Annex Estonia - Climate Targets

June 2025

1 Estonia

In the introduction of the NECP they write that Estonia will, based on projections, reach the target of becoming climate neutral by 2050 and that by 2030 100% electricity production will be from renewable sources [1, 4]. With respects to the supply side of things, I found good numbers describing the different sectors, but not that much in relation to the demand side. The annex as follows is almost empty with regards to relevant data meaning that there is a distinct lack of data when it comes to Estonia.

In the translated NECP the page number lacks its second digit and I have, therefore, used the search functions page number as the reference number. Another general problems here are the translation errors, I found this excerpt from the text describing the capacity "it is estimated that up to 2 850 MW of onshore fireworks will need to be built in Estonia" [2, 29]. Following this the translation starts repeating sentences which, therefor, is the reason for why I have added most of the former NECPs numbers.

1.1 Supply

1.1.1 Percent targets

As stated the energy target for electricity consumption has to be 100% renewable by 2030 - they reiterate this under the objectives chapter i.e. chapter two [1, 27]. However, they do not expand on these targets.

1.1.2 Capacity targets

They capacity targets in the final updated NECP of Estonia lacks a lot of information that exists in the former. I have added the old information into the data set but made them a "problem" data point.

Year (GWh)	2020	2022	2025	2027	2030
Gross final energy consumption (GWh)	34336	35750	34410	34275	34000
Renewable electricity production	2733	2570	3469	4619	9400
Hydropower	30 (8 MW)	25 (8 MW)	25 (8 MW)	25 (8 MW)	25 (8 MW)
Wind energy	844 (310 MW)	664 (310 MW)	974 (520 MW)	2624 (810 MW)	6840 (2310 MW)
Including onshore wind energy	844 (310 MW)	664 (310 MW)	794 (370 MW)	2624 (810 MW)	3124 (1310 MW)
Including offshore wind	0	0	0	0	3715 (1000 MW)
Solar energy	245 (290 MW)	506 (607 MW)	936 (1100 MW)	936 (1100 MW)	1000 (1200 MW)
Biomass	1746 (1300 MW)	1400 (1050 MW)	1540 (1100 MW)	1540 (1100 MW)	1540 (1100 MW)
RES-T	643	753	695	407	565
Hydrogen	0	0	4	4	50
District heating	5063	4960	4900	4860	4800
District heating	4046	4160	4400	4560	4800
Heat pumps	1022	1040	1175	1265	1400

Table 1: Renewable energy contributions

[1, 29]

1.2 Demand

There is a fundamental lack of energy/ electricity demand in the NECP - it is, therefore, mostly empty.

1.2.1 EV targets

n/a

1.2.2 Heat pump targets

They write that heat pumps will be a central dimensions in reducing climate emissions, but they give give some numbers [1, 31]. However, they do specify that there are some numbers in the graph below, but there are no numbers on the graph. Therefore, I have taken the heat pumps target from Table 1.

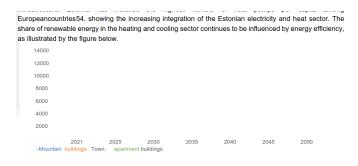


Figure 2.2 Heat demand as a result of building renovations, not inwork 55

Figure 1: Caption

1.2.3 Storage

n/a

References

- $[1]\,$ NECP. Estonia Draft Updated NECP 2021-2030 European Commission.
- [2] NECP_U. Estonia Final Draft Updated NECP 2021-2030 European Commission.