SDG7 Energy Compact of Portugal

A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change

SECTION 1: AMBITION

1.1. Ambitions to achieve SDG7 by 2030. [Please select all that apply, and make sure to state the baseline of each target]

(Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporate strategy)

7.1. By 2030, ensure universal access to affordable, reliable and modern energy services.

Target(s): Ensure universal access to affordable, reliable and modern energy services. Electric energy services currently cover 99.9% of the country.

Time frame: 2030

Context for the ambition(s):

Portugal is already guaranteeing the universal access to reliable and modern energy services, according to the most recent energy Strategies, such as the National Energy and Climate Plan, published by Cabinet Resolution No. 53/2020, 10th July. Additional information can also be consulted in the recent assessment to the national energy policies conducted by IEA. See In-Depth Review Report (IDR) 2020/2021 for Portugal at https://www.iea.org/reports/Portugal-2021).

Regarding affordability, a Social Tariff for Energy Services (gas and electricity) is in place, regulated by Decree Law 138-A/2010 (electricity) and Decree Law 101/2011 (natural gas), both in its current wording.

A National Strategy on Energy Poverty, that will strongly contribute to improve affordability of energy services is currently in the final stage of preparation, af $/P \ 4(/P \$

| | The 2030 RES targets are defined in the Portuguese National Energy and Climate Plan 2021-2030 (NECP 2030), submitted to the European Commission by the end of 2019, in accordance with the Regulation on the governance of the Energy Union and Climate Action (Regulation EU 2018/1999, agreed as part of the Clean Energy for All Citizens Package, adopted in 2019). The NECP was approved and published by Cabinet Resolution 53/2020, 10 th July (see at: https://dre.pt/application/file/a/137619487) |
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| | The Green Hydrogen targets are defined in the National Hydrogen Strategy (EN-H2) that was approved by the Council of Ministers on May 2020, and published in Cabinet Resolution 63/2020, of 14 August 2020 and which can be consulted here: https://www.portugal.gov.pt/download_ficheiros/ficheiro.aspx?v=%3d%3dBQAAAB%2bLCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA |
| 7.3. By 2030, double the global rate of improvement in energy efficiency. | Target(s): 35% reduction on primary energy consumption (baseline 2020: In 2020, the target was a 25% reduction on primary energy consumption, but a final statistic is not yet available. In 2019, 24.5% of reduction on primary energy consumption was achieved.) Time frame: 2030 |
| | Context for the ambition(s): Energy Efficiency target is defined in the Portuguese National Energy and Climate Plan 2021-2030 (NECP 2030), submitted to the European Commission by the end of 2019, in accordance with the Regulation on the governance of the Energy Union and Climate Action (Regulation EU 2018/1999, agreed as part of the Clean Energy for All Citizens Package, adopted in 2019). The NECP was approved and published by Cabinet Resolution 53/2020, 10 th July (see at: https://dre.pt/application/file/a/137619487) |

7.a. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy u5.5 4

Target(s): Achieving net zero

Time frame: by 2050

Context for the ambition(s): Portugal was a pioneering country in committing to carbon neutrality by 2050. The commitment was taken in 2016, at the Marrakech UNFCCC COP, outlining a clear vision for an intense decarbonization of the national economy, as a contribution to the Paris Agreement and in line with the most ambitious efforts under way at an international level. This commitment is aligned with the vision of our Long-Term Strategy for Carbon Neutrality that sets the path to carbon neutrality in a sustained manner, establishes the main guidelines and identifies

cost-effective options to achieve this end in different socio-economic development scenarios. Accomplishing carbon neutrality in Portugal implies reducing greenhouse gas emissions by more than 85%, compared to 2005. Portugal's Carbon Neutrality Roadmap was published and approved by Cabinet Resolution No 107/2019, 1^{st} July and submitted to the UN (see at https://dre.pt/aplication/file/a/122760092) as National Long-Term Strategy for Carbon Neutrality, according with the already referred Regulation EU 2018/1999 (consult it here: -651801201020120102014(apef-4(tib26et<13(c)3d>2gla01C0>6-699()4(.)-69)9(/r-4(i)(2)-3(RN)n)5(.)-4(1)7(95%27)9%4(1002E(N)n)1_2

SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. [Please add rows as needed].

| On 7.1 - The following key actions are being developed: | Start and end date |
|--|--|
| - A Social Tariff for electricity is in place since 2010 and a Social Tariff for Natural Gas since 2011. Portugal will continue update these mechanisms as support schemes for low incomes families;. - Development of the National Strategy on Energy Poverty; | - Start (2010) till 2030 - Start (2021) till 2050 |
| | |

On 7.2 The following key actions are being developed:

Start and end date

- Promotion of onshore RES capacity (higher increase in solar PV) and guarantees of origin (including RECs and auto-consumption);
- Promotion of electric mobility;
- Promotion of offshore Wind and Floating solar PV:
 - a) Offshore wind and grid infrastructure developments
 - b) Offshore Hydrogen-Wind farms, together with offshore energy and grid infrastructure
 - c) Floating Solar PV in water bodies;
- Promotion of Hydrogen Economy
 - a) Development of new Technology's (eg.: Modular photo-electrolysis for hydrogen production Fusion Fuel)
 - b) Promotion of green Hydrogen production (via centralized and distributed models);
 - c) Design support calls with a focus on new technology development
 - d) Promote innovative power-to-H2 value chains to demonstrate the 'energy-island' concept in RECs
- Production capacity for green Hydrogen and other renewable gases
 - a) EU Important Projects of Common European Interest IPCEI National Call for Expression of Interest (37 proposals selected; Estimate of 9 billion Euros of investment)
- b) Calls PRR C14 (2021-2025): 185 million euros of public investment (88 MW in 2023; 176 MW in 2024; 264 MW in 2025) c) Call POSEUR 2021 (projects under evaluation): 195 557 MWh H2+CH4 annual production; ca 90 million euros of total investment Promoting decarbonization in the National Gas Grid: Blending with renewable gases, incl green hydrogen,
- Promoting decarbonization in Industry and transport

Vide outcomes section

| Outcome | Date |
|--|------|
| Outcomes for Actions on 7.1: a) Social Tariff: b) National Strategy for Energy Poverty: | |
| Outcomes for Actions on 7.2: | |
| Promotion of RES capacity - In 2019 and 2020, 2 Solar PV auctions launched; Offshore RES: At sea - at least 25 MW, 2021; On Water bodies: an auction on floating Solar PV in water bodies is being designed during 2021 for 100 MW; Auctions for guarantees of origin (GOs): Auctions on GOs will be launched addressing RES-based electricity when supported by public investments (DL 141/2010, 31 December; DL 60/2020, 17 August; DGEG Dispatch 6560-B/2021, 5 July) Promoting the Hydrogen Economy: scaling up of hydrogen production capacity (Recovery and Resilience Program C14): 88 MW in 2023; 176 MW in 2024; 264 MW in 2025; Auction to be launched on green hydrogen consumption for 2 End-use sectors: Industry, and Transportation; 4. Design of an auction model to support hydrogen consumers. | |
| Outcomes for Actions on 7.3: | |
| Decree-law No. 71/2008 set targets for energy-intensive installations: a. >500 tep annual consumption: 4% reduction of primary energy b. >1000 tep annual consumption: 6% reduction of primary energy Primary energy savings through building renovation of 11% in 2030, 27% in 2040 and 34% in 2050 and reduction of the number of hours of thermal discomfort in residential buildings of 26% in 2030, 34% in 2040 and 56% in 2050 30 million euros to the improvement of buildings efficiency in 2021 Launch of the initiative "Efficiency Voucher" that will support efficiency measures in buildings for low-income families. The goal for 2025 is to attribute 100.000 vouchers. In 2021, 20.000 vouchers will be attributed. | |
| Outcomes for Actions on 7.a 1. Portugal will provide an additional 20 million euros for climate finance between 2021 and 2030 | |
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| Outcomes for Actions on 7.b 1. Portugal will provide an additional 20 million euros for climate finance between 2021 and 2030 | |

SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for <u>each</u> of the actions in section 2.

| | are duly aligned with the National Energ elements to achieve our 2030 and 2050 to | | Portuguese Long-Term Strategy on C | arbon Neutrality by 2050 and with the go | oals of the |
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