

Beyond Fit-for-55: How can Romania align with the EU's 2040 climate target?

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Introduction

In 2024, [the EU proposed a target](#) of reducing GHG emissions by 90% by 2040, compared to 1990 levels. This target not only secures the pathway to climate neutrality by 2050, but also gives a clear signal of what the 2030-2040 decade will look in terms of fossil fuel phase-out, cleantech development and just transition, among others. The proposed 2040 target underscores the EU's commitment to aligning with the Paris Agreement while making significant progress towards its long-term goal of climate neutrality by 2050.

To help reach the Union's climate targets, Member States are required under the EU Governance Regulation to develop long-term strategies for climate change mitigation. [Romania's Long-term Strategy \(LTS\)](#), adopted in 2023, sets a target of achieving climate neutrality by 2050, provides a framework for interim targets, and proposes policies to achieve a cohesive and sustainable approach to climate change mitigation. It defines a clear interim target of 78% emission reduction by 2030 (compared to 1990 levels), reaching 91% in 2040. The adopted LTS could enhance Romania's contribution to the EU's collective emission reduction efforts and achievement of climate neutrality by 2050.

These interim goals serve as benchmarks on the pathway towards achieving Romania's long-term climate objectives, as they enhance predictability, safeguard against potential setbacks, and enable earlier investments in new technologies and infrastructure. Although the LTS aligns with the proposed EU 2040 target, Romania does not have a legally binding target for 2040 and the strategy still exhibits gaps and uncertainties regarding its implementation. These shortcomings add to other challenges Romania faces in meeting its climate objectives, especially given its reliance on fossil fuels, hard-to-abate industries, regulatory uncertainties and limited fiscal capacity. Uncertainties and risks may also arise from various technological, economic, or political factors, as well as public resistance to climate policies and geopolitical shocks. These risks must be mitigated through clear, robust policies and commitments at national and sectoral level.

Moreover, Romania has already submitted to the Commission the final version of [its updated NECP](#) (which is more ambitious than the LTS) and has adopted other key sectoral strategies ([the National Hydrogen Strategy](#), [the National Adaptation Strategy](#), [the National Energy Strategy](#) and [the Romanian Industrial Strategy 2024-2030](#)). According to [the Governance](#)

[Regulation](#), Member States should update their long-term strategies only if they deem it necessary. To align with the latest national and EU policy developments, enhance coherence, and increase certainty in the achievement of existing emissions targets and trajectories, a revision of the existing LTS may be due.

Romania's pathway to climate neutrality

Between 1990 and 2019, Romania's emissions fell by 62%, primarily due to a shrinking of inefficient industrial activity and a gradual decoupling from fossil fuels. However, the national pathway to Romania's 2040 target will require significant efforts, with some sectors, such as transport, buildings and waste management, requiring more attention to curb and reverse their current upwards emissions trajectories.

To align with the proposed 2040 target, Romania's **energy sector** will require a fundamental transformation. In this sense, the LTS presents several critical gaps: there is no detailed roadmap for coal phase-out, a clear plan for "green gases" (such as biomethane) and electricity to replace natural gas is lacking, and insufficient detail is provided on increasing the penetration of renewable energy into Romania's grid. The latter point is critical and must include a robust estimate of necessary investments in grid modernisation to facilitate the buildout of renewables to 2030 and beyond. [An EPG study](#) estimates that Romania will need to invest €6.8bn in transmission and €9.2 – 11.5bn in distribution just to meet its 2030 targets. Without a clear regulatory framework and consistent national strategies, these investments might fail to materialise, further slowing down action beyond 2030.

Romania's **transport sector** has seen a 41% increase in emissions over the past three decades, driven by rising economic activity, road freight and household incomes. Key challenges for this sector include the rise of urban transport, a major contributor to the overall increase in emissions, the age and inefficiency of Romania's vehicle stock, and a lack of data at municipal level for accurate assessment of emissions and integrated transport planning. While the LTS recognises the need to transition to electric and hydrogen-powered vehicles, it falls short in outlining the incentives or regulatory frameworks to accelerate adoption of cleaner alternatives. Furthermore, it fails to address the development of infrastructure for alternative fuels, does not sufficiently address the need for integrated transport and urban planning, and provides no measures for increasing data availability. These shortcomings will pose challenges to reversing the recent increase in transport emissions and achievement of a low-carbon transport sector in the decades to 2050.

Romania is one of the few EU countries where emissions from the **building stock** have grown over the last two decades. To achieve the LTS trajectory of drastically reducing building emissions by 2040, the emissions from this sector, significant changes will be needed: among other measures, the LTS outlines a need to significantly increase the share of heat pumps to replace natural gas and biomass, adopt high-efficiency technologies for heating, cooling, and cooking, and increase and sustain renovation rates beyond 2030. Currently, the strategy does not provide an adequate roadmap for implementing and financing these measures, which will only increase in ambition and complexity beyond 2030 (the annual renovation rate will increase to 3.79%). There is insufficient support for scaling the adoption of heat pumps, with no clear financial incentives to facilitate their widespread implementation. The LTS also fails

to adequately address how vulnerable or low-income households will be supported in making energy-efficient upgrades, which could contribute to an increased risk of social pushback to stringent climate policies.

The LTS outlines ambitious decarbonisation targets for the **industrial sector**. Overall, the strategy offers a general overview of the existing policies, plans and measures for industrial decarbonisation, without sector-specific detail. There is little in the way of addressing broader implications of industrial decarbonisation, such as pressure on the grid from industrial electrification, the need for renewable hydrogen, or required infrastructure for CO₂ transport and storage. The LTS also fails to include intermediate targets for decarbonisation of the metallurgical and mineral industries (the main sectors addressed in strategy), while at the same time projecting long-term deep emissions reductions and the deployment of new technologies (e.g., carbon capture) by 2050. The lack of a clear roadmap with intermediate targets will make industrial decarbonisation, already a significant undertaking, even more challenging, particularly given the associated infrastructure and financing requirements.

In **agriculture**, where emissions are expected to remain nearly constant to 2050, the LTS proposes policies and measures aimed at mitigating emissions, such as improving livestock diets and eliminating the burning of agricultural residues. At the same time, Romania's **LULUCF sector** is expected to provide a significant natural carbon sink in the long-term thanks to forestry management. However, the LTS shows significant gaps in both these sectors: the reduction of agricultural emissions has been slow to date and faces challenges such as proper implementation of methane recovery and adoption of renewable energy, and there is a lack of proactive afforestation measures, which may be key to maintaining natural carbon sinks given the effects of climate change and current issues with illegal deforestation.

For the **waste sector**, the LTS focuses on reducing waste production, increasing recycling and composting, promoting energy recovery and improving wastewater treatment. Though ambitious, these measures are not accompanied by appropriate measures for infrastructure development, such as expanding waste management or investing in technologies for energy recovery. Furthermore, given tightening EU regulations on methane emissions, in the medium-term waste incineration is projected to increase as an alternative to landfilling. Resulting emissions will need to be carefully managed, particularly as waste incinerators are required to monitor and report their emissions under the EU Emissions Trading System [as of 2024](#).

Preparing for 2040

As Romania is on track for an ambitious 2040 emissions reduction pathway, this will translate into strong socio-economic impacts, if not accordingly managed. [The LTS focuses](#) solely on green job creation, leaving aside other socio-economic impacts of the transition, such as impact on low-income and other vulnerable communities, including energy poverty. The LTS also lacks a comprehensive vision on just transition and how the carbon-intensive regions of Romania will adapt to a new low-carbon economic model. A possible “greenlash” (public resistance towards climate policies) risks slowing down the pace of the transition, which might even lead to a backtracking on LTS targets. A careful consideration of socio-economic impacts, coupled with robust policies for its mitigation, is necessary in the LTS. Additionally, Romania must carefully reconsider the way it engages citizens in climate policymaking; the

LTS public participation process was mostly focused on interministerial consultations and lacked a broader public engagement mechanism. A multi-level governance approach must be adopted, and future public engagement must include local government actors and municipalities, many of which are already preparing climate neutrality plans.

In addition to reducing GHG emissions, Romania must engage in concerted efforts for climate change adaptation. The policies and measures proposed in the LTS must be aligned with Romania's national Climate Adaptation strategy and consider the potential effects of climate change on mitigation strategies. For example, projected rises in summer temperatures will affect electricity generation, while increased heat stress vulnerability in urban areas may exacerbate public health issues. A dual approach to climate mitigation and adaptation involves smart climate action, which brings benefits to the environment and economy alike.

Conclusions and recommendations

As the EU embarks on a deep decarbonisation journey and envisages a decade of concerted action after 2030, Romania needs to adopt a strategic and forward-looking approach by matching its ambitious 2040 target to robust policies and measures. The LTS does trace an ambitious decarbonisation pathway, but still needs to fill the gaps regarding financing, support schemes, infrastructure needs and set a better direction towards mitigating the socio-economic impact. In this sense, the following recommendations should be considered for future iterations of the LTS and other key climate policy documents:

- **Set a legally binding emission reduction target for 2040.** Propose climate framework law with a 2040 target, including sectoral plans and a robust monitoring and evaluation mechanism.
- **Update the LTS to reflect the latest policy developments and ambitions to ensure a coherent national response to climate change.** The LTS can become a core planning instrument for a national climate framework law, with prescribed periodic updates to match the changing policy landscape.
- **Accelerate investments in key technologies for the 2040 target achievement, especially those with long permitting timescales.** Propose detailed policies and measures to scale up renewable energy, modernise the grid, elaborate hydrogen and CO₂ transport plans, and incentivise green hydrogen production and CO₂ storage.
- **Position Romania as a low-carbon hub.** Evaluate Romania's key areas of competitive advantage in clean energy production (including export) and low-carbon manufacturing, such as electric vehicles, batteries and renewable energy technologies, and decarbonise heavy industry to provide sustainable and resilient value chains for steel and concrete.
- **Elaborate on a mix of financing and funding tools to fill investment gaps.** Provide a comprehensive plan for funding the transition, including EU funding, national funding (including green bonds, fiscal measures and Carbon Contracts for Difference), market creation instruments, and blended finance through public-private partnerships.

- **Comprehensively address socio-economic impact and effectively engage citizens.** Build on existing development just transition plans to revitalise regions in transition, comprehensively evaluate the impact of energy and climate policies on citizens, particularly vulnerable communities, and propose evidence-based measures to mitigate socio-economic impact.

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