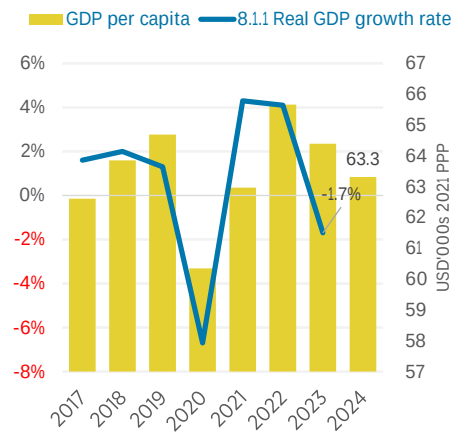
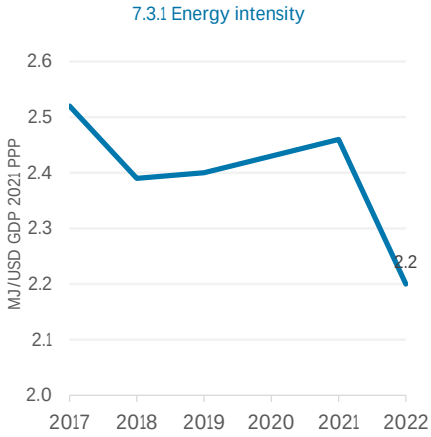
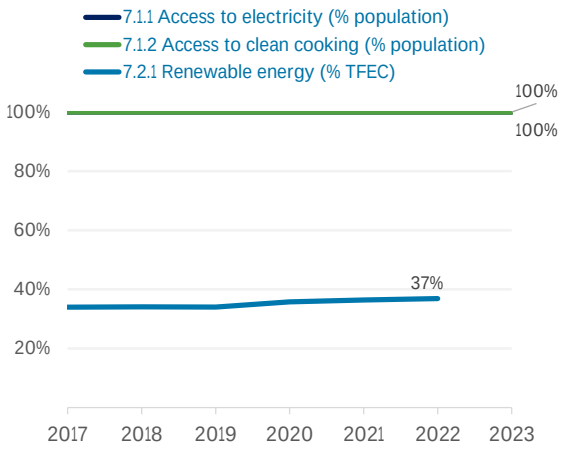
ENERGY PROFILE

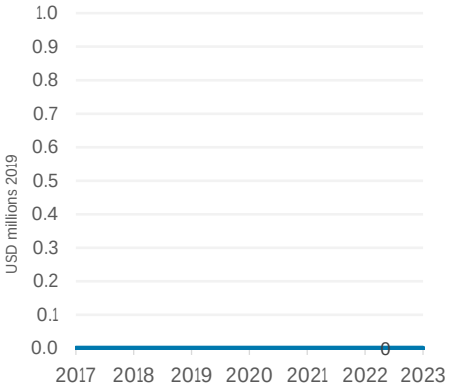
Austria

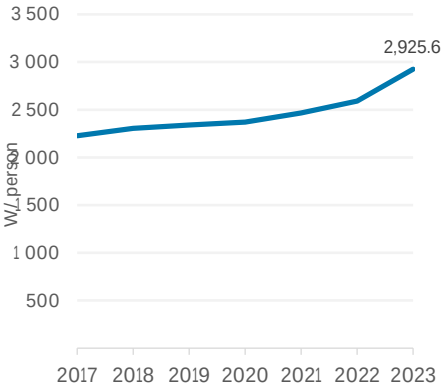
COUNTRY INDICATORS AND SDGS

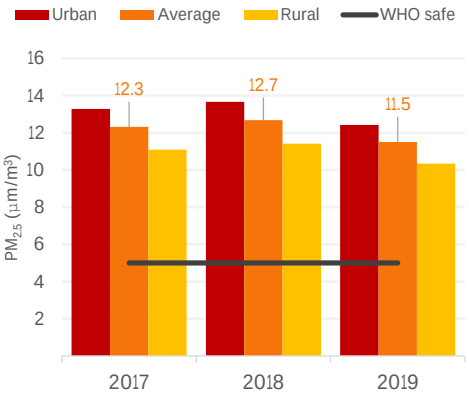












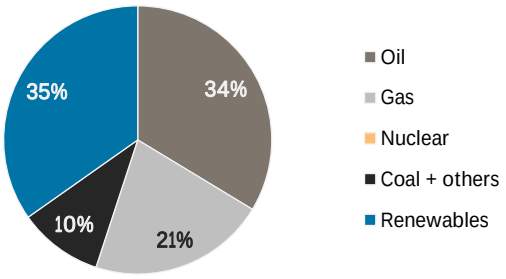
TOTAL ENERGY SUPPLY (TES)

Total Energy Supply (TES)	2017	2022
Non-renewable (TJ)	975 491	879 751
Renewable (TJ)	434 162	468 979
Total (TJ)	1 409 653	1 348 730
Renewable share (%)	31	35

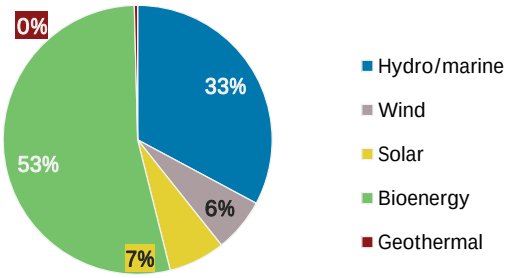
Growth in TES	2017-22	2021-22
Non-renewable (%)	-9.8	-6.7
Renewable (%)	+8.0	+6.1
Total (%)	-4.3	-2.7

Primary energy trade	2017	2022
Imports (TJ)	1 349 351	1 190 984
Exports (TJ)	413 513	175 288
Net trade (TJ)	- 935 838	-1 015 696
Imports (% of supply)	96	88
Exports (% of production)	81	34
Energy self-sufficiency (%)	36	39

Total energy supply in 2022

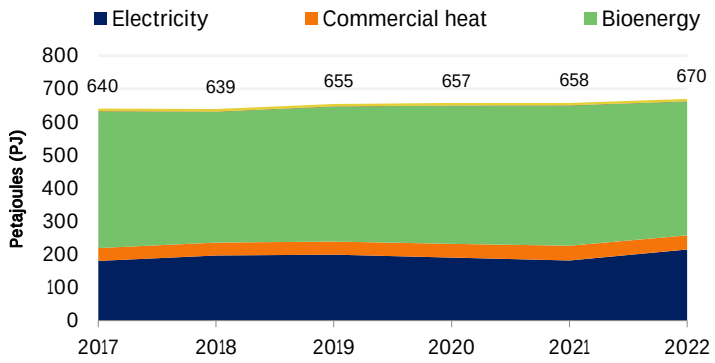


Renewable energy supply in 2022



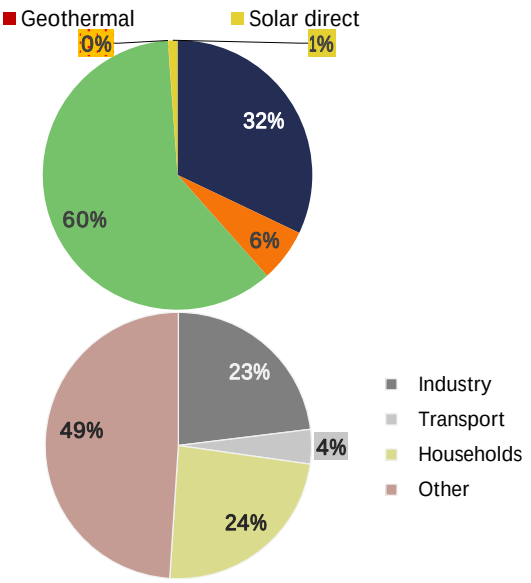
RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend



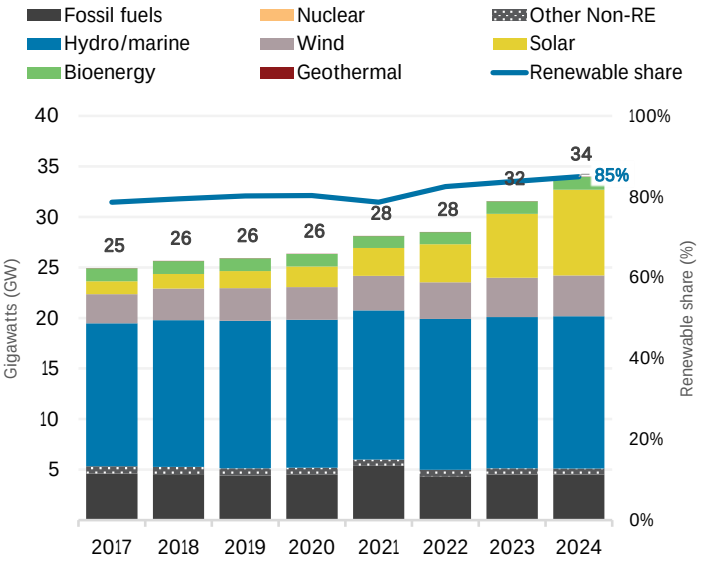
Consumption by sector	2017	2022
Industry (TJ)	167 792	154 418
Transport (TJ)	29 088	28 024
Households (TJ)	150 131	159 368
Other (TJ)	293 288	327 951

Renewable energy consumption in 2022



ELECTRICITY CAPACITY

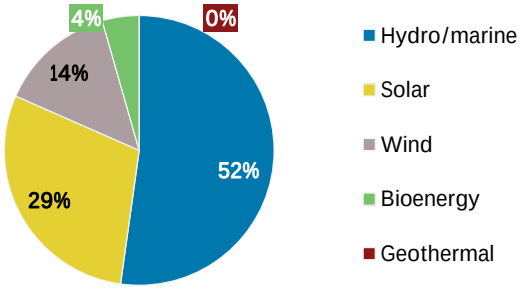
Installed capacity trend



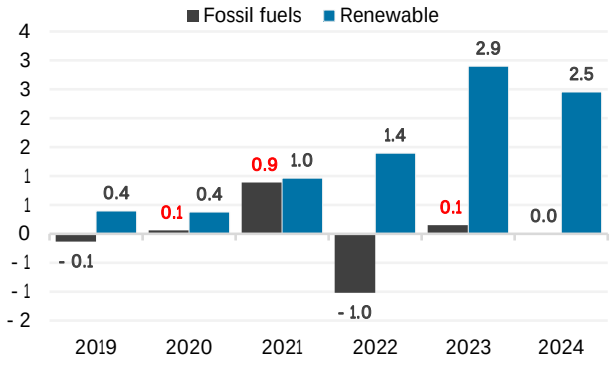
Net capacity change in 2024 (MW)

Non-renewable: - 24	Hydro and marine: + 118
Solar: + 2 150	Wind: + 139
Bioenergy: + 48	Geothermal: 0

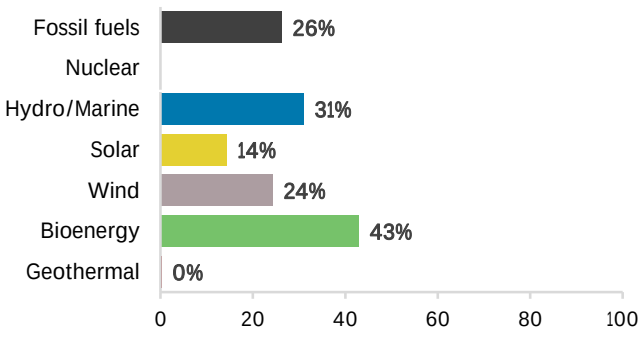
Renewable capacity in 2024



Net capacity change (GW)



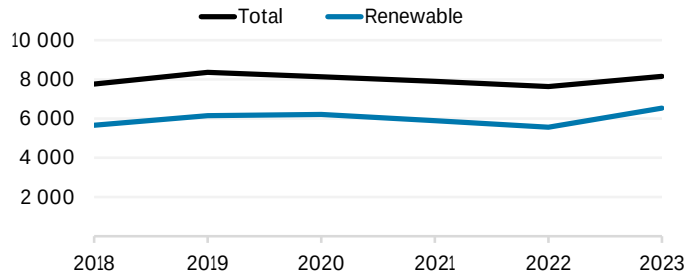
Capacity utilisation in 2023 (%)



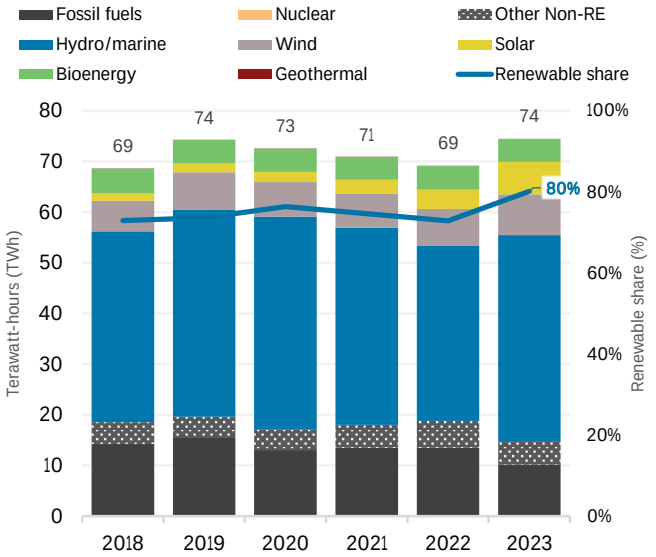
ELECTRICITY GENERATION

Generation in 2023	GWh	%
Non-renewable	**14 797**	**20**
Renewable	**59 662**	**80**
Hydro and marine	40 673	55
Solar	6 395	9
Wind	8 037	11
Bioenergy	4 558	6
Geothermal	0	0
Total	**74 459**	**100**

Per capita electricity generation (kWh)



Electricity generation trend

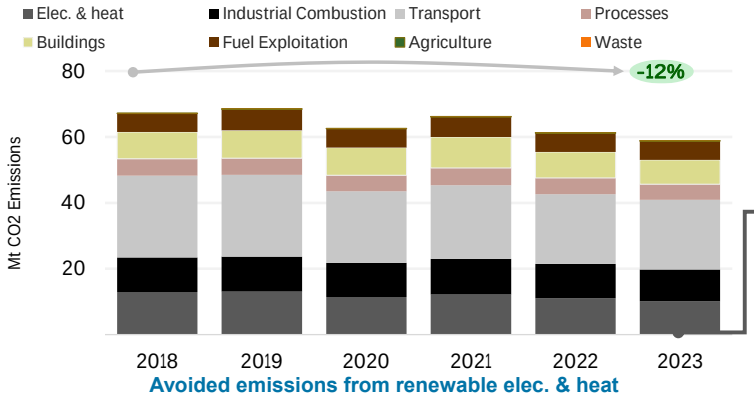


LATEST POLICIES, PROGRAMMES AND LEGISLATION

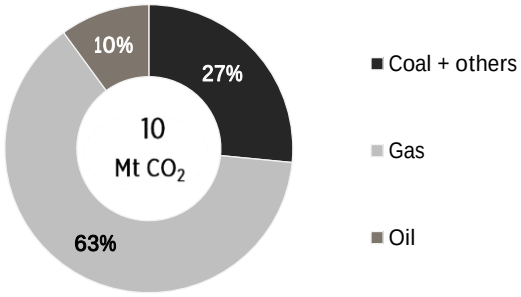
1	Austria's REPowerEU	2024
2	Photovoltaic systems and electricity storage systems	2024
3	Regulation 2024/573 on fluorinated greenhouse gases	2024
4	Renewable Heat Act - ban on gas heating	2024
5	Energy subsidies for households and companies	2023

ENERGY AND EMISSIONS

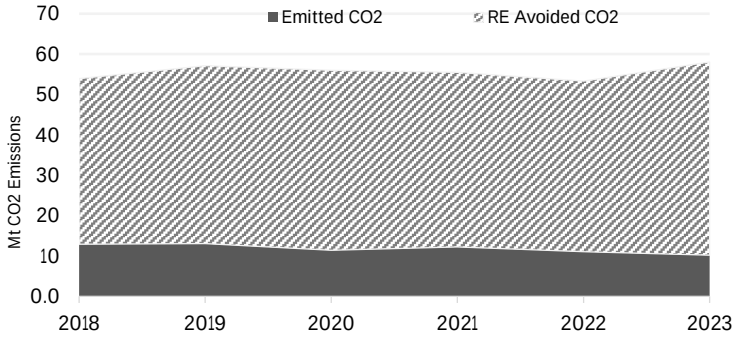
CO_2 emissions by sector



Elec. & heat generation CO_2 emissions in

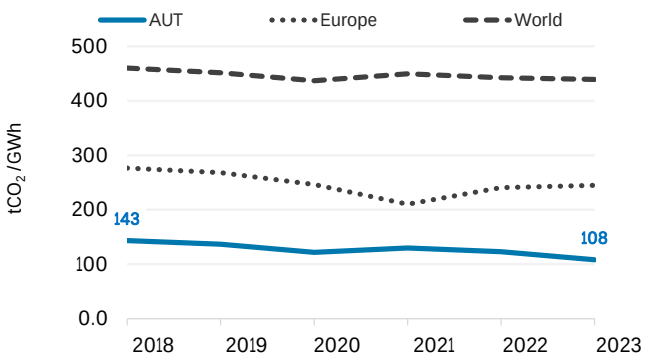


Avoided emissions from renewable elec. & heat



Avoided emissions based on fossil fuel mix used for power

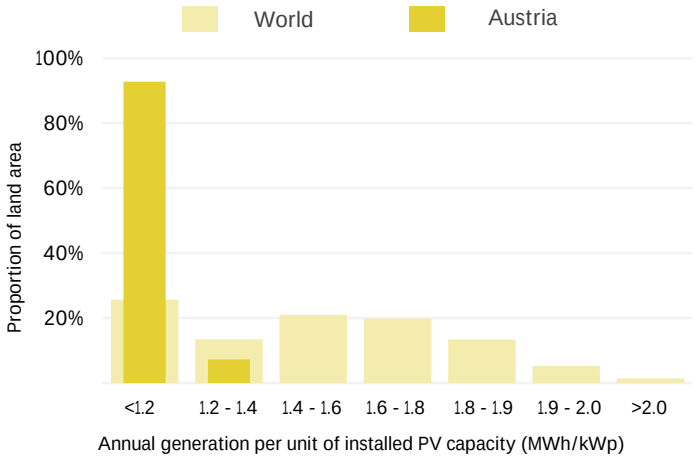
CO_2 emission factor for elec. & heat generation



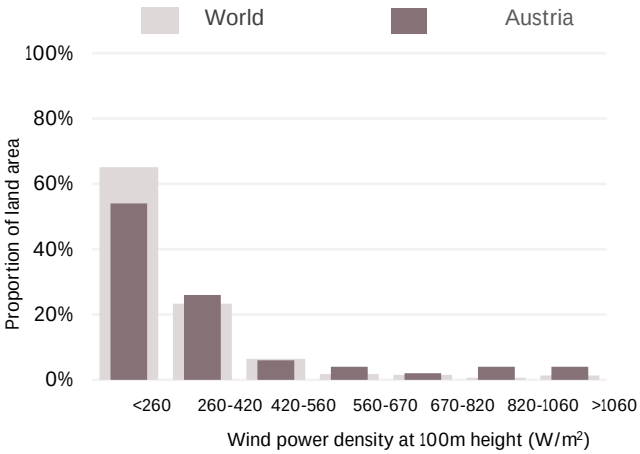
Calculated by dividing power sector emissions by elec. + heat gen.

RENEWABLE RESOURCE POTENTIAL

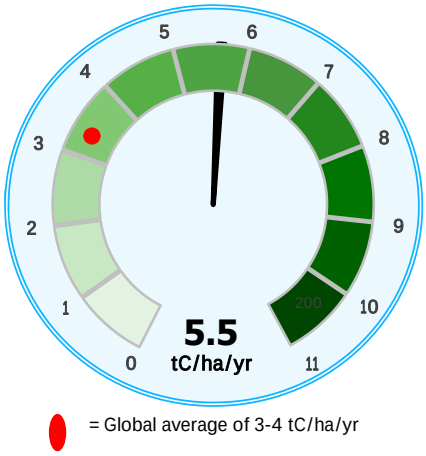
Distribution of solar potential



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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