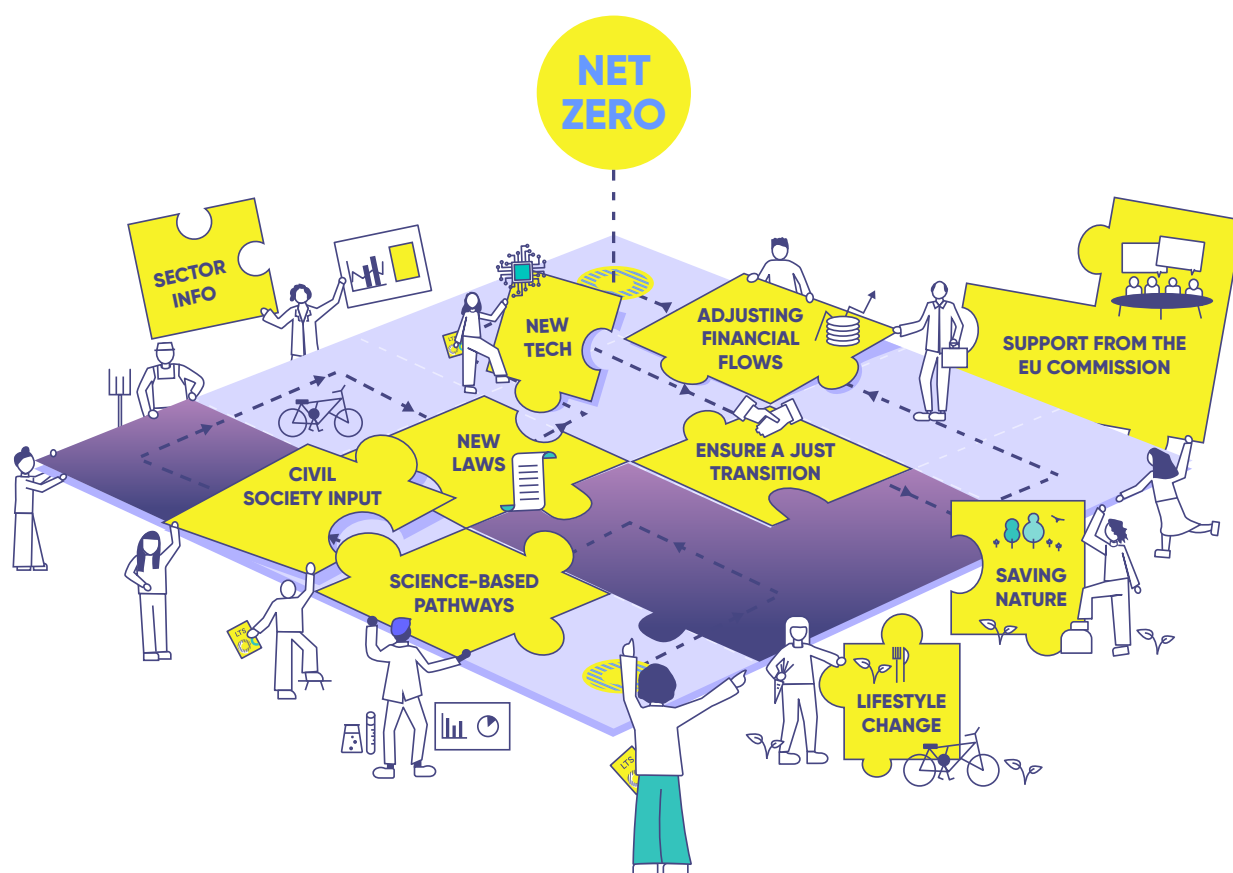


CHARTING A PATH TO NET ZERO:

AN ASSESSMENT OF NATIONAL LONG-TERM STRATEGIES IN THE EU



EU Member States must act now to implement their collective duty to help achieve climate neutrality in the EU by 2050 as enshrined in the EU Climate Law. **Robust strategic planning is required to ensure that short-term decisions align with long-term climate goals**, and therefore the Governance Regulation asked EU countries to produce national long-term strategies (LTSs) by January 2020 in addition to producing short-term plans with specific policies (NECPs).

This briefing summarises findings from an [assessment of the 22 strategies](#) available as of March 2022; at the time, five countries had not yet submitted their LTS. The analysis looked at two distinct qualities of strategies: the **vision of a low-emission future** represented in the pathways and projections of the LTS as well as the preparation and use of the strategy as a tool to guide policy decisions, in other words its **relevance in national climate policy**.

LTSS MAKE A DIFFERENCE, BUT MOST EXISTING DOCUMENTS NEED IMPROVEMENT

In several Member States developing an LTSS has had a positive impact on national policy already. However, the assessment found that to varying degrees most LTSS lack information on their long-term vision and some LTSS are already outdated. Strategies with missing or out-of-date information cannot sufficiently guide near-term policymaking. In addition, most LTSS preparation processes fall short on participation, and the strategies omit detail on follow-up. This risks generating lower political support and ultimately reduces the use of the strategies as a tool to guide policies and interim targets.

POLICY RECOMMENDATIONS TO MAKE LTSS MORE EFFECTIVE



The EU should amend the Governance Regulation by:

1. **adding a mandatory template** asking for more detail on the long-term vision (scenarios and targets) and on preparation and use of the document
2. **adding mandatory regular updates** slightly ahead of the NECP updates
3. **requesting more effective participation** (early, meaningful, iterative) during preparation

National governments should create national ownership of the long-term vision by:

1. **engaging a wide variety of interests** in strategy preparation and revision, drawing on the national multilevel climate dialogue.
2. including an **independent peer review process** using scientific expertise, such as existing national climate advisory bodies, during LTSS preparation and follow-up
3. integrating a **regular LTSS review cycle** in national policy-making
4. specifying a **date for achieving climate neutrality** at national level with quantitative info for remaining greenhouse gas emissions and necessary removals

The European Commission should take an active role by:

1. providing **additional technical support**, e.g., capacity support, common modelling tools or parameters
2. launching a **forum for good practice experience sharing** among Member States, and for encouraging integrated planning processes across borders
3. **enforcing compliance** with the requirements for LTSS in the Governance Regulation including timely submission
4. creating a **bottom-up vision for climate neutrality** in the EU using the national LTSS and integrating it into an **update of the EU LTSS**

KEY INSIGHTS FROM THE ANALYSIS

The in-depth analysis of the existing national LTSs revealed valuable insights about their content and development process. Given the limited guidance from the EU Governance Regulation on the required structure and information, not surprisingly, the national LTSs submitted are a very diverse set of documents. Political attention to the LTS also seems to have varied significantly country-by-country as indicated by differences in the preparation process, planned follow-up and integration into the national policy landscape.

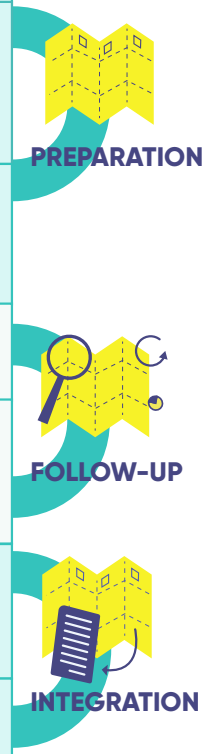
MANY GOOD PRACTICES EXIST

Three LTSs stand out as good practice examples, delivering on both vision and relevance; they are the strategies from France, Portugal and Spain. All three of these LTSs plus that of Hungary provide good information on their long-term vision, including details on total and sectoral GHG emission reductions, on the future energy mix (excluding France) and at least to some extent on the use of hydrogen, biomass, CCUS and sinks. The strategies also cover information about the horizontal elements although Portugal has no information on adaptation to climate change. France, Portugal and Spain built their strategies on clearly defined long-term pathways for 2050, with concrete input from the scientific community. In terms of relevance, all three good practice cases embed their LTS as the long-term planning element of a national climate framework law, with regular cycles of review. France and Portugal further provide a description of a participatory process with input on initial LTS scenario elaboration; France especially has expanded stakeholder and expert consultations over time.

Many other countries showed good practice on one or more underlying elements of the analysis, such as the level of detail on specific sectors, participation processes and monitoring cycles for the strategy (see Table 1: Selected good practice on LTS relevance and Table 2: Selected good practice on LTS vision).

Table 1: Selected good practice on LTS relevance

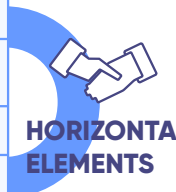
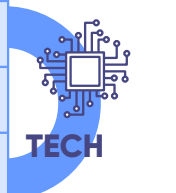
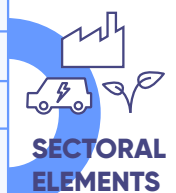
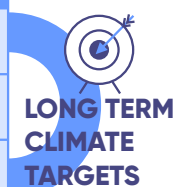
RELEVANCE: GOOD PRACTICE EXAMPLES	
COMPLIANCE	AT, DK, EE, EL, LT, LI, NL, PT, SE: timely submission; IT, HU, PT, ES, SL: provide quantitative GHG data through 2050 for economy-wide reductions, removals and all mandatory sectors.
SCIENTIFIC BASIS	AT, HR, CZ, FI, FR, EL, HU, IT, MT, PT, SL, ES: clearly defined long-term scenarios for 2050; NL: dedicated scoping phase for researchers to provide long-term perspectives; HU: commissioned a quality review of strategy; FR: national research institutes represented in technical working groups; AT, DE, PT, ES, SE: consulted independent research institutes for technical advice; SL: scenario-building via EU-funded project spearheaded by reputable national research organisation.
PARTICIPATION	FI, HU, IT, LU, SK: inter-ministerial coordination for LTS development via dedicated working committee; HR, EE; PT, (ES): parliament given role in (future) strategy development (in PT enshrined in climate law); FR: highly representative stakeholder engagement process with various formats before and after initial draft, clear signs of impact (participation has expanded over time).
IMPLEMENTATION RESPONSIBILITIES	CZ, EE, FR, LI, SK: implementation responsibilities clearly assigned; FR, LT, EE: sectoral responsibilities outlined in strategy; HR, CZ, EE, PT: new monitoring responsibilities assigned to existing institutions.
MONITORING AND REVISION	CZ, DK, EE, FR, DE, LT, LU, LV, MT, SK, ES: outline concrete revision cycles; CZ, EE, FR, MT, SK, ES: at least a five-year revision cycle established either in strategy or climate law; EE: annual monitoring cycle for sectoral emissions established in strategy (for 2035 scenario); FR: robust monitoring with indicators; (EE), FR, HU, LI: already updated LTS since initial submission (EE not yet submitted officially).
POSITION IN NATIONAL GOVERNANCE	LV: diagram presenting position of strategy in relation to other current governance processes, plans and strategies; CZ: all sectoral strategies, policies and measures must be checked against LTS; FI, FR, MT, PT, ES: strategy viewed as prominent element of a coherent framework embedded in a climate law.
NECP COHERENCE	AT, EL, ES: high LTS-NECP coherence indicated by timing of submission, methodological consistency and common institutional responsibilities.



Source: own compilation based on national LTSs and interviews

Table 2: Selected good practice on LTS vision

VISION: GOOD PRACTICE EXAMPLES	
NET ZERO EMISSIONS	FI, AT: clear info and with net zero targets in 2035 and 2040; SE: mentions that it wants to achieve net negative emissions.
EMISSION REDUCTIONS	NL: clear info with target of 95% emission reduction (2050 vs. 1990) enshrined in law; HU, GR: clear info from scenarios with 95% and 85-95% emission reduction (2050 vs. 1990).
GHG REDUCTION PATHWAYS	LV: clear info with interim target for 2040 of 85% (vs. 1990); FI: Early action in at least one of the scenarios; MT: clear info with 10-year data points.
ENERGY SUPPLY	LU, ES: clear target setting with highest share of renewables in 2050; PT: clear energy mix and target setting with phase-out of coal power in 2030 (enshrined in law), gas-fired power and mineral oils use in 2040.
ENERGY DEMAND	LT: with 2050 target of ≥ 2.4 times a reduction of energy demand; HR, FI, PT, ES: clear info including pathways.
TRANSPORT	BE, IT: outline an emission reduction of 100% by 2050; FR: clear and detailed info.
BUILDINGS	IT, LT, ES: outline an emission reduction of 100% by 2050; EL: clear and detailed info.
INDUSTRY	HU: outlines an emission reduction of 98% by 2050; LT: sets target of reducing GHG emission by 100% by 2050 and phasing out fossil fuel use in ETS-industries by 2045.
AGRICULTURE	HU: outlines an emission reduction of 79% by 2050; FR, IT, ES, PT: clear and detailed info.
GHG REMOVAL	AT, FI: clearly outline interlinkages between natural and technical (BECCS) sinks and include land cover; ES, IT: consider a set of measures for natural sinks including sustainable soil management and wetland restoration; EL: detailed info on technical sinks.
HYDROGEN	EL: considers green H ₂ and rules out blue hydrogen due to restrictions on CO ₂ storage; LU: only considers green H ₂ and plans to pursue H ₂ certification.
BIOMASS	CZ: provides a comparison of biomass import dependencies for different scenarios and cap domestic biomass generation based on potential.
CCUS	EL: provides most specificity including capture and stored emissions; AT: provides domestic storage capacity.
BEHAVIOUR CHANGE	LT: includes various targets for behaviour change; FR: provides detailed info with some quantifications.
FINANCE	PT: identifies total and additional investment needs including sectoral split; ES: indicates specific shares for public and private sector investment.
JUST TRANSITION	LU: provides detailed info on various aspects including specific measures.
CLIMATE ADAPTATION	MT: with good vulnerability assessment including adverse effects on vulnerable groups; LU: with catalogue of measures; FR, MT, LT, SL: highlight importance of nature for adaptation and mitigation.



Source: own compilation based on national LTSs

MOST LTSs LACK SUFFICIENT DETAIL ON THE LONG-TERM VISION AND NEED IMPROVEMENT ON PARTICIPATION AND FOLLOW-UP

Aside from the examples of good practice overall and on specific elements, **most LTSs lack key information underlining the vision** they present. Some LTSs function more as descriptive documents with only qualitative or aspirational details of a low emission future. Some do not contain a scenario that reaches the stated long-term target, while others lack sectoral data or clear figures on the socio-economic impacts of the transformation. **Most strategies with more than one scenario do not provide a preference for one over the other** or indicate when decisions must be made on which path to follow. Such strategies cannot fulfil their role as a tool to guide near-term decisions. Moreover, a handful of LTSs are outdated due to the advancement of national climate targets, and almost all LTSs need to be revised to include the policy changes on the use of natural gas in light of increasing EU independence from Russian energy imports – and how to replace it while staying on track for climate neutrality.

Most LTSs also at least partly lack information on citizens participation or national plans for follow-up. Where LTSs do provide this information, only a third of the countries describe strong and inclusive participatory processes. The remaining countries limited public and stakeholder engagement to a single point in time, i.e., once a draft was already finished and may not have actively sought representation from a diversity of interests. Also on follow-up, **only a third of countries elaborate in their strategy on a national five-year LTS review and revision cycle.** A similar share of countries clearly defines implementation responsibilities in their strategies, with three countries providing an indication of sectoral competencies. However, most of the time LTSs do not mention a concrete monitoring and revision cycle, and most countries do not assign explicit responsibilities for use of the strategy to guide policy-making.

TURNING LONG-TERM STRATEGIES INTO NET ZERO POWER TOOLS

AMENDING THE GOVERNANCE REGULATION TO IMPROVE INFORMATION, ENSURE UPDATING AND NECP CONSISTENCY AND TO ENCOURAGE BETTER STAKEHOLDER PARTICIPATION

The Governance Regulation should be amended to include a mandatory template asking for more specific information. This should include:

- **defining a specific target date for climate neutrality** with details on remaining GHG emissions and necessary removals,
- **economy-wide and sector-specific information based on a scenario that reaches the long-term climate goal** and the use of harmonised indicators,
- **interpretation of data to clarify the preferred pathway**, important enablers and potential risks to deriving near-term actions and **identifying decision points**,
- **a description of participatory processes**, including details on who is involved, when, at what periods; and
- **information on how the LTS is anchored in national policymaking**, if and what type of national monitoring process exists and who is responsible for LTS follow-up.

The Governance Regulation should be further amended to include a **five-year regular update** of the LTSs so that strategies are based on the latest knowledge and national circumstances. This should occur shortly **before and in line with the NECP update** so that the strategies can serve as a valid basis for the NECPs, ensuring the consideration of long-term needs in near- to mid-term planning.

The Governance Regulation should also ask for a **two-stage engagement process** for each LTS iteration considering a range of different interests to collect and incorporate feedback in both an initial scoping phase and on a first draft.

CREATING NATIONAL OWNERSHIP FOR REALISING THE VISION SET OUT IN THE LTS THROUGH PARTICIPATION, SCIENTIFIC GROUNDING AND FOLLOW-UP

National governments should use the preparation process to **get buy-in from the parliament and different societal groups**. Governments should actively seek out feedback from a diversity of interests, e.g., business, public, civil society, and **local governments at least twice, during initial scoping and on a first draft**. Countries should draw on existing national stakeholder and public engagement fora where possible, including the multi-level climate dialogue required under EU regulation, national stakeholder platforms and citizen assemblies.

A separate **process for engaging scientific expertise in LTS preparation** would support a robust scientific foundation for the long-term vision and provide a quality check on the government's assumptions and methodologies of the underlying scenarios. This process should draw on an existing advisory body in the country where possible, such as an independent climate council.

Finally, governments should **anchor the LTS in national policy-making by clearly assigning a responsible authority** to oversee its implementation and establishing a five-year policy learning cycle for the strategy, either via a national framework law or other means. The learning cycle should include a regular review and revision schedule for the strategy that tracks progress towards the long-term goals, accounting for the latest scientific evidence as well as socio-economic and technological developments taking into consideration the impacts of the transition including the distribution of costs and benefits.

AN ACTIVE ROLE OF THE EUROPEAN COMMISSION PROVIDING SUPPORT AND A LONG-TERM VISION FOR THE EU

The European Commission should build upon on its active role in the development of NECPs and support NECP and LTS development in an integrated manner. This could take the form of **technical working groups and capacity support as well as making available a common toolbox for joint assumptions** to harmonise the methodological basis of Member State LTSs.

The EU Commission should also **provide a forum for good practice sharing** on technical and governance aspects and for encouraging integrated planning processes across borders. The **Czech presidency could help to initiate and raise political attention** for long-term planning in the context of their own ongoing LTS updating process. **Sweden and Spain** could continue by sharing their own experiences to promote good practice in LTS development and use, particularly in 2023 as the review mechanisms of the EU Climate Law are first implemented.

There is also clear **need for a new bottom-up long-term vision for the EU** as the EU LTS is outdated and lacks Member State specific information. Therefore, the EU Commission should create **a vision for climate neutrality in the EU using the national LTSs and integrating it into updates of the EU LTS**. In this context, the Commission must assess the alignment of aggregated national planning with the EU goal of reaching climate neutrality by 2050, and the Commission should pinpoint the role of important enablers to consider these in near-term decision making. However, for such an assessment the EU should **enforce compliance with the requirements for LTSs in the Governance Regulation**, requesting the submission of missing LTSs and updates to LTSs without sufficient detail.

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