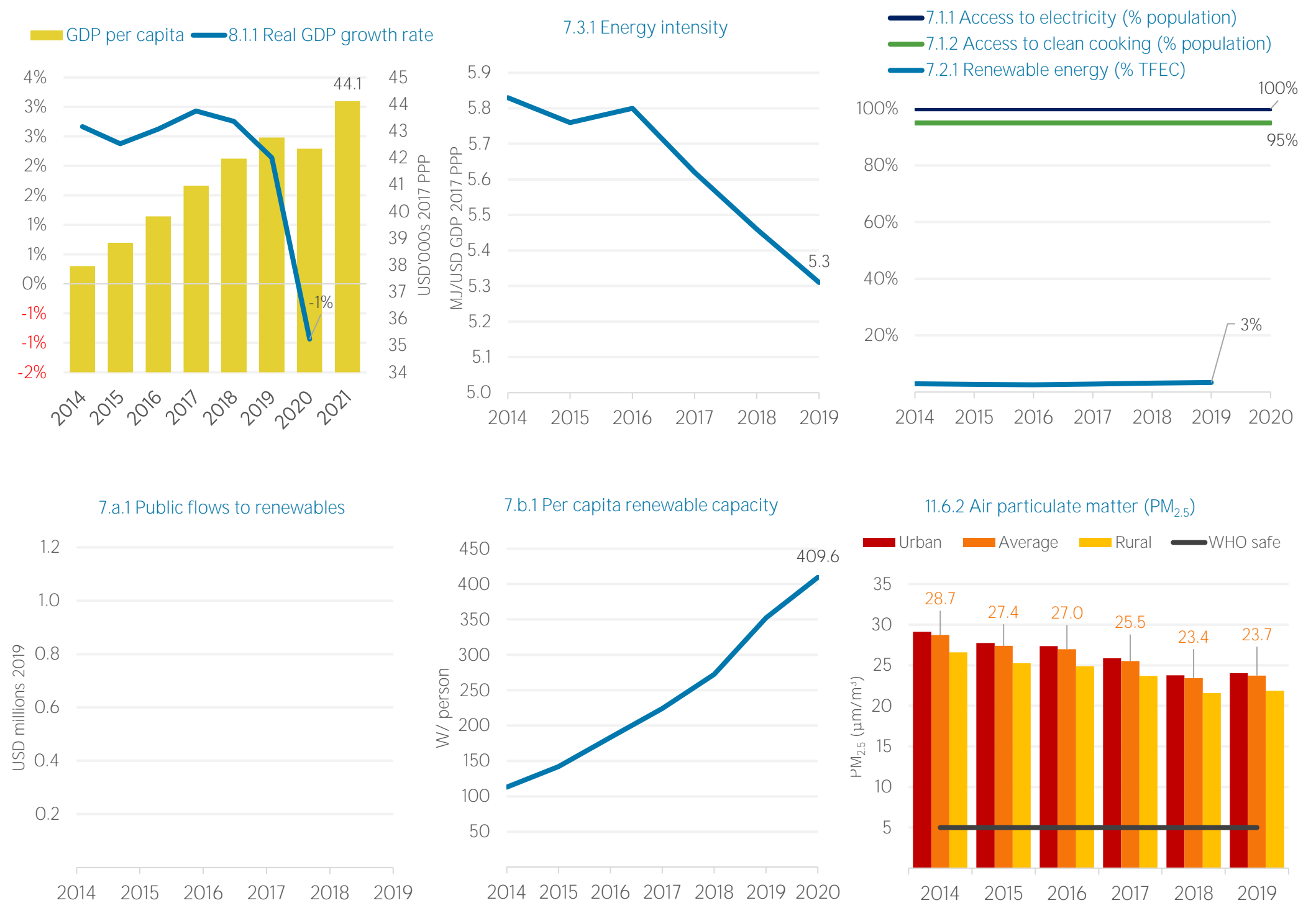


COUNTRY INDICATORS AND SDGS



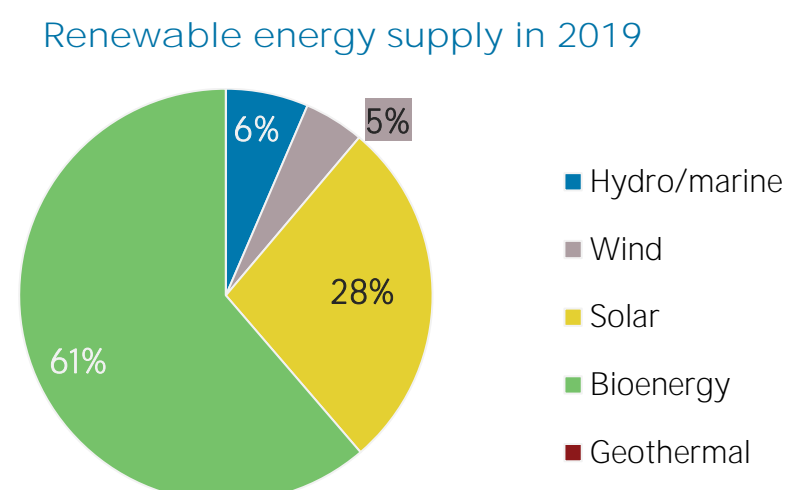
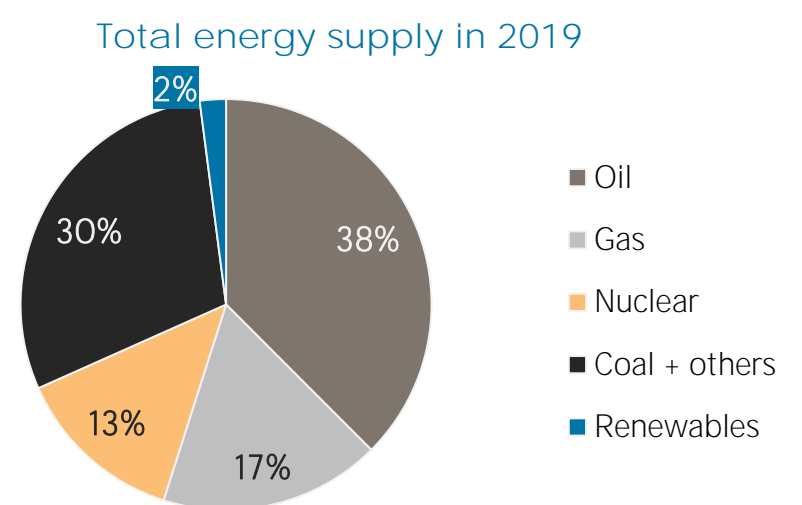
TOTAL ENERGY SUPPLY (TES)

Total Energy Supply (TES)	2014	2019
Non-renewable (TJ)	11 060 436	11 508 610
Renewable (TJ)	159 998	241 498
Total (TJ)	11 220 434	11 750 108
Renewable share (%)	1	2

Growth in TES	2014-19	2018-19
Non-renewable (%)	+4.1	-0.7
Renewable (%)	+50.9	+6.1
Total (%)	+4.7	-0.6

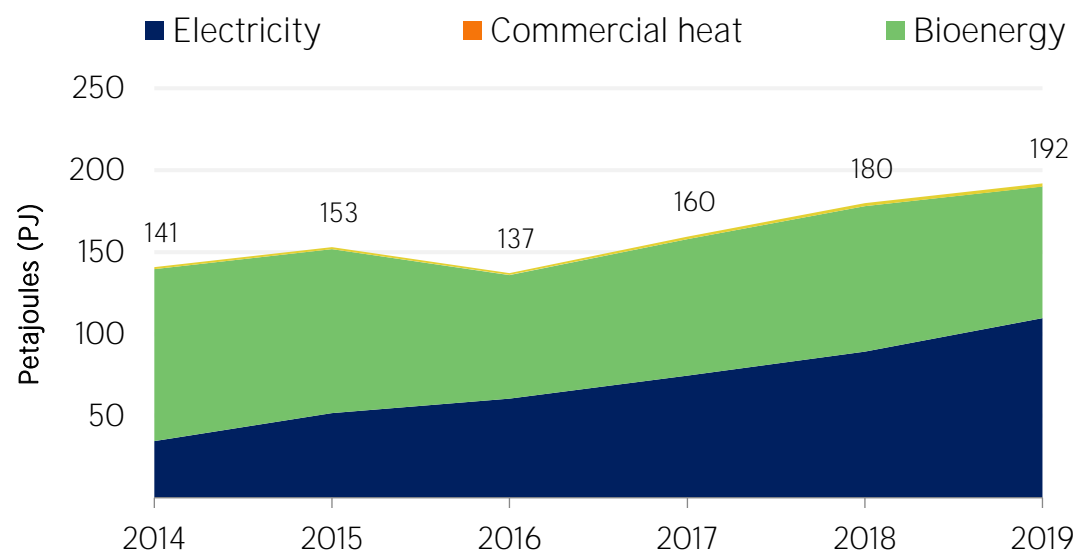
Primary energy trade	2014	2019
Imports (TJ)	12 232 892	13 256 260
Exports (TJ)	2 472 617	2 905 002
Net trade (TJ)	-9 760 275	-10 351 258

Imports (% of supply)	109	113
Exports (% of production)	122	145
Energy self-sufficiency (%)	18	17

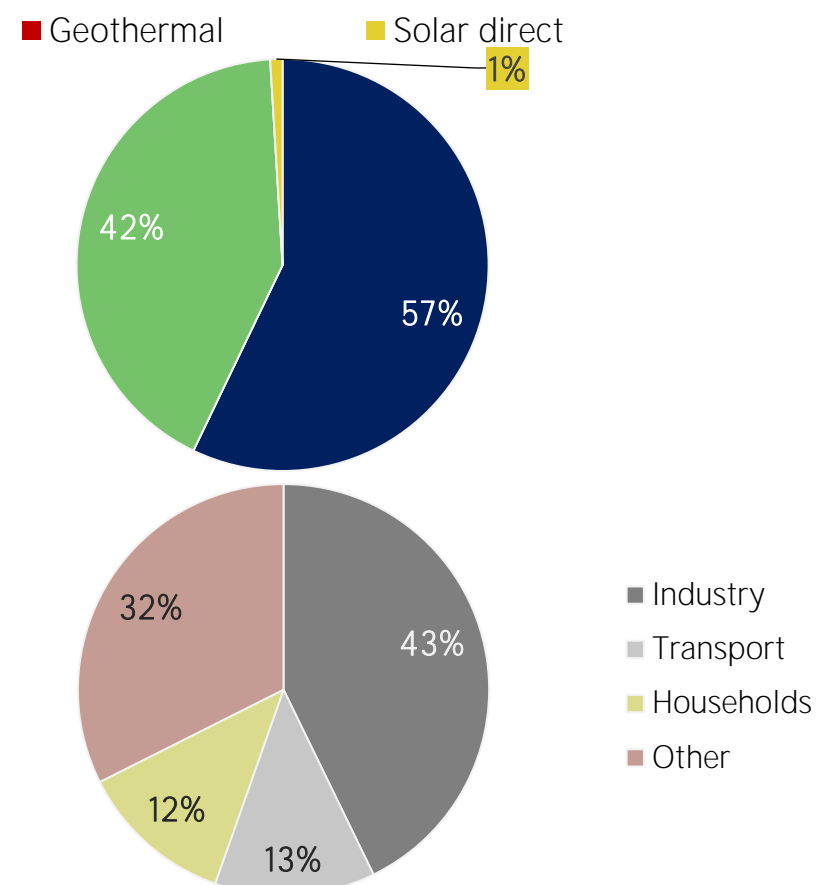


RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend



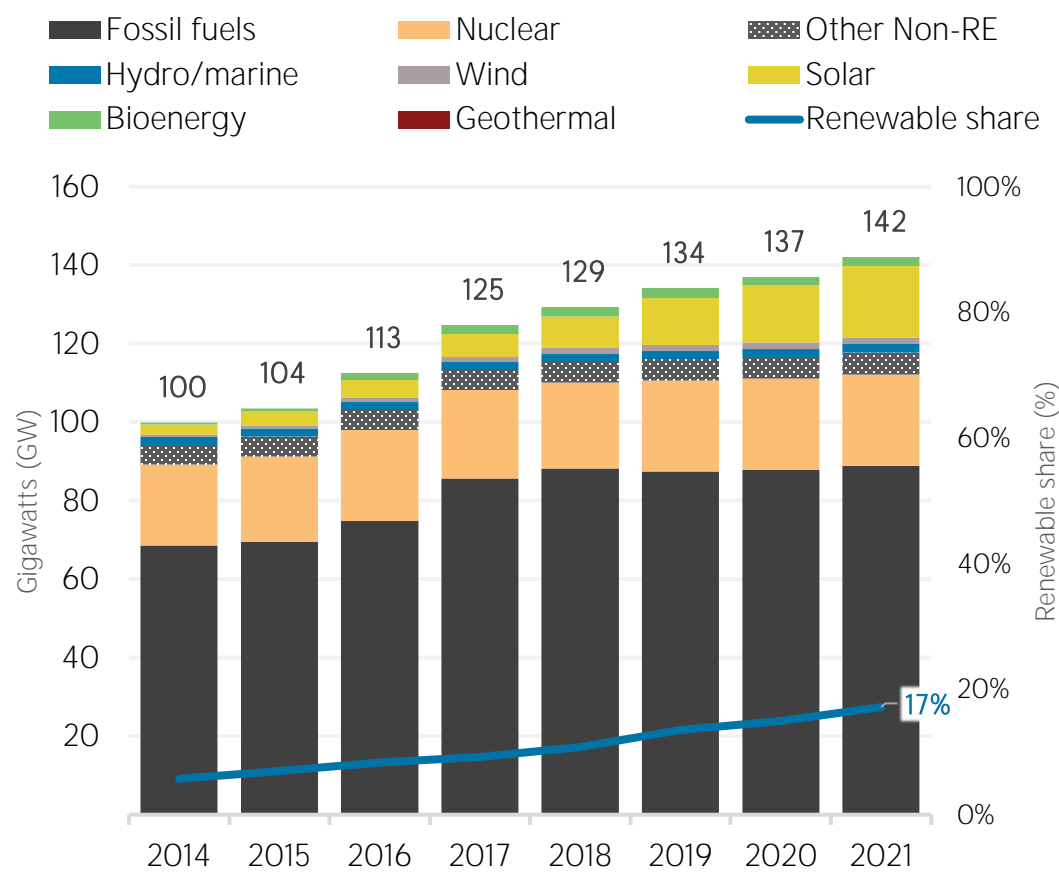
Renewable energy consumption in 2019



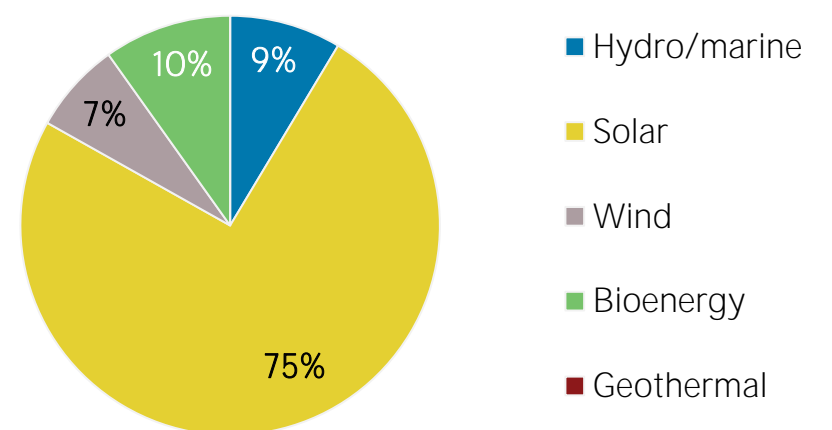
Consumption by sector	2014	2019
Industry (TJ)	62 194	82 125
Transport (TJ)	13 721	24 202
Households (TJ)	6 694	23 407
Other (TJ)	58 143	62 197

ELECTRICITY CAPACITY

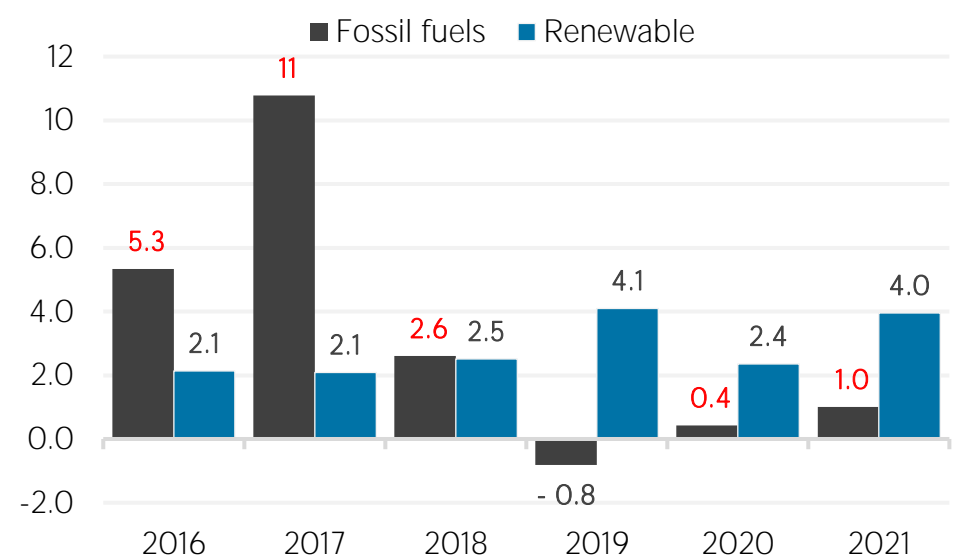
Installed capacity trend



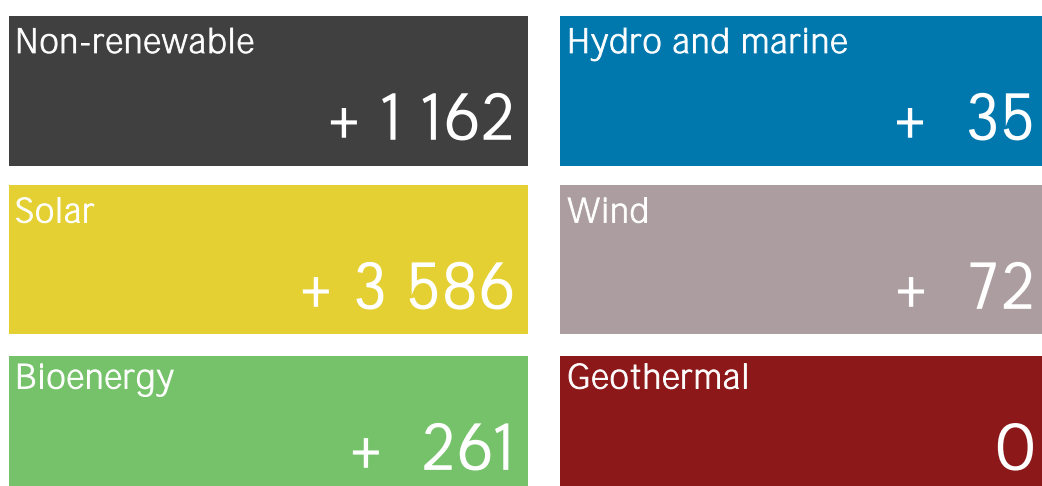
Renewable capacity in 2021



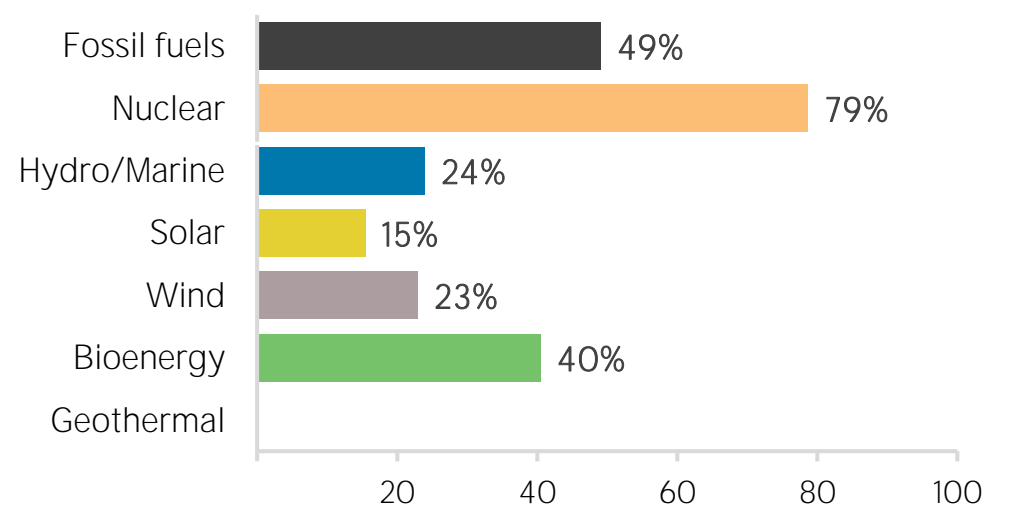
Net capacity change (GW)



Net capacity change in 2021 (MW)

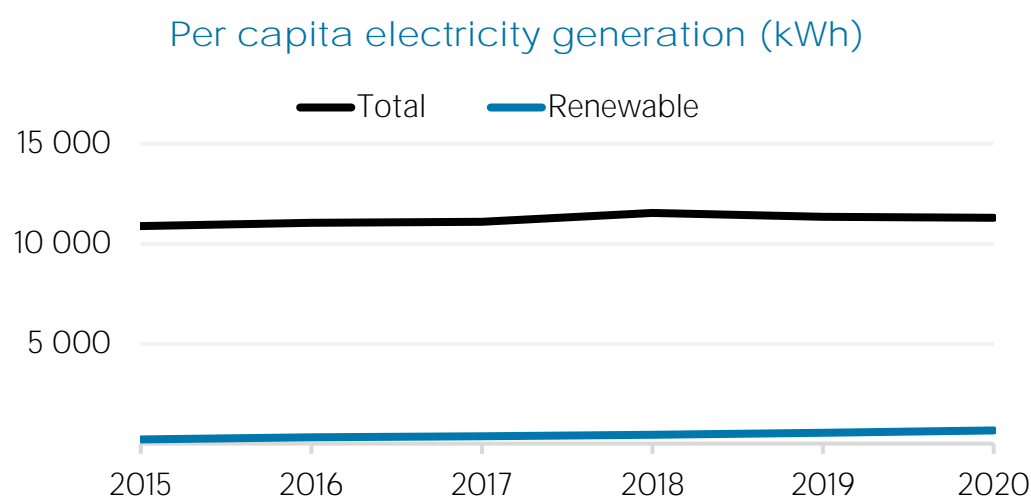


Capacity utilisation in 2020 (%)

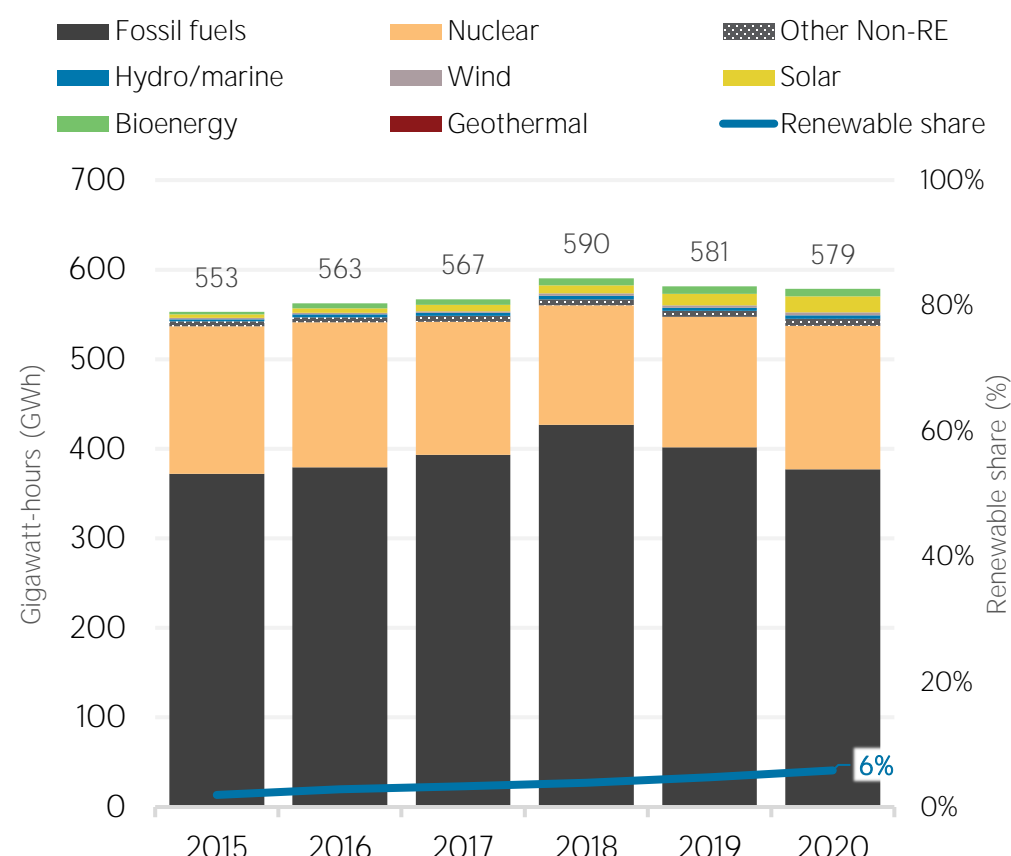


ELECTRICITY GENERATION

Generation in 2020	GWh	%
Non-renewable	544 842	94
Renewable	33 750	6
Hydro and marine	4 334	1
Solar	17 967	3
Wind	3 151	1
Bioenergy	8 298	1
Geothermal	0	0
Total	578 592	100



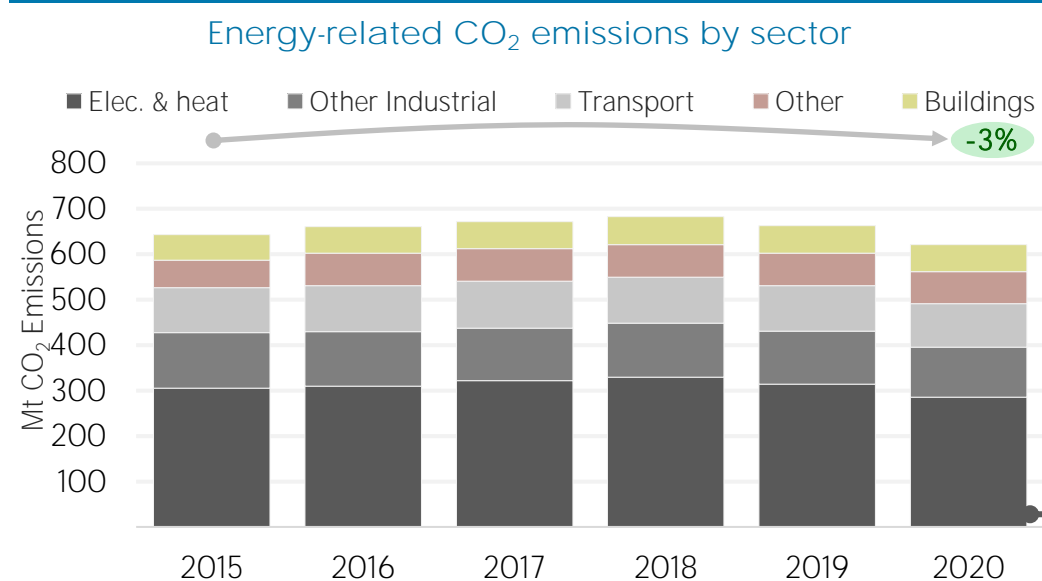
Electricity generation trend



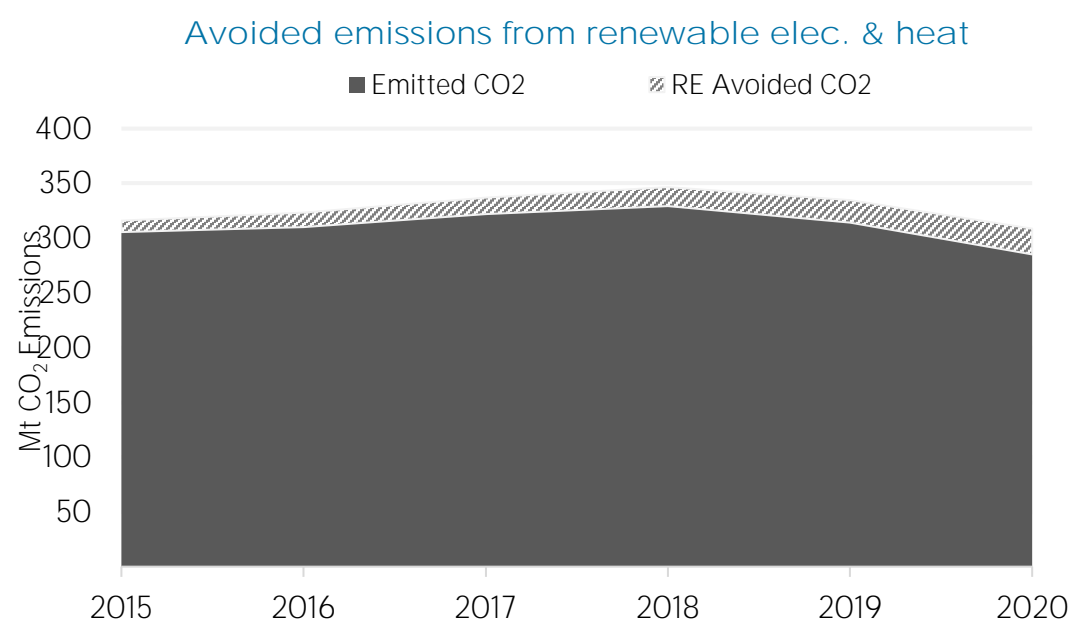
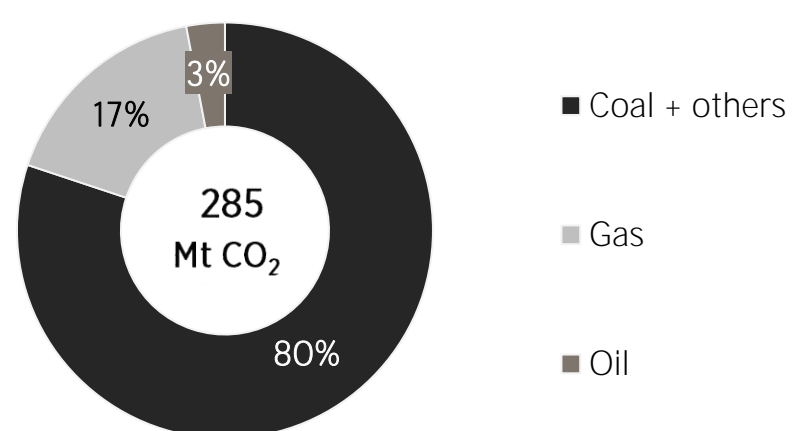
LATEST POLICIES, PROGRAMMES AND LEGISLATION

- 1 2018 - 2030 Methane Reduction Plan 2021
- 2 Amendments to the "Enforcement Decree of the Environment-friendly Vehicles Act" 2021
- 3 Coal power plants to be suspended in March 2021 2021
- 4 Energy vouchers for vulnerable households 2021
- 5 Green Guarantee Business - Loan guarantees with estimated GHG reductions 2021

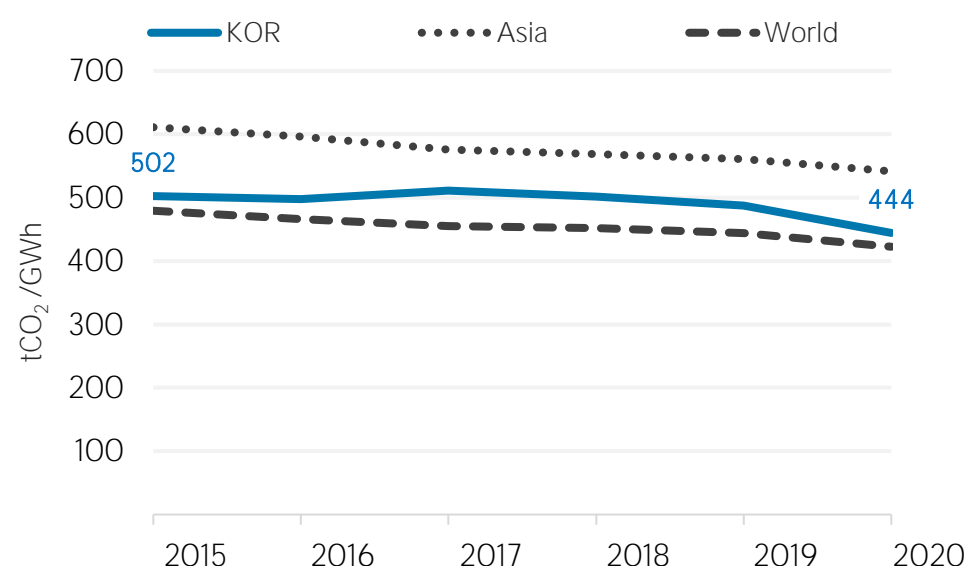
ENERGY AND EMISSIONS



Elec. & heat generation CO₂ emissions in



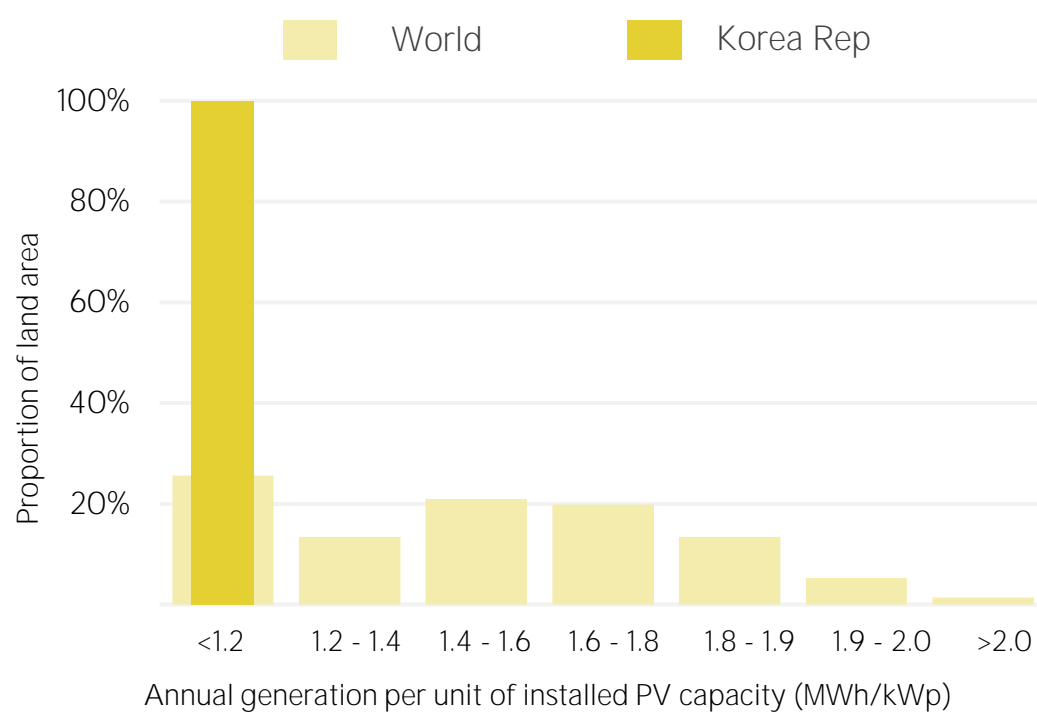
CO₂ emission factor for elec. & heat generation



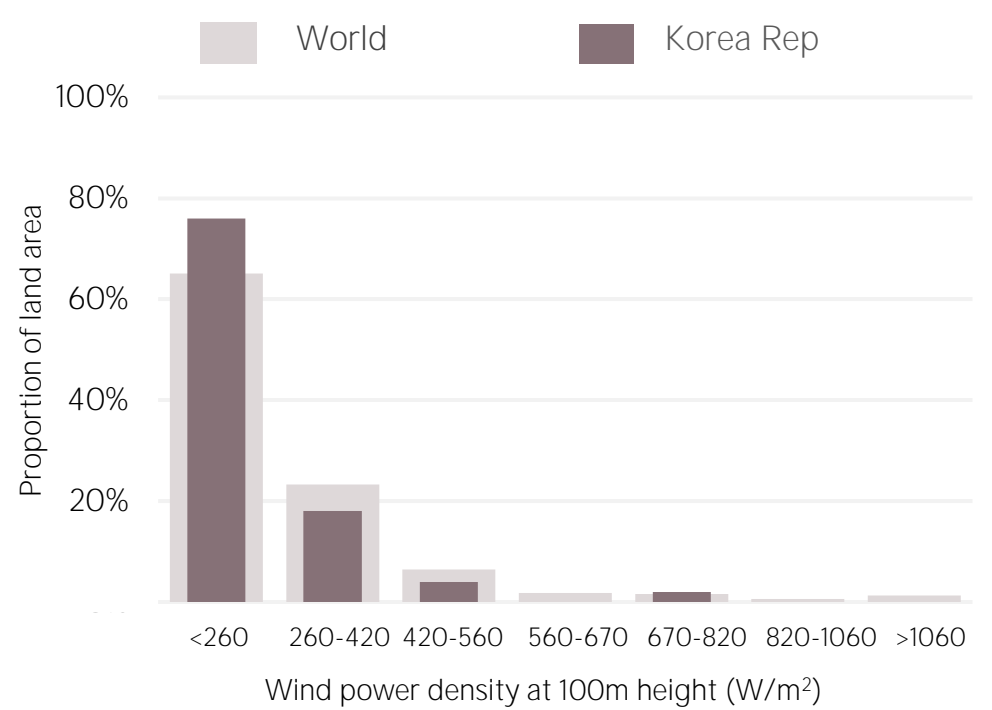
Avoided emissions based on fossil fuel mix used for power

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

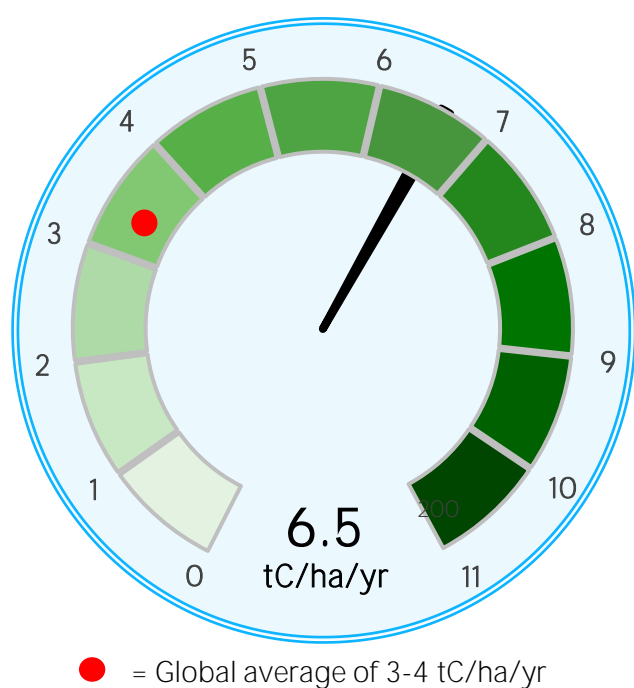
Distribution of solar potential



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