




Czechia

1 Overview of key objectives, targets and contributions in the final NECP


Table 1: Summary of key objectives, targets and contributions of Czechia's final updated NECP

		2020	Progress based on latest available data	2030 national targets and contributions	Assessment of 2030 ambition level
	Binding target for greenhouse gas (GHG) emissions compared to 2005 under the Effort Sharing Regulation (ESR) (%)		2022: -6.7% 2023: -5.7% ¹²	-26%	NECP: -35.8% ¹³
	Binding target for additional net GHG removals under the Regulation on Land Use, Land Use Change and Forestry (LULUCF)		2022: Reported net emissions of 11.268 Mt CO ₂ eq.	-0.83Mt CO ₂ eq. (additional removal target)	Insufficient ambition, projected gap of 0.25Mt CO ₂ eq
	National target/contribution for renewable energy: Share of energy from renewable sources in gross final consumption of energy (%)	17.3% (SHARES) 13% (target)	2023: 18.5%	30.1%	Czechia's contribution of 30.1% is below the 33% required according to the formula set out in Annex II of the Governance Regulation ¹⁴
	National contribution for energy efficiency:				
	Primary energy consumption	44.3 41.4Mtoe	2023: 35.49 Mtoe	29.19 Mtoe	CZ primary energy consumption contribution of 29.19 Mtoe is in line with the EED recast Annex I formula results: 28.81 Mtoe (Reference Scenario) or 29.18 Mtoe (Updated

¹² The ESR emissions in 2022 are based on 2024 final GHG inventory reports, and 2023 emissions are based on 2024 approximated inventory reports. The percentage reduction is compared with the 2005 emissions as set out in Annex I of Commission Implementing Decision (EU) 2020/2126. However, the final ESR emissions for 2021-2025 will only be established in 2027 after a comprehensive review.

¹³ The emissions reductions by 2030 are measured against the 2005 emission level as set out in [Commission Implementing Decision \(EU\) 2020/2126](#) of 16 December 2020. For Czechia this number is 64.965295 MtCO₂ eq. in 2005.

¹⁴ Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action OJ L 328, 21.12.2018, p. 1–77 ('Governance Regulation')

					Reference Scenario)
	Final energy consumption	25.3 Mtoe	2023: 22.61 Mtoe	20.35 Mtoe	CZ final energy consumption contribution of 20.35 Mtoe is in line with the national contribution of 20.35 Mtoe submitted by the European Commission.
	Level of electricity interconnectivity (%)	27.5%	2024: 27.0%	15% ¹⁵	CZ has surpassed the EU-wide interconnectivity target.

Source: Eurostat; Czechia's final updated national energy and climate plan

2 CONSIDERATION OF COMMISSION RECOMMENDATIONS ON DRAFT NECP UPDATE

In December 2023, the Commission published a thorough assessment of Czechia's draft updated NECP and provided recommendations¹⁶ for the preparation of the final updated NECP. Czechia submitted its final updated NECP on 20 December 2024, almost six months after the deadline of 30 June 2024.¹⁷

2.1 DECARBONISATION

Czechia expects to decrease total GHG emissions (including LULUCF) by 68% by 2030, 86% by 2040 and 96% by 2050 compared to 1990.

2.1.1 Effort Sharing Regulation

Czechia has addressed recommendation 1. The final plan provides sufficient details on how Czechia will meet its ESR target of -26% by 2030 compared to 2005. The plan provides updated projections showing that the existing and planned policies and measures will lead to a decrease of 35.8% of ESR emissions in 2030 compared to 2005, overachieving the national ESR target by 9.8 percentage points. In 2023, GHG emissions from ESR sectors represented 56.7% of the total in Czechia (will be 64.3% in 2030)¹⁸, with transport and buildings projected

¹⁵ Calculated by the European Commission based on the ETNSO-E data (Winter Outlook 2022-2023). The 2030 level represents the general interconnectivity target of 15%. The level of ambition cannot be assessed, because the actual 2030 interconnectivity levels will depend on the implementation of the planned interconnectors and changes in the generation capacity. The 2020 figure covers also interconnectors with the neighbouring countries outside the EU.

¹⁶ SWD (2023) 926 final, and Commission Recommendation of 18 December 2023, C/2023/9616. The recommendation from 18 December 2023 was supplemented with a revised recommendation regarding ESR adopted in February 2024, C/2024/1175.

¹⁷ Article 14(2) of Governance Regulation.

¹⁸ Total GHG excluding LULUCF. Source: Commission calculations based on the Czech final updated NECP

to represent the largest shares.¹⁹ The with additional measures (WAM) projected value for ESR in 2030 is roughly 12.6% lower than the with existing measures (WEM), hinting that implementing the plan will require a significant effort. Notably the plan recognises the difficulties in reducing emissions in the transport and buildings sectors. The final plan did not complement the information on the policies and measures provided in the draft in terms of scope, timeline and expected impact on GHG emissions.

On **transport**, the WAM projections describe a change of trend in emissions in the period 2025-2030, with an annual percentage decrease of 2.5% following a steady increase of emissions by 0.42% per year in the period 2015-2025.²⁰ Czechia has indicated a number of existing and planned measures for the transport sector, including further electrification of railways and urban public transport, gradual shift to freight transport from road to rail and/or waterborne transport, tax incentives, use of alternative fuels. However, it is unclear which remain to be implemented, or which will be scaled up to reach the ESR target.

The plan refers to the introduction of the emissions trading system for fuel combustion in buildings, road transport and additional sectors (ETS2). It is unclear if the WAM scenario projections account for the effect of ETS2. The projections do not quantify the impact of ETS2 in achieving the ESR target.

On **agriculture, the projected non-CO2 emissions** are lower than in the draft plan, despite policies being the same. The main measures mentioned in the plan concern biogas and organic farming, but limited details are provided. The plan does not provide sufficient detail in terms of funding and impacts of measures. The projections reflect a stagnation of emission from agriculture in 2030, indicating a need for targeted policies and actions. The emission savings expected from policies addressing HFCs and other fluorinated gases, including as a result of the newly reinforced Regulation (EU) 2024/573 (F-gas Regulation), remain unclear.

The plan describes various waste management and circular economy strategies, promoting waste reduction, recycling and recovery. However, the plan remains unclear on how to tackle CH₄ from landfills, failing to mention effective mitigation solutions such as separate collection, landfill gas capture and anaerobic digestion.

2.1.2 LULUCF

Czechia has partially addressed recommendation 3. The LULUCF sector in Czechia generates net emissions, representing roughly 2.9% of the total GHG emissions in 2022. According to the LULUCF Regulation, Czechia has to enhance its net removals by -0.827 Mt CO₂eq in 2030 as compared to the yearly average in the 2016-2018 reference period. However, according to the latest reported 2022 figures, Czechia's performance has worsened by 14.5 Mt CO₂eq in comparison to the reference period. The gap to comply with the "no-debit" commitment in 2025 is expected to be significant. A considerably smaller gap of 0.25 MT CO₂eq is expected towards reaching the 2030 target. Despite the fact the policies and measures are the same as in draft plan, the updated plan shows a reduced gap towards the 2030 target. The difference is due to more optimistic assumptions on the decline of the bark beetle and

¹⁹ Source: EEA. The plan does not include disaggregated information on emissions from the ESR part of transport and buildings.

²⁰ Compound annual growth rate.

forest restoration, resulting in more removals. The plan lacks sufficient information to quantify the contribution of policies and measures to the LULUCF target. In view of the persistent gap, Czechia does not design sufficiently effective policies to support the performance of the land sector.

Czechia acknowledges that the level of accuracy of reporting of LULUCF emissions and removals needs to be improved. However, the plan does not provide sufficient information on the status and progress in ensuring higher tier levels and geographically explicit datasets needed to ensure the robustness of net removal estimates.

2.1.3 Carbon Capture and Storage

Czechia **has not addressed recommendation 2** on CCUS. The NECP still does not provide estimates on emissions to capture annually by 2030. Yet, the plan provides CO₂ capture targets from 2035 onwards by source, and indicates Czechia is in the process of preparing a CCUS strategy.

2.1.4 Adaptation

Czechia has partially addressed recommendation 4. The plan refers to the National Adaption Plan for Climate Change, the National Climate Change Adaptation Strategy, and Czechia's Common Agricultural Policy Strategic Plan 2023-2027 to respond to the recommendation, acknowledging the importance of integrating adaptation planning. The plan partially embeds adaptation policies and measures in the relevant Energy Union dimensions.

The plan contains a partial analysis of **climate vulnerabilities and risks**, especially in the land-use sector and the energy security dimension. The plan identifies several significant risks related to drought and other extreme weather events. The plan also outlines adequate **policies and measures** to address these vulnerabilities and risks but is short of quantifiable assessment of impacts. The plan partially outlines the **links to the specific Energy Union objectives and policies**, that adaptation policies and measures are meant to support. The formulation of adaptation goals has progressed through inclusion of goals on energy security. However, the impacts and benefits of adaptation policies on other Energy Union dimensions have generally not been quantified. The plan sets out some **additional adaptation-related policies and measures** to support the achievement of national objectives, targets and contributions under the Energy Union, such as investments aiming at minimising environmental impacts (e.g. biodiversity loss).

2.1.5 Fossil Fuels

Czechia has not addressed recommendation 19. The plan recognises one fossil fuel subsidy (housing allowance), which Czechia does not plan to phase out, due to its role to encourage environmentally friendly heating methods and provide social support. It also provides a list of subsidies in energy transformation, energy extraction and agriculture which Czechia does not consider fossil fuel subsidies. The plan lacks clear measures and a timeline to phase out fossil fuel subsidies.

2.2 RENEWABLES

Czechia has partially addressed recommendation 5. The final NECP includes a contribution for a renewable energy share of 30.1% in gross final energy consumption for 2030, which is similar to the one submitted in the draft plan and below the level of 33% resulting from the

formula of Annex II of the Governance Regulation. Czechia also provides a reference point for 2025 of around 23% which is in line with the trajectory calculated with the increased EU 2030 renewable energy target of 42.5%. However, no information has been provided on the 2027 reference point.

Czechia has partially addressed recommendation 6. The final NECP includes specific targets, namely the target to contribute to the sub-target for buildings for 2030 (40%), an average increase in heating and cooling of 1.4 pps for the period 2021-2025 and 1.9 pps for 2026-2030, in line with the binding target of Article 23 of Directive (EU) 2018/2001 (the ‘revised RED II’)²¹, but below the level of the indicative top-ups, as well as targets for advanced biofuels and renewable fuels of non-biological origin (RFNBOs) in transport by 2030 (5% and 1% respectively). The final plan however does not include a target for innovative renewable energy technologies by 2030 or an indicative target in district heating and cooling for the period 2021-2030. The plan does not contain a specific target for the renewable energy share in industry.

Czechia has partially addressed recommendation 7. Czechia refers to its plans to designate “renewables acceleration areas”, but it does not elaborate further. It also includes information on recent measures to promote self-consumption and energy communities, and information on the New Green Savings 2030 programme which will support the installation of small-scale renewable energy installations for self-consumers and energy communities. Czechia indicates that it plans to support the modernisation of the existing heat systems to make them more efficient, including by introducing new small decentralised renewable heating systems, but no granular information or quantitative data has been provided. Czechia has not provided further information on how it plans to accelerate the deployment of renewables via the uptake of renewable power purchase agreements or guarantees of origin. The plan does not contain specific information on the measures to accelerate deployment of renewables in district heating and cooling, nor on creating an enabling framework for increasing the integration between the electricity and heating and cooling networks.

Czechia has addressed recommendation 8. Czechia includes further measures to promote the sustainable production of biomethane.

Czechia has not addressed recommendation 9. The plan does not contain an expected timeline of the procedural steps leading to the adoption of measures to transpose and implement the revised RED II.

2.3 ENERGY EFFICIENCY DIMENSION

Czechia has partially addressed recommendation 10. Czechia included an amount of energy consumption reduction of 15.2 Mtoe¹ per year to be achieved by all public bodies but without disaggregating it by sector. Czechia reported the corresponding yearly energy savings to be achieved but it did not specify if they opted for the alternative or default approach. Czechia set

²¹ Directive (EU) 2018/2001 on the promotion of energy from renewable sources, as amended by Directive (EU) 2023/2413

out policies and measures to achieve the reduction of energy consumption from public bodies and the renovation of public buildings.

Czechia has partially addressed recommendation 11. Czechia set out complete policies and measures to achieve the national contributions on energy efficiency. Czechia specified how the energy efficiency first principle will be implemented and mentioned a consortium set up to carry out and monitor its implementation.

Czechia set out complete policies and measures to achieve the required amount of cumulative end-use energy savings by 2030 and it quantified the energy savings from the reported energy efficiency measures to ensure the achievement of the cumulative target³, including those measures targeting energy poverty.

Czechia specified robust energy efficiency financing programmes and support schemes, including financial instruments and public guarantees, able to mobilise private investments and additional co-financing. Czechia specified existing policy measures to promote the uptake of energy efficiency lending products and innovative financing schemes (such as Energy Performance Contractors, ESCOs).

Czechia has addressed recommendation 12. Czechia details the impact in terms of energy savings of each new measures put forward on buildings. The final updated NECP presents an ambitious scenario according to which most buildings (85%) will be deeply renovated from 2025 to 2030. Only buildings where this is not technically possible will receive shallow or medium renovations. In addition, the renovation rate will be approximately doubled, which would mean that every building will be renovated over a period of less than 30 years. This increase in depth and renovation rates is expected to lead to a reduction in energy consumption by 166 PJ (44%) in 2050.

2.4 ENERGY SECURITY DIMENSION

Czechia has partially addressed recommendation 13. Czechia does not further set out how it intends to continue encouraging gas demand reduction towards 2030. It also does not provide exact estimates for the evolution of natural gas consumption, noting only that the share of gas in the energy mix is expected to increase to 21% of primary energy consumption by 2030²², and then decrease until 7% by 2050²³.

Czechia clarifies that the development and installation of energy storage systems is a priority. In a report on the flexibility of the Czech electricity system, Czechia is analysing the impact of the energy transition on flexibility needs, which will be followed by an action plan, setting priorities for the development of non-fossil flexibility and defining the objective for flexibility of non-fossil sources, including energy storage for the next ten years.

The final updated NECP describes measures taken to ensure security of supply of nuclear materials and fuel but does not provide information on spare parts and maintenance services. The plan includes some information on plans to develop Small Modular Reactors (SMRs) and

²² Total primary energy consumption in 2030 is expected to be 1 206PJ, according to the plan.

²³ According to Eurostat data, this share was of approximately 15% in 2022, for a total gross inland consumption of around 1 754 PJ:

<https://op.europa.eu/en/publication-detail/-/publication/993e1f3f-89d1-11ef-a67d-01aa75ed71a1/language-en>

notes that the Atomic Act is being amended to include SMR technology. The first SMR is expected to become operational in the mid-2030s, with the total installed capacity of SMRs reaching up to 3 GW depending on the construction of large reactors. In addition to electricity generation, the use of SMRs is considered for district heating systems.

The final updated NECP does not provide information on measures taken to ensure the long-term management of nuclear waste. This is however covered in the 4th national report submitted in 2024 in accordance with Article 14 of Directive 2011/70/EURATOM²⁴.

The plan addresses the need to diversify from Russian oil imports however it does not assess the adequacy of the oil infrastructure (pipelines, refineries, and oil storage) in the long run with the expected oil demand decline and the move to lower-carbon alternatives.

The final plan refers to the energy system's vulnerabilities identified in the National Climate Change Adaptation Strategy. However, it still does not contain information about the concrete envisaged measures to prepare for it.

2.5 INTERNAL ENERGY MARKET DIMENSION

Czechia has partially addressed recommendation 14. Czechia does not put forward clear objectives and targets for demand response to improve the flexibility of the energy system underpinned by an assessment of the flexibility needs. The plan also does not describe specific measures to facilitate energy system integration in the context of implementing provisions of Article 20a of the revised RED II. However, Czechia is working on a report on flexibility of the Czech electricity system, which examines the assessment of the flexibility needs of the energy system. The report will analyse the impact of phasing out fossil fuels on flexibility needs as well as the potential for flexibility in the period 2025-2030. This report will be followed by an action plan setting priorities for the development of non-fossil flexibility, defining objectives on their development for the next ten years.

Czechia has been taking steps to increase the level of consumer empowerment in the retail market by a legislative anchoring of energy communities, renewable energy communities and active customers. Act 469/2023 Coll., which entered into force on 1 January 2024, introduces a definition of an energy community and a definition of renewable energy communities.

While the NECP underlines that a call has been made under the National Recovery Plan to support the establishment of energy communities and an evaluation of energy community projects is ongoing, the plan contains few details on next steps in terms of developing energy communities and facilitating citizen engagement.

Czechia has partially addressed recommendation 15. While the definition of energy poverty is not yet legally enshrined in Czech law, Czechia took steps to develop the approach to addressing energy poverty. An expert group on energy poverty was set up under the Ministry of Industry and Trade. By end of 2024, this expert group was expected to propose a definition of energy poverty, set appropriate indicators for measuring energy poverty and the related definitions and indicators for vulnerable households. The plan further explains that the expert

²⁴ Council Directive 2011/70/Euratom of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste.

group will aim to continue to coordinate the state's approach to energy poverty, develop an energy poverty strategy and concrete measures.

Despite the absence of an energy poverty definition, certain customer support systems (such as economic support, protection against disconnection) are in place. The plan explains how the use of affordability and energy efficiency measures already supports vulnerable households and can therefore be considered to some extent as addressing energy poverty. In particular, the New Green Savings Light programme targets the elderly and low-income households and provides funding for instance for insulation of facades, roofs, ceilings, and exchange of windows. Subsidies are also available for low-income households to replace old boilers. In early April 2023, a call was launched with an allocation of CZK 1.7 billion to replace heating systems in low-income households. This is expected to lead in about 15 000 vulnerable households changing the way they heat their homes.

2.6 RESEARCH, INNOVATION AND COMPETITIVENESS

Czechia has partially addressed recommendation 16. The plan includes a comprehensive approach, although it does not include targets to support research, innovation, and competitiveness in clean energy technologies, nor establishes a pathway to 2030 and 2050. Relevant policies and measures include the National Research and Innovation Strategy for Smart Specialisation, the proposal for updating the 2015 State Energy Policy, the updated National Hydrogen Strategy and the THETA 2 programme supporting applied research and innovation in the energy sector. The plan does not set out measures to promote the development of net-zero projects including those relevant for the energy intensive industries. It does not describe how it will ensure a predictable and simplified regulatory framework for permitting procedures for manufacturing or how access to national funding will be simplified where needed. The plan does not include information on policies and measures for the development of clean energy-related skills and resilient and sustainable supply chains of key net-zero components and equipment.

2.7 FINANCING THE ENERGY AND CLIMATE TRANSITION

Czechia has not addressed recommendation 17. The plan does not specify measures to mobilise private investments and does not provide robust estimates of the total investment needs nor investment needs per sector. Investment needs and funding sources are not mentioned at the level of the measures. There is only a high-level assessment of funding sources including national and EU sources. Although the plan states that most of the investments should be financed by the private sector, it does not provide a breakdown of investments by public and private sources. The information provided in the plan is not sufficient to estimate whether there is a potential financing gap with respect to the investment needs, or how this would be filled.

Czechia has partially addressed the recommendation to provide a robust assessment of the macroeconomic impact of the planned policies and measures. A macro-economic assessment is included in the plan, but the analysis of some key variables is absent. The plan includes quantitative estimates of the impact on some socio-economic variables and selected sectors. However, it does not describe the impact of the planned measures on public finances.

2.8 JUST TRANSITION

Czechia has partially addressed recommendation 20. The plan includes an analysis of the social and economic impacts of the transition, providing a comprehensive understanding of the potential effects on different segments of the population. However, it does not sufficiently address the sectoral employment and skills impacts, except for the coal regions Karlovarský, Ústecký and Moravskoslezský. Moreover, the plan does not specify the form of support, the impact of initiatives or the resources available, except for the JTF.

The plan does not contain the analytical basis needed for the preparation of the Social Climate Plan, such as information on the estimated impact of ETS2 and the identification of vulnerable groups. The plan does not explain how the policy framework identified in the NECP will contribute to the preparation of Czechia's Social Climate Plan nor how the consistency of the two plans will be ensured.

2.9 PUBLIC CONSULTATION

Czechia has partially addressed recommendation 21. Czechia organised two rounds of public consultation towards the preparation of the final plan. The first consultation was carried out between 15 May 2023 and 4 June 2023 using a structured online unlimited questionnaire (164 responses were received). The second consultation on the draft update NECP took place between 9 January and 29 February 2024, using a structured online questionnaire (1092 responses received).

The plan includes links to the website of the Ministry of Industry and Trade with a detailed summary and evaluation of both consultations. It does not describe how the final plan integrated input from stakeholders.

2.10 REGIONAL COOPERATION

Czechia did not address recommendation 22. While the plan includes a simple description of how the regional cooperation under the Visegrad group works, it does not specify further how it could be strengthened in the future, nor whether Czechia considers joining other regional structures such as the CESEC High-Level Group. Czechia does not provide further information in its final plan on establishing the framework for cooperation on joint projects by 2025 in line with Article 9 of the revised RED II. The plan also did not provide information on signing the four bilateral solidarity arrangements for the security of gas supply with its neighbours (Poland, Slovakia, Germany, Austria).

2.11 ANALYTICAL BASIS

The plan provides a description of the analytical framework with projections reaching 2050 and an impact assessment of policies and measures. The plan is based on quantitative analysis and the methodologies used for projections and impact assessment are referenced.

2.12 STRATEGIC ALIGNMENT, COHERENCE AND INTERACTION WITH OTHER PLANNING INSTRUMENTS AND POLICIES

Czechia has partially addressed recommendation 8. While improved, the final updated NECP does not sufficiently cover the main reforms and investments of the Recovery and Resilience Plan (RRP) that contribute to implementing the objectives, targets, and contributions. The final updated NECP does not refer to the two reforms LEX RES II and LEX RES III, which are relevant climate and energy reforms of the RRP and its REPowerEU chapter. Some measures, such as the new act on simplification of permitting procedures (LEX RES I) and Electricity Data center investment, are now mentioned in the NECP, but it is not specified that this reform is financed by the Recovery and Resilience Facility.

3 GUIDANCE ON THE IMPLEMENTATION OF THE NATIONAL ENERGY AND CLIMATE PLAN

The Commission encourages to ensure a timely and complete implementation of the final updated NECP. Czechia should pay particular attention to the elements listed below.

- Implement in a timely manner additional policies towards the **ESR target**, as even though Czechia is expected to meet its target, a significant part of the emissions reduction is driven by measures that are not yet fully implemented. Given the stagnating trend in emissions in waste and transport, closely monitor the implementation of related policies, and design additional ones where needed.
- On **LULUCF**, enforce and improve the targeting of current policies, including agroforestry, organic farming, sustainable management of grassland and afforestation and closely monitor their contribution to the achievement of the target. Adopt additional policies to decrease the LULUCF gap.
- **On adaptation**, assess quantitatively the relevant climate vulnerabilities and risks for the national objectives, targets, contributions, policies and measures in the different Energy Union dimensions. This would enable better outlining and quantifying the link to the specific Energy Union objectives and policies, that adaptation policies and measures are meant to support as well as setting out additional adaptation policies and measures in sufficient detail.
- Develop a roadmap with specific measures to phase out all **fossil fuels subsidies**.
- On **renewable energy** put in place measures to achieve the higher ambition for the deployment of renewables by 2030 that aligns with the EU's collective target for renewable energy. Accelerate deployment of renewables in district heating and cooling, including by creating an enabling framework to integrate electricity and heating and cooling networks. Promote the uptake of renewable power purchase agreements and guarantees of origin.
- On **nuclear energy**, continue efforts to diversify nuclear fuel supplies and to ensure long-term supply of spare parts and maintenance services.
- On **energy efficiency**, further promote the exemplary role of the public sector and to present additional measures to support the achievement of end-use energy savings particularly targeting the industry and transport sectors, where policies to reduce energy consumption appear limited.
- **On energy poverty**, establish the definition of energy poverty in law and create a strategy with specific targets, timelines, and concrete measures to support households affected by

energy poverty. Implement concrete measures including advice and financing towards households in energy poverty.

- On **research, innovation and competitiveness**, continue strengthening support to the development and manufacturing of innovative net-zero technologies.
- Develop a more **comprehensive just transition strategy** that includes training and re-skilling measures and that allocates sufficient funding.