Summer project - Country

Claus Ole Munthe Øren

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1 Portugal

In the NECP of Portugal their WAM scenarios are understood as the targets. The translation error exist her as well, but I believe that it should be well understood. From that their nnumbers are good and give a good assessment of where they want to be in 2030. However, they do not give any numbers after 2030.

1.1 Supply

1.1.1 Percent targets

source [3, 60]

Table 1: Estimated trajectories for the sectoral share of renewable energy in final energy consumption by 2030

	NECP 2030			PNEC Revision 2030	
	2020	2025	2030	2025	2030
Electricity	60%	69%	80%	86%	93% *
Heating and Repair	34%	36%	38%	46%	63% **
Transportation	10%	13%	20%	19%	29% **

1.1.2 Capacity targets

Source: [3, 70]

Table 2: Prospects of evolution of installed capacity for electricity generation by technology in Portugal by 2030, based on planned policies and measures – WAM Scenario (GW)

	2025	2030
Water	8.1	8.1
of which pumped	3.6	3.9
Wind *	6.3	12.4
Onshore wind	6.3	10.4
Offshore wind	0.03	2.0
Solar Photovoltaic	8.4	20.8
of which centralised	6.1	15.1
of which decentralised	2.8	5.7
Concentrated Thermal Solar *	0	0
Biomass/Biogas and Waste	1.3	1.3
Geothermal	0.1	0.1
Waves	0	0.2
Natural Gas	4.8	3.5
Petroleum products	0.6	0.5
Storage (Batteries)	0.5	2.0
TOTAL	31	48

1.1.3 Climate targets

Portugal aims to be climate neutral by 2045 [1].

1.2 Demand

Here is the predicted in ktoe in the NECP broken down into different categories [3, 73].

Table 3: Prospects for the evolution of bioenergy demand in Portugal towards 2030, based on policies and planned measures – WAM Scenario (ktoe)

	2025	2030
Electricity	821	668
Heating and Repair	846	893
Transportation	400	423
TOTAL	2,068	1,984

1.2.1 EV targets

Portugal aims to have a 100 % of cars be EVs by 2050 and 36 % by 2035 [2]

1.2.2 Heat pump targets

Here the WAM is given in ktoe [3, 72].

Table 4: Outlook for the evolution of renewable consumption in heating and cooling by technology in Portugal by 2030, based on planned policies and measures – WAM Scenario (ktoe)

	2025	2030
Biomass	846	893
Heat pumps	941	1,241
Heat by solar thermal	132	184
Heat from cogeneration	550	547
Renewable gases	0	162
TOTAL	2,470	3,026

1.2.3 Storage

The target in 2030 is 2.0 GW in storage [see Capacity targets Portugal]

References

- [1] MORGADO SIMOES Henrique. Portugal's climate action strategy.
- [2] Jennifer Mota. EV charging on Portugal's public grid costs twice as much as at home, November 2024. Section: Politics.
- [3] NECP. Portugal Final updated NECP 2021-2030 (submitted in 2024) European Commission.