

Solar Heat Europe

Analysis on the National Energy and Climate Plans (NECPs)

Summary

NECPs are an important instrument to set the path towards an integrated approach to the energy system that can contribute effectively to the EU climate and energy targets. In order to do so, it must reflect the needs at local, regional and national level, reflecting the urgency of energy transition, both at the decentralised level and utility scale.

This means it cannot be a mere top-down process but rather ensure the participation of local stakeholders, especially when it comes to the heating and cooling requirements and solutions.

A consistent approach to 2030 targets requires that no sector or technology should be overlooked in the NECPs, as a bouquet of renewable energy-based solutions is more likely to deliver the intended results, in a competitive and fair manner.

This said, it is clear that the overall analysis on the plans is not satisfactory. **Several plans are missing a strategic approach towards heating and cooling**, which are highly overlooked and poorly analysed. The general impression is that Member States are not realising the pressing urgency of addressing the **decarbonisation of the H&C sector within the next decade**, since all polluting systems installed in 2030 are likely to be still active in 2050¹. A long-term vision is missing and in many cases the phase out of coal is substituted with natural gas. **Targets are insufficient** (especially in central and eastern Europe) and more transparency is required regarding the timeline and procedure of the plans.

The implementation of different provisions included in EU regulations such as the Renewable Energy Directive, the Energy Efficiency Directive and the Energy Performance of Buildings Directive are overlooked (or not clear enough) in the plans. The possible synergies with other complementary regulations such as Energy Labelling Directive or Air Quality Directive are largely ignored.

As an example, in several NECPs (AT, NL, SE...) there are **no measures on art. 23 of RED II or art. 7 of EED**. More concrete measures should be included, since NECPs must be complementary to the existing EU legislation. Renewable heating & cooling is severely neglected. The supply of space heating, space cooling, domestic hot water and industrial process heat should be addressed with concrete measures, promoting a clear path towards decarbonisation of the heating and cooling sector.

¹ Considering an average lifetime of 15-20 years.

Plans are **missing clearance about competences** (states or local level) and budget, and most of the time provisions are mentioned but there is **no detail on the concrete measures or the timing to implement them**. Finally, building performance related provisions are often not enough.

In summary, the following provisions of the RES-D, EED and EPBD are not properly addressed or explained in the NECPs:

- RED II (Renewable Energy Directive recast)
 - o Art. 15 which requires the inclusion of RES-HC in urban planning and to provide transparent information to consumer;
 - o Art. 21 which allows and promotes RES self-consumption;
 - o Art. 23 on **Mainstreaming renewable energy in heating and cooling**.
This article introduces the renewable heat obligations (RHOS), and according to it:
“each Member State shall endeavour to increase the share of renewable energy in that sector by an indicative 1,3 percentage points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030, starting from the share of RE energy in the heating and cooling sector in 2020”²;
Art. 24 which focuses on district heating and the right to disconnect from the heat grid.
- EED Energy Efficiency Directive
 - o Art.7 on **Energy saving obligations**, which include minimum RES provision for new buildings³ and the Energy Efficiency Obligations (EEOs)⁴
 - o **Annex VIII** which represents a comprehensive assessment on the H&C and requires member States to conduct an extensive mapping of this sector.
- EPBD (Energy Performance in Buildings Directive)
 - o Which promotes the use of Renewables and the inspection of heating systems in building in art. 14.⁵
- Interaction with the **ERDF and Cohesion Policy** to strengthen the local aspect and the interconnection between European funds and energy and climate planning.

² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L2001&from=EN>

³Art7(f) *“exclude from the calculation of the amount of required energy savings, 30 % of the verifiable amount of energy generated on or in buildings for own use as a result of policy measures promoting new installation of renewable energy technologies;”*

⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L2002&from=EN>

⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L0844&from=EN>

NECPs assessment indicators per main countries

1. No measures at all
2. The issue is mentioned only
3. Measures are included but short-term and lacking detail
4. Measures are included with detail (but medium-term and/or insufficiently ambitious)
5. Measures are good

Country	AT	BE	CY	DE	ES	FR	GR	NL	PL	SE
Targets										
2030 RES targets	2	2	4	4	5	5	3	3	3	3
RES-HC targets	3	1	4	3	1	5	3	1	2	1
GHG reduction targets	2		4	4	4	5	2	2	2	2
EE targets	2		4	5	3	5	3	2	4	3
Measures										
RES support schemes	1	1	1	3	1	4	3	1	3	2
Promotion RES HC	2	1	3	3	3	4	2	1	2	1
Addressing transition from fossil fuels	3	1	3	1	3	4	2		1	4
Planned replacement of heating systems	2	1	1	1	2	4	2	1	4	1
R&I policies and funds	4		2	3	2	1	2		1	3
Measures art. 23 RED II (RES-HC obligations)	2	1	2	4	1	5	3	1	2	1
Measures on art. 7 EED (Min. RES in Buildings)	1	1	2	2	3	3	2	1	1	1

Measures specific (S) or applicable (A) for solar thermal

Country	AT	BE	CY	DE	ES	FR	GR	NL	PL	SE
Provisions for buildings (residential or commercial)	2	1	2	3	3	4	2	1	1	1
Provisions for the industry	2	1	1	3	3	4	2	1	1	1
Provisions on district heating	2	1	1	3	3	4	2	1	2	1

Country specific recommendations

BELGIUM – To achieve the EU target of 32% RES, Belgium should adapt its overall **RES target to at least 25% of final energy consumption**. Additionally, there is **no annual trajectory** (nor global nor by technology which will be important for the nuclear phase out planned for 2025 and the Belgian security of supply in the short-term. The **ambition and measures for RE heat in 2030 are too weak** and this despite the plan mentions that RES-H is a cost-effective option especially if combined with EE measures. There should be a **clear calendar to promote renewables** and heat policy to phase out fossil-based installations. Furthermore, **minimum RES share in new buildings** (which is currently implemented only in Flanders) should be extended. Finally, the plan does not provide any commitment nor **timeframe for a carbon tax**.

FRANCE – The French plan is including **overall good targets**, but a **general long-term vision is missing** and there are **no specific measures for renewable heat or solar thermal**. RES support schemes are ambitious for 2019 but they lack visibility for 2020, when the tax credit will be reviewed. The topics of transitioning away from fossil fuels and the planned replacement of heating systems are mentioned but focused mainly on oil boilers: **more can be done** especially by including the lowering of temperature levels on district heating network. Finally, RES heating and cooling related provisions are included for medium and large installations, but there is no visibility for single homes, which will be important especially in new buildings.

GERMANY – 65% of the 2030 RES target was already included in the Coalition Treaty but is not yet implemented. A precise and **ambitious target for RES-HC is missing** and target incentives are barely mentioned without further explanation. Regarding the target on GHG emissions, there was **no adjustment following the Paris agreement**. The plan is including some support schemes, but it also pushing specific technologies favouring them instead of promoting a comprehensive approach. Details and timeline for market incentives as the MAP are not mentioned in the plan. Finally, on the topic of planned replacement of heating systems, there are some discussion going on, which are not reflected in the plan.

GREECE – RES-HC is partially promoted in the plan, although **specific measures are missing**. In some cases, measures on RES-H obligations are mentioned, but they lack concrete actions. The transition from fossil fuels is also mentioned, but this issue is **solved with the use of natural gas instead of promoting RES** and CO₂ free technologies as solar thermal.

NETHERLANDS – The Dutch plan is entirely **overlooking the renewable heating and cooling sector** and, in particular, the solar thermal technology. There are no measures or provisions regarding these topics mentioned in the draft text, and the discussions happening at national level are not reflected in the plan. Finally, **obligations referring to art. 23 and art. 7 are not even mentioned**.

POLAND – The Polish plan foresees 21% RES share in final gross energy consumption in 2030, and an annual increase in RES for H&C is foreseen (1-1.3pp), however there is a **lack of information on the overall target**. Energy efficiency target is set to 20% but this goal is not sufficiently considered, and **several details are omitted, for instance the share of RES and EE in key segments as buildings**. The document does not contain a forecast of GHG emissions for the proposed path, and overall measures are insufficient. The plan mentions general support schemes **without relevant details** as key targets and topics as the transitioning away from fossil fuels are not considered. Finally, the draft plan omits the role of prosumer energy as one of the key elements of the future development of electricity and heat supply in Poland.

SPAIN – According to the plan, RES share in final energy use in 2030 should reach 42%, but **targets for RES-HC are not mentioned. Furthermore, the issue seems to be avoided under the excuse** that *“In the H&C sector there are currently no disruptive technologies that lead to decarbonisation”*. The plan focuses on RE communities rather than on RES-HC targets. The plan includes 37% investments in energy saving and efficiency and advancement in RES as intervention on the thermal envelop of 1,200,000 houses. **RES support schemes are missing**. The topic of the **integration of thermal renewables in the building sector** should be further considered and implemented. Provisions on building are just indirect and not ambitious enough.

SWEDEN – Sweden reached 54% of RES share in 2015 and has implemented a CO₂ tax since some years already. Nevertheless, a high percentage of fossil fuels remains in the industry and there is a consistent contribution from nuclear. **Targets on RES-HC are completely missing along with measures promoting solutions in this sector**, as for example planned replacement or art. 23 RES-HC obligations and art. 7 (which includes provisions in the building sector).