



PROJECTS AND ENERGY

Portuguese targets for renewable energy in energy consumption

Decree-Law 84/2022 of 9 December updates the Portuguese targets for renewable energy in energy consumption and it came into force on 10 December 2022¹. This new decree-law completes the incorporation into Portuguese law of Directive (EU) 2018/2001 of 11 December on the promotion of the use of energy from renewable sources, which had been partially incorporated into Portuguese law by Decree-Law 15/2022 of 14 January. In doing so, the decree-law extends the system for issuing guarantees of origin to energy production through high-efficiency cogeneration. It also extends the mechanisms for meeting the sustainability criteria set out in Decree-Law 117/2010 of 25 October to electricity production plants using biomass fuels.

Decree-Law 117/2010 of 25 October and Decree-Law 141/2010 of 31 December are repealed.

1. Targets for the gross final consumption of energy² and in the transport sector:

2022	<ul style="list-style-type: none"> o Incorporation of 11%³ low carbon transport fuels to be provided by fuel suppliers o Fuel suppliers are also subject to a minimum annual contribution of advanced biofuels and biogas⁴, except for liquefied petroleum gas, of 0.2%
2023	<ul style="list-style-type: none"> o Incorporation of 11.5% of low carbon transport fuels, to be provided by fuel suppliers o Fuel suppliers are further subject to a minimum annual contribution of advanced biofuels and biogas of 0.7%

¹ Established by Decree-Law 141/2010 of 31 December.

² The gross final consumption of energy from renewable sources results from the sum of (i) the gross final consumption of electricity produced from renewable energy sources, including the production of renewable electricity for self-consumption, (ii) the gross final consumption of energy from renewable sources in the heating and cooling sector, and (iii) the final consumption of energy from renewable sources by the transport sector. Only biofuels, bioliquids and biomass fuels that comply with the sustainability criteria set out in Decree-Law 84/2022 are considered in the calculation of the share of energy from renewable sources.

³ The percentages of the targets for the incorporation of low-carbon transport fuels are calculated on the amount of road fuels introduced by fuel suppliers for consumption.

⁴ The minimum annual contributions provided for in Decree-Law 84/2022, relate to advanced biofuels and biogas produced from raw materials listed in part A of Annex I to Decree-Law 84/2022.

2024	<ul style="list-style-type: none"> o Target of 34% or more renewable energy use in gross final energy consumption
2025	<ul style="list-style-type: none"> o Incorporation of 13% low carbon transport fuels, to be ensured by fuel suppliers o Fuel suppliers are further subject to a minimum annual contribution⁵ of advanced biofuels and biogas of 2.0% o The minimum share of energy from renewable sources for sea and air transport is 2.5% and 75% for railways
2026	<ul style="list-style-type: none"> o Target of 40% or more renewable energy use in gross final energy consumption
2027	<ul style="list-style-type: none"> o Incorporation of 14% low carbon transport fuels, to be ensured by fuel suppliers o Fuel suppliers are further subject to a minimum annual contribution⁶ of advanced biofuels and biogas of 4.0% o The minimum share of energy from renewable sources for sea and air transport is 6%
2028	<ul style="list-style-type: none"> o Target of 44% or more renewable energy use in gross final energy consumption
2029	<ul style="list-style-type: none"> o Incorporation of 16% of low carbon transport fuels, to be provided by fuel suppliers o Fuel suppliers are further subject to a minimum annual contribution of advanced biofuels and biogas of 7% o The minimum share of energy from renewable sources for sea and air transport is 9%
2030	<ul style="list-style-type: none"> o The share of energy from renewable sources in gross final consumption of energy should be 49% or more o The minimum share of energy from renewable sources in final energy consumption in the transport sector is 29% o The minimum share of energy from renewable sources for rail transport is 100% o Fuel suppliers are further subject to a minimum annual contribution of advanced biofuels and biogas of 10.0%

2. Sustainability criteria and reduction of greenhouse gas (GHG) emissions

Decree-Law 84/2022 extends the mechanisms for checking compliance with the sustainability criteria set out in Decree-Law 117/2010 of 25 October to plants producing electricity, heating or cooling energy from biomass fuels. In parallel, it provides for the creation of a system for checking compliance with sustainability criteria and the reduction of greenhouse gas emissions, to be notified to the Commission. Thus, the new targets are accompanied by sustainability and GHG emission reduction criteria.

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⁵ The percentage of minimum contribution provided for here will be applicable in 2025 and 2026.

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Only biofuels, bioliquids and biomass fuels consumed in Portugal that meet the criteria of sustainability and reduction of GHG emissions provided for in the legislation are considered.

Regarding the sustainability criteria for biofuels, bioliquids, biomass fuels and forest biomass, it should be noted that:

- Only biofuels, bioliquids and biomass fuels consumed in Portugal that meet the criteria of sustainability and reduction of GHG emissions provided for in the legislation are considered, regardless of their geographical origin or the geographical origin of their raw materials.
- Only biofuels, bioliquids and biomass fuels made from wastes and residues from agricultural land use where monitoring or management plans to manage impacts on soil quality and soil carbon are implemented by operators or national competent authorities are considered.
- Biofuels, bioliquids and biomass fuels produced from agricultural biomass from land with high biodiversity value are not considered.
- Biofuels, bioliquids and biomass fuels made from agricultural biomass from land with high carbon stock are not considered.
- Only biofuels, bioliquids and biomass fuels produced from forest biomass that meet the criteria set out below to minimise the risk of using forest biomass from unsustainable production are considered. It is assumed that biomass extracted in Portugal in a manner compliant with national legislation in force meets these criteria:
 - a) The country where the forest biomass was extracted has national or regional legislation applicable in the area of harvesting, as well as control and enforcement systems that ensure (i) the legality of harvesting operations, (ii) forest regeneration in harvesting areas, (iii) protection of designated areas, by national or international legislation or by the competent authority for nature protection purposes, including wetlands and peatlands, (iv) that harvesting is carried out taking into account the preservation of soil quality and biodiversity in order to minimise negative impacts, and (v) that the long-term productive capacity of the forest is maintained or improved through harvesting. Alternatively,
 - b) In the absence of proof, there are management systems at the level of the forest provisioning area, to comply with the provisions of sub-paragraphs i) to v) of the previous sub-paragraph.

As for the **reduction of GHG emissions**⁷, the law determines that the reduction of GHG emissions resulting from the use of renewable liquid and gaseous fuels of non-biological origin for transport must, in comparison with the fuel they are intended to replace, correspond to at least **70%**. Furthermore, the reduction of GHG emissions:

- Resulting from the use of biofuels and biogas consumed in the transport sector and bioliquids must, in comparison that they aim to replace, correspond to:
 - a) At least 50%, if their production comes from plants that were commissioned by 5 October 2015.
 - b) At least 60%, if their production comes from plants that started operation from 6 October 2015 until 31 December 2020.
 - c) At least 65%, if their production comes from plants that are put into operation from 1 January 2021.
- For the production of electricity, heating and cooling from biomass fuels, it must, compared to the fuel they aim to replace, correspond to:
 - a) At least 70%, for plants starting operation from 1 January 2021 until 31 December 2015.
 - b) At least 80% for plants put into operation on or after 1 January 2026.

To meet sustainability and GHG reduction criteria, producers and importers of low-carbon transport fuels and bioliquids must provide evidence of compliance using a mass balance method.

To meet sustainability and GHG reduction criteria, producers and importers of low-carbon transport fuels and bioliquids must provide evidence of compliance using a mass balance method. This information must be supported by an independent audit, certifying that the systems used are accurate, reliable and secure, and ensuring that materials have not been intentionally modified or discarded.

Confirmation of compliance with the sustainability and GHG emission reduction criteria set out here is the responsibility of the body that coordinates compliance with the sustainability criteria, to be done in Portugal by Laboratório Nacional de Energia e Geologia, I.P. (LNEG, I.P.) - the national energy and geology laboratory.

3. Encourage the use of energy from renewable sources in urban development and construction

To encourage the use of energy from renewable sources, it is expected that passive energy system solutions will be favoured in urban development and construction. If necessary, so will the installation of equipment and systems for electricity use, heating and cooling, using renewable energy sources.

⁷ For the purposes of the targets set out in Decree-Law 84/2022, only the following are subject to the GHG emission reduction criteria set out in article 15 of this law: (i) Biofuels, bioliquids and biomass fuels produced from waste and debris not from agriculture, aquaculture, fisheries or forestry, or from a product resulting from an initial processing of waste or debris; (ii) Recycled carbon fuels and renewable liquid and gaseous fuels of non-biological origin for transport.

4. Guarantees of Origin (GO)

Decree-Law 84/2022 condenses into a single piece of legislation all technologies eligible for the issue of guarantees of origin. This also includes guarantees of origin for energy production in high-efficiency cogeneration plants, which were only regulated in Decree-Law 23/2010 of 25 March, which has been amended several times. In addition, the new decree-law regulates the guarantees of origin for renewable electricity and renewable and low-carbon gases.

The Decree-Law also includes guarantees of origin for energy production in high-efficiency cogeneration plants.

5. Low-carbon fuels for transport

The law also proposes an incentive for the use of fuels for road transport with a higher percentage of biofuels incorporated, provided the safety of its use is safeguarded.

Thus, for instance, it is determined that biofuels may be sold in their pure state or incorporated into fossil fuels. The sale of biofuels in their pure state to captive fleets by biofuel producers and fuel suppliers will be allowed.

The introduction of new products, not yet known in the Portuguese market, in road fuel and their eligibility for the issuance of a Biofuel Permit (BP) or Low Carbon Permit (LCP) is subject to the existence of and compliance with: (i) national technical specifications or European technical standards, which make it possible to safeguard the specifications and performance of the final fuel into which they are incorporated, and (ii) ensuring that the emissions produced by these emerging products, when incorporated into road fuels, do not have negative effects on the environment and human health.

Incidentally, biofuels or biogas with a low risk of indirect land-use change become eligible to for the issuance of a BP, but must be accompanied by certification as biofuels or biogas with a low risk of indirect land-use change under Commission Delegated Regulation (EU) 2019/807 of 13 March 2019.

Additionally, it is determined that each type of biofuel or biogas produced from raw materials listed in part A of Annex I of the decree and intended for the domestic market for consumption in all modes of transport benefits from the emission of 1 subsidised BP. ■