

Annex Spain - Climate Targets

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1 Spain

Spain wants to get net-zero carbon emission by 2050. The difficulties with the translation is present here as well. The main assumption made is that "objectives" is translated as targets.

1.1 Supply

1.1.1 Percent targets

n/a

1.1.2 Capacity targets

The capacity targets are given in MW[1, 71].

Table 1: Evolution of gross installed electrical power (MW)

Years	2019	2020	2025	2030
Wind	25,583	26,754	36,149	62,054
Solar Photovoltaic	8,306	11,004	46,501	76,277
Solar thermoelectric	2,300	2,300	2,304	4,804
Hydraulic	14,006	14,011	14,261	14,511
Biogas	203	210	240	440
Other renewables	0	0	25	80
Biomass	413	609	1,009	1,409
Coal	10,159	10,159	0	0
Combined cycle	26,612	26,612	26,612	26,612
Cogeneration	5,446	5,276	4,068	3,784
Fuel and Fuel/Gas (Non-Peninsular Territories)	3,660	3,660	2,847	1,830
Waste and other	600	609	470	342
Nuclear	7,399	7,399	7,399	3,181
Storage	6,413	6,413	9,289	18,913
Total	111,100	115,015	161,173	214,236

Off shore wind targets [2, 1].

1.2 Demand

Here is the general demand for the different energies where 2025 and 2030 are estimated given in ktoe[1, 79].

Table 2: Evolution of final energy consumption(ktoe)

Years	2019	2020	2025	2030
Coal	446	396	241	189
Petroleum Products	44,373	34,133	36,237	28,035
Natural gas	14,456	13,819	13,272	11,085
Electricity	20,166	18,887	20,758	23,543
Renewable	5,895	5,511	7,351	8,449
Other non-renewables	217	193	353	408
Total	85,553	72,939	78,213	71,709

1.2.1 EV targets

n/a

1.2.2 Heat pumps targets

n/a

1.3 Hydorgen

There are some writing on hydorgen but no concreet numbers are found.

References

- [1] NECP. Spain - Final updated NECP 2021-2030 (submitted 2024) - European Commission.
- [2] Petr Novak. Spain issues plan for up to 3 GW offshore wind by 2030 - in perfect time for WindEurope 2022 in Bilbao!, December 2021.