POLICY STUDY
March 2026

THE EUROPEAN GREEN DEAL TRACKER

ASSESSING THE IMPLEMENTATION OF THE GREEN DEAL IN MEMBER STATES

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FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES

Policy Study published in March 2026 by

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This Policy Study was produced with the financial support of the European Parliament. It does not represent the view of the European Parliament.

Language editor: Rosalyne Cowie

Layout: Hearts&Minds, Brussels

Cover image: Hearts&Minds, Brussels

Suggested citation: Deffet, C., Gonçalves, T., Chelariu, B-A. et al. (2026) "The European Green Deal Tracker: Assessing the implementation of the Green Deal in member states". Policy Study, Foundation for European Progressive Studies.

ISBN: 978-2-39076-061-0
KBR deposit number: D/2026/15396./12

ROLES AND ACKNOWLEDGEMENTS

Project coordinator and research editor: Chloé Deffet

Index methodology: designed by a group of independent researchers

NECP analysis for the index: Tomás Gonçalves

Case studies: Bogdan-Alexandru Chelariu (Bulgaria, Slovakia, Poland), Irene Chiocchetti (Italy), Emma Bergeling and Emma Watkins (Sweden)

Project management: Luis Sáez Jiménez

The authors would also like to thank the following people who contributed to this challenging project and provided valuable input: Stephan Thalhofer, Kevin Le Merle, and David Rinaldi.

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EXECUTIVE SUMMARY

The European Green Deal (EGD), once hailed as the EU's visionary strategy towards climate neutrality by 2050, is often presented to be in a difficult position today. Finding a commonly accepted and just pathway toward EGD targets is proving increasingly difficult amid geopolitical tensions, the rise of populism and disinformation, and increasing inequalities. In the meantime, climate change continues to fuel more intense and frequent extreme weather events, incurring great human and financial costs. In this challenging context, taking stock of the progress made in implementing the EGD, the successes and the failures, is an important step to define the path ahead, address weaknesses where needed and reinvigorate the EU's engagement towards eco-social policies that benefit all citizens.

The EGD Tracker assesses how member states are implementing the EGD across 16 criteria. The main objective guiding this policy study is to develop an educational and easy-to-understand overview and comparison of the EGD implementation at national level. Two methodologies based on the analysis of National Energy and Climate Plans are used: (1) the index provides a score for each EU member state based on their implementation performances in several policy areas, allowing the identification of which countries show good progress and which ones are lagging behind; (2) case studies complement the findings from the index by providing a more in-depth understanding of EGD policies and national implementation dynamics in four policy areas: housing; energy poverty; transport; and health.

The results of the index indicate that the mean score for the 27 EU member states is mediocre at 0.58, between the partial laggard and partial leader categories. While the member states are, for the most part, progressing in the implementation of the EGD, progress remains insufficient to fully achieve the climate and social justice objectives linked to the EGD. The highest score (0.75) is attributed *ex aequo* to Spain, Ireland and Finland and the lowest score to Poland (0.21). While no member state is a complete laggard, conversely no member state reaches the score of full leader. Several criteria appear to be weaknesses in many countries: the phasing out of fossil fuel subsidies; timeliness of and involvement of stakeholders in the NECP process; and health considerations. The European Green Deal, the first strategy of its kind, was an essential first step towards a prosperous and climate resilient Europe. We must now build on it and deploy more concrete policies that address its teething problems and weaknesses.

INTRODUCTION

The European Green Deal (EGD), once hailed as the EU's visionary strategy towards climate neutrality by 2050, is often presented to be in a difficult position today. From Russia's war against Ukraine and the energy crisis to trade tensions with the USA, the European and international contexts have changed significantly since the launch of the EGD in 2019. Finding a commonly accepted and just pathway toward EGD targets is proving increasingly difficult amid geopolitical tensions, the rise of populism and disinformation, and increasing inequalities. While Ursula von der Leyen's Political Guidelines for 2024-2029[1] restate climate action as a top priority, the European Commission's (EC's) current approach to competitiveness and deregulation often contradicts or weakens climate and environmental policies. In addition, the EGD is increasingly being criticised for its failure to properly integrate the socio-economic issues exacerbated by climate policies and disproportionately affecting vulnerable and low-income groups.[2] This situation is quite paradoxical considering that many EGD policies have the potential to improve the lives of European citizens, for example, by increasing energy efficiency in the housing sector and, thereby, reducing energy bills and improving wellbeing at home.

In the meantime, climate change continues to fuel more intense and frequent extreme weather events, incurring great human and financial costs. Environmental degradation and nature losses threaten ecosystems vital for human health and food systems. Climate action and nature protection should therefore be strengthened and increased. In this challenging context, taking stock of the progress made in implementing the EGD, the successes and the failures, is an important step to define the path ahead, address weaknesses where needed and reinvigorate the EU's engagement towards eco-social policies that benefit all citizens. Contributing to existing efforts to assess progress towards EGD objectives, the present policy study explores how member states are implementing the EGD according to 16 criteria. It does not seek exhaustiveness, but rather approaches the EGD with a special focus on its social and governance dimensions.

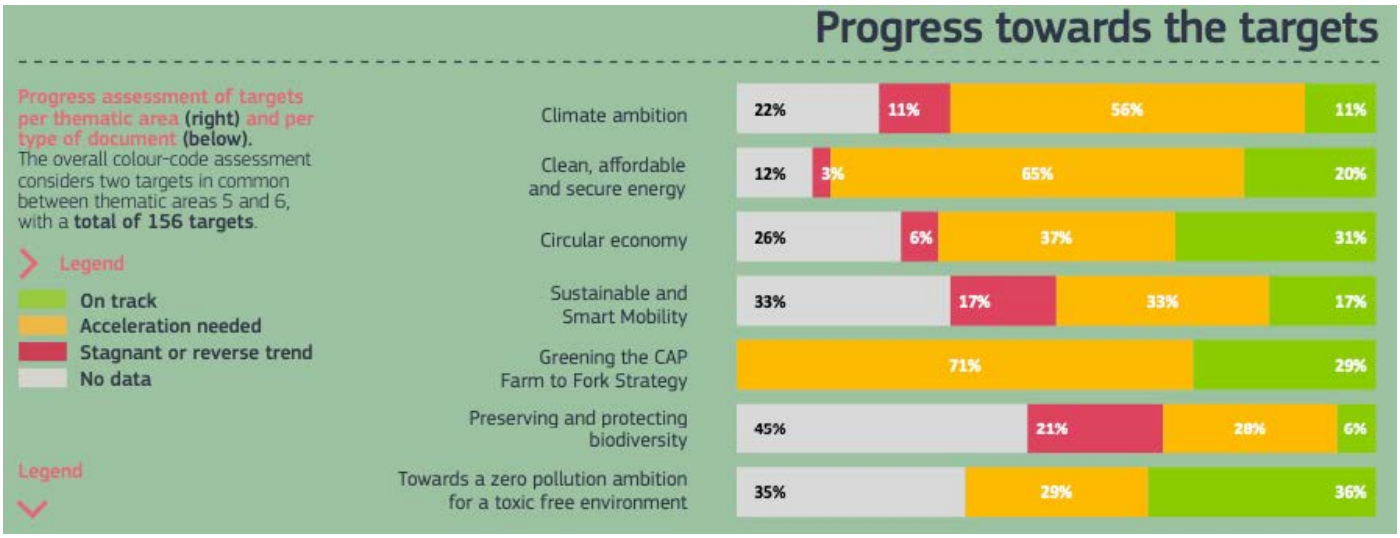
The European Green Deal: A brief reminder

In 2019, following calls for action from experts and civil society, social movements such as Fridays for Future and the European Parliament's declaration of a climate and environmental emergency, the EC presented a communication entitled "The European Green Deal".[3] The EGD constitutes the EC's response to climate change and environmental degradation, with the aim to "protect the health and well-being of citizens".[4] But it also represents "a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy", emphasising that the "transition must be just and inclusive […] [and] must put people first, and pay attention to the regions, industries and workers who will face the greatest challenges".[5]

The EGD prompted the development and adoption of diverse targets, legislation and policies seeking to reduce greenhouse gas (GHG) emissions and pollution, transform energy systems, shift towards a circular and resource efficient mode of production, protect ecosystems and more.[6] With 154 quantifiable targets and 44 key policy documents covering a wide range of policy areas,[7] the EGD has become as complex as the problems it is attempting to solve. As of February 2026, 94 legislative items and 17 non-legislative ones had been adopted as part of the EGD "train" and the process is still ongoing.[8]

Despite this accomplishment, the EGD faces numerous challenges, such as political dynamics provoking delays and inconsistencies, uneven implementation in member states and insufficient financial resources.[9] The EC's 2025 assessment[10] confirms the difficulties in implementing the EGD policies. Indeed, only 21% of the EGD targets are well on track to reach the stated ambitions and 62% are progressing but require acceleration. In some areas, the EC notices stagnation or reverse trends. The report also highlights a significant lack of data for many targets. For example, data is not available for 45% of the targets related to "preserving and protecting biodiversity" and for 33% of the targets related to "sustainable and smart mobility" (Figure 1).

Figure 1. Assessment of the progress towards EGD targets.



Reproduced from Marelli et al., 2025.

Since the beginning of the current EU mandate, EGD objectives and key environmental acquis are further threatened by the deregulation and backtracking pushed by political groups on the right and by some powerful industry players. In addition, the current proposal for the next Multiannual Financial Framework does not maintain dedicated funding for just transition regions, although current funds are already insufficient to ensure the social fairness of the EGD and local stakeholders often lack financial and technical capacities to effectively implement measures.[11] Current political trends appear at odds with recommendations from academia and experts, who emphasise the importance of improving the implementation of the EGD through enhanced multilevel governance, correcting its democratic deficit through deeper citizen and stakeholder engagement, and addressing structural inequalities by strengthening the just transition elements of the EGD.[12]

Tracking the implementation of the EGD in member states

The EGD tracker aims to assess the implementation progress of the EGD at national levels through an indicator-based index and case studies. The main objectives guiding this study are to develop an educational and easy-to-understand overview and comparison of the EGD implementation in member states. The implementation of the EGD differs from member state to member state, depending on political will and socio-economic contexts. Assessing these differences and the level of progress towards EGD objectives is a key step to understand how to enhance national policies and where efforts should focus. Building on the observation that national decision-making is best supported by high-quality national long-term strategies,[13] the EGD Tracker analyses the National Energy and Climate Plans (NECPs) to provide an overview of member states' progress towards key EGD goals, including emission reduction, renewable energy, energy efficiency and social justice.

1. The index provides a score for each EU member state based on their implementation performances in several policy areas covered by NECPs and which represent a main concern for many EU citizens, such as energy, housing, transport, health, fairness and governance. The index allows the identification of which countries show good progress in implementing the EGD and which countries are lagging behind.

2. Case studies for five member states (Italy, Sweden, Slovakia, Bulgaria and Poland) complement the findings from the index by providing a more in-depth understanding of EGD policies and national implementation dynamics in four policy areas: housing; energy poverty; transport; and health.

Research findings show that, overall, most EU member states are progressing in their implementation of climate and environmental policies but not sufficiently to achieve the EGD objectives. The 27 member states as a whole obtain a score hovering between the "partial laggard" and "partial leader" categories. The findings also highlight substantial differences in the priorities, ambitions and policy accomplishments presented by member states in their respective NECPs. Despite good performances by a number of countries, no country can be called a "leader". Worryingly, some countries show limited progress towards and commitment to the implementation of the EGD. The EGD tracker allows for a better understanding of the strengths and weaknesses of each member state.

THE EGD TRACKER: METHODOLOGY

Using NECPs to track progress in the EGD

The EGD contains a plethora of initiatives taking various forms: directives; regulations; revisions of existing texts; strategies; and so on (see Supplementary Materials). Some of these stand out as particularly important, such as the European Climate Law, the Effort Sharing Regulation (ESR), the Energy Efficiency Directive (EED) and the Renewable Energy Directive. Assessing progress in the implementation of the EGD presents many challenges. Indeed, tracking the implementation progress of individual initiatives is particularly difficult as each have different scopes, implementation processes and timelines. In addition, national-level mechanisms to monitor compliance with EGD objectives often vary in terms of quality and robustness, making comparison difficult.[14] While using European statistics may provide interesting insights,[15] these types of analyses cannot offer more qualitative assessments of policy processes and planning. In the present case, taking into consideration methodological options and constraints, we chose to develop a composite index and case studies focusing on a limited number of key policies and targets of the EGD.

The sources of information used for these two methodologies are the NECPs – the most comprehensive policy documents written by member states to provide evidence of their progress in reaching shared EU energy and climate policy goals. NECPs were introduced in 2018 by the Regulation on the Governance of the Energy Union and Climate Action (EU)2018/1999 (commonly called Governance Regulation). In terms of content, NECPs must address the five dimensions of the energy union – decarbonisation; energy efficiency; energy security; internal energy market; and research, innovation and competitiveness – as well as issues of social justice and energy poverty. In terms of governance, the NECPs must involve a public consultation process and take into account the views of sub-national authorities. The Governance Regulation sets the structure, format, technical details, process and updating that NECPs must follow.

Covering the period 2021-2030, NECPs had to be first submitted as a draft by the end of 2018, then in their final version in 2019. A few years later, following EGD provisions and targets, a process of updating NECPs started, with a draft to be submitted in 2023 and a final version by 30 June 2024.[16] Despite their varying quality, NECPs constitute important reference documents to track countries' performance in the implementation of the EU climate and energy transition agenda.[17]

The multi-criteria index

The index provides a systematic overview of NECP commitments according to 16 criteria (Table 1). Rather than seeking to represent all the dimensions encompassed in the EGD, the criteria were selected following several considerations:

- reflecting the most significant initiatives identified in EGD legislation;
- special interest in the energy transition, especially those dimensions that affect European citizens in their daily lives, such as housing, transport and energy poverty (i.e., compliance with the revised EED, the Renewable Energy Directive, and the ESR);
- special interest in social dimensions linked to a just transition and health; and
- special interest in governance processes, such as stakeholder participation and regional cooperation.

The NECPs of each member state were analysed according to the 16 criteria. The criteria are divided into five groups, each representing a specific dimension of the EGD: (1) GHG emission reduction; (2) energy strategy; (3) energy efficiency; (4) social justice; and (5) compliance and governance.

The member states were then scored for each criterion, depending on how comprehensively it was addressed: leader (1.0); partial leader (0.66); partial laggard (0.33); and laggard (0.0). This classification approach is inspired by the principles of Qualitative

Comparative Analysis (QCA) – specifically the fuzzy set variant (fsQCA) – which is commonly used in social sciences to assess the degree to which cases exhibit certain characteristics.[18] This methodology allows for textual and interpretative information – such as strategies, policy narratives and planning documents – to be translated into structured numerical scores that reflect degrees of implementation quality or ambition. Therefore, the score reflects not only whether a policy element is present but also how well-developed, detailed and credible it is. Unlike purely quantitative approaches, this type of qualitative assessment relies on systematic expert judgment, using predefined criteria and thresholds for each score to ensure consistency across cases.

Table 1 presents the criteria included in the index, descriptions and the threshold defined for each score category. For many criteria, a score of 1.0 (leader) indicates a detailed and ambitious strategy with clear implementation measures, while 0.0 (laggard) indicates that the policy area was either not covered or lacked meaningful information. For criteria where numerical data was available rather than qualitative assessments, such as GHG emission reduction targets, a standard data-driven classification approach was applied. The index provides an overall score for each member state, as well as their scores for each individual criterion, allowing for the assessment of member states' varying performances across criteria and highlighting nuances in EGD implementation. From a long-term perspective, the index could be used to track and compare EGD implementation over time by updating the index with the next NECPs.

It is important to be aware of the limits of the chosen methodology. Firstly, using NECPs as reference documents comes with several uncertainties and challenges: NECPs may be of poor quality due to vague vocabulary and inconsistencies, making assessment difficult; NECPs are plans with sometimes limited guarantee that what is written is actually implemented; NECPs may incompletely reflect policy development and measures adopted at national level; and so forth. While NECPs are a strategic tool for reporting and monitoring, caution is necessary as to the reliability of the information. Secondly, the index does not explain why some member states perform better and why some dimensions show important variations for one member state. Thirdly, and as explained above, the methodology does not seek to exhaustively address all aspects of the EGD but focuses on some policy areas of special interest. Therefore, it cannot be considered as providing a picture of the full implementation progress of the EGD.

Table 1. Criteria included in the index and thresholds defined for each score category.

DIMENSION	CRITERIA	EXPLANATION	SCORE CATEGORIES			
			1 Leader	**0.66** Partial leader	**0.33** Partial laggard	**0** Laggard
GHG reduction	**Overall GHG Reduction Target**	Alignment with binding annual GHG reductions by member states, as defined by the **EU ESR** (Article 4 and Annex I)	Meets or exceeds ESR target	Slightly below target (99-80% of target)	Below target (79-60%)	Far below target (below 60%)
	GHG Reduction Target from LULUCF	Alignment with commitments in terms of GHG emissions from the land use, land use change and forestry sector, as defined by the **LULUCF Regulation**: • Inclusion of a LULUCF national GHG reduction target for 2030 • Compliance with the "no debit rule" (Article 4)	Target and actions clearly defined	Actions but no specific target	Addressed in a vague manner, with target and actions	No target or action defined
Energy strategy	**Renewable Energy Target**	Alignment with the binding 2030 renewable energy target, as defined in the **Renewable Energy Directive** (at least 42.5% share of renewables in the energy mix by 2030 – Article 3)	Meets or exceeds EU target	Slightly below target (99-80% of target)	Below target (79-60%)	Far below target (below 60%)
	Energy Transition Planning	Energy transition measures, including: • Setting national targets for the main relevant areas of the transition until 2030, as defined in **Renewable Energy Directive III** (Transport – Article 25, Heating and cooling – Article 23 and Industry – Article 22a) • Clear and detailed financial allocation plan to execute the transition	Highly ambitious and clear planning, including targets and financial allocation	Moderate ambition; some gaps within the targets and financial allocation	Low ambition; limited clarity in both targets and financial allocation	No ambition or plans for energy transition planning

DIMENSION	CRITERIA	EXPLANATION	SCORE CATEGORIES			
			1 Leader	**0.66** Partial leader	**0.33** Partial laggard	**0** Laggard
Energy strategy	**Phase out of fossil fuel subsidies**	Measures to eliminate direct and indirect financial support of fossil fuels, as identified in the **Governance Regulation**: • Define clearly phase out timelines and measures, aligned with the EU target of carbon neutrality by 2050 (Annex I, 3.1.3 (iv.)) • Reporting on subsidy volume, across all relevant sectors • Just transition safeguards, ensuring that the removal of subsidies will consider any potential vulnerable social impact	Highly ambitious, concrete and timely measures (covering all three criteria)	Moderate ambition; some gaps on measures and deadlines (covering 2/3 criteria)	Low ambition; limited clarity on measures and deadlines (covering 1/3 criteria)	No ambition or plans for phase out of fossil fuel subsidies
	Energy security, diversification and resilience	Plans to diversify energy supply and enhance energy system resilience, as identified in the **Governance Regulation** (Article 4c): • Diversification of energy sources and supply from third countries, the purpose of which may be to reduce energy import dependency • Addressing constrained or interrupted supply of an energy source, for the purpose of improving the resilience of regional and national energy systems, including a timeframe for when the objectives should be met	Comprehensive, diversified and detailed measures (covering two criteria)	Moderate diversification (covering the two criteria, but with some gaps)	Limited diversification (covering one criterion)	No significant measures
Energy efficiency	**Overall energy efficiency strategy**	Measures to improve energy efficiency with a focus on reducing energy intensity, as defined in the **EED**, including: • Ambition and compliance with 2030 EED targets (FEC, PEC – Article 4) • Compliance with the Energy Efficiency First principle (Article 3) • Robust governance and implementation framework, by identifying agents for its execution, funding mechanisms and timely internal transposition	Comprehensive and detailed measures, covering all three criteria	Fragmented measures, covering 2/3 criteria	Limited measures, significant gaps covering 1/3 criteria	No meaningful measures
	Energy efficiency in transports	Measures to improve energy efficiency in transports: • Modal shift measures and targets in transport and related infrastructure • Phase out the sale of new fossil fuel vehicles • Dedicated funding and investment to modernise and expand the transport sector (e.g., railways, public transport, infrastructure)	Comprehensive and detailed measures, covering every criteria	Fragmented measures, covering 2/3 criteria	Limited measures with significant gaps, covering 1/3 criteria	No meaningful measures

DIMENSION	CRITERIA	EXPLANATION	SCORE CATEGORIES			
			1 Leader	**0.66** Partial leader	**0.33** Partial laggard	**0** Laggard
Energy efficiency 	**Energy efficiency in buildings** 	Measures to improve energy efficiency in buildings, as defined in the **Energy Performance of Buildings Directive**: • National Strategic Planning, encompassing the NBRP (Article 3) • Phase out of fossil fuel heating, while adopting renewables (e.g., heat pumps). • Financial support mechanisms, through boosting investments on in-depth renovations	Comprehensive and detailed measures, covering all criteria (3/3)	Fragmented measures, covering 2/3 criteria	Limited measures with significant gaps, covering 1/3 criteria	No meaningful measures
Social justice 	**Just Transition** 	Social measures to support workers and communities affected by the transition away from fossil fuels, ensuring inclusivity and equity, as defined in the **Just Transition Fund (JTF)** Regulation and as identified in the **Governance Regulation**: • Mandate ambitious reskilling and upskilling programs for new employment opportunities in the green economy (Article 8) • Focus on supportive investments that lead to economic diversification • Integrated territorial planning (TJTPs), through a robust plan and specific actions to support vulnerable citizens and regions	Comprehensive and detailed strategy, covering every criteria (3/3)	Fragmented strategy, covering 2/3 criteria	Limited strategy with significant gaps, covering 1/3 criteria	No just transition measures
	Energy poverty 	Measures to address energy poverty, as defined in the **EED** and as identified in the **Governance Regulation**: • Robust national assessment, defining energy poverty (Article 24, EED) through indicators that identify the energy-poor households (Article 24, Gov. Reg.) and the root causes • Strategic policy objectives and indicators, establishing a national target to reduce the number of households in energy poverty (Article 24, Gov. Reg.) • Integrated funding strategy and clear implementation timeframe	Comprehensive strategy, covering every criteria (3/3)	Largely addressed but lacking specific details, covering 2/3 criteria	Sporadically addressed, covering 1/3 criteria	No strategy at all

DIMENSION	CRITERIA	EXPLANATION	SCORE CATEGORIES			
			1 Leader	**0.66** Partial leader	**0.33** Partial laggard	**0** Laggard
Social justice	**Health**	Inclusion of health in relation to climate, as prescribed by the **Governance Regulation**: • Health impact assessments of policies • Policy alignment with energy and climate measures designed to address environmental impacts (e.g., air pollution, energy poverty) • Public health entities involved in the planning and implementation of the energy and climate measures	Impacts on health have been clearly assessed and are taken into consideration in policies (3/3)	Impacts on health have been assessed or are going to be assessed in some way in the near future (2/3)	Health is briefly mentioned (1/3)	Health is not mentioned at all
Compliance & governance	**Timeliness of NECP process**	Timeliness of the NECP submission based on the **EU deadlines** (Article 14)	On or before deadline	Delayed ≤1 month	Delayed 1-6 months, met procedural requirements	Delayed >6 months
	Compliance with the Governance Regulation	Extent to which the NECP complies with the **Governance Regulation**: • Covers all five dimensions of the Energy Union (Article 1): - Energy security - Internal energy market - Energy efficiency - Decarbonisation - Research, innovation and competitiveness • Clear national objectives, targets, contributions, integrated policies and measures (WEM and WAM scenarios), according to the key components identified in Annex I (Article 3) • Long-term perspective (2021-2030) towards the 2050 climate neutrality objective • Financial allocation, specifying public and private investment needs	Covers all five dimensions, objectives and assessments (4/4)	Covers most areas, objectives and assessments with minor gaps (3/4)	Significant gaps in two or more criteria, objectives and assessments (2/4)	Fails to address selected policy areas, objectives and assessments

DIMENSION	CRITERIA	EXPLANATION	SCORE CATEGORIES			
			1 Leader	**0.66** Partial leader	**0.33** Partial laggard	**0** Laggard
Compliance & governance	**Involvement of diverse stakeholders**	Involvement of civil society, social partners and the general public, as prescribed in the **Governance Regulation**: • Transparent and timely public consultation (Article 10(4)), with all the information publicly and easily accessible • Inclusive multi-level dialogue, ensuring an active engagement of local authorities and all relevant stakeholders (Article 11) • Accountability and feedback, the NECP must determine how stakeholders input was considered	Clear and detailed consultation processes for local authorities, civil society, social partners and the general public involved at different stages, covering every criteria (3/3)	Consultation processes for local authorities, civil society, social partners and/or the general public, covering 2/3 criteria	Consultation processes mentioned but not detailed/ explained, covering 1/3 criteria	No consultation processes mentioned
	Regional cooperation	Establishment of regional cooperation strategies, as prescribed in the **Governance Regulation** (Article 12): • Active and voluntary joint drafting of specific parts of the NECP, demonstrating a shared approach • Quantified joint projects and objectives • Transparent cost and benefit sharing	Clear and detailed regional cooperation strategies for different regions and areas, involved at different stages (3/3)	Regional cooperation strategies for different regions (2/3)	Regional cooperation mentioned but not detailed/explained (1/3)	No regional cooperation mentioned

Case studies

To complement the index, the NECPs of several countries – Italy, Sweden, Slovakia, Bulgaria and Poland – were analysed in more depth to further explore how different policy areas related to the EGD are addressed. The four policy areas chosen – energy poverty, housing, transport and health – reflect the special interests guiding this research, as explained in the previous section. The case studies were carried out through a simple content analysis methodology based on a keyword search. For each policy areas, keywords were identified and searched through the NECPs (see Table 2). The researchers then read the related paragraphs and/or section, based on their assessment of the relevance of the content. When possible, the NECPs were analysed in their original language and the keywords translated. When necessary, additional reports and legislation were consulted. Finally, the researchers also gathered informal inputs from civil society and government experts to feed into their analysis.

Table 2. Keywords used for the content analysis of the NECPs.[19]

Topic	Keywords
energy	energy poverty
housing	housing, building, renovat*
mobility	mobility, transport, vehicle*
health	health

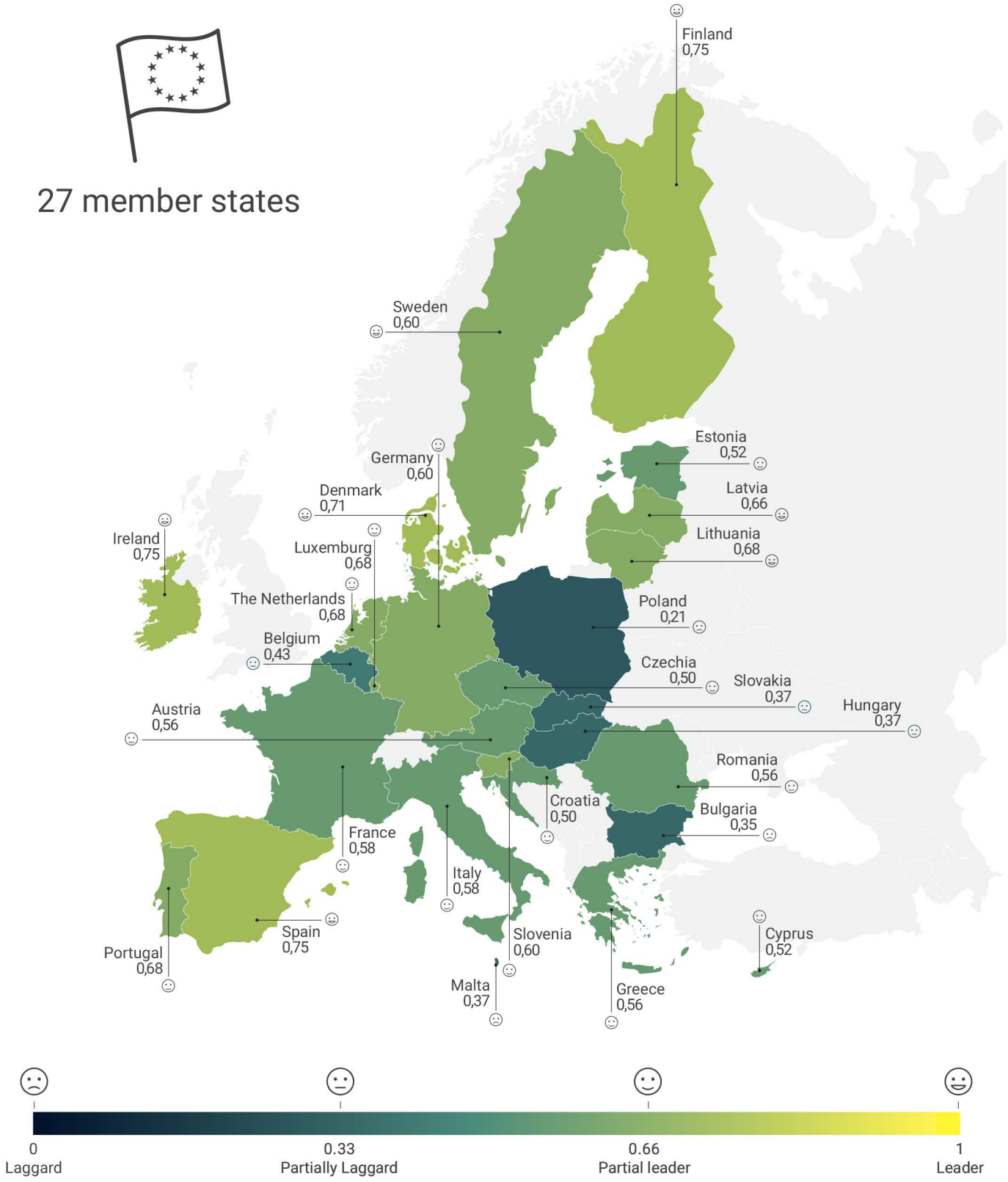
TRACKING PROGRESS AT THE NATIONAL LEVEL: WHERE ARE THE LEADERS?

This section provides an overview of the index scores at different levels of analysis: EU-27 mean scores; dimensions; individual criteria; and so forth. A complete table with the analysis of the 27 NECPs according to each criterion can be found in a separate file on the FEPS website.

Overall performance of member states

The mean score for the 27 EU member states is **0.58, which is between the partial laggard and partial leader categories**. While the member states are, for the most part, progressing in the implementation of the EGD, progress remains insufficient to fully achieve the climate and social justice objectives linked to the EGD. Overall, this result is in line with other types of EGD assessments.[20] Map 1 and Table 3 reveal **substantial variation** in the implementation progress of the EGD between member states. The lowest score (0.21) goes to Poland based on the draft NECP submitted in 2023, as the Polish government had still not submitted its final NECP as of February 2026. The highest score (0.75) goes jointly to Spain, Ireland and Finland, which score as leaders for at least six criteria. While no member state is a complete laggard, no member state reaches the score of full leader.

Map 1. Overall performance of the 27 member states.



The **geographic distribution of the scores** does not reveal any clear pattern or striking dividing lines between Northern and Western Europe, on one hand, and Southern and Central and Eastern Europe on the other. The results present some differences compared to past analyses of environmental policy implementation, which usually identify countries like Austria, Denmark, Finland, Germany, the Netherlands and Sweden as leaders and countries like Greece, Ireland, Portugal, Spain and most of the Eastern and Central European countries as laggards.[21] Indeed, Spain, Portugal and Ireland rank in the top five of the index, while Austria, Italy, Greece and Germany gravitate towards the average score. The top ten is a mix of traditional "good students" in environmental policies, such as Finland, Denmark, the Netherlands and Luxembourg, and emerging good students, showing increasing ambition and efforts, such as Spain, Portugal, Lithuania and Slovenia. The bottom of the ranking still counts many Central and Eastern European countries, but also includes Belgium and Malta.

Table 3. Overall performance by country.

EU Member States	Total score
Spain	0,75
Ireland	0,75
Finland	0,75
Denmark	0,71
Portugal	0,68
Netherlands	0,68
Luxembourg	0,68
Lithuania	0,68
Latvia	0,66
Slovenia	0,60
Sweden	0,60
Germany	0,60
Italy	0,58
France	0,58
Romania	0,56
Greece	0,56
Austria	0,56
Estonia	0,52
Cyprus	0,52
Czechia	0,50
Croatia	0,50
Belgium	0,43
Malta	0,37
Hungary	0,37
Slovakia	0,37
Bulgaria	0,35
Poland	0,21

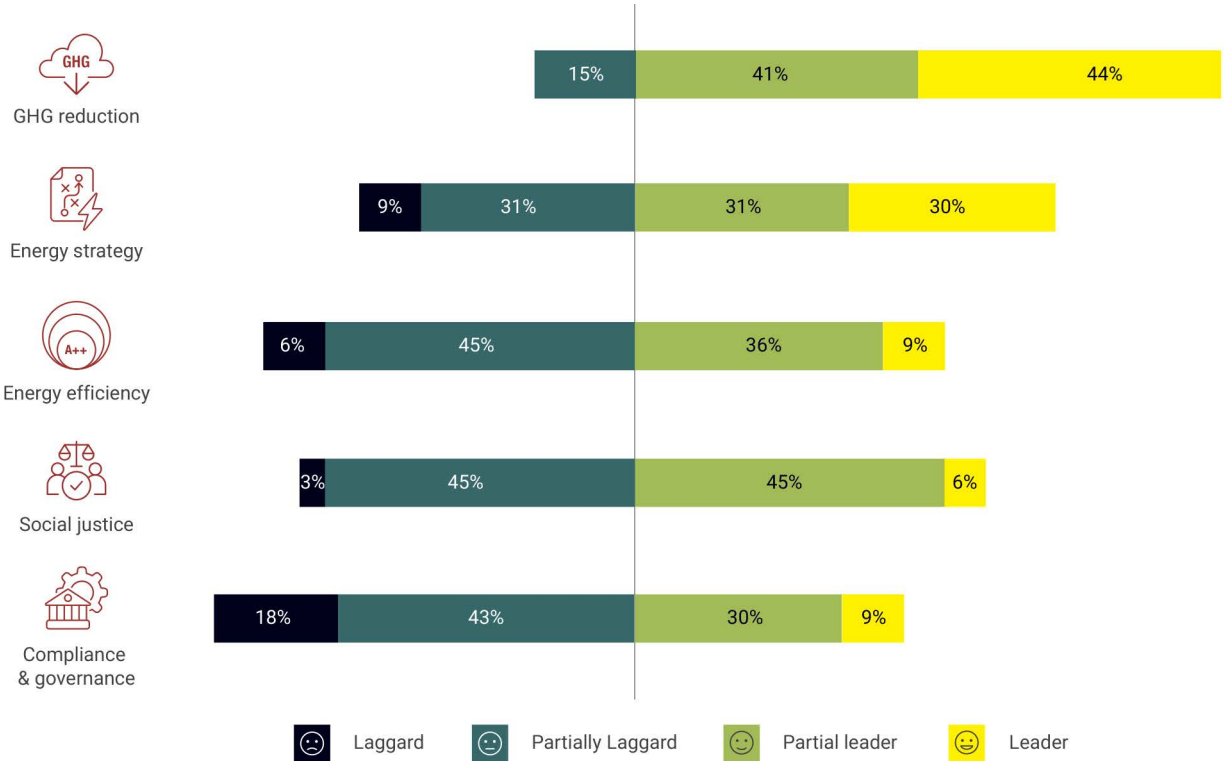
Performance of the member states across five dimensions

Beyond the overall score, the index allows a more granular view thanks to the 16 criteria grouped into five key dimensions of the EU's process towards 2050 climate neutrality: (1) reduction in GHG emissions; (2) energy strategy; (3) energy efficiency; (4) social justice; and (5) compliance and governance. As Table 4 shows, the dimension *GHG reduction* obtains the highest EU-27 mean score (0.76), followed by the *energy strategy* (0.60). The three other dimensions reveal relatively poor performances from member states, below the overall mean score. *Compliance and governance* obtains the lowest score (0.48). Each member state may present high scores in some dimensions and low scores in others. For example, Germany scores well in *GHG reduction* but is only a partial laggard (0.33) in the *social justice* dimension. Despite overall high scores, Denmark is also scored as a partial laggard in the *social justice* dimension. Overall, no member state is a leader across the board; all of them present some weaknesses. The following subsections will dive into each of the five dimensions.

Table 4. National scores and EU-27 average for each dimension analysed.

Criteria	Average EU score per criteria
Overall GHG Reduction Target	0,90
Energy security, diversification and resilience	0,80
Renewable Energy Target	0,69
Just Transition	0,63
GHG Reduction Target from LULUCF	0,62
Compliance with the Governance Regulation	0,61
Energy efficiency in transports	0,54
Energy efficiency in buildings	0,54
Energy poverty	0,53
Energy Transition Planning	0,53
Regional cooperation	0,50
Overall energy efficiency strategy	0,49
Involvement of diverse stakeholders	0,43
Health	0,40
Timeliness of NECP process	0,38
Phase out of fossil fuel subsidies	0,38

Figure 2: Distribution of the four score categories across the five dimensions analysed.



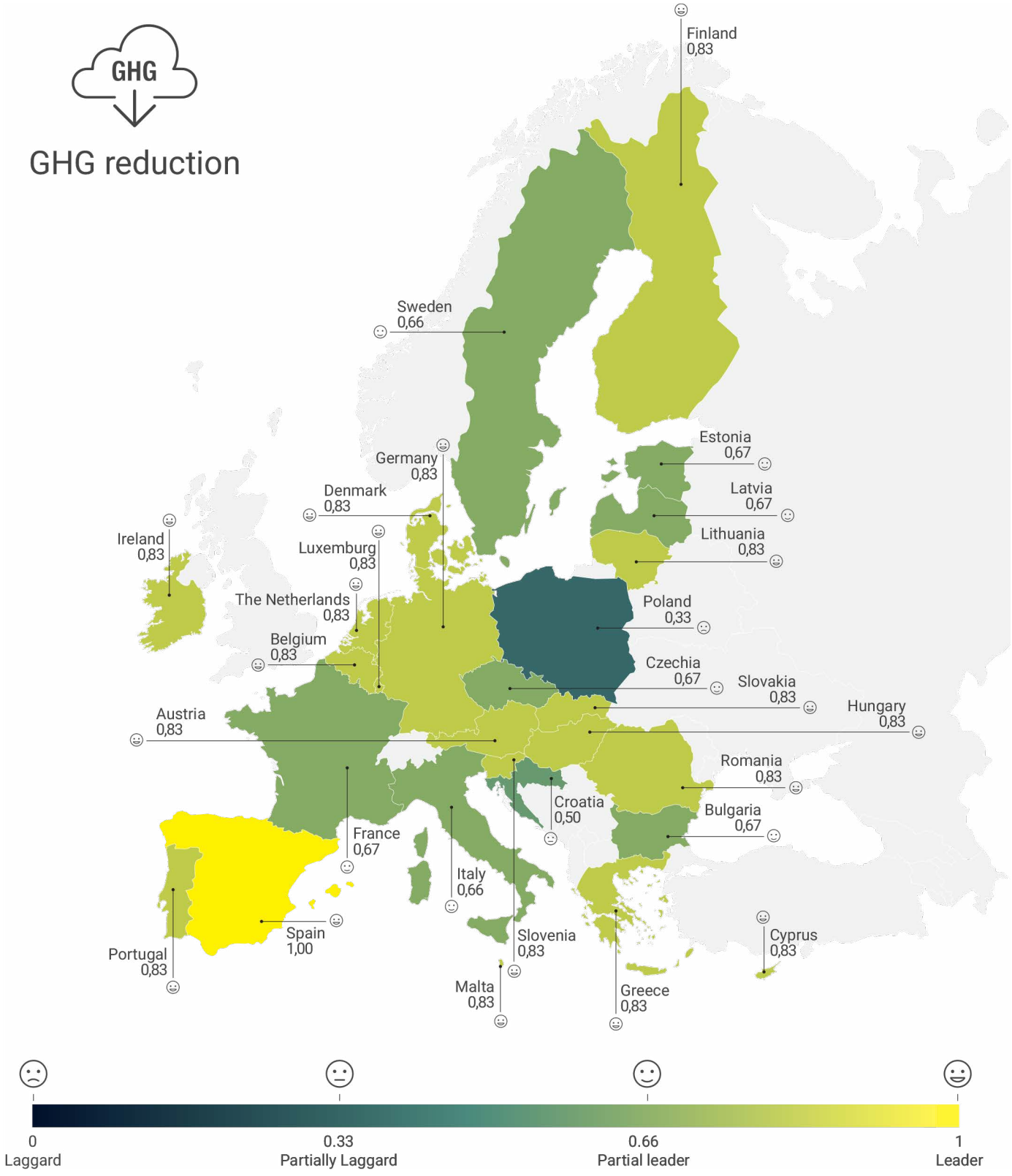
GHG emission reduction

The *GHG emission reduction* dimension reflects member states' alignment with the GHG emission reduction targets under the ESR and the LULUCF Regulation. With an EU-27 mean score of 0.78, above the partial leader threshold, this dimension reveals serious, though insufficient, ambition in NECPs. Caution should be exercised when assessing this score, as setting a target does not guarantee reaching it through appropriate measures. In some cases, the quality and precision of the NECP also make it difficult to assess the feasibility of planned measures, despite a strong commitment in line with EU regulations.

The *overall GHG reduction* target criterion has the highest score out of all criteria (0.90). Twenty member states received the score of leader, six of partial leader and only one of partial laggard (Poland).

Fourteen member states present targets or foresee emission reductions exceeding the national targets set by the ESR (Finland, France, Hungary, the Netherlands, Slovakia, Luxembourg, Denmark, Spain, Greece, Germany, Latvia, Ireland, Romania and Czechia). The performance for the second criterion, *GHG emission reduction target from LULUCF*, is lower, only reaching an EU-27 mean score of 0.60. Cyprus appears to be a potentially interesting case to explore, with a detailed strategy for the LULUCF sector, a catalogue of measures to reach the 2030 target, and public and stakeholder consultations on this specific topic. The analysis of NECPs also reveals the influence of external factors on this criterion. For example, the Finnish NECP highlights the uncertainty in future compliance created by ending wood imports from Russia.

Map 2. Performance of the 27 member states for the GHG emission reduction dimension.

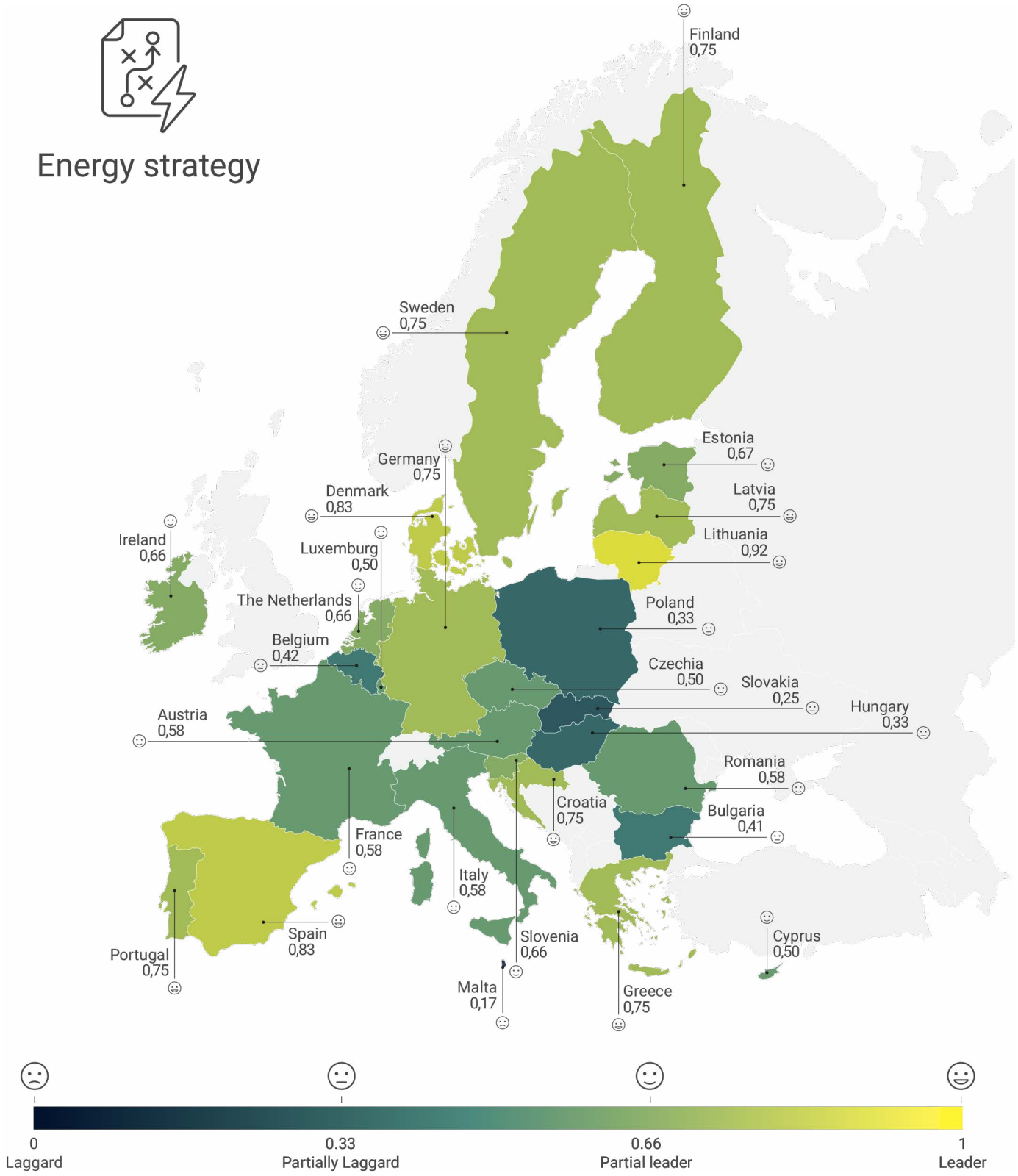


Energy strategy

The *energy strategy* dimension encompasses different key components of the energy transition process at the core of the EGD objectives. The EU-27 mean score is 0.60, slightly below the partial leader threshold, revealing that, overall, member states are planning their energy transition, though policies and measures are insufficient. The individual scores for each of the four criteria included in this dimension are: renewable energy target, 0.69; energy transition planning, 0.53; phase-out of fossil fuel subsidies, 0.38; energy security, diversification and resilience, 0.80. The criterion regarding the phase-out of fossil fuel subsidies obtains a particularly low EU-27 mean score (the lowest out of the 16 criteria, jointly with the timeliness of NECPs), despite being a priority of the eighth Environment Action Programme to 2030.

The *energy strategy* dimension also presents important disparities between member states. Fourteen member states meet the requirements to be considered partial leaders, with Lithuania close to being a leader, with a score of 0.92. Indeed, Lithuania's NECP reports a highly ambitious renewable energy target, a structured energy transition plan aligned with RED III and including financial resources, and measures for energy diversification. At the other end of the spectrum, Malta and Slovakia, with respective scores of 0.17 and 0.25, are lagging behind. Malta's NECP, receiving a score of zero for three of the four criteria, fails to demonstrate a concrete energy transition plan and clearly states that the country has no plan to phase out fossil fuel subsidies, despite its international commitments.

Map 3. Performance of the 27 member states for the energy strategy dimension.



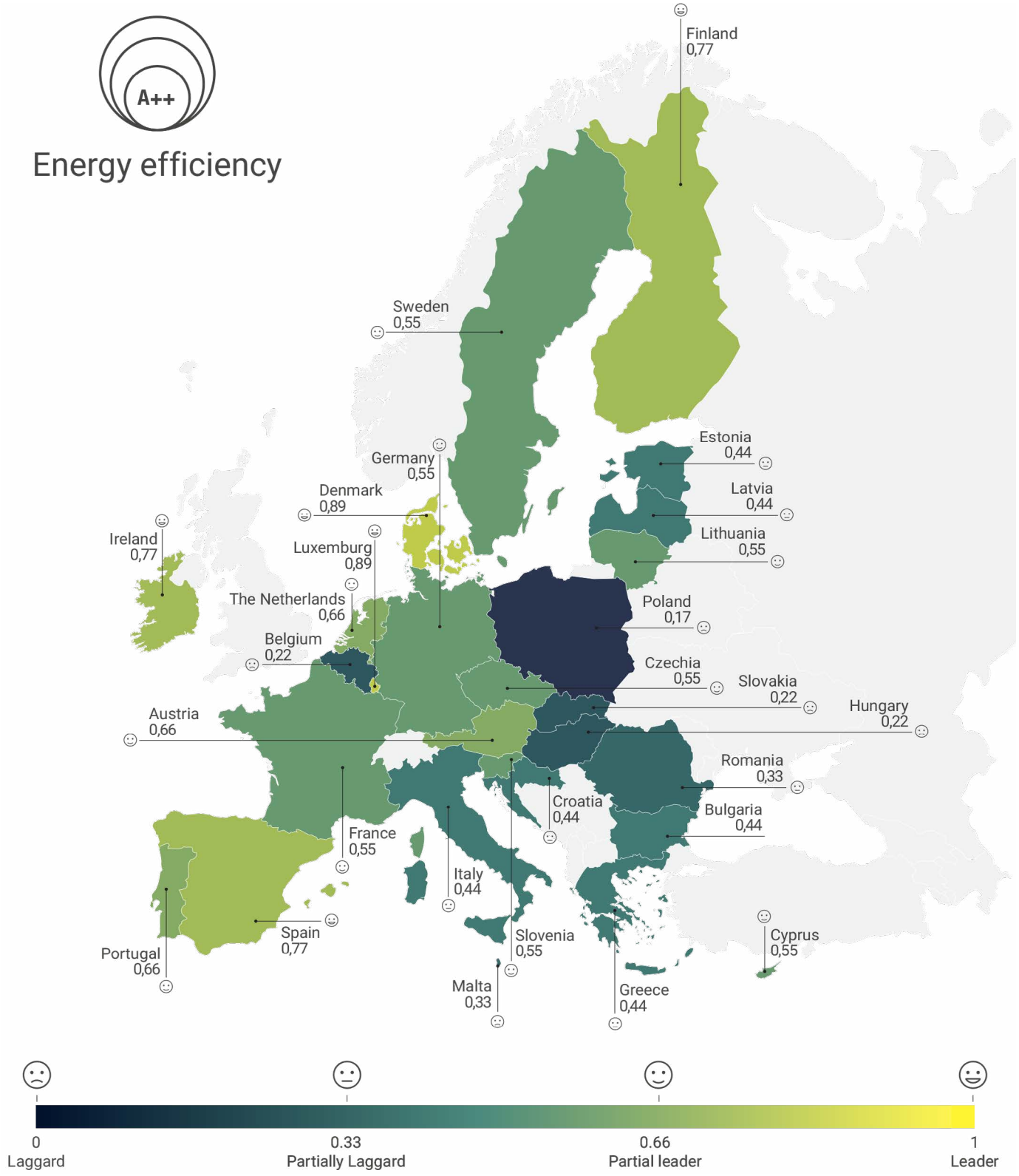
Energy efficiency

Energy efficiency constitutes a cornerstone of the EGD to reduce energy demands. The EU-27 mean score for this dimension (0.52) highlights that much progress is still needed in this area. Similarly, the EU-27 mean scores of the three criteria included in this dimension – overall energy efficiency strategy (0.49), energy efficiency in buildings (0.54) and energy efficiency in transport (0.54) – reflect the overall mediocrity of the member states' performances.

With a score of 0.89, Luxembourg and Denmark are the best performers. Both countries present strong plans for the transport and buildings sectors, with measures to support modal shifts, public transport investments and fossil-free heating. They are followed by Spain, Finland and Ireland (0.77). Finland is the only country to receive a score of leader for its overall energy efficiency strategy.

Indeed, its NECP presents energy consumption targets aligned with the EED, measures to apply the Energy Efficiency First principle throughout the document, and collaborative efforts through Voluntary Energy Efficiency Agreements between the government and industry and municipalities. Belgium, Hungary, Slovakia (0.22) and Poland (0.17) are laggards. Belgium received a score of zero for the energy efficiency in buildings criterion, partly due to the fragmented nature of its NECP, while Poland received a score of zero for the energy efficiency in transport criterion due to the lack of a clear plan and measures.

Map 4. Performance of the 27 member states for the energy efficiency dimension.

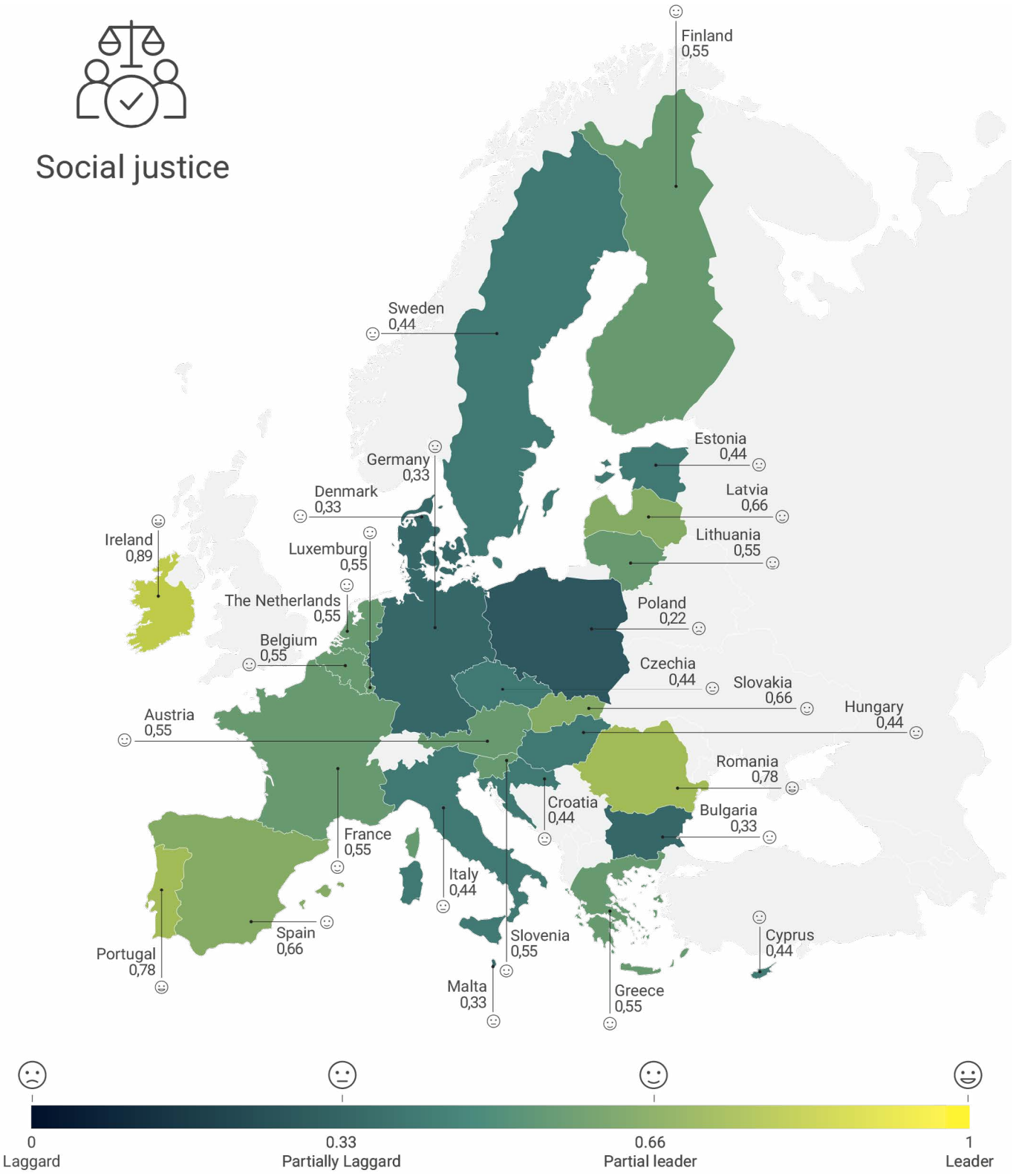


Social justice

The *social justice* dimension, which focuses on how states address the just transition, energy poverty and health, is equally as mediocre as the previous dimension, with an EU-27 mean score of 0.52. The best performer is Ireland (0.89), while the worst one is Poland (0.22).

With a score of 0.63 for just transition measures to support workers and communities affected by the transition away from fossil fuels, member states as a whole are just below the partial leader threshold. The Netherlands, Slovakia, Portugal, Greece, Ireland and Romania are leaders in this criterion. Their measures include reskilling and upskilling programmes to support employment opportunities in the green economy, robust territorial just transition plans (TJTPs), and state support to diversify economic activities. The EU-27 mean score for the energy poverty criterion is 0.53, with only four member states (Portugal, Latvia, Ireland and Romania) identified as leaders and 13 identified as partial laggards. The health criteria obtains an EU-27 mean score of 0.40 – the lowest individual criterion score after the ones on fossil fuel subsidies and NECP timeliness – highlighting the poor inclusion of health-climate policy interactions in NECPs. The only country receiving a score of leader is Spain, with quantified health assessments related to air pollution and concrete collaboration between the Ministries of Health and Ecological Transition. Denmark scored zero, as there was no evidence of health considerations in its NECP.

Map 5. Performance of the 27 member states for the social justice dimension.

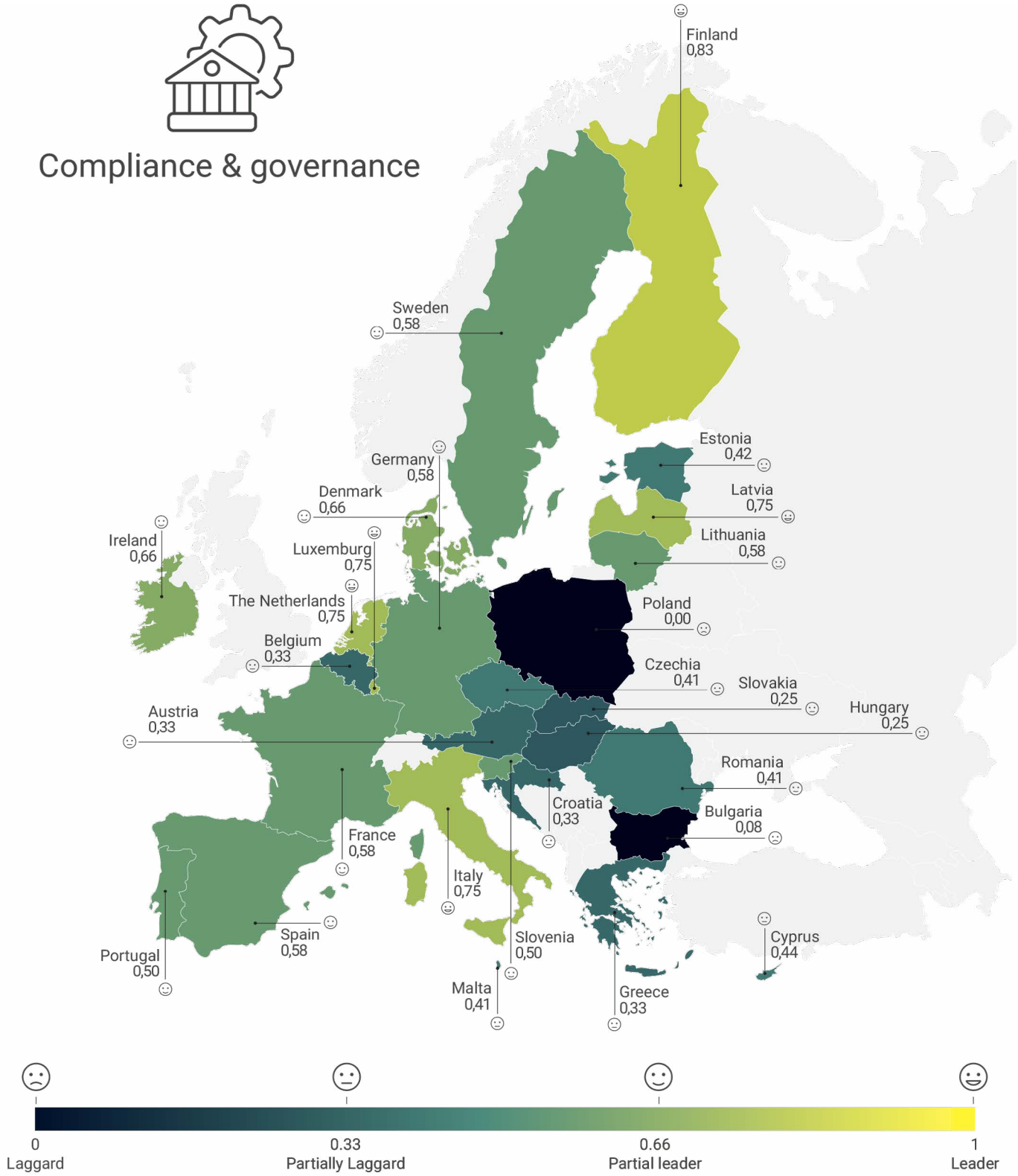


Compliance and governance

The dimension on compliance with the Governance Regulation and governance processes related to NECPs shows the varying quality of the NECPs and the disparities between member states when it comes to administrative strength and planning depth. Unsurprisingly, only a handful of countries scored well on the timeliness of the NECP process criteria (Finland, Italy, the Netherlands and Sweden). The criterion on the compliance of NECPs with the Governance Regulation obtains an EU-27 mean score of 0.61, slightly below the partial leader threshold. Most member states (20 out of 27) submitted NECPs with either minor (partial leaders) or significant (partial laggards) gaps compared to the Governance Regulation.

The EU-27 mean score for the criterion on the involvement of diverse stakeholders is low at 0.40, suggesting that participatory governance in NECP planning remains underdeveloped. Slovenia is the only country identified as a leader, with three rounds of public consultations, expert and stakeholder consultations, a multi-level climate and energy dialogue, and the preparation of a feedback report. Poland, Romania, Bulgaria and Hungary all scored zero, with NECPs indicating no documented or meaningful stakeholder involvement processes. Finally, the criterion on the inclusion of regional cooperation in the NECP, with a score of 0.50, reveals a mixed picture. While Latvia and Estonia's NECPs provide different examples of cooperation between Baltic states, Bulgaria's NECP only mentions the need for regional cooperation without providing any details.

Map 6. Performance of the 27 member states for the compliance and governance dimension.



Understanding underperformance: Why is implementation limited?

The index constitutes the first step towards mapping and understanding the implementation dynamics of the EGD at the national level. It allows us to identify key areas where overall EU performance is poor and further research and action is needed, such as the phasing out of fossil fuel subsidies, the consideration of health-climate policy interactions, the timeliness of the NECP process and the meaningful involvement of stakeholders.

While the index does not seek to identify nor explain the factors influencing the level of performance of member states, existing literature provides possible explanations that could be tested in in-depth qualitative research on the EGD implementation.[22] On the political side, political will, perceived public support for green policies and the influence of organised interest groups may all influence the national implementation of the EGD. If a government has a lukewarm position towards environmental issues and fears electoral backlash due to environmental policies, it could slow or impede implementation.

Conversely, governments favourably oriented towards environmental policies would be expected to perform better in the implementation of the EGD. Policymakers tend to underestimate public support for climate and environmental action, which can lead to reduced support for green policies.[23] Lobbying groups can also amplify some positions opposing climate and environmental policies and influence policymakers.

In addition, administrative and institutional capacities are likely to influence the implementation of the EGD. Some EGD policies and regulations are complex and require extensive changes at different levels of government. National and sub-national public administration practices may not have the necessary capacities and resources to carry out these measures at the necessary pace and scale, or even at all. Limited capacities may also slow down the absorption of EU funds, hampering the green transition process, despite the availability of some dedicated financial resources.[24] It is important to remember that, even with the necessary political will and institutional capacities, a transition such as the one required by the EGD to achieve climate neutrality by 2050 takes time and a long-term commitment.

CASE STUDIES

Italy

Overview

The Italian Ministry of the Environment and Energy Security submitted its updated draft NECP[25] on 19 July 2023 (Table 5). In its assessment, the EC pointed out serious failures to meet some of the 2030 EU climate objectives. In particular, the GHG emission reduction targets in Emission Trading System (ETS) sectors under the ESR ((EU) 2023/857) and the GHG net removals in LULUCF, as foreseen in the Regulation (EU) 2018/841, were not considered sufficiently ambitious. Other shortcomings included the targets for the building sector and efforts to combat energy poverty. On the other hand, some positive points were identified, for example, in planning energy efficiency improvements and in the deployment of renewable energies.[26] Regarding the NECP drafting process, the EC considers that, even though public consultations took place, stakeholder engagement was not fully transparent and inclusive.[27] Participants were not given the opportunity to review the updated the NECP nor discuss the inputs provided.[28]

Table 5. Timeline of Italy's NECP submissions, with the NECP analysed highlighted in purple.

First NECP	Updated draft NECP	EC assessment	Updated NECP
December 2019	July 2023	December 2023	June 2024
297 pages	423 pages	10 pages	490 pages

Italy's final updated NECP was submitted on time in June 2024. The index gives Italy an overall score of **0.58**. While slightly above the EU average, it indicates that the targets, policies and measures presented remain inadequate to follow a path aligned with the EGD. The NECP fails, for the most part, to integrate the EC's recommendations; the EC's final assessment highlighted the need for Italy to increase its efforts in all ESR sectors, in particular by reducing its dependency on fossil fuels in buildings and transport.[29]

The scores of the criteria relevant to the four themes discussed in this case study are particularly low, all belonging to the "partial laggard" category (Table 6).

Table 6. Italy's scores for the criteria relevant to the policy themes analysed in the case study.

Policy theme	Related criteria	Score
Energy poverty	Energy poverty	0.33
Housing	Energy efficiency: buildings	0.33
Mobility	Energy efficiency: transport	0.33
Health	Inclusion of health considerations	0.33

Thematic analysis

Housing

The measures related to housing in the Italian NECP are often associated with energy efficiency and energy consumption due to the significant portion of national energy consumption and emissions coming from buildings. With many buildings built before the 1970s and half of the Italian housing stock (around 6 million buildings) belonging to energy class F or G,[30] Italy exhibits widespread energy inefficiencies and ranks among the highest GHG emissions from heating and cooling in the EU.[31]

The 2030 target for emission reduction in the building sector set by the Italian government is 41.6% compared to 2005 levels, falling short of the 43.7% target set by the ESR. However, the NECP complies with the targets of the EED (COM(2021) 558 final) in the building sector.[32] The NECP contains often imprecise measures to improve the energy efficiency of buildings (both private and public) and lower emissions. For example, it mentions intentions to promote heat pumps as the main heating system and an increased use of thermal renewables, such as solar panels, geothermal and bioenergy, for which fiscal incentives are available.

To comply with the targets of the European Performance Building Directive (EPBD - COM(2021) 802 final), transposed into national law through the "Direttiva Case Green" and the updated decree on minimum energy performance requirements for buildings (Decreto Ministeriale 12 agosto 2024), the government highlights the need for updating the national long-term strategy for the renovation of the building stock,[33] consolidating available information about the Italian housing stock and identifying the level of renovation needed. The NECP presents the objectives to achieve an overall annual upgrading rate of 2% in 2030 and 2.6% by 2050, with specific intermediate targets covering ten-year periods for residential buildings and the public sector, in line with EU targets.[34]

Improving building energy efficiency is also linked to energy poverty in the Italian NECP and is proposed as one of the measures that Italy is planning to adopt to comply with the new EED and EPBD and support vulnerable households. Several financial measures have been adopted to renovate buildings, such as tax deductions for energy requalification of buildings; a new National Energy Efficiency Fund, recently created to provide subsidies or state-guaranteed loans for energy efficiency measures carried out by companies and public administration; and "*Conto Termico*", giving specific incentives for public administration to improve energy efficiency and increase renewable energy sources (RES).

However, current research shows that the implementation of this new legislation is lagging behind: Italy is not on track to meet EU targets, failing to effectively decarbonise its building stock, due to insufficient emission reduction and inadequate use of RES in the heating and cooling of buildings.[35] Fiscal incentives to promote housing renovation and improve energy efficiency do not contain any precise requirement for emission reduction. In addition, a monitoring mechanism was not put in place, with the risk of compromising public finances, as occurred with the "Superbonus".[36] Worryingly, since the submission of the NECP, the revision of the budget law reversed the building renovation strategy, eliminating some of the planned incentives. Moreover, it remains difficult to verify who benefits from the incentives, with the risk of excluding the most vulnerable households who live in the least-energy-efficient buildings.

The index reflects these findings: while there are some efforts to transpose EU legislation and to support the renovation of buildings to improve energy efficiency, these are still limited. The way the measures are presented in the NECP does not allow one to conclude on robust and quantified plans with sufficient financial resources.

Energy poverty

Energy poverty is recognised as a widespread and increasing phenomenon in Italy, linked to economic crises and geopolitical tensions, and it receives attention in specific sub-sections of the Italian NECP. Italy does not possess an official definition of energy poverty. A provisional definition is currently used to identify energy poverty in the country: "the inability to keep [the] home adequately warm", taken from a list drafted by the EC in the EU guidance on energy poverty (SWD(2023) 647 final). The Italian government used different indicators to analyse historical trends, including through an Energy Poverty Indicators Calculation project financed by Eurostat. To better coordinate existing objectives and measures between institutions, the government established a National Energy Poverty Observatory in 2022 (Decreto Ministeriale 29 marzo 2022). The NECP explains that the Italian government will only adopt an official definition and indicators with the transposition of the EED (COM(2021) 558 final).

The main measure to address energy poverty included in the NECP is through social allowances and targeted interventions to reduce vulnerable households' economic burden, executed via direct discounts on electricity and gas bills. The allocation of such subsidies is determined through the so-called "ISEE" (translated into English as "Equivalent Economic Status Indicator"), an indicator based on the composition and economic situation of a household. All families that fall within a certain ISEE threshold are eligible to receive such allowances, regardless of their effective energy consumption: the electricity subsidy covers about

30% of the family's annual charges, while the gas subsidy covers 15% of the family's annual charges. According to analyses conducted by the Italian National Institute of Statistics (ISTAT) reported in the NECP, the largest share of households benefiting from the allowance belong to the poorest bracket, confirming a positive redistributive effect. Through these measures indicated, the objective is to reduce energy poverty levels by 1% every year from 2023 to 2030, equivalent to 2.4 million households. Following the establishment of a new definition and new indicators, targets will be updated.

As mentioned in the section on housing, the NECP also addresses some of the root causes of energy poverty through measures seeking to improve energy efficiency and promote renewable energy in both private and public buildings, targeting in particular social housing and low-income families. The Italian NECP also mentions the possibility of addressing energy poverty through the development of renewable energy communities,[37] in particular for vulnerable families living in remote or rural areas. Energy communities are included in Italy's National Recovery and Resilience Plan (NRRP)[38] to support municipalities with fewer than 5,000 inhabitants and strengthen social cohesion.[39] Finally, the NECP mentions Italy's intention to apply for the Social Climate Fund (Regulation (EU) 2023/955), potentially an additional tool to mitigate energy poverty and support vulnerable households affected.

Although the government provides fiscal incentives and social allowances, the EGD Tracker does not consider the Italian strategy to effectively tackle energy poverty due to the lack of a comprehensive framework, indicators and a monitoring mechanism.

Transport

Although Italy presents the highest motorisation rate in Europe (682 vehicles per 1,000 inhabitants),[40] it is one of the EU member states with the lowest share of fully electric passenger cars in new registrations.[41]

The NECP indicates that Italy's transport sector has one of the highest energy consumption patterns. It has been on an upward trend since 2017, with the exception of 2020 due to the COVID-19 pandemic. However, in 2022, energy consumption in the transport sector returned to growth by increasing by 5.4% compared to 2021.[42] According to the results of public consultations presented in the NECP, decarbonising this sector and reducing demand for private cars is considered one of the main challenges in carrying out a successful energy transition.

Italy has one of the highest emission reduction targets for 2030, according to the ESR, amounting to a total reduction of 43.7% compared to 2005 levels, which includes the transport sector. In line with the Renewable Energy Directive III (Directive (EU) 2023/2413), Italy has set a national target of a 34% RES share in the gross final consumption of energy in the transport sector. However, reaching this target is considered very unlikely by stakeholders who analysed the NECP provisions, considering that, in 2022, the energy consumption from RES accounted for only 8%;[43]

To reduce emissions from transport and reach the RED III targets, the NECP foresees an increasing use of biofuels, electric mobility, mobility fuelled by hydrogen and investments in rail transport. This will mean updating the "National Air Pollution Control Programme" and the "National Infrastructure Plan for Charging Electrically Powered Vehicles", which will have to take into account the provisions and financial tools of the NRRP.[44] The NECP presents a goal of deploying nearly 6.5 million electrically powered vehicles by 2030, of which about 4.3 million should be pure electric vehicles (BEVs) and for which more electric charging stations are planned to be built. The NECP highlights the key role of biofuels in the short term to contribute to the decarbonisation of the existing fleet. In the long term, they should play an important role for sectors that are difficult to electrify, in particular in the aviation and shipping sectors, especially through the implementation of FuelEU maritime (Regulation (EU) 2023/1805) and ReFuelEU aviation (Regulation EU) 2023/2405).

Furthermore, in light of a technology-neutral perspective, subsidies for the purchase of light vehicles in the case of the use of low-carbon fuels will be implemented for freight transport.

According to the NECP, Italy's main strategy to reduce emissions in the transport sector is through a "modal shift", aiming at shifting significant shares of traffic from polluting means to more sustainable transports. Such measures include behavioural changes in car users and employers. For example, incentives have been put in place for citizens to switch from private and polluting cars to leasing or sharing cars powered by low-carbon or electric fuels (social leasing), and major investments are planned to improve local transport and cycle routes to encourage citizens to use more public transport and bicycles. Fiscal incentives for the purchase of electric vehicles have been made available by reinforcing the "Ecobonus". At the same time, companies should incorporate remote work policies and consider the reduction of working days for the same number of hours worked to reduce physical travel, while boosting digitalisation. Regarding freight transport, there are also measures to support a shift from road to rail or ship.

Despite many measures, the NECP does not appear to provide an overall strategy to decarbonise the transport sector. The focus on a "modal shift" changing citizens' behaviour is considered insufficient to decrease emissions in the sector. Contradictory policies, such as incentives for diesel cars, also cast doubts over a potential shift to electric vehicles. These shortcomings confirmed the score of partial laggard.

Health

Health and, more precisely, its interactions with climate policies are mentioned in a few sections of the Italian NECP. Firstly, it is briefly mentioned in the context of emergency measures adopted to address the energy crisis following the Russian invasion of Ukraine, measures that will be applied again in the event of similar crises. Specifically, vulnerable citizens with particularly severe health conditions requiring life-saving electrical equipment were eligible for higher allowances during the peak of energy prices.

Secondly, the NECP announces that health will be taken into consideration to define energy poverty, following the approach of the EED, which links energy poverty to "decent standards of living and health".

In a more indirect way, health is also mentioned in reference to air pollution. Italian municipalities have received financial support through the Development and Cohesion Fund to reduce air pollution and with respect to the targets of the EU Ambient Air Quality Directive (AAQD; Directive (EU) 2024/2881). However, because the revision of the directive was finalised after the submission of the final Italian NECP, it refers to the previous version (Directive 2008/50/EC). Furthermore, the "National Air Pollution Control Programme",[45] approved in 2021, defines the set of measures and initiatives to be implemented at the national level to achieve the reduction targets for certain atmospheric pollutants imposed by EU National Emission Ceiling Directive (NEC Directive - 2016/2284). Finally, some measures presented in the NECP for research could potentially benefit health. For example, the National Innovation Fund, bringing together public and private resources dedicated to innovation, includes the healthcare sector as one of the key strategic areas.

Overall, while health is taken into consideration in the context of energy poverty, the Italian NECP does not provide health impact assessments of the policies and references to health are limited. The lack of clear connections between decarbonisation, air pollution and health seem to reflect the absence of a holistic approach on the significant health benefits that air quality improvements can provide, despite Italy facing several infringement procedures initiated by the EC on air pollution. This analysis confirms the score of partial laggard.

Conclusion

Italy's final updated NECP is considered to show insufficient progress and plans to meet some of the key 2030 climate objectives. For some, Italy is considered one of the member states that has least improved its NECP compared to the initial draft.[46] While the revised NECP was submitted within the deadline, its lack of a long-term vision for the delivery of EGD objectives reflects the current conservative government's position on the EU green agenda. Overall, the analysis of this case study reflects the index scores and further sheds light on potentially non-realistic objectives included in the NECP.

Sweden

Overview

Having reduced national emissions by 38% between 1990 and 2023, Sweden has long been seen as a leader in climate policies. However, the current government[47] brought significant changes and has stepped back from the previous government's ambition on emission reductions. Sweden submitted its draft updated NECP in June 2023[48] (Table 7). The draft received substantial critique from the EC, notably because projections suggest the country will fail to reach targets for GHG removal in LULUCF (9% below target), energy efficiency (19% above target energy consumption) and renewable energy (14.5% below target share). Moreover, the EC highlighted a lack of precision on how targets will be reached, on implementation timeframes and on the quantification of impacts. On the positive side, power generation in Sweden is coal-free with the objective to phase out fossil fuels for electricity production by 2040.[49]

Table 7. Timeline of Sweden's NECP submissions, with the NECP analysed highlighted in purple.

First NECP	Updated draft NECP	EC assessment	Updated NECP
January 2020	June 2023	December 2023	June 2024
217 pages	196 pages	11 pages	328 pages

The final updated NECP, prepared by the Ministry of Climate and Enterprise and updated "to the extent possible" with consideration of the EC recommendations, was submitted on time in June 2024.[50] The index gives Sweden an overall score of **0.60**. While slightly above the EU average, the score indicates that the targets, policies and measures presented remain inadequate to follow a path aligned with the EGD. In its final assessment (May 2025), the EC encourages Sweden to monitor the impacts of policies on ESR emission reductions; develop a road map on the phasing out of fossil fuel subsidies; and increase measures and ambition for energy efficiency by 2030, including in the transport sector.[51] In the four policy themes discussed in this case study, Sweden obtains "partial laggard" scores for energy poverty and health, and "partial leader" scores for energy efficiency in buildings and transport (Table 8).

Table 8. Sweden's scores for the criteria relevant to the policy themes analysed in the case study.

Policy theme	Related criteria	Score
Energy poverty	Energy poverty	0.33
Housing	Energy efficiency: buildings	0.66
Mobility	Energy efficiency: transport	0.66
Health	Inclusion of health considerations	0.33

Thematic analysis

Housing

The Swedish NECP addresses housing in the context of energy use and efficiency, renewable energy, the cost of energy (see the section below on energy poverty), renovation, and adaption to climate change. Buildings account for roughly 20% of Sweden's GHG emissions, and the electricity for and heating of buildings accounts for some 40% of Sweden's energy use.[52] The NECP does not include official emission reduction targets for the buildings sector and does not clearly describe the scope, timeframe and impact of the policies and measures presented (as noted in the EC's assessment[53]).

Sweden possesses several pieces of legislation for the building sector: the Planning and Building Act (SFS 2010:900), regulating building requirements; the Building Rules (the BBR, BFS 2011:6), which set requirements for energy management; the Act on energy declarations for buildings (SFS 2006:985) that aims to support efficient energy use by setting rules for energy declarations; and the Planning and Building Ordinance (SFS 2011:338). The NECP documents Sweden's current progress regarding the EPBD. In June 2024, the government mandated the Swedish National Board of Housing, Building and Planning – the "*Boverket*", that is, the authority managing the built environment – to prepare for the national implementation of the recast EPBD by June 2026, in line with the 29 May 2026 deadline in the EPBD. Legislative proposals were presented in March 2025.[54] The recast EPBD requires a new national building renovation plan to replace the national renovation strategy by the end of 2026. The NECP outlines that Sweden's long-term renovation strategy, reported to the EC in 2020, includes "indicative milestones": energy use in buildings should progressively decrease over time in 2030, 2040 and 2050; more buildings should have energy performance classes A-C and fewer classes E-G; and the share of fossil fuels used in buildings should be lower than 1% in 2030 and 0% in 2040 and 2050. While the NECP lists indicators to assess progress, it does not present precise targets.[55]

The NECP also mentions FossilFree Sweden, a state initiative launched by the Swedish government in 2016, although it does not explain its precise role in the housing sector. The objective of the initiative is to develop voluntary road maps for different industry sectors to cut GHG emissions by 50% in 2030, 75% in 2040 compared to 2015 levels and reach net-zero emissions by 2045.[56] It is carried out in collaboration with over 500 public and private stakeholders, including in the building and construction sector.

In terms of financial measures, Sweden allocated approximately 1.2 billion Swedish krona from its 2023 national budget to support the energy-efficient renovation of single-family houses and domestic heating, up to 50% of eligible costs and up to a maximum of 30,000 Swedish krona per approved application.[57] Applications for grants could be made until 1 June 2025.[58]

Overall, while the Swedish NECP presents different measures related to energy efficiency in buildings, some precision and key information are missing to get a better sense of the government's targets and accomplishments in that area.

Energy poverty

While the NECP does not outline specific targets for energy poverty, it highlights Sweden's existing legislation for social protection and welfare relevant to energy poverty. Firstly, the Swedish Energy Markets Inspectorate's mandate includes paying specific attention to vulnerable customers on the energy market, defined as "persons who are permanently unable to pay for the electricity or natural gas which is transmitted or supplied to them for purposes other than business activity".[59] Secondly, the District Heating Act (SFS 2008:263), the Natural Gas Law (SFS 2005:403) and the Electricity Law (SFS 1997:857) all include provisions to prevent energy distribution from being cut in the case of default on payment by customers. Thirdly, the Social Security Law (SFS 2001:453), among other provisions, provides financial support for household electricity under certain eligibility criteria.

The Swedish government also mandated the Swedish Energy Agency to produce evidence for the implementation of EED provisions related to energy poverty (Articles 24 and 8.3) and of the provision protecting vulnerable customers in the common rules for the internal market for electricity (Article 28). The government asked for the Energy Agency to look at two key specific aspects. The first was to research how energy poverty can be defined in a way that is relevant to the Swedish context, taking into account the existing definition of vulnerable consumers. The second was to investigate if there is existing capacity to fulfil the criteria for Article 24.4 of the EED to provide a cross-sectoral network of experts to offer policy support and advice on energy poverty matters, and to propose how to establish such a network if necessary.

Whilst there are measures in place to protect and support vulnerable customers, the NECP acknowledges that there is no target on energy poverty and that concepts and definitions still need to be laid out more clearly to allow EU legislation to be adapted to Swedish circumstances. These elements contribute to the index score of 0.33 on energy poverty. However, the case of energy poverty in Sweden may constitute an example of the limits of NECP reporting requirements analysis. Indeed, the country has already put in place different welfare mechanisms, but these do not fit into the EU framework yet.

Transport

The NECP highlights Sweden's target to reduce emissions from domestic transport by 70% by 2030, compared to 2010.[60] The government points to the electrification of the vehicle fleet as the key pathway for reaching climate targets for transport, in combination with increased use of alternatives to fossil fuels. Sweden has horizontal measures for the taxation of fuels, namely, an energy tax (SFS 1994:1776) and a carbon tax (SFS 1990:582). However, with current policies alone, it is estimated that the 70% emission reduction target will not be reached.[61] The Swedish Climate Policy Council highlights that transport policies adopted by the current government will increase fossil fuel use in the transport sector and that preliminary statistics showed a substantial increase in road transport emissions of 18% in 2024.[62] The Council argues that more action is needed on transport efficiency, electrification and alternative fuels. To investigate alternative pathways to reach EU targets in a cost-effective manner, the NECP indicates that a government investigation was launched to investigate policy options for the 2027-2030 period.

The NECP also highlights Sweden's efforts in terms of energy efficiency in transport and a shift from road to rail transport. The NECP describes how the strengthened CO_2 emission performance standards for new heavy-duty vehicles ((EU) 2024/1610) is adding to the existing carbon and energy taxes and further strengthens incentives for energy efficiency in transport. To support the shift of freight transport from road to rail, the government introduced environmental compensation for rail freight in 2018, with 550 million Swedish krona allocated per year for the period 2021-2025.[63] In 2024, the Swedish government also unilaterally requested the inclusion of railway transport in ETS2, which was approved by the EC.[64] The ReFuel Aviation ((EU) 2023/2405) for reduced emission in aviation and the FuelEU Maritime ((EU) 2023/1805) are also being implemented as of 2025.[65]

The NECP contains many mentions of transport, the importance of the sector in contributing to GHG emission reductions and the policy measures in place to contribute to this. However, there are concerns from key stakeholders that the existing policies, and measures introduced by the current government, will be insufficient to meet the emission reduction goal for the sector. The case study analysis appears in line with a score of partial leader.

Health

The Swedish NECP includes some discussions of health dispersed throughout the document. The NECP (in Section 5.2.1.4) outlines some of the health impacts of climate and energy policies based on the findings of reports by the Swedish Energy Agency[66] and the Public Health Agency.[67] These include reduced air pollution thanks to electrification of the

transport and energy sector, and increased use of metals and minerals for the energy transition that may have negative health impacts where they are extracted.

Health is also mentioned in the context of energy policies. The proposition on the Direction of Energy Policy (prop. 2017/18:228), adopted in 2016, states the importance of a reliable energy system for people's lives and health and that energy policies should avoid any negative impact on human health. The NECP highlights how health benefits from energy-related policies, such as energy efficiency renovations, are not necessarily captured in economic analyses but benefit society as a whole.[68] It also indicates that the Planning and Building Act (SFS 2010:900) sets out rules for health. The NECP points out that further efforts are needed to reach EU air quality standards to benefit health. The Swedish Environmental Protection Agency is tasked to analyse how the revised AAQD should be implemented and report to the government by November 2025.[69]

Overall, health does not appear to be a core consideration of the Swedish NECP. The NECP mostly relies on the Swedish Energy Agency's report on electrification when discussing the health impacts of climate and energy policies and does not provide health impact assessments of policies. The NECP does not provide evidence of the involvement of any public health actor. This analysis confirms the score of partial laggard.

Conclusion

While Sweden's final updated NECP shows some encouraging policies and measures, these seem insufficient to achieve key EGD objectives. National stakeholders, such as the Swedish Climate Policy Council, the Swedish Society for Nature Conservation, the Swedish Environmental Protection Agency[70] and the Swedish Fiscal Policy Council, all consider that current policies do not allow national and EU climate targets to be reached. For example, the two latest annual evaluations of national climate policies by the Swedish Climate Policy Council, published in March 2024 and March 2025, highlight that policy decisions made by the government installed in 2022 will lead to significantly increased GHG emissions during the political mandate (spanning 2022-2026) and that the budgetary changes are largely contradictory to achieving climate targets. Moreover, the Council found lacking empirical ground for projections to reach net-zero emissions by 2045.[71] The Council is concerned that the government may reduce the level of ambition, which is currently higher than EU targets.

Both the case study analysis and the index score highlight the need for improvement in the Swedish NECP. As additional policies and measures are necessary, the work of key government agencies and the future political direction of the Swedish government will be essential to implement and stay on track with the goals of the EGD.

Bulgaria

Overview

The Bulgarian Ministries of Energy and of Environment and Water submitted the updated draft NECP in February 2024, long after the June 2023 deadline (Table 9). In its assessment, the EC pointed out the lack of elaboration on how some key targets would be reached.[72] Indeed, the document did not provide evidence on how the country would meet its ESR GHG emission reduction target of 10% by 2030 and lacked data and projections for the GHG net removal of LULUCF.[73] The EC identified many other shortcomings, such as the lack of commitment on phasing out coal use for power generation, of relevant analysis on climate shocks and vulnerabilities, and of a proper description of adaptation policies.[74] Nevertheless, some strong points were identified in the area of energy efficiency, where Bulgaria's plan was considered credible, although the integration of EED requirements needed to be improved.[75]

Table 9. Timeline of Bulgaria's NECP submissions, with the NECP analysed highlighted in purple.

First NECP	Updated draft NECP	EC assessment	Updated NECP
January 2019	February 2024	April 2024	January 2025
152 pages	247 pages	27 pages	336 pages

The final updated NECP was submitted on 15 January 2025, long after the June 2024 deadline. The index gives Bulgaria an overall score of **0.35**, just above the threshold to reach the "partial laggard" category and the second-lowest score among all EU member states. The score indicates that most of the targets, policies and measures presented by Bulgaria are not on track with the EGD. While the EC's final assessment acknowledges some improvement since the draft version, the current NECP commitments and proposed policies remain largely insufficient. For instance, the NECP does not provide a clear strategy to decarbonise energy production or the financial investments needed for the energy transition.[76] Bulgaria scores quite poorly on the four criteria most relevant to this case study, especially when it comes to energy poverty policies (Table 10).

Table 10. Bulgaria's scores for the criteria relevant to the policy themes analysed in the case study.

Policy theme	Related criteria	Score
Energy poverty	Energy poverty	0.00
Housing	Energy efficiency: buildings	0.33
Mobility	Energy efficiency: transport	0.33
Health	Inclusion of health considerations	0.33

Thematic analysis

Housing

The Bulgarian NECP vaguely portrays housing as a structural problem connected to other issues such as low incomes and energy poverty. Housing conditions are mentioned in the context of renovation needs to improve energy efficiency.[77] However, the NECP does not provide a clear assessment of the housing stock and the interactions between climate policies and housing, nor does it identify precise issues to address. According to Eurostat, 31.4% of the Bulgarian population aged 16 or above lived in a dwelling with an energy efficiency improved in the last five years in 2023.[78]

The NECP does not include specific information on the emissions from the ESR part of buildings. It indicates that the Bulgarian government will mainly focus on renovating residential buildings and highlights how energy efficiency measures should prioritise vulnerable customers and social housing. The information included in the NECP regarding the EED and the EPBD makes it difficult to assess whether targets, strategies and policies exist or are implemented. The NECP mentions a long-term National Renovation Programme under the EED with "indicative interim targets", a "description of financial means" and "effective mechanisms to encourage investments". It vaguely refers to a "technical harmonisation" of the energy performance of buildings that will be in line with the revised EPBD. It also mentions the "renovation wave", an overarching initiative that takes on board action already proposed under the EPBD and builds on the long-term renovation strategy. Overall, the renovations of residential and non-residential buildings are estimated to result in energy savings of 7,329 GWh/year and reduce GHG emissions by more than 3 million tonnes of CO_2. However, the reliability of these numbers is questionable due to the lack of proper impact assessment.

The NECP presents other measures linked to European mechanisms. For example, the Regional Development Programme, the main regional EU investment tool in Bulgaria for the 2021-2027

period, includes measures to improve energy efficiency in buildings in line with the long-term national strategy to support renovation of the national stock of residential and non-residential buildings. The expected energy efficiency gains from this programme are described in an unclear manner, potentially reaching 10% of targets for reducing annual energy consumption by 2030. The implementation of Bulgaria's NRRP should lead to the creation of the National Decarbonisation Fund, which includes the building sector, with an estimated budget of 11 billion Bulgarian lev (approximately €5 billion) coming from different European funds and banks for the 2021-2030 period. However, since the NECP was submitted, the Bulgarian NRRP has been amended.[79] This development brings some uncertainty to how the measures presented in the NECP will be implemented in the future. The NECP also points to other measures and investments to reduce emissions from buildings as part of the Bulgarian Social Climate Plan, without more precision.

Overall, the Bulgarian final updated NECP does not provide sufficient information on housing, whether on the state of the housing sector or its emissions. The NECP lacks proper impact assessments of different measures, does not include a clear plan to phase out the use of fossil fuels in heating and cooling, and does not detail financial needs and investment mechanisms.

Energy poverty

The NECP underlines that Bulgaria is one of the countries with the highest energy poverty rate in Europe;[80] this is linked to low income and poor thermal insulation of buildings. In the context of a reform linked to its NRRP, the country adopted national definitions and criteria of identification for "household in a situation of energy poverty" and "vulnerable customer for the supply of electricity" in 2023. Based on these definitions, energy poverty was assessed to affect 1.809 million people in Bulgaria in 2023. However, the NECP does not provide a clear assessment of the root causes of energy poverty.

The NECP presents several measures related to energy poverty with varying degrees of precision. Firstly, the NECP mentions that Bulgaria supports vulnerable households for heating, but no further information is provided. Secondly, the Bulgarian Social Climate Plan should include national, regional and local measures and investments to renovate buildings. It may also include temporary direct income support to vulnerable households. Thirdly, the Bulgarian government plans to create an Observatory for Energy Poverty, a "platform bringing together a wide community of practices, officials and researchers". The Observatory will have two main missions: (1) provide policy advice and coordination; and (2) act as a knowledge centre stimulating research, centralising information and exchanging with stakeholders. It should be financed through the Recovery and Resilience Facility and the Social Climate Fund, but clear budgeting is not provided. While the establishment of the Observatory represents a positive development, it is unclear if and how civil society will be included in its analyses and activities.

Overall, the Bulgarian final updated NECP reflects the early stages of energy poverty policies in the country, with measures to assess the phenomenon and inform policies and plans to renovate buildings. While the proposed measures are important first steps, the NECP does not present precise information on a national target nor dedicated budget for energy poverty reduction. This explains why Bulgaria is categorised as a laggard for that issue. Its position could progress in the next years, depending on the implementation of announced measures.

Transport

Bulgaria presents a projection to reach 29.93% RES share of final energy consumption in the transport sector by 2030 and sets a limit of 7% for the use of conventional biofuels in final energy consumption in the transport sector by 2030. Apart from these numbers, the Bulgarian NECP refers to mobility in the context of many topics, such as businesses, citizen mobility, tourism and trade. In terms of decarbonising the transport sector, Bulgaria presents a series of policy objectives and measures, such as promoting

the production and use of "environmentally friendly vehicles", accelerating the deployment of charging stations, and organising awareness raising campaigns and capacity building. It is unclear how the "Transport Connectivity Programme 2021-2027" presented in the NECP could contribute to reducing GHG emissions. Bulgaria also seems to possess an "Integrated Transport Strategy for the period up to 2030", which includes measures to increase the share of public electric transport, increase the share of biofuels and introduce "intelligent transport systems". Overall, the extensive list of objectives, strategies and measures presented in the NECP is quite unclear. Most of these are presented without any assessment of the current situation, quantified targets, or estimated financial needs and resources, making any evaluation of their feasibility and impacts complicated.

In addition, the NECP lists some of the reforms envisaged in the NRRP and that have an impact on mobility, especially the law on the promotion of electric mobility. However, the lack of information makes it difficult to understand how the law would be implemented. The NECP also refers to the "sustainable transport" component of the NRRP and an investment called Green Mobility, which is a pilot scheme to support sustainable urban mobility, energy efficiency in public transport and urban-rural connectivity, in line with territorial development strategies and urban mobility plans. Finally, the Bulgarian Social Climate Plan should include a national analysis of transport poverty and measures to support "vulnerable transport users".

The Bulgarian NECP's transport measures appear fragmented and difficult to understand. The feasibility of their implementation and their impacts in terms of emission reduction seem uncertain. This analysis confirms the score of partial laggard.

Health

The Bulgarian NECP vaguely mentions health in relation to a variety of topics: energy use; the environmental impacts of transport, waste and environmental pollution from industrial plants; or building renovation. Most attention is given to how pollution affects health and on how energy efficiency measures (from cooling, heating and ventilation to fuels used) can reduce or contribute to certain health risks. Healthcare facilities are also identified as a key sector for building renovation. Regarding transport, the NECP highlights that the measures proposed should limit the impact of transport on environment and human health, without further indication. It also indicates that low-emission zones can be introduced "in cases where the type and extent of ambient air pollution significantly increases the risk to human health and/or the environment or failure to meet the standards for harmful substances (pollutants)". Health is also mentioned in the context of the use of biomass for energy production and the need to avoid detrimental health impacts for populations living in the vicinity of biomass energy installations. In addition, the NECP notes the positive impact of improved waste management for health. Finally, health is also a key factor in the definition of "vulnerable customer for the supply of electricity" mentioned above, in the section on energy poverty.

Interestingly, the Bulgarian NECP presents health as a key component of the National Strategy for Adaptation to Climate Change, with an overall objective to increase the country's resilience to the impacts of climate change, including in the health sector. The operational objectives for the health sector are (1) improving adaptation management; (2) creating knowledge and awareness based on adaptation; and (3) adapting the external environment to reduce the impact of climate change on health. However, concrete measures are not presented in the NECP.

While the NECP highlights that a low-carbon economy is beneficial for healthier and safer living and working conditions and establishes some connections between climate policies and health, the information is mostly fragmented and insufficient. Overall, the NECP does not provide health impact assessments of the policies and measures presented and lacks evidence of the involvement of public health actors in the NECP process, therefore justifying its score of partial laggard.

Conclusion

The Bulgarian final updated NECP often addressed issues and policies related to housing, energy poverty, transport and health through superficial checklists of measures. The issues connected to these policy areas are not properly identified, making the proposed measures either irrelevant or insufficient. Many of these measures lack clear objectives, timelines and funding details.

While the transposition of EU legislation has prompted developments in some areas such as energy poverty, many gaps remain. The amendments made to the NRRP over the last two years, and its slow implementation, raise doubts as to the implementation of the NECP measures relying on this instrument. The lack of collaboration between ministries and involvement of stakeholders in the preparation of the NECP similarly do not suggest positive dynamics for the proper implementation of measures. Overall, the case study analysis confirms the status of Bulgaria as one of the member states demonstrating the most challenges in implementing the EGD.

CONCLUSION: MOVING FORWARD WITH JUST AND INCLUSIVE CLIMATE POLICIES

This first iteration of the EGD tracker has allowed us to assess how EU member states are progressing in their adopting of key EGD objectives and their implementation of key policies. Thanks to the methodology adopted and despite the methodological limits (see Methodology section), the index provides a rich array of findings which allow for a comparison between member states and between policy areas. Reassuringly (to some extent), no member state is a complete laggard and no criterion receives 0 across all countries. Worryingly, no member state is a complete leader and the EU-27 mean score sits between the partial laggard and partial leader categories.

The index highlights that the "Compliance and governance" dimension constitutes a weakness for many member states. Far from being a trivial matter, submitting NECPs on time and structuring them according to the Governance Regulation guarantees a constructive and effective planning, reporting and monitoring process that ultimately supports progress in the EGD. Multi-level and multi-stakeholder involvement in the drafting of NECPs not only enhances the quality, feasibility and implementation of policies and measures, but also contributes to their fairness and acceptability. More member states should acknowledge this dimension and strive to improve these complex but essential processes. Key dimensions for the daily lives of EU citizens, energy efficiency and social justice, also require significant improvements. The complex question of fossil fuel subsidies also emerges as a key weakness of the EU, despite several member states being part of the Coalition on Phasing Out Fossil Fuel Incentives Including Subsidies (COFFIS).

The case studies enable a deep dive into NECPs, some presenting well-structured information, others being more challenging to understand. For all the countries analysed, whether they receive a high or low score, the NECPs provide ideas for policies, lessons, research questions to explore and more.

Where do we go from here? The European and international contexts carry both challenges and opportunities. The consequences of volatile international relations on energy prices demonstrates every couple of years the importance of phasing out fossil fuels in favour of safer and more stable renewable energies that allow for a sustainable European sovereignty. The competitive advantage that decarbonisation can provide to the European Union and its industries must be emphasised.

Climate policies designed without consideration for economic, social and gender issues garner opposition, while well-designed eco-social policies can reduce inequalities and ensure fairness. The just transition must not remain a theoretical concept or an empty buzzword; it must be integrated into all climate and environmental policies to improve the wellbeing of all. The EGD, the first strategy of its kind, was an essential first step towards a prosperous and climate resilient Europe. We must now build on it and deploy more concrete policies that address its teething problems and weaknesses. Further research should focus on the reasons explaining the limited implementation of some policies and on the compensatory or redistributive accompanying policies that are needed to guarantee an effective just transition.

ENDNOTES

[1] von der Leyen, U. (2024) "Europe's choice: Political guidelines for the next European Commission 2024–2029". European Commission, 18 July.

[2] Sofia, D. and P. Huntjens (2025) "The European Green Deal: An eco-social contract for Europe?" in P. Huntjens, N. Mohamed, K. Hujo et al. (eds) *Eco-Social Contracts for Sustainable and Just Futures. Mobilising Collective Power to Deal with the 21st Century Polycrisis* (Cham: Springer). DOI: 10.1007/978-3-031-99109-7

[3] Sofia, D. and P. Huntjens (2025) "The European Green Deal: An eco-social contract for Europe?"

[4] "The European Green Deal". COM(2019) 640 final. European Commission, 11 December 2019.

[5] "The European Green Deal". European Commission.

[6] Ibid.

[7] Marelli, L. M. Trane, G. Barbero Vignola et al. (2025) "Delivering the EU Green Deal: Progress towards targets". Publications Office of the European Union. DOI: 10.2760/3105205

[8] "A European Green Deal". Legislative Train Schedule, European Parliament.

[9] Sofia, D. and P. Huntjens (2025) "The European Green Deal: An eco-social contract for Europe?"

[10] Marelli, L. M. Trane, G. Barbero Vignola et al. (2025) "Delivering the EU Green Deal: Progress towards targets".

[11] Sofia, D. and P. Huntjens (2025) "The European Green Deal: An eco-social contract for Europe?"

[12] Charveriat, C. (2023) "The Green Deal: Origins and evolution". GREEN, Issue 3, January; Sofia, D. and P. Huntjens (2025) "The European Green Deal: An eco-social contract for Europe?"

[13] "State of EU progress to climate neutrality. Summary for policy-makers". European Climate Neutrality Observatory, 2024.

[14] Sofia, D. and P. Huntjens (2025) "The European Green Deal: An eco-social contract for Europe?"

[15] For example: Palmisano, O., Lucia Rocchi, G., Negri, L. et al. (2025) "Evaluating the progress of the EU countries towards implementation of the European Green Deal: A multiple criteria approach". *Land, 1(14): 141. DOI:* 10.3390/land14010141

[16] "National energy and climate plans". European Commission.

[17] Mandelli, M. (2022) "Mapping eco-social policy mixes for a just transition in Europe". Working Paper 15. European Trade Union Institute.

[18] Ragin, C. C. and B. Rihoux (2004) "Qualitative comparative analysis (QCA): State of the art and prospects". *Qualitative Methods*, 2(2): 3-13; Schneider, C. Q. and C. Wagemann (2012) *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis* (Cambridge: Cambridge University Press).

[19] Additional keywords were tested during a preliminary phase of the research. The ones yielding irrelevant results were not selected.

[20] Marelli, L. M. Trane, G. Barbero Vignola et al. (2025) "Delivering the EU Green Deal: Progress towards targets".

[21] See, for example: Liefferink, D., B. Arts, J. Kamstra et al. (2009) "Leaders and laggards in environmental policy: a quantitative analysis of domestic policy outputs". *Journal of European Public Policy*, 5(16): 677-700; Melidis, M. and D. J. Russel (2020) "Environmental policy implementation during the economic crisis: an analysis of European member state 'leader-laggard' dynamics". *Journal of Environmental Policy & Planning*, 2(22): 198-210.

[22] For example: Domorenok, E., P. Graziano and L. Polverari (2021) "Policy integration, policy design and administrative capacities. Evidence from EU cohesion policy". *Policy and Society*, 1(40): 58-78.

[23] Andre, P., T. Boneva, F. Chopra et al. (2024) "Globally representative evidence on the actual and perceived support for climate action". *Nature Climate Change*, 14: 253–259. DOI: 10.1038/s41558-024-01925-3; Tanase, L.-M., L. A. Reisch, M. Dewies et al. (2025) "Bridging the perception gap in parliament: UK MPs underestimate climate policy support and overestimate polarisation". *PsyArXiv*, 19 October. DOI: 10.31234/osf.io/hrwz3_v1; Walgrave, S., K. Soontjens and J. Sevenans (2022) *Politicians' Reading of Public Opinion and Its Biases* (Oxford: Oxford University Press), chapter 7. DOI: 10.1093/oso/9780192866028.003.0008

[24] Sofia, D. and P. Huntjens (2025) "The European Green Deal: An eco-social contract for Europe?"

[25] "Italy - draft updated NECP 2021-2030". European Commission, 24 July 2023.

[26] "Assessment of the draft updated National Energy and Climate Plan of Italy". SWD(2023) 917 final. European Commission, 18 December 2023.

[27] Augustowski, W., M. Niewitała-Rej, A. Śniegocki et al. (2025) "European governance for just and fair transition: Reflecting on the NECP revision process and looking ahead". Reform Institute.

[28] "Struggling for a voice: The mixed reality of public participation in National Energy and Climate Plans". CAN Europe and WWF EPO, March 2025; informal interviews with ECCO - the Italian Climate Change Think Tank and MIRA.

[29] "EU-wide assessment of the final updated national energy and climate plans Delivering the Union's 2030 energy and climate objectives". SWD(2025) 140 final. European Commission, 2025.

[30] "Caratteristiche degli immobili" [in English "Characteristics of buildings"]. ENEA, Sistema Informativo sugli Attestati di Prestazione Energetica (SIAPE),

[31] "Housing in Europe". EUROSTAT, 2022.

[32] "Piano Nazionale Integrato per l'Energia e il Clima: Progress Report" [in English "National Energy and Climate Plan (NECP): Progress report"]. ECCO, 2024.

[33] "STREPIN 2020 - Consultazione pubblica sulla Strategia per la riqualificazione energetica del parco immobiliare nazionale". Minister of Entreprises and Made in Italy, 2020.

[34] Residential buildings: from 2020 to 2030 (1.9%), from 2030 to 2040 (2.7%), from 2040 to 2050 (2.7%); public sector: from 2020 to 2030 (2.8%), from 2030 to 2040 (2.6%), from 2040 to 2050 (2.6%).

[35] "Italy Buildings Climate Tracker: Is Italy on track to decarbonise its building stock?" BPIE, 3 March 2025.

[36] Balmer, C. and G. Fonte (2024) "Explainer: Why Italy's Superbonus blew a hole in state accounts". Reuters, 9 April.

[37] Established in a Ministerial Decree "Decreto Ministeriale CER 7 dicembre 2023".

[38] «Italia Domani, il Piano Nazionale di Ripresa e Resilienza». Italia domani.

[39] "Investimento 1.2 - Promozione rinnovabili per le comunità energetiche e l'auto-consumo". Please note that the renewable energy capacity was reduced compared to the NECP target, which was 2,000 MW.

[40] "Number of passenger cars per 1,000 inhabitants in Italy in selected years from 1990 to 2022". Statista, 29 November 2025.

[41] "Hybrid & electric cars make up 48% of new registrations". Eurostat, 13 December 2024.

[42] Iorio, G. and A. Fiorini (2025) "Energy efficiency in Italy: Energy consumption trends and policies in 2000-2022". ENEA.

[43] "Piano Nazionale Integrato per l'Energia e il Clima: Progress Report" [in English "National Energy and Climate Plan (NECP): Progress report"].

[44] In Italian: «Piano Nazionale Infrastrutturale per la Ricarica dei veicoli alimentati a energia Elettrica».

[45] In Italian: "Programma Nazionale Controllo Inquinamento Atmosferico".

[46] Augustowski, W., M. Niewitała-Rej, A. Śniegocki et al. (2025) "European governance for just and fair transition Reflecting on the NECP revision process and looking ahead".

[47] "Sweden's climate action strategy". European Parliament Research Service, 19 December 2024.

[48] "Sweden's updated NECP is decided" ["Sveriges uppdaterade nationella energi- och klimatplan är beslutad"]. Government Offices of Sweden, 3 July 2024.

[49] "Sweden's draft updated National Energy and Climate Plan highlights of the Commission's assessment". European Commission, 2024.

[50] "Sweden's updated NECP is decided" ["Sveriges uppdaterade nationella energi- och klimatplan är beslutad"].

[51] "EU-wide assessment of the final updated national energy and climate plans Delivering the Union's 2030 energy and climate objectives". SWD(2025) 140 final. European Commission, 27 May 2025.

[52] "The climate and the building and housing sector" ["Klimatet och bygg- och fastighetssektorn"]. The Swedish Environmental Protection Agency, 2025.

[53] "EU-wide assessment of the final updated national energy and climate plans Delivering the Union's 2030 energy and climate objectives". SWD(2025) 140 final.

[54] "Energy Performance of Buildings Directive" ["Direktiv för byggnaders energiprestanda"]. The Swedish National Board of Housing, Building and Planning, 18 March 2024; "Swedish National Board of Housing, Building and Planning submits legislative proposals for the implementation of the Energy Performance Directive" ["Boverket lämnar författningsförslag för genomförandet av energiprestandadirektivet"] The Swedish National Board of Housing, Building and Planning, 2025.

[55] Sweden's updated National Energy and Climate Plan 2021-2030, pp. 52-53.

[56] "Construction and civil engineering sector". Fossil Free Sweden, 2018.

[57] Sweden's updated National Energy and Climate Plan 2021-2030, p. 138.

[58] Regulation on grants for energy efficiency in single-family homes (2023:402).

[59] The definition of vulnerable customers is set in the law instructing the Swedish Energy Markets Inspectorate, SFS 2016:742. Translated from Swedish. Original definition: *"Med utsatta kunder avses personer som varaktigt saknar förmåga att betala för den el eller naturgas som överförs eller levereras till dem för ändamål som faller utanför näringsverksamhet".*

[60] "Goals for the transport politics" ["Mål för transportpolitiken"]. Government Offices of Sweden.

[61] "Is Sweden reaching national climate targets?" *["När Sverige de nationella klimatmålen?"]. The Swedish Environmental Protection Agency, 19 June 2025.*

[62] "2025 Climate Policy Council report". The Swedish Climate Policy Council, 2025.

[63] Sweden's updated National Energy and Climate Plan 2021-2030, p. 83.

[64] "Commission Delegated Decision C/2024/8160 final". European Union.

[65] "How can emissions from transport be reduced?" ["Hur kan transporternas miljöpåverkan minska?"]. The Swedish Environmental Protection Agency, 3 July 2025.

[66] "The electrified society of the future – analysis for a sustainable electrification" ["Framtidens elektrifierade samhälle – analys för en hållbar elektrifiering"]. The Swedish Energy Agency, 2021.

[67] "Public health in a changed climate – The Public Health Agency's goals and action plan for climate adaptation 2021-2024" ["Folkhälsa i ett förändrat klimat – Folkhälsomyndighetens mål och handlingsplan för klimatanpassning 2021–2024"]. The Public Health Agency of Sweden, 2021.

[68] Sweden's updated National Energy and Climate Plan 2021-2030, p. 54.

[69] "EU's air quality directive" ["EU:s luftkvalitetsdirektiv"]. The Swedish Environmental Protection Agency, 13 August 2025.

[70] "Is Sweden reaching national climate targets?" *["När Sverige de nationella klimatmålen?"]. The Swedish Environmental Protection Agency.*

[71] "Report of the Swedish Climate Policy Council 2024". The Swedish Climate Policy Council.

[72] "Commission staff working document: Assessment of the draft updated National Energy and Climate Plan of Bulgaria". SWD(2024) 125 final. European Commission, 26 April 2024.

[73] Ibid., p. 5.

[74] Ibid., p. 5.

[75] Ibid., p. 6.

[76] "Commission Assessment of the Final Updated National Energy and Climate Plan of Bulgaria". European Commission, 28 May 2025.

[77] "Integrated Plan Energy and Climate the Republic of Bulgaria: Updated 2024". Ministry of Energy, Ministry of Environment and Water. Republic of Bulgaria, 2024, p. 119.

[78] "Housing in Europe. 2024 Edition". Eurostat, 2025.

[79] "The European Commission approves Bulgaria's revised Recovery and Resilience Plan". Council of Ministers of the Republic of Bulgaria, 2 July 2025.

[80] Ibid., p. 119.

BIBLIOGRAPHY

Andre, P., T. Boneva, F. Chopra et al. (2024) "Globally representative evidence on the actual and perceived support for climate action". *Nature Climate Change*, 14: 253–259. DOI: 10.1038/s41558-024-01925-3

Charveriat, C. (2023) "The Green Deal: Origins and evolution". GREEN, Issue 3, January.

Domorenok, E., P. Graziano and L. Polverari (2021) "Policy integration, policy design and administrative capacities. Evidence from EU cohesion policy". *Policy and Society*, 1(40): 58-78.

"State of EU progress to climate neutrality. Summary for policy-makers". European Climate Neutrality Observatory, 2024.

"The European Green Deal". COM(2019) 640 final. European Commission, 11 December 2019.

"State of the Energy Union report 2024". COM(2024) 404 final. European Commission, 11 September 2024.

"The Clean Industrial Deal: A joint roadmap for competitiveness and decarbonisation". COM(2025) 85 final. European Commission, 26 February 2025.

"Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action". OJ L 328, 21.12.2018, pp. 1-77.

"Climate Change 2023: Synthesis report: Summary for policymakers". Intergovernmental Panel on Climate Change. DOI: 10.59327/IPCC/AR6-9789291691647.001

Liefferink, D., B. Arts, J. Kamstra et al. (2009) "Leaders and laggards in environmental policy: a quantitative analysis of domestic policy outputs". *Journal of European Public Policy*, 5(16): 677-700.

Mandelli, M. (2022) "Mapping eco-social policy mixes for a just transition in Europe". Working Paper 15. European Trade Union Institute.

Marelli, L. M. Trane, G. Barbero Vignola et al. (2025) "Delivering the EU Green Deal: Progress towards targets". Publications Office of the European Union. DOI: 10.2760/3105205

Melidis, M. and D. J. Russel (2020) "Environmental policy implementation during the economic crisis: an analysis of European member state 'leader-laggard' dynamics". *Journal of Environmental Policy & Planning*, 2(22): 198-210.

Ragin, C. C. and B. Rihoux (2004) "Qualitative comparative analysis (QCA): State of the art and prospects". *Qualitative Methods*, 2(2): 3-13.

Schneider, C. Q. and C. Wagemann (2012) *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis* (Cambridge: Cambridge University Press).

Sofia, D. and P. Huntjens (2025) "The European Green Deal: An eco-social contract for Europe?" in P. Huntjens, N. Mohamed, K. Hujo et al. (eds) *Eco-Social Contracts for Sustainable and Just Futures. Mobilising Collective Power to Deal with the 21st Century Polycrisis* (Cham: Springer). DOI: 10.1007/978-3-031-99109-7

Tanase, L.-M., L. A. Reisch, M. Dewies et al. (2025) "Bridging the perception gap in parliament: UK MPs underestimate climate policy support and overestimate polarisation". *PsyArXiv*, 19 October. DOI: 10.31234/osf.io/hrwz3_v1

Walgrave, S., K. Soontjens and J. Sevenans (2022) *Politicians' Reading of Public Opinion and Its Biases* (Oxford: Oxford University Press), chapter 7. DOI: 10.1093/oso/9780192866028.003.0008

SUPPLEMENTARY MATERIALS

The case studies for Slovakia and Poland, the full results of the NECP analysis and the extended methodological note of the research can be found in separate files on the FEPS website.

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ABOUT THE FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS)

FEPS is the European progressive political foundation and the think tank of the progressive political family at EU level. Our mission is to develop innovative research, policy advice, training and debates to inspire and inform progressive politics and policies across Europe.

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ABOUT FRIEDRICH-EBERT-STIFTUNG – CLIMATE AND SOCIAL JUSTICE

In 2021 the Friedrich-Ebert-Stiftung launched its competence center for Climate and Social Justice, based in Brussels. Climate and social policies must be two sides of the same European coin in the future. We need to develop climate-neutral energy systems and industries. Simultaneously, we need to safeguard and strengthen the welfare state, local participation and workers' rights.

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ABOUT THE CEE BANKWATCH NETWORK

The CEE Bankwatch Network gathers 16 member groups in 14 countries in central and eastern Europe, the Caucasus and Russia into the largest network of grassroots, environmental and human rights groups in central and eastern Europe. CEE Bankwatch has its headquarters in Prague, Czechia, but their staff is based in offices across the region and in Brussels

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ABOUT THE INSTITUTE FOR EUROPEAN ENVIRONMENTAL POLICY (IEEP)

The Institute for European Environmental Policy is a sustainability think tank. Working with stakeholders across EU institutions, international bodies, academia, civil society and industry, the team of economists, scientists and lawyers produce evidence-based research and policy insight. IEEP's work spans five research areas and covers both short-term policy issues and long-term strategic studies. As a not-for-profit organisation with over 45 years of experience, IEEP commits to advancing impact-driven sustainability policy across the EU and the world.

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The European Green Deal (EGD), once hailed as the EU's visionary strategy towards climate neutrality by 2050, is often presented to be in a difficult position today. Finding a commonly accepted and just pathway toward EGD targets is proving increasingly difficult amid geopolitical tensions, the rise of populism and disinformation, and increasing inequalities. In the meantime, climate change continues to fuel more intense and frequent extreme weather events, incurring great human and financial costs. In this challenging context, taking stock of the progress made in implementing the EGD, the successes and the failures, is an important step to define the path ahead, address weaknesses where needed and reinvigorate the EU's engagement towards eco-social policies that benefit all citizens.

The EGD Tracker assesses how member states are implementing the EGD across 16 criteria. The main objective guiding this policy study is to develop an educational and easy-to-understand overview and comparison of the EGD implementation at national level. Two methodologies based on the analysis of National Energy and Climate Plans are used: (1) the index provides a score for each EU member state based on their implementation performances in several policy areas, allowing the identification of which countries show good progress and which ones are lagging behind; (2) case studies complement the findings from the index by providing a more in-depth understanding of EGD policies and national implementation dynamics in four policy areas: housing; energy poverty; transport; and health.

The results of the index indicate that the mean score for the 27 EU member states is mediocre at 0.58, between the partial laggard and partial leader categories. While the member states are, for the most part, progressing in the implementation of the EGD, progress remains insufficient to fully achieve the climate and social justice objectives linked to the EGD. The highest score (0.75) is attributed *ex aequo* to Spain, Ireland and Finland and the lowest score to Poland (0.21). While no member state is a complete laggard, conversely no member state reaches the score of full leader. Several criteria appear to be weaknesses in many countries: the phasing out of fossil fuel subsidies; timeliness of and involvement of stakeholders in the NECP process; and health considerations. The European Green Deal, the first strategy of its kind, was an essential first step towards a prosperous and climate resilient Europe. We must now build on it and deploy more concrete policies that address its teething problems and weaknesses.

POLICY STUDY PUBLISHED IN MARCH 2026 BY:

Friedrich Ebert Stiftung
CEE Bankwatch Network
Institute for European Environmental Policy
FEPS FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES

ISBN: 978-2-39076-061-0
KBR deposit number: D/2026/15396./12