Cyprus

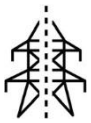
1 Overview of key objectives, targets and contributions in the final NECP

Table 1: Summary of key objectives, targets and contributions of Cyprus' 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: +4.3% 2023: +4.6%[116]	-32%	NECP: -25.9%
	Binding target for additional net GHG removals under the Regulation on Land Use, Land Use Change and Forestry (LULUCF)		2022: Reported net removals of -0.3 Mt CO_2 eq.	-0.06 Mt CO_2 eq. (additional removal target)	Insufficient ambition based on projections: a gap of 0.02 Mt CO2 eq
	National target/contribution for renewable energy: Share of energy from renewable sources in gross final consumption of energy (%)	16.9% (SHARES) 13% (target)	2023: 20.2%	33.2%	Cyprus's contribution of 33.2% is slightly above the 33% required according to the formula set out in Annex II of the Governance Regulation[117]
	National contribution for energy efficiency:				
	Primary energy consumption	2.2 Mtoe	2023: 2,52 Mtoe	2.03 Mtoe	CY primary energy consumption contribution of 2.03 Mtoe is in line with the EED recast Annex I formula results: 2.04 Mtoe (Reference Scenario) or 1.92 Mtoe (Updated

[116] 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.

[117] 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	1.9 Mtoe	2023: 1.87 Mtoe	1.80 Mtoe	CY final energy consumption projection of 1.80 Mtoe is in line with the national contribution of 1.81 Mtoe submitted by the European Commission.
	Level of electricity interconnectivity (%)[118]	0%	2024: 0%	15%	CY is below the EU-wide interconnectivity target.

Source: Eurostat; Cyprus' 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 Cyprus' draft updated NECP and provided recommendations[119] for the preparation of the final updated NECP. Cyprus submitted its final updated NECP on 19 December 2024, almost six months after the deadline of 30 June 2024.[120]

2.1 DECARBONISATION

Cyprus expects to increase total GHG emissions (including LULUCF and excluding international aviation) by 1% in 2030 compared to 1990 and decrease by 39% by 2040. The final updated plan indicates that Cyprus has a national target of net zero emissions by 2050.

2.1.1 Effort Sharing Regulation

Cyprus has partially addressed recommendation 1. The final NECP does not provide sufficient details on how Cyprus will meet its ESR target of 32% by 2030 compared to 2005. The plan provides updated projections that mark an improvement compared to the draft plan but showing that the existing and planned policies and measures will lead to a decrease of only 25.9% in 2030 compared to 2005, falling short by 6.1 percentage points from the national ESR target. ESR sectors represent 50% of total GHG emissions in 2022, (expected to be 46% in 2030). The large difference between the WAM (-25.9%) and WEM scenarios (-3.8%) hint that implementing the plan will require a significant effort. The plan mentions that the possible use of flexibilities to reach the ESR obligations is currently being explored.

[118] Calculated by the European Commission based on the ETNSO-E data (Winter Outlook 2024). The 2030 level represents the general interconnectivity target of 15%.
[119] SWD(2023) 910 final, and Commission Recommendation of 18 December 2023, C/2023/9600.
[120] Article 14(2) of Governance Regulation.

The final plan complemented the information on the policies and measures provided in the draft plan but could still benefit from a clearer description of their scope, timeline and, where possible, expected greenhouse gas reduction impacts. **Transport** represented the largest share of ESR emissions in 2022 (46%), mainly due to private car use. While some measures are foreseen in the transport sector (e.g. biofuels, infrastructure and incentives for electric vehicles, improving public transport availability, incentivising cycling, etc), others are delayed until after 2030 (e.g. improving public transport availabilities through launching a tram). Regarding **buildings**, the plan notes the challenge of lacking administrative capacity to support decarbonisation of buildings.

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

On **agriculture**, the plan does not provide sufficient detail in terms of funding and impacts of measures, and how these contribute to the ESR target. Moreover, the projections reflect a stagnation in emission in 2030, indicating a need for targeted policies and actions. On **waste**, the plan outlines several relevant policies and measures but fails to quantify their impact.

On **F-gases**, the plan includes a collection campaign and destruction effort of refrigerants, as well as the preparation of an inventory of equipment but it is not clear if the collection campaign will be a recurring effort. The plan also lacks consideration of campaigns to train technicians and promote the uptake of heat pumps.

2.1.2 LULUCF

Cyprus has partially addressed recommendation 3. The LULUCF sector in Cyprus generates net removals of -0.3 Mt CO2 eq., absorbing roughly 3.4% of the total GHG emissions in 2022. According to the LULUCF Regulation, Cyprus has to improve its net removals by -0.063 Mt CO2eq in 2030 as compared to its yearly average in the 2016-2018 reference period. However, according to the plan, Cyprus is projected to have a gap of 0.02 Mt CO2eq in 2030. The plan indicates additional LULUCF measures compared to the baseline scenario.

The plan provides sufficient information on how public funding (CAP, State aid) and private financing through carbon farming schemes are used to reach the LULUCF target. However, the plan lacks information on the status and progress in ensuring higher tier levels and geographically explicit datasets needed to ensure the robustness of net removal estimates. Overall, based on the available information, Cyprus does design sufficiently effective policies to support the land sector and the achievement of the LULUCF target.

2.1.3 Carbon Capture and Storage

Cyprus has not addressed recommendation 2. The plan does not contain a comprehensive CCUS strategy. It does not identify the amount of CO2 emissions that could be captured on an annual basis, provide details on how any captured CO2 would be transported, or identify the overall CO2 storage capacity and injection volumes available by 2030. Nevertheless, Cyprus recognizes the significant role CCUS can play in reducing emissions from hard-to-abate industries. The country is also considering the possibility of opening parts of its territory for the exploration of geological formations suitable for carbon storage sites.

2.1.4 Adaptation

Cyprus has partially addressed recommendation 4. The plan refers to the Cypriot Strategy for Adaptation to Climate Change, and its ongoing review. However, it lacks for most parts adaptation policies and measures in the relevant Energy Union dimensions. The plan contains a partial analysis of climate vulnerabilities and risks.

Even if a **climate risk and vulnerability assessment** has recently been prepared, covering 15 sectors including energy, the plan is nevertheless short of quantifiable assessment of impacts.

The plan partially outlines the **link to the specific Energy Union objectives and policies**, that adaptation policies and measures are meant to support, particularly for the research, innovation and competitiveness dimensions. However, the impacts and benefits of adaptation policies on other Energy Union objectives have generally not been quantified. The plan sets out **additional adaptation policies and measures** to support the achievement of national objectives, targets and contributions under the Energy Union, but those proposed for agriculture are insufficient, as they do not address the consumption of freshwater. Measures for water management (including networks) are also considered insufficient to properly address the leakage of freshwater during transport or the impacts of floods. The plan does not address the consequences of climate change on **future water availability** and its implications on the energy sector.

2.1.5 Fossil Fuels

Cyprus has not addressed recommendation 16. The plan states that Cyprus does not provide fossil fuels subsidies and hence does not provide a timeline for their phase- out[121]. However, the plan states that there are subsidies to oil prices, and that energy products and electricity are subject to excise duty in accordance with the Excise Duty Act No 91 (I) of 2004.

2.2 *RENEWABLES*

Cyprus has addressed recommendation 5. The final plan contains an increased contribution of 33.17% as a share of renewable energy in gross final energy consumption by 2030, based on WAM scenario. This contribution is slightly above the one resulting from the formula of Annex II of the Governance Regulation (of 33%). Cyprus also provides a table with the indicative trajectory that reaches the reference points for 2025 (23.8%) and 2027 (26.3%) respectively, which are above the trajectory (22% and 26%) calculated in line with the increased EU Renewable energy target of for 2030.

Cyprus has partially addressed recommendation 6. Sector-specific projections for 2030 are included, but the plan does not confirm whether those constitute specific targets to achieve the sub-targets of Directive (EU) 2018/2001 (the 'revised RED II')[122]. Specifically, Cyprus indicates that the share of renewables in electricity will reach 37.6%, in heating and cooling 53.6% and in transport 18.6%. The average annual increase of renewables in heating and

[121] The Commission 2024 study and Report on Energy subsidies in the EU identifies the existence of fossil fuel subsidies.

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

cooling is slightly below the level of the indicative top-ups of Annex IA for the period 2021-25 (1.52%) but above it for 2026-2030 (1.78 ppt). A projected share for renewable energy industry of 27.98% for 2030 is included, mainly to be fulfilled by biomass and energy from waste to produce industrial heat in combination with solar electricity. The Plan does not include a target for district heating and cooling for the 2021-2030 period since Cyprus does not foresee its deployment before 2032. Cyprus does not indicate a specific target for innovative technologies but aims to adopt measures to achieve at least 5% of new installed renewable energy capacity in 2030.

Cyprus has partially addressed recommendation 7. Cyprus mentions that it has concluded the mapping of renewables acceleration areas and published the maps, but without specifying which technologies will be covered. Cyprus indicates that the legislation on the acceleration of permitting is pending, without giving further details. The plan includes additional information on the measures planned to promote energy communities and renewable self-consumption. However, the completion of legal framework with all the necessary elements is still pending. No further information is provided on renewable power purchase agreements except the reference to the need for amending national electricity market legislation nor on the design of the obligation on fuel suppliers in the transport sector.

Cyprus has partially addressed recommendation 8. Some information is included regarding the transposition of the permitting provisions of the revised RED II and the enabling framework on self-consumption and energy communities. However, no detailed timeline is provided for the adoption of measures implementing the targets for RFNBO in industry and the sub-target for advanced biofuels and renewable fuels of non-biological origin (RFNBOs) in transport by 2030.

2.3 ENERGY EFFICIENCY DIMENSION

Cyprus has addressed recommendation 9. The plan includes an indicative national contribution to the Union's binding **final energy consumption target** for 2030 of 1.80 Mtoe for final energy consumption. This contribution is in line with Article 4 of Directive (EU) 2023/1791 ('EED recast')[123] or equal to the corrected indicative national contribution that the Commission submitted to Cyprus in March 2024 under Article 4(5) of that Directive. Cyprus included an indicative national contribution to the Union's indicative primary energy consumption target for 2030 of 2.03 Mtoe for **primary energy consumption**, is in line with Article 4.

Cyprus has partially addressed recommendation 10. The NECP does not include an updated ambition level to ensure a highly energy efficient and decarbonised national **building stock** and to transform existing buildings into zero-emission buildings by 2050. The plan includes intermediate milestones for 2030 and for 2040 and milestones for the renovation of both non-residential and residential buildings, including on energy saving. The plan details the impact in terms of energy savings of each new measures put forward and includes sufficient information on measures for buildings in terms of funding and costs and provided specific information on policies and measures addressing **deep renovation**, with focus on worst-performing buildings

[123] Directive EU 2023/1791 on energy efficiency and amending Regulation (EU) 2023/955 (recast).

and vulnerable consumers, as well as decarbonisation of heating and installation of renewables in buildings.

2.4 ENERGY SECURITY DIMENSION

Cyprus has partially addressed recommendation 11. Cyprus does not have gas in its energy mix, nor does it have gas interconnections with other Member States. The final plan mentions the objective to start natural gas imports by 2026 thanks to the PCI "CyprusGas2EU", compared to the aim in the draft plan to start in early 2024. The delays are attributed to the pandemic and to the termination of the contract between the company ETHNV and the Cypriot government. According to the WAM scenario, natural gas consumption is expected to ramp up and reach 578 ktoe and make for approximately 27% of the primary energy mix (608 ktoe and 26% in the WEM scenario). The plan does not assess the compatibility of its future gas infrastructure or the ramp up of gas consumption with decarbonization objectives.

The final plan indicates that an indicative target for energy storage has been postponed to a later stage.

The plan does not assess the adequacy of the oil infrastructure (oil storage) in the long run with the expected oil demand decline and the move to lower-carbon alternatives.

While the plan refers to the present and upcoming new Strategy on Adaptation to Climate Change and the recently executed Climate Vulnerability and Risk Assessment, it does not provide specific details on how this will contribute to enhancing the climate resilience of the Cypriot energy system.

2.5 INTERNAL ENERGY MARKET DIMENSION

Cyprus has partially addressed recommendation 12. The plan mentions that the electricity market in Cyprus cannot currently support either flexibility services, demand response or aggregation. Cyprus has recently adopted some new legislative measures that make possible flexibility services for storage as well as cumulative representation and demand response, but most likely towards the end of the decade, and the plan does not refer to specific targets. The final plan does not provide information on specific measures to facilitate system integration of renewable electricity in accordance with Article 20a of the revised RED II.

Furthermore, the plan does not provide information regarding the development of a more competitive retail energy market or on strengthening consumer engagement. Although the plan mentions some elements of market liberalization and regulatory changes, it does not clearly describe policies or concrete measures that would ensure greater competition among energy suppliers or increase consumer empowerment.

Cyprus has partially addressed recommendation 13. The draft updated NECP includes an assessment of energy poverty outlining measures such as energy efficiency improvements, financial support through the Social Climate Fund, and the Energy Efficiency Obligation Scheme to assist vulnerable households. It also sets a national reduction target to reduce affected households by 10% by 2030. However, though the financial resources and social measures are outlined, the plan could further detail dedicated funding streams and how the Energy Efficiency Obligations Scheme will address energy poverty.

2.6 RESEARCH, INNOVATION AND COMPETITIVENESS

Cyprus has partially addressed recommendation 14. The plan includes comprehensive approach, with specific targets to support research, innovation, and competitiveness in clean energy technologies, establishing a pathway to 2030 and 2050, but does not specify the support per technology. The plan describes measures to promote the development of net-zero projects including those relevant for the energy intensive industries. It describes how it will ensure a predictable and simplified regulatory framework for permitting procedures for manufacturing and how access to national funding will be simplified where needed. The plan provides information on policies and measures for the development of clean energy-related skills and facilitate resilient and sustainable supply chains of key net-zero components and equipment. Relevant measures include the "Labour Force Training Programme for Knowledge and Skills related to the Green Economy", that is being implemented to address the skills gap, funded under the Recovery and Resilience Plan.

2.7 FINANCING THE ENERGY AND CLIMATE TRANSITION

Cyprus addressed recommendation 15. The plan provides estimates of total and additional investment needs per sector with a breakdown by public and private investments. The assessment is based on a sound methodology, using a top-down model, complemented by a bottom-up approach.

The plan does not elaborate on how to mobilise private investments, nor does it include a comprehensive description of the financial support schemes or the types of financial instruments. The plan describes planned national and EU sources and outlines only occasionally the sources of funding at measure or project level.

Cyprus provides a robust assessment of the macroeconomic impact of the planned policies and measures**.** The plan includes a quantitative assessment of sectoral impacts, on different socio-economic variables.

2.8 JUST TRANSITION

Cyprus has partially addressed recommendation 17. The plan provides information on the impact of the transition to climate neutrality on employment but does not sufficiently address the impact on skills and the most vulnerable households. Moreover, the plan does not specify the form of support, the impact of initiatives or the resources available, except for the JTF. The analysis still focuses on the JTF.

The gradual decarbonisation of Dhekelia heavy fuel power plant is mentioned without indicating whether it will be aligned to the fossil fuel phase-down timeline in the Territorial Just Transition Plan (TJTP).

The plan lacks 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 only partly explains how the policy framework identified in the NECP will contribute to the preparation of Cyprus' Social Climate Plan and how it will interact with other public funds, both from the EU and the state budget.

2.9 PUBLIC CONSULTATION

Cyprus has partially addressed recommendation 18. Cyprus organised two rounds of public consultations for the preparation of the final plans. The first round took place from the publication of the draft in December 2023 to the publication of the final NECP in December 2024. The plan notes that input was received from various groups, including companies and environmental organisations, and that it was assessed and taken into account in the final text. The second round was a formal public consultation on a preliminary version of the final NECP. The consultation lasted three weeks but was closed only one week before the publication of the final NECP, which limited the possibility to fully take stakeholder input into account. It is unclear how many stakeholders commented on the draft, as the plan only mentions a public presentation on the draft (on 3 December), attended by over 75 participants from the public, private and NGO sector.

The plan includes a detailed summary of the outcome of the consultations and how these comments have been or will be addressed by the Government of Cyprus.

2.10 REGIONAL COOPERATION

Cyprus has not addressed recommendation 19. The final updated plan does not provide further information on plans to establish a framework for cooperation with other Member States by 2025 in line with Article 9 of the revised RED II.

2.11 ANALYTICAL BASIS

The plan provides a description of the analytical framework under both WEM and WAM scenarios, with projections primarily focusing on 2030, complemented by longer-term view of 2050. The plan also includes a quantitative impact assessment on sectoral basis, which estimates the effect on and socio-economic variables.

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

The final NECP covers sufficiently the main reforms and investments of the Recovery and Resilience Plan (RRP) that contribute to implementing the objectives, targets, and contributions of the Energy Union.

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

The Commission encourages Cyprus to ensure a timely and complete implementation of the final updated NECP. Cyprus is invited to pay particular attention to the following main elements:

- On **ESR**, implement additional policies towards meeting the 2030 target, increase efforts to reduce GHG emissions across all effort sharing sectors, particularly those geared towards

decarbonising transport and reducing passenger vehicles. Explore flexibilities to ensure compliance with ESR obligations.

- On **adaptation**, identify gaps and needs, including financial, to assess the feasibility of implementing the revised 2017 Adaptation Strategy and its action plan. Consider how climate risk assessments are used for policy and investment decisions, i.e. how national or regional/local climate risk assessments are used for spatial planning and what factors hamper their use. Continue to develop adaptation policies and measures to increase the water resilience of key water-using sectors.
- Clarify existing **fossil fuels subsidies** along with a roadmap with specific measures for their gradual phase out.
- On **renewable energy**, accelerate deployment of renewables in heating and cooling and transport sectors, and put in place an effective framework for speeding up the RES permit granting procedures and further measures in support of self-consumption and industry decarbonisation.
- On **energy efficiency**, ensure and monitor proper implementation of the energy efficiency first principle.
- On **buildings**, ramp up the pace and depth of renovation in the overall building stock including through increasing the availability and accessibility of technical assistance to citizens and implementing ambitious reskilling programs to address construction labour shortages.
- Develop a more comprehensive **just transition strategy,** that includes vulnerable households as well as upskilling/reskilling and allocates sufficient funding.
- On **grid development**, speed up the implementation of the Great Sea Interconnector project to ensure its completion by 2030, given the importance of the project to end the energy isolation of Cyprus and to decarbonize through the integration of more renewable energy.