

Methodology and Material

EU Tracker – Local heating and cooling plans

Below is a description of the methodology and the material collected to assess the current state of local heating and cooling planning across the EU.

For each EU Member State, the legislative framework and the support framework have been assessed separately. The readiness level for transposing the provisions of EED article 25.6 into national legislations and policy frameworks, indicated as a colour for each Member State, has been based on these two assessment categories.

ASSESSMENT OF THE LEGISLATIVE FRAMEWORKS

The **legislative framework** has been assessed according to the following criteria: to what extent preparing a local heating and cooling plan, or an energy or climate plan which covers heating and cooling aspects by municipalities is mandated by law, according to the obligation for planning criteria outlined below:

PLANNING OBLIGATION	No incentive nor obligation, or minor component of heat planning in other planning documents	Detailed regional plans with details for heating and cooling for municipalities	Heat planning done voluntary but encouraged	Mandatory for municipalities of a certain size or as part of a bigger commitment	Mandatory for all municipalities.
RATING	1	2	3	4	5

As there are several plans that local authorities do or have to do, we also assessed if these plans can be qualified to heating and cooling plans as per the EED article 25.6 to understand if there are already incentivised or mandated by law. We assessed these plans according to the following aspects:

- The content and level of detail of the plans
- The involvement of citizens and relevant stakeholders throughout their preparation
- The extent to which the plan is integrated with other municipal planning and governance documents with impact on spatial, physical and energy related structure in municipalities
- How well these are aligned to and consolidated with national climate and energy targets and objectives

ASSESSMENT OF THE SUPPORT FRAMEWORKS

The rating for the support framework to local authorities has been divided into four sub-categories, from which an average rating (1 to 5) was calculated. Each sub-category was assessed according to the following criteria:

Technical and organisational support:	The extent and quality of technical guidance dedicated to local heating and cooling plans (e.g., technology catalogues, technical guidance, tools), the appointment of dedicated structures to support local authorities, the existence and the quality of forums of exchange of practice and knowledge at regional or national levels (e.g., networks and one-stop-shops)
Financial support:	To what extent municipalities are eligible to receive financial support for energy planning is available and made accessible. Local financial resources (including local taxation) and the <i>degree of decentralisation</i> of public spending related to the green transition have also been considered.
Staff and skills:	The number of staff members with competence on energy planning; the degree of reliance on external contractors for energy planning purposes

Access to data:

Availability, quality, frequency and accessibility of the type of energy and building-related geodata needed for developing spatial heating and cooling plans. The existence of databases with harmonised geodata bases has been positively evaluated. These data categories have been included in the assessment:

- Demand data for buildings – specified by heating sources – and whether such data are made accessible to local authorities by energy utilities
- Building data for all buildings, including the heating systems, heating fuels, building age, energy performance standard, renovation rate and heated surface
- Data on the spatial position and distribution capacity of energy carrying (electricity, gas, and district heat) or cooling infrastructures
- Data on the technical and economic potential for local renewable energy sources (for wind, biomass, solar thermal, geothermal, waste heat from industry and incinerators), level of detail, and temporal supply patterns.

THE OVERALL ASSESSMENT

An overall assessment was drawn from the assessed legislative framework and support framework (using the average rating of each sub-category) for each EU Member State. The overall assessment was drawn from the matrix below:

PLAN OBLIGATION / SUPPORT	1	2	3	4	5
1 to 1,9					
2 to 2,9					
3 to 3,9					
4 to 4,9					
5					

MATERIAL

The material collected for the assessment consists of secondary data and qualitative primary data collected through interviews and email correspondence. The secondary data includes legal files and policy documents, and grey and academic literature. Interviews were conducted with representatives from local administrations, state ministries, energy agencies, think-tanks, academia, consultancy firms, public associations and non-governmental organisations. Common trends, observations and policy recommendations included in the **overall analysis** were mainly collected during the process of preparing the country-specific factsheets used for the EU tracker. The assessments have in most of the countries been reviewed and validated by external actors.

LIMITATIONS

Despite the efforts put into this work, the subject is vast, and we were limited by the resources available. The description of the situation of each country in few pages necessarily leads to a synthesis, which cannot be exhaustive. We are hence grateful to receive input and suggestions for how the tracker methodology could be further developed during the transposition phase of EED article 25.6.

The authors and Energy Cities are fully accountable for the material presented related to this EU tracker.