COUNTRY INDICATORS AND SDGS

GDP per capita — **8.1.1 Real GDP growth rate**

7.3.1 Energy intensity

- 7.1.1 Access to electricity (% population)
- 7.1.2 Access to clean cooking (% population)
- 7.2.1 Renewable energy (% TFEC)

7.a.1 Public flows to renewables

7.b.1 Per capita renewable capacity

11.6.2 Air particulate matter (PM$_{2.5}$)

Urban — Average — Rural — WHO safe
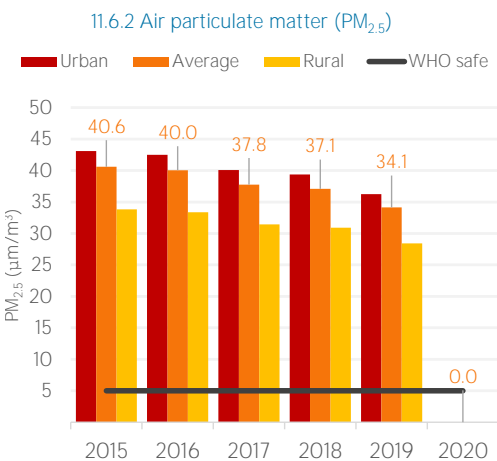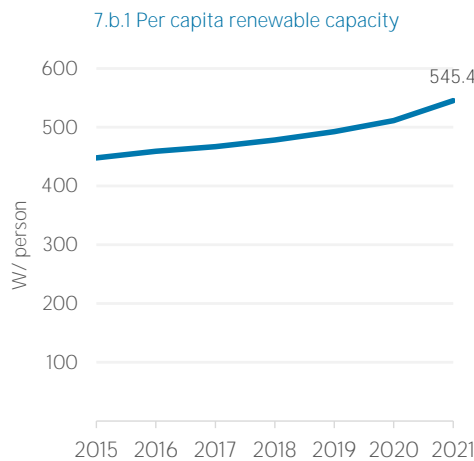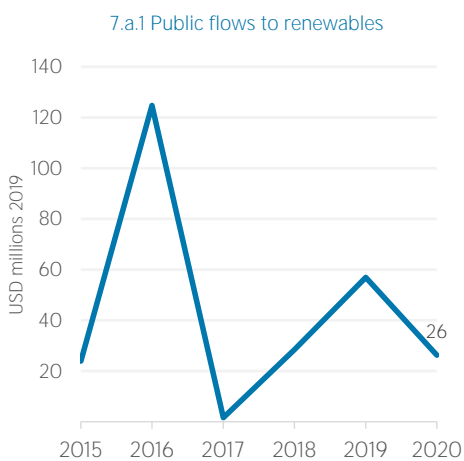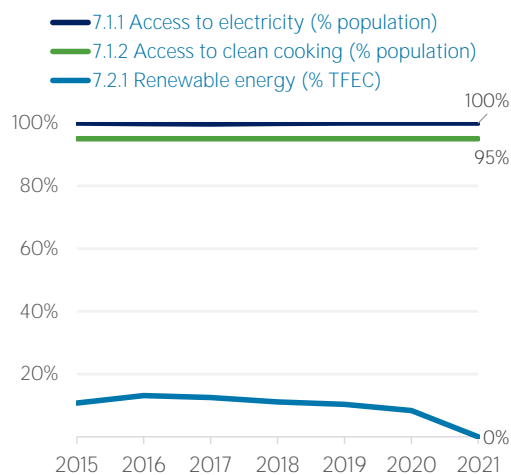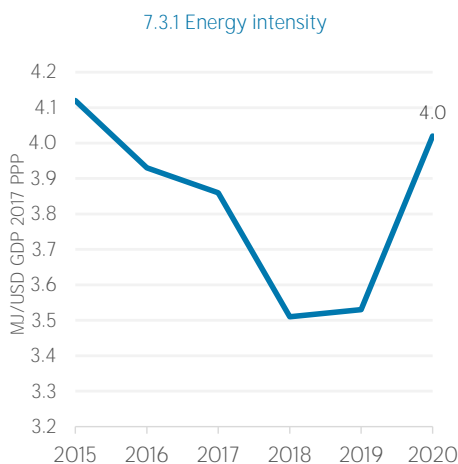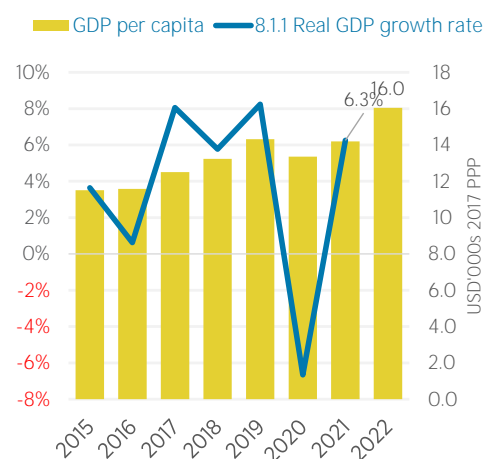
TOTAL ENERGY SUPPLY (TES)

Total Energy Supply (TES)	2015	2020
Non-renewable (TJ)	121 292	140 434
Renewable (TJ)	13 943	13 590
Total (TJ)	135 235	154 024
Renewable share (%)	10	9

Growth in TES	2015-20	2019-20
Non-renewable (%)	+15.8	+9.9
Renewable (%)	-2.5	+20.6
Total (%)	+13.9	+10.8

Primary energy trade	2015	2020
Imports (TJ)	97 857	118 415
Exports (TJ)	5 138	4 872
Net trade (TJ)	- 92 719	- 113 543
Imports (% of supply)	72	77
Exports (% of production)	11	11
Energy self-sufficiency (%)	33	28

Total energy supply in 2020

- Oil
- Gas
- Nuclear
- Coal + others
- Renewables
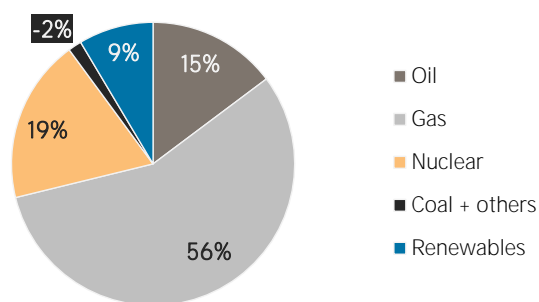
Renewable energy supply in 2020

- Hydro/marine
- Wind
- Solar
- Bioenergy
- Geothermal
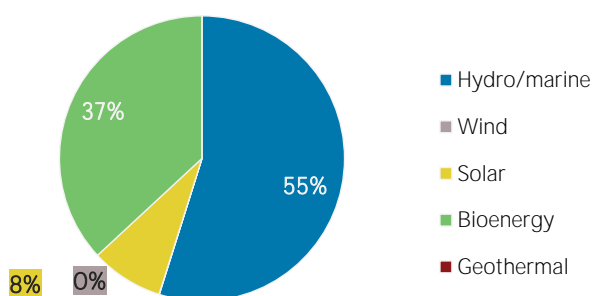
RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend

- Electricity
- Commercial heat
- Bioenergy

Petajoules (PJ)

	2015	2016	2017	2018	2019	2020
	23	25	26	23	21	21

Renewable energy consumption in 2020

- Geothermal
- Solar direct

40%
57%
3%

- Industry
- Transport
- Households
- Other

11%
1%
39%
49%

Consumption by sector
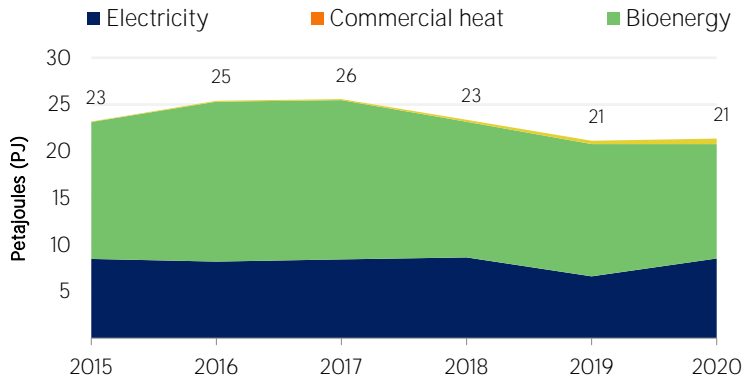
Consumption by sector	2015	2020
Industry (TJ)	2 487	2 384
Transport (TJ)	166	129
Households (TJ)	9 680	8 335
Other (TJ)	10 841	10 505
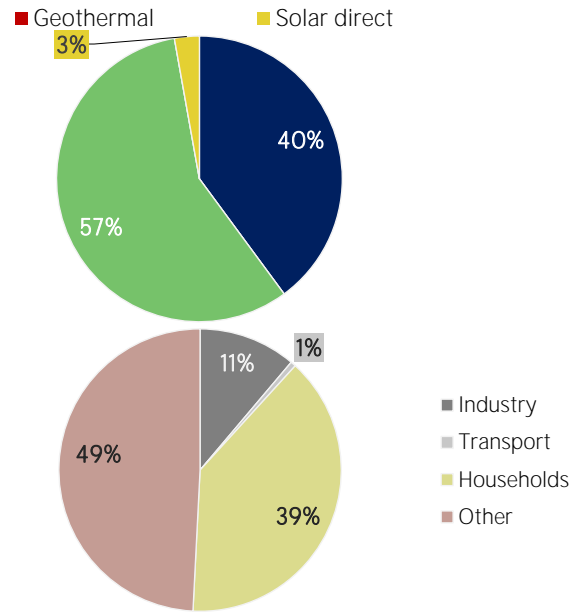
ELECTRICITY CAPACITY

Installed capacity trend

- Fossil fuels
- Nuclear
- Other Non-RE
- Hydro/marine
- Wind
- Solar
- Bioenergy
- Geothermal
- Renewable share

Gigawatts (GW) — Renewable share (%)

2015	2016	2017	2018	2019	2020	2021	2022
3.5	3.6	3.6	3.6	3.6	3.6	4.0	4.1

38%
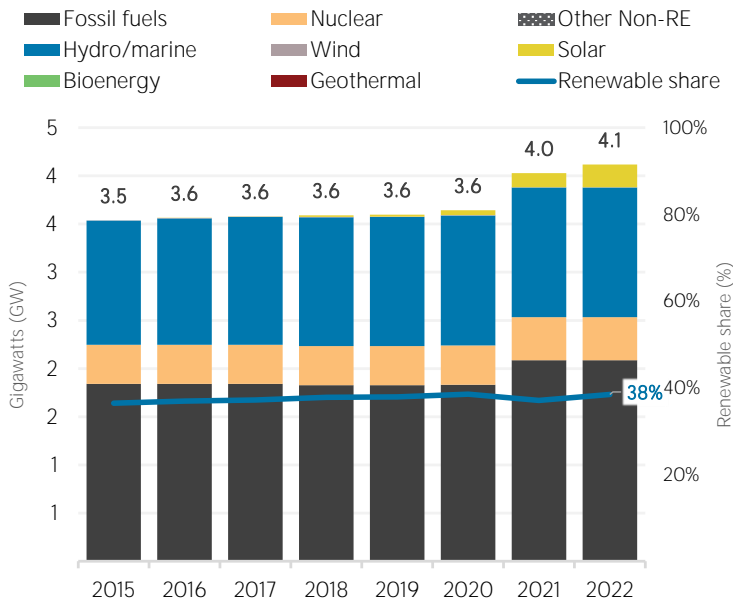
Renewable capacity in 2022

0%
15%
85%

- Hydro/marine
- Solar
- Wind
- Bioenergy
- Geothermal
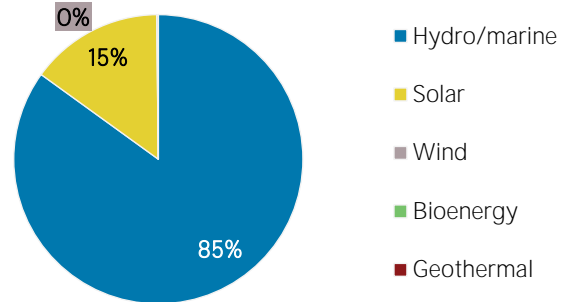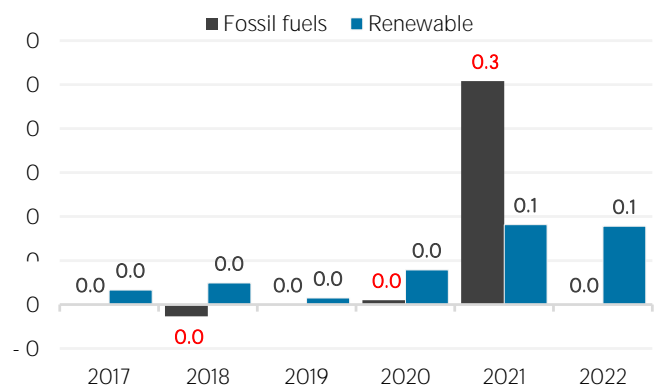
Net capacity change in 2022 (MW)

Non-renewable	0	Hydro and marine	0
Solar	+ 89	Wind	0
Bioenergy	0	Geothermal	0

Net capacity change (GW)

- Fossil fuels
- Renewable

2017	2018	2019	2020	2021	2022
0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.0 / 0.0	0.3 / 0.1	0.0 / 0.1
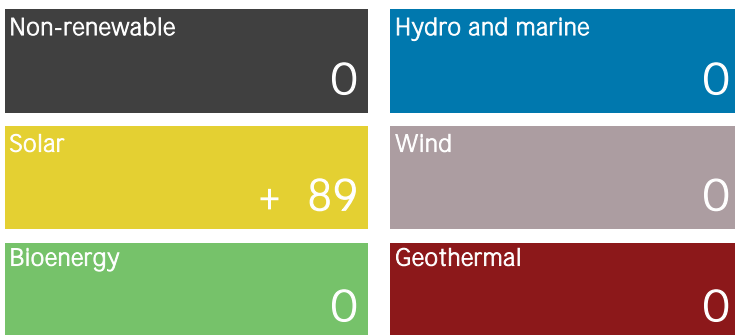
Capacity utilisation in 2021 (%)

- Fossil fuels: 20%
- Nuclear: 53%
- Hydro/Marine: 19%
- Solar: 19%
- Wind: 6%
- Bioenergy
- Geothermal
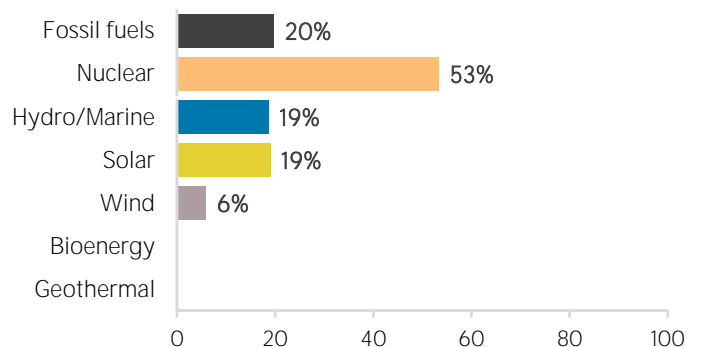
ELECTRICITY GENERATION

Generation in 2021

Generation in 2021	GWh	%
Non-renewable	5 382	69
Renewable	2 367	31
Hydro and marine	2 202	28
Solar	164	2
Wind	2	0
Bioenergy	0	0
Geothermal	0	0
Total	7 749	100

Per capita electricity generation (kWh)
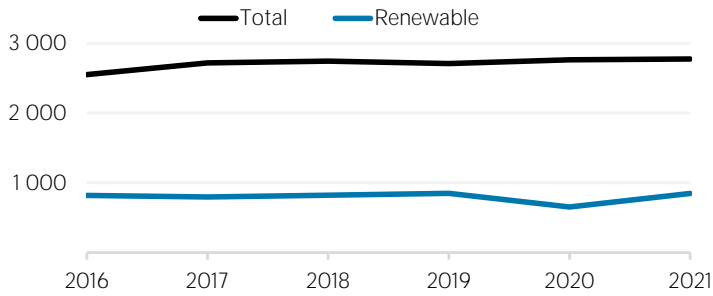
Electricity generation trend
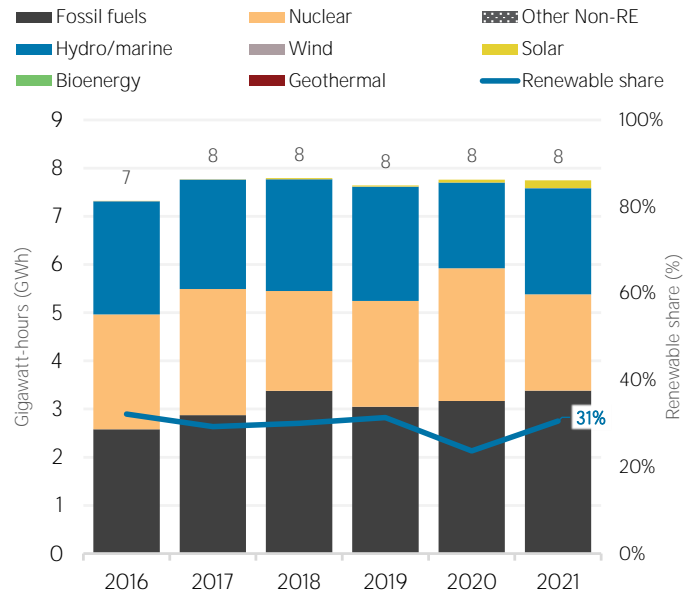

LATEST POLICIES, PROGRAMMES AND LEGISLATION

|		
1	On Urban Development	2018
2	"Artificial and Natural Lighting" RACN 22-03-2017	2017
3	EE building Code - "Thermal Protection of Buildings" 24-01-2016 RACN	2016
4	Scaling Up Renewable Energy Program for Armenia (SREP Armenia)	2014
5	The Strategic Development Program of Hydro energy Sector of the Republic of Armenia	2011

ENERGY AND EMISSIONS

Energy-related CO_2 emissions by sector
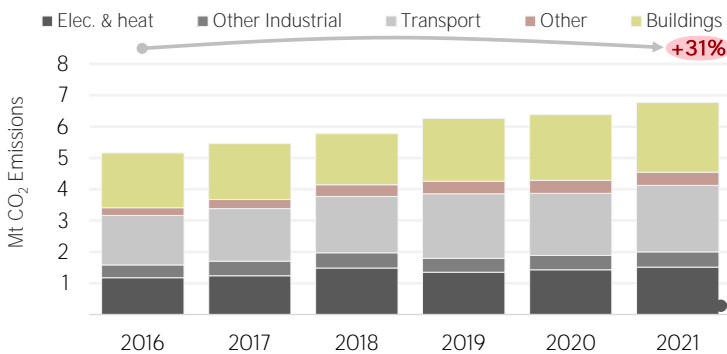
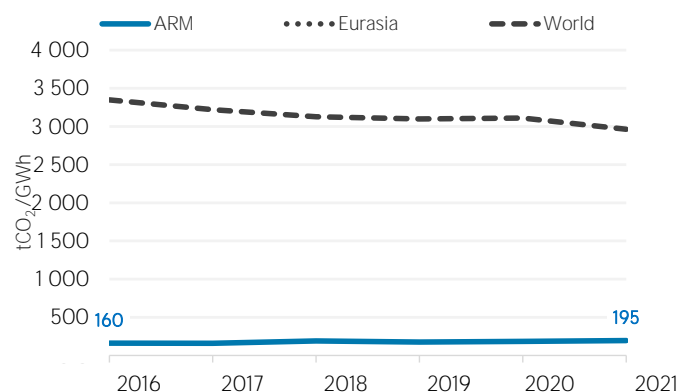## Elec. & heat generation CO_2 emissions in
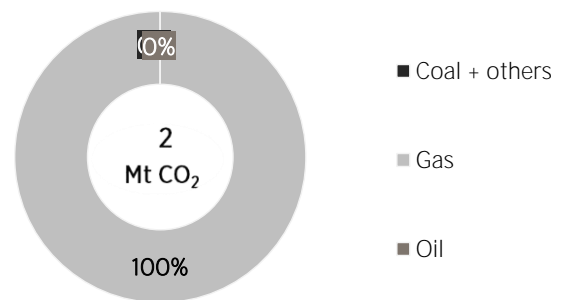
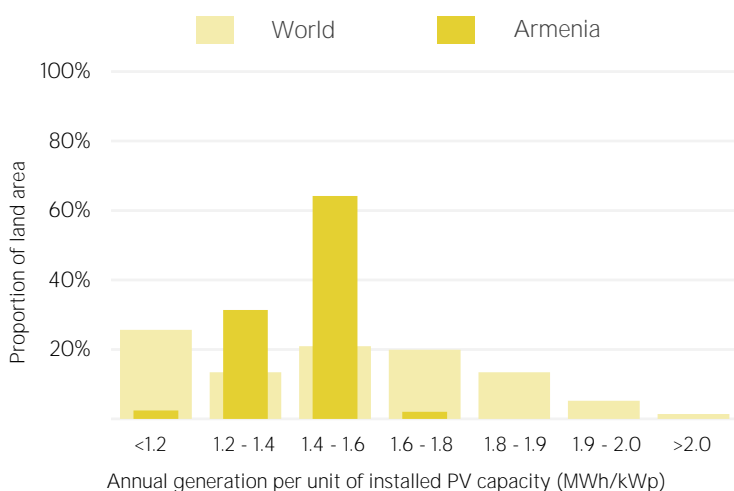## Avoided emissions from renewable elec. & heat
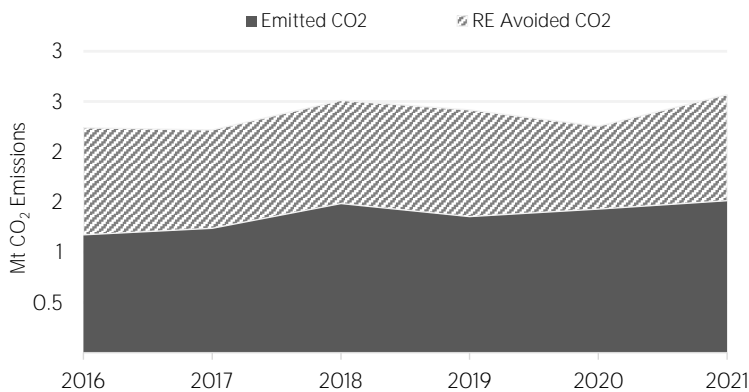
Avoided emissions based on fossil fuel mix used for power
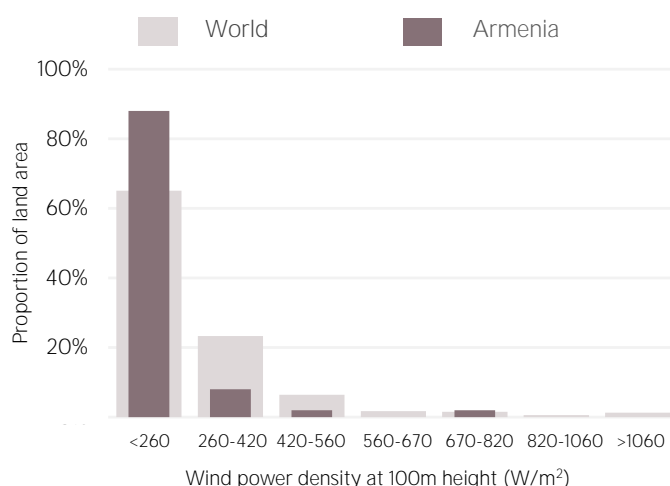
CO_2 emission factor for elec. & heat generation

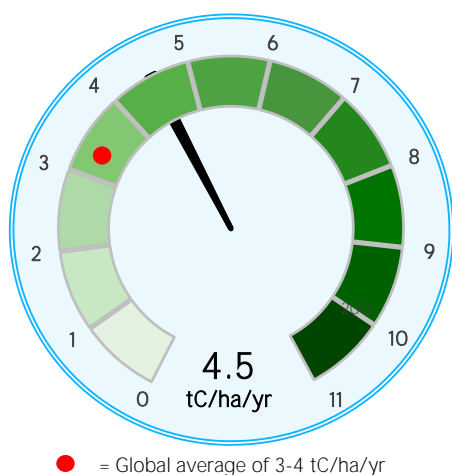*Calculated by dividing power sector emissions by elec. + heat gen.*

Distribution of solar potential

Proportion of land area

Legend: World, Armenia

Annual generation per unit of installed PV capacity (MWh/kWp)

Categories: <1.2, 1.2 - 1.4, 1.4 - 1.6, 1.6 - 1.8, 1.8 - 1.9, 1.9 - 2.0, >2.0

Distribution of wind potential

Proportion of land area

Legend: World, Armenia

Wind power density at 100m height (W/m²)

Categories: <260, 260-420, 420-560, 560-670, 670-820, 820-1060, >1060

Biomass potential: net primary production

4.5
tC/ha/yr

● = Global average of 3-4 tC/ha/yr

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