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**COMMISSION RECOMMENDATION**

**of 18.12.2023**

**on the draft updated integrated national energy and climate plan of Portugal covering  
the period 2021-2030**

**and on the consistency of Portugal's measures with the Union's climate-neutrality  
objective**

**and with ensuring progress on adaptation**

{SWD(2023) 922 final}

(Only the Portuguese text is authentic)

# COMMISSION RECOMMENDATION

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**on the draft updated integrated national energy and climate plan of Portugal covering the period 2021-2030**

**and on the consistency of Portugal's measures with the Union's climate-neutrality objective**

**and with ensuring progress on adaptation**

(Only the Portuguese text is authentic)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292 thereof,

Having regard to 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, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council<sup>1</sup> and in particular Article 9(2), and Article 14(6) thereof,

Having regard to Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999<sup>2</sup>, and in particular Article 7(2) thereof,

Whereas:

*Recommendations on Portugal's draft updated integrated National Energy and Climate Plan (NECP) of Portugal covering the period 2021-2030*

- (1) Portugal submitted its draft updated integrated national energy and climate plan on 30 June 2023.
- (2) Article 3 and Annex I to Regulation (EU) 2018/1999 ('the Governance Regulation') lay down the elements that are to be included in the updated integrated national energy and climate plan. In December 2022, the Commission adopted the Guidance to Member States on the process and scope for preparing the draft and final updated national energy and climate plans<sup>3</sup>. The Guidance identified good practices and

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<sup>1</sup> OJ L 328, 21.12.2018, p. 1

<sup>2</sup> OJ L 243, 9.7.2021, p. 1

<sup>3</sup> 2022/C 495/02

outlined the implications of recent policy, legal and geopolitical developments in energy and climate policies.

- (3) In connection with REPowerEU plan<sup>4</sup>, and as part of the 2022 and 2023 European Semester cycles, the Commission has put a strong focus on Member States' energy and climate related reform and investment needs to strengthen energy security and affordability by accelerating the green and fair transition. This is reflected in the 2022 and 2023 Country Report for Portugal<sup>5</sup> and the Council Recommendations to Portugal<sup>6</sup>. Member States should take into account the Council's latest country-specific recommendations in their final updated integrated national energy and climate plans.
- (4) The Commission's recommendations regarding the delivery of national targets under the Effort Sharing Regulation<sup>7</sup> (ESR) are based on the likelihood that the Member States will respect the 2030 targets, taking into account the rules for the use of flexibilities under the ESR.
- (5) The Commission's recommendations regarding Carbon Capture, Utilisation and Storage (CCUS) aim at having an overview of the intended deployment of these technologies at national level, including information about annual volumes of CO<sub>2</sub> planned to be captured by 2030, split by source of CO<sub>2</sub> captured coming from installations covered by Directive 2003/87/EC<sup>8</sup> or from other sources, such as biogenic sources or direct air capture; about planned CO<sub>2</sub> transport infrastructure; and about potential domestic CO<sub>2</sub> storage capacity and injection volumes of CO<sub>2</sub> planned to be available in 2030.
- (6) The Commission's recommendations regarding the performance under the Land Use, Land Use Change and Forestry Regulation ('LULUCF Regulation')<sup>9</sup> address the delivery by the Member State on the "no debit" rule for the period 2021-2025 (Period 1) and its national target for the period 2026-2030 (Period 2), taking into account the rules governing the use of flexibilities as set out in that Regulation. The Commission's recommendations also take into account that in Period 1 any excess in emissions under the LULUCF Regulation will automatically be transferred to the ESR.
- (7) For climate adaptation to properly support the achievement of energy and climate mitigation objectives, it is essential to identify the potential climate change hazards and analyse climate vulnerabilities and risks that may affect relevant areas or sectors. The Commission's recommendations on adaptation considers the extent to which Portugal integrated in its updated NECP adaptation goals that account for climate risks that could prevent Portugal from meeting the objectives and targets of the Energy

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<sup>4</sup> COM(2022) 230 final

<sup>5</sup> SWD(2022) 623 final; SWD(2023) 622 final

<sup>6</sup> (2022/C 334/22); Recommendation for a Council Recommendation (2023/C 312/22), Recommendation for a Council Recommendation

<sup>7</sup> Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018, OJ L 156, 19.6.2018, p. 26. as amended by Regulation (EU) 2023/857 of 19 April 2023, OJ L 111, 26.4.2023, p. 1

<sup>8</sup> Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ 275, 25.10.2003, p. 32)

<sup>9</sup> Regulation (EU) 2018/841 of the European Parliament and of the Council of 30 May 2018 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework- and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU, OJ L 156, 19.6.2018, p. 1, as amended by Regulation (EU) 2023/839 of the European Parliament and of the Council of 19 April 2023 OJ, L328/1, 21.4.2023, p. 1

Union. Without specific adaptation policies and measures, planned and implemented, the achievement of objectives in Energy Union dimensions is at risk. Water management in changing climatic conditions requires particular attention due to risks of electricity disruption as floods, heat and drought impact the energy production.

- (8) The Commission's recommendations regarding renewable energy ambition are based on the formula set out in Annex II to Regulation (EU) 2018/1999, which is based on objective criteria, and on the main policies and measures missing in Portugal's NECP to enable a timely and cost-effective achievement of Portugal's national contribution to the Union's binding renewable energy target of at least 42.5% in 2030, with the collective endeavour to increase it to 45% pursuant to Directive (EU) 2018/2001 as regards the promotion of energy from renewable sources as amended by Directive (EU) 2023/2413<sup>10</sup>. The Commission's recommendations are also based on Portugal's contribution to the specific targets of Articles 15a, 22a, 23, 24 and 25 of that Directive and the related policies and measures to rapidly transpose it and implement it. The recommendations reflect the importance to develop comprehensive long-term planning for the deployment of renewable energy, and in particular wind, to increase visibility for the European manufacturing industry and grid operators in line with the European Wind Power Package<sup>11</sup>.
- (9) The Commission's recommendations regarding the national contribution to energy efficiency are based on Article 4 of the Directive (EU) 2023/1791 on energy efficiency and the formula in Annex I to that Directive and the related policies and measures to implement it.
- (10) The Commission's recommendations pay particular attention to the objectives, targets, and contributions and related policies and measures to deliver on the REPowerEU plan to rapidly phase out dependence from Russian fossil fuels. They take into account lessons learnt from the implementation of the Save gas for a Safe winter Package<sup>12</sup>. The recommendations reflect the imperative to make the energy system more resilient in light of the obligations stemming from Regulation (EU) 2019/941 on risk preparedness in the electricity sector<sup>13</sup> and Regulation (EU) 2017/1938 on the security of gas supply<sup>14</sup> and in line with the Commission's Recommendation on energy storage<sup>15</sup>.
- (11) The Commission's recommendations take into account the need to accelerate the integration of the internal energy market to strengthen the role of flexibility and to empower and protect consumers. The Commission's recommendations also consider

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<sup>10</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82), as amended by Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023, OJ L, 2023/2413, 31.10.2023

<sup>11</sup> Communication on European Wind Power Action Plan COM (2023) 669 final, 24.10.2023 and Communication on delivering EU offshore renewable energy ambition, COM (2023) 668 final

<sup>12</sup> Communication from the Commission to the European Parliament, the Council, the European economic and social committee, "Save gas for a safe winter", COM/2022/360 final

<sup>13</sup> Regulation (EU) 2019/941 of the European Parliament and of the Council of 5 June 2019 on risk preparedness in the electricity sector and repealing Directive 2005/89/EC OJ L158/1

<sup>14</sup> Regulation (EU) 2017/1938 of the European Parliament and of the Council of 25 October 2017 concerning measures to safeguard the security of gas supply and repealing Regulation (EU) n°994/2010, OJ L 280

<sup>15</sup> Commission Recommendation of 14 March 2023 on Energy Storage – Underpinning a decarbonised and secure EU Energy system; OJ C 103, 20.3.2023, p. 1

the importance of assessing the number of households in energy poverty in line with the requirements of Article 3 of Regulation (EU) 2018/1999, and the Commission Recommendation (EU) 2023/2407<sup>16</sup>.

- (12) The Commission's recommendations reflect the importance of ensuring sufficient investments in clean energy research and innovation to boost their development and manufacturing capacities, including appropriate policies and measures for energy intensive industries and other businesses; and the need to upskill workforce for a net-zero industry in order to consolidate a strong, competitive and clean economy within the Union.
- (13) The Commission's recommendations build on the commitments taken under the Paris Agreement to phase down the use of fossil fuels, as well as on the importance of phasing out fossil fuel subsidies.
- (14) The Commission's recommendations on investment needs follows its assessment of whether the draft updated plan provides a general overview of investment needs to achieve the objectives, targets and contributions for all dimensions of the Energy Union; indicates the sources of financing distinguishing private and public sources; outlines investments consistent with Portugal's Recovery and Resilience Plan, Portugal's Territorial Just Transition Plans and the 2022-2023 country-specific recommendations issued under the European Semester; and includes a robust macro-economic assessment of planned policies and measures. The NECP should ensure the transparency and predictability of national policies and measures to support investment certainty.
- (15) The Commission's recommendations reflect the crucial importance of a wide regional consultation, and of ensuring early and inclusive consultation on the plan, including effective public participation with sufficient information and timeframe in line with the Aarhus convention<sup>17</sup>.
- (16) The Commission's recommendations on just transition reflect the assessment of whether Portugal's plan identifies in sufficient depth the relevant social, employment and skills impacts of the climate and energy transition and outlines adequate accompanying policies and measures to promote a just transition, while contributing to the promotion of both human rights and gender equality.
- (17) The Commission's recommendations to Portugal are underpinned by the assessment of Portugal's draft updated integrated national energy and climate plan<sup>18</sup>, which is published alongside this Recommendation.
- (18) Portugal should take due account of the present recommendations when developing its final updated integrated NECP to be submitted by 30 June 2024.

*Recommendations on the consistency with the Union's climate-neutrality objective and with ensuring progress on adaptation*

- (19) Pursuant to Regulation (EU) 2021/1119 (the European Climate Law), the Commission is required to assess the consistency of national measures with the climate-neutrality

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<sup>16</sup> Commission Recommendation (EU) 2023/2407 of 20 October 2023 on energy poverty, C:2023/4080, OJL 2023/2407, 23.10.2023

<sup>17</sup> Convention on access to information, Public Participation in Decision-making and Access to Justice in Environmental Matters of 25 June 1998 (the 'Aarhus convention')

<sup>18</sup> SWD(2023) 922

objective and with ensuring progress on adaptation. The Commission assessed the consistency of Portugal's measures with these objectives<sup>19</sup>. The below recommendations are based on that assessment. Portugal should take due account of the present recommendations and follow up on them in accordance with the European Climate Law.

- (20) The most vulnerable communities are those with elevated likelihood of being impacted by climate change. Unequal exposure and vulnerability to climate impacts of different regions and socio-economic groups worsens pre-existing inequalities and vulnerabilities. Just resilience should reduce the unequal burden of climate risk and ensure equity in the distribution of the benefits of adaptation. The local level has competences that can impact climate resilience more broadly. The preparation and implementation of sub-national adaptation policies is of significant importance.

HEREBY RECOMMENDS THAT PORTUGAL TAKES ACTION TO:

**CONCERNING THE DRAFT UPDATED NATIONAL ENERGY AND CLIMATE PLAN UNDER REGULATION (EU) 2018/1999**

1. Provide projections to show how the existing and planned policies and measures will deliver on the national greenhouse gas target of -42% in 2030 compared to 2005 levels under the ESR. If necessary, specify additional policies and measures, including for methane, N<sub>2</sub>O and F-gases from industrial processes and product use, agriculture and waste management, or how flexibilities available under the ESR will be used to ensure compliance. Complement the information on the policies and measures, clearly spelling out their scope, timeline and, where possible, expected greenhouse gas reduction impact, including for measures in Union funding programmes, such as the common agricultural policy.
2. Identify the amount of CO<sub>2</sub> emissions that could be captured annually by 2030, including the source. Provide details on how the captured CO<sub>2</sub> will be transported. Identify the overall CO<sub>2</sub> storage capacity and injection volumes available by 2030.
3. Update the LULUCF projections to reflect the methodological review carried out in the national inventories and quantify the expected impacts of stated policies and measures to ensure that greenhouse gas removals in this sector are effectively aligned with the 2025 'no-debit' rule, with the 2030 EU net removal target of -310 MtCO<sub>2</sub>eq and with the country-specific removal target of - 968 ktCO<sub>2</sub>eq defined in Regulation (EU) 2018/841. Provide clear information on how public funds (both Union funds, including the common agricultural policy, and State aid) and private financing through carbon farming schemes are consistently and effectively used to achieve the net removal national target. Provide information on the status and progress to be made in ensuring the enhancements to higher tier levels/geographically explicit datasets for monitoring, reporting and verification, in line with Part 3 of Annex V to Regulation (EU) 2018/1999.
4. Provide additional analysis on the relevant climate vulnerabilities and risks regarding the achievement of national objectives, targets, and contributions and the policies and measures in the different dimensions of the Energy Union. Better outline and

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<sup>19</sup> EU Climate Action Progress Report 2023, COM(2023) 653 final, and Commission Staff Working Document Assessment of progress on climate adaptation in the individual Member States according to the European Climate Law, SWD(2023) 932.

quantify the link to the specific Energy Union objectives and policies, that adaptation policies and measures should support. Pay particular attention to water management in changing climatic conditions due to risks of electricity disruption as floods, heat and drought impact the energy production.

5. Raise the ambition to achieve a share of renewable energy sources of at least 51% as a contribution to the EU's binding renewable energy target for 2030 laid down in Article 3(1) of Directive (EU) 2018/2001, as amended by Directive (EU) 2023/2413, in line with the formula in Annex II to Regulation (EU) 2018/1999. Include an indicative trajectory that reaches the reference points for 2025 and 2027 pursuant to Article 4 (a)(2) of Regulation (EU) 2018/1999.
6. Provide estimated trajectories and a long-term plan for the deployment of renewable energy technologies over the next 10 years, with an outlook to 2040. Include an indicative target for innovative renewable energy technologies in line with Directive (EU) 2018/2001 as amended. Include specific targets to contribute to the indicative sub-target in buildings and industry for 2030, and the binding sub-target for renewable fuels of non-biological origin (RFNBOs) in industry for 2030, in line with Directive (EU) 2018/2001 as amended. Include the binding targets in heating and cooling for both 2021-2025 and 2026-2030, and include an indicative target to achieve the top-ups of Annex IA to Directive (EU) 2018/2001. Include an indicative target in district heating and cooling for 2021-2030. Specify which target Portugal intends to achieve in the transport sector through the obligation on fuel suppliers, including by means of a sub-target for advanced biofuels and renewable fuels of non-biological origin (RFNBOs), making sure the minimum level of RFNBO in 2030 is observed.
7. Include detailed and quantified policies and measures in a way that enables a timely and cost-effective achievement of its national contribution to the EU's binding renewable energy target of at least 42.5% in 2030, with the collective endeavour to increase it to 45%. Describe in particular how it aims to accelerate the deployment of renewables via the uptake of renewable power purchase agreements and include the publication of a long-term schedule anticipating the expected allocation of support, covering at least the next 5 years.
8. Include projections on biomass supply by feedstock and on the origin of the feedstock, differentiating between domestic production and import. Include an assessment of the domestic supply of forest biomass for energy purposes in 2021-2030, in accordance with the strengthened sustainability criteria of Article 29 of the Directive (EU) 2018/2001, as amended. Include an assessment of the compatibility of the projected use of forest biomass for energy production with Portugal's obligations under the revised LULUCF Regulation, particularly for 2026-2030, alongside the necessary national measures and policies to ensure such compatibility. Encompass further measures to promote the sustainable production of biomethane, given Portugal's sustainable biogas/biomethane potential and its profile of natural gas consumption and existing infrastructure, digestate use and biogenic CO<sub>2</sub> applications.
9. Provide to the extent possible an expected timeline of the steps leading to the adoption of legislative and non-legislative policies and measures aimed at transposing and implementing the provisions of the Directive (EU) 2018/2001 as amended, in particular for the above-mentioned measures mentioned in the previous points.

10. Include a national energy efficiency contribution on final energy consumption to the EU's binding final energy consumption target for 2030 in line with Article 4 and Annex I of Directive (EU) 2023/1791, or equal to the corrected indicative national contribution that the Commission will submit to each Member State by 1 March 2024 pursuant to Article 4(5) of that Directive. Include a national energy efficiency contribution in primary energy consumption to the EU's indicative primary energy consumption target in line with Article 4 and Annex I of Directive (EU) 2023/1791. Specify the amount of energy consumption reduction to be achieved by all public bodies disaggregated by sector and the total floor area of heated and/or cooled buildings owned by public bodies to be renovated yearly or corresponding yearly energy savings to be achieved.
11. Set out complete policies and measures to achieve the national contributions on energy efficiency, in particular how the Energy Efficiency First principle will be implemented. Specify robust energy efficiency financing programmes and support schemes, able to mobilise private investments and additional co-financing. Provide information on the energy saving measures to ensure the achievement of the required amount of cumulative end-use energy savings by 2030, as well as on the measures to promote energy audits and energy management systems.
12. Include updated ambition levels for ensuring a highly energy efficient and decarbonised national building stock and transforming existing buildings into zero-emission buildings by 2050. Include intermediate milestones for 2030 and 2040, and a comparison of these milestones with the most recent long-term renovation strategy. Include more information on the related measures for buildings and provide their expected impact in energy savings' terms.
13. Strengthen the resilience of the energy system by setting clear objectives and measures to address constrained or interrupted supply and putting forward policies and measures to integrate the imperative of climate adaptation in the energy system. Assess the adequacy of the oil infrastructure (including refinery, oil stocks) with the expected decline in oil demand and the move toward lower-carbon alternatives.
14. Put forward clear objectives and targets for demand response to improve the flexibility of the energy system in light of an assessment of the flexibility needs and how to facilitate energy system integration in connection with Article 20a of Directive (EU) 2018/2001 as amended. Outline the measures to promote more competitive retail markets and improve the level of consumer empowerment in the retail market.
15. Further develop the approach to addressing energy poverty by including an assessment of the situation of currently affected households and indicating a specific measurable reduction target as required by Regulation (EU) 2018/1999, taking account of Commission's Recommendation (EU) 2023/2407. Provide additional detail on existing and potential measures to address energy poverty, and on the dedicated financial resources from the perspective of both social policy (affordability) and structural energy measures, particularly as regards access to energy efficiency, building renovation and renewable energy. Explain how the use of energy efficiency measures under the Energy Efficiency Obligations Scheme to alleviate energy poverty is foreseen to be deployed as required by Regulation (EU) 2018/1999.
16. Further clarify national objectives in research, innovation and competitiveness to deploy clean technologies, establishing a pathway for 2030 and 2050 with a view to



support the decarbonisation of industry and promote the transition of businesses towards a net zero and circular economy. Put forward policies and measures to promote the development of net-zero projects including those relevant for the energy intensive industries. Describe a predictable and simplified regulatory framework for permitting procedures and how access to national funding will be simplified where needed. Provide detailed policies and measures for the digitalisation of the energy system, the development of clean energy-related skills, and to facilitate open trade for resilient and sustainable supply chains of key net-zero components and equipment.

17. Specify the reforms and measures to mobilise the private investments needed to achieve the energy and climate targets. Improve and expand the analysis of investment needs to include a comprehensive and consistent overview of the public and private investment needs in aggregate and by sector. Complement a top-down economy-wide approach with a bottom-up project-specific assessment. Include a breakdown of total investment needs with additional information on the national, regional and Union funding sources, as well as private financial sources to be mobilised. Add a short description of the type of financial support scheme chosen to implement the policies and measures, which are financed through the public budget, Union funding, and the use of blended financial instruments making use of grants, loans, technical assistance and public guarantees, including the role of national promotional banks in the respective schemes and/or how private financing is mobilised. Consider the cost-effective generation of transfers to other Member States under the ESR as a funding source. Provide a robust assessment of the macroeconomic impact of the planned policies and measures.
18. Outline how the policies and measures included in the updated plan are consistent with the Portuguese recovery and resilience plan and its REPowerEU chapter.
19. Explain in more detail how and by when Portugal intends to phase out fossil fuel subsidies.
20. Provide more detailed information on the social, employment and skills consequences, or any other distributional impacts, of the climate and energy transition and on the planned objectives, policies and measures to support a just transition. Specify the form of support, the impact of the initiatives, the targeted groups and the resources dedicated, taking into account the Council Recommendation on ensuring a fair transition towards climate neutrality<sup>20</sup>. Include, to the extent possible, more elements to provide an adequate analytical basis for the preparation of a future Social Climate Plan, in accordance with Regulation (EU) 2023/955<sup>21</sup>, including indications on how to assess the challenges and social impacts on the most vulnerable of the emissions trading system for fuel combustion in buildings, road transport and additional sectors, and to identify potential beneficiaries and a relevant policy framework. Explain how the policy framework identified in the NECP will contribute to the preparation of Portugal's Social Climate Plan and how the consistency between the two plans will be ensured.

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<sup>20</sup> Council Recommendation of 16 June 2022 on ensuring a fair transition towards climate neutrality, OJ C243, 27.6.2022 p.35-51

<sup>21</sup> Regulation (EU) 2023/955 of the European Parliament and of the Council of 10 May 2023 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060 (OJ L 130, 16.5.2023, p. 1)

21. Provide a clear and detailed overview on how the consultation process enabled public participation from all relevant authorities, citizens and stakeholders, including social partners, in the preparation of both the draft and the final updated plan. Provide a summary of the views expressed by different actors, and a summary of how the plan integrates the views expressed during the consultations.
22. Expand the already good regional cooperation with neighbouring countries, in particular by describing how Portugal plans to establish a framework for cooperation with other Member States by 2025 in line with Article 9 of Directive (EU) 2018/2001 as amended. Facilitate the adoption of joint solidarity agreement for the security of gas supply with its neighbours (Spain).

**CONCERNING THE CONSISTENCY OF NATIONAL MEASURES WITH THE CLIMATE-NEUTRALITY OBJECTIVE AND WITH ENSURING PROGRESS ON ADAPTATION UNDER REGULATION (EU) 2021/1119**

1. Engage stakeholders that are particularly vulnerable to the impacts of climate change in Portugal's adaptation policy design and implementation. Document the processes and outcomes of such consultations. Establish or improve mechanisms to ensure that sub-national policies are regularly reviewed and updated.

Done at Brussels, 18.12.2023

*For the Commission*  
*Kadri Simson*  
*Member of the Commission*