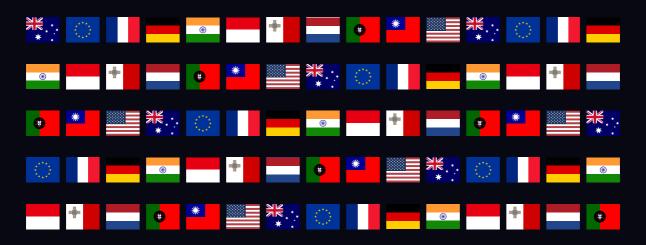
CLIMATE REGULATION

Portugal





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Climate Regulation

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Quick reference guide enabling side-by-side comparison of local insights, including the main climate regulations, policies and authorities; national emission levels, limits and emission reduction projects; emission allowances and trading; energy and non-energy sector regulation; renewable energy consumption, policy and general regulation, including carbon capture and storage; climate matters in M&A transactions; and recent trends.

Generated 22 February 2023

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Portugal



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MAIN CLIMATE REGULATIONS, POLICIES AND AUTHORITIES

International agreements

Do any international agreements or regulations on climate matters apply in your country?

Portugal is a party to the United Nations (UN) Framework Convention on Climate Change. The country ratified the Kyoto Protocol on 25 March 2002 and the Paris Agreement on 30 September 2016, having assumed obligations in accordance with them.

As an EU member state, EU climate change regulations apply in Portugal. For instance, Directive 2003/87/EC (as amended, among others, by Directive 2004/101/EC of 27 October 2004, Directive 2009/29/EC of 23 April 2009 and Directive 2018/410/EC of 14 March 2018) was implemented through Decree-Law No. 233/2004 of 14 December 2004 on the establishment of a scheme for the trading of greenhouse gas (GHG) allowances and complementing regulations. Decree-Law No. 233/2004, which was initially the cornerstone of GHG allowances in Portugal, was subsequently revoked by Decree-Law No. 38/2013 of 15 March 2013, which transposed Directive 2009/29/EC of 23 April 2009. In turn, Decree-Law No. 38/2013 was revoked by Decree-Law No. 12/2020 of 6 April 2020, which enacts Directive 2018/410/EC of 14 March 2018 and sets out the legal regime for GHG emissions and allowances trading for the 2021–2030 period.

Portugal is also a party to the UN Convention on Long-range Transboundary Air Pollution.

Law stated - 25 January 2023

International regulations and national regulatory policies

How are the regulatory policies of your country affected by international regulations on climate matters?

Article 8 of the Portuguese Constitution establishes the principle of direct applicability of EU law in national territory, meaning that EU directives and regulations may apply directly in Portugal and, in fact, will prevail in the case of a positive conflict with national law. In light of this, Portuguese regulatory policies on climate change matters shall always be subject to, and compliant with, EU regulations.

Other international regulations outside of EU law, such as the UN Framework Convention on Climate Change, are legally binding on the Portuguese state insofar as they are ratified by the Portuguese parliament. The ratification process crystallises international regulations into national law.

Although one cannot be certain that ratifying international treaties or regulations ensures compliance by the Portuguese state, the influence that such instruments have on the lawmaking process is tangible.

Law stated - 25 January 2023

Main national regulatory policies

Outline recent government policy on climate matters.

To achieve the goals undertaken through international treaties (such as the Kyoto Protocol and the Paris Agreement), Portugal has implemented several multi-annual programmes and plans.

The current key instruments for climate policy implemented at a national level are the following:

· The Strategic Framework for Climate Policy (QEPiC), which establishes the vision and objectives of national



climate policy within the 2020–2030 period. On the mitigation side, the QEPiC included the National Climate Change Programme 2020/2030, which was revoked by the Resolution of the Council of Ministers No. 53/2020 of 10 July 2020. On the adaptation side, the QEPiC establishes the National Climate Change Adaptation Strategy 2020, the validity of which was extended until 31 December 2025 by the Resolution of the Council of Ministers No. 53/2020 of 10 July 2020.

- The Carbon Neutrality Roadmap 2050, which came into force through the Resolution of the Council of Ministers
 No. 107/2019 of 1 July 2019 with the aim of technically supporting the long-term commitment to GHG emissions
 neutrality in Portugal by 2050.
- The National Plan for Energy and Climate 2020–2030 (PNEC 2030), which was approved by the Resolution of the Council of Ministers No. 53/2020 of 10 July 2020. The PNEC 2030 is the Portuguese government's current macro policy for the energy transition and climate, and sets forth the national targets to be achieved by 2030. It is designed to be aligned with the goal of achieving carbon neutrality by 2050.
- The National Air Strategy, approved by the Resolution of the Council of Ministers No. 46/2016 of 26 August 2016, aims to improve air quality for the protection of human health, quality of life and preservation of ecosystems.
- The Green Growth Commitment, approved by the Resolution of the Council of Ministers No. 28/2015 of 20 April 2015, sets out several initiatives and targets for the 2020–2030 period related to GHG emissions as well as the increase of energy efficiency and share of renewable energy in final consumption.

Portugal has implemented a set of green fiscal rules in sectors such as energy and emissions, transport, water, waste, planning, and forests and biodiversity. It has also introduced taxes on plastic bags and incentives for car scrapping.

Additionally, the Portuguese Environmental Fund (established by Decree-Law No. 42-A/2016 of 12 August 2016, as amended), supports environmental policies aimed at the pursuit of sustainable development objectives. It also contributes to the achievement of national and international objectives and commitments on the environment, including issues related to climate change, protection of water resources, nature conservation and biodiversity.

Finally, and most recently, Law No. 98/2021 of 31 December 2021 (in force since 1 February 2022) approved the Climate Framework Law, which consolidates the objectives, principles and obligations applicable to the different levels of governance for climate action through public policies. This law established new provisions in terms of climate policy by:

- stipulating climate rights and duties, reinforcing the right to citizen participation in the drafting and reviewing of climate policy instruments;
- defining the climate policy governance framework, creating new structures and requirements, including the Climate Action Council:
- establishing several planning instruments, including national, regional and municipal climate action plans, and carbon budgets with different time frames (five years, 10 years and 30 years);
- establishing several evaluation instruments, including annual reports and the creation of a national GHG emissions inventory;
- establishing economic and financial instruments including the implementation of sustainable financing instruments and measures applicable to public investment, promoting a just transition to a carbon-neutral economy;
- defining principles and rules for sectoral climate policy instruments, namely in the areas of energy, transport, materials, consumption and carbon sequestration as well as the agri-food chain;
- establishing budgetary and tax instruments including:
 - the provision of a budgetary allocation for climate policy in the state budget;
 - · making oil and energy products subject to a carbon price; and
 - · creating the Green IRS, a category of tax deductions benefiting taxpayers who purchase, consume or use



goods and services that are environmentally sustainable; and

· setting out that a specific administrative offence regime concerning climate offences is to be enacted.

This law thus established a set of obligations regarding the need to develop new climate policy instruments with a view of guaranteeing climate justice, promoting a circular economy, developing and reinforcing current carbon sinks, promoting renewable energies, and boosting sustainable financing.

Law stated - 25 January 2023

Main national legislation

Identify the main national laws and regulations on climate matters.

These are:

- Decree-Law No. 42-A/2016 of 12 August 2016, as amended by Decree-Law No. 114/2021 of 15 December 2021, which established the Portuguese Environmental Fund;
- Decree-Law No. 12/2020 of 6 April 2020, as amended by Decree-Law No. 114/2021 of 15 December 2021, which established a scheme for GHG emission allowance trading;
- Resolution of the Council of Ministers No. 53/2020 of 10 July, which approved the PNEC 2030;
- Resolution of the Council of Ministers No. 107/2019 of 1 July 2019, which approved the Carbon Neutrality Roadmap 2050;
- Resolution of the Council of Ministers No. 28/2015 of 30 April 2015, which approved the Green Growth Commitment:
- Law No. 82-D/2014 of 31 December 2014, as amended by Law No. 42/2016 of 28 December 2016, which established a set of green fiscal rules;
- Law No. 98/2021 of 31 December 2021, which approved the Climate Framework Law; and
- Decree-Law No. 162/2015 of 14 August 2015 on the agricultural insurance system, which supports the contracting of insurance against, among others, adverse climatic events.

Law stated - 25 January 2023

National regulatory authorities

Identify the national regulatory authorities responsible for climate regulation and its implementation and administration. Outline their areas of competence.

The main regulatory authority responsible for monitoring and developing climate policy at the national level is the Portuguese Environment Agency (APA), a public institute with administrative autonomy from the central government. In particular, the APA is responsible for the award of GHG Emissions Titles and GHG emission allowances in the context of the emissions trading system.

Other national regulatory authorities that also play a role in climate and environmental matters include, among others:

- the General Inspectorate of Agriculture, Sea, Environment and Spatial Planning;
- · the Water and Waste Regulatory Authority; and
- · the Institute for Nature Conservation and Forests.

The Portuguese Environmental Fund was established within the Ministry of Environment. Its main goal in respect of climate change is to promote and work in favour of achieving Paris Agreement targets, notably through actions contributing to the reduction of GHG emissions, adaptation to climate change and cooperation to achieve international commitments. These include sponsoring projects aimed at reducing GHG emissions as well as improving GHG emissions recording and inventory.

Law stated - 25 January 2023

GENERAL NATIONAL CLIMATE MATTERS

National emissions and limits

What are the main sources of emissions of greenhouse gases (GHG) (or other regulated emissions) in your country and the quantities of emissions from those sources? Describe any limitation or reduction obligations. Do they apply to private parties in your country?

In 2020, the main sources of greenhouse gas (GHG) emissions in Portugal were the energy, transport sector and heavy industries sectors, representing roughly 67.1 per cent of overall GHG emissions according to the Portuguese National Inventory Report on GHG, published by the Portuguese Environment Agency on 31 August 2022 under the United Nations Framework Convention on Climate Change and the Kyoto Protocol.

Pursuant to the Kyoto Protocol and various EU directives, Portugal has undertaken to reduce GHG emissions by 20 per cent by 2020, 40 per cent by 2030 and 80–90 per cent by 2050. These reductions take into account the levels of GHG in 1990.

The GHG reduction target for 2020 was achieved collectively by the European Union. In Portugal, the emissions recorded in 2020 reflect an achievement of the national and European emission reduction targets for 2020, representing a reduction of approximately 33 per cent compared to 2005 levels.

No specific limits on GHG emissions apply to private parties in Portugal. However, pursuant to Decree-Law No. 12/2020 of 6 April 2020, certain activities that generate significant GHG levels must obtain a GHG Emissions Title and GHG emission allowances, and must comply with monitoring and information obligations regarding GHG emissions.

Law stated - 25 January 2023

National GHG emission projects

Describe any major GHG emission reduction projects implemented or to be implemented in your country. Describe any similar projects in other countries involving the participation of government authorities or private parties from your country.

Currently, the major GHG emission reduction project implemented at the national level is the National Plan for Energy and Climate 2020–2030 (PNEC 2030), a governmental programme aimed at compliance with GHG emission reduction targets. The PNEC 3030 contains a long-term strategy designed to be aligned with the Carbon Neutrality Roadmap 2050 goal of achieving carbon neutrality by 2050. The main objectives of the PNEC 2030 are the promotion of the decarbonisation of the economy and the energy transition to achieve carbon neutrality, taking into account Paris Agreement goals.

The PNEC 2030 sets out guidelines for sectorial policies and measures, defines sectorial GHG emissions reduction objectives, and identifies a set of additional policies and measures to be implemented in coordination with relevant

sectors (such as the transport, energy and agriculture industries).

In terms of GHG emissions reduction, the aim of the PNEC 2030 is to:

- reduce GHG emissions by 45-55 per cent by 2030, compared to 2005 levels; and
- reduce GHG emissions for non-emissions trading system sectors by 17 per cent.

The Carbon Neutrality Roadmap 2050 also established a target for GHG emissions to be reduced by between 85 and 90 per cent (compared to 2005 levels), to be achieved by 2050.

In line with the PNEC 2030, the Climate Framework Law (approved by Law No. 98/2021 of 31 December 2021 and in force since 1 February 2022) also sets ambitious goals. Its headline target is the achievement of climate balance and GHG neutrality by 2050, taking into account the following targets for reducing GHG emissions with reference to 2005 levels:

- · reduction of, at least, 55 per cent by 2030;
- · reduction of, at least, 65 to 75 per cent by 2040; and
- reduction of, at least, 90 per cent by 2050.

Law stated - 25 January 2023

DOMESTIC CLIMATE SECTOR

Domestic climate sector

Describe the main commercial aspects of the climate sector in your country, including any related government policies.

Over the past decade, we have seen growing political awareness of climate change matters, and several energy-related decisions and investment projects with perceived underlying environmental and climate concerns. This is most evident in the field of renewable energy, which grew exponentially between 2001 and 2014, strongly supported by attractive feed-in tariffs. As new renewable energy projects do not benefit from feed-in tariffs, new contractual structures have emerged that allow for the development of these projects.

Together with the growth in renewables (mostly wind and solar), there has been a relative decrease in the use of fossil fuels in the energy generation mix and an inherent reduction of greenhouse gas emissions.

Law stated - 25 January 2023

GENERAL GHG EMISSIONS REGULATION

Regulation of emissions

Do any obligations for GHG emission limitation, reduction or removal apply to your country and private parties in your country? If so, describe the main obligations.

In 2014, the European Union defined its greenhouse gas (GHG) emission reduction targets for 2021–2030, with one of the main binding objectives for EU member states being the reduction of GHG emissions by at least 40 per cent in comparison with the levels observed in 1990. The 'Fit for 55' package, a set of proposals to revise and update EU legislation recently introduced by the European Union, sets an even more ambitious goal that aims to impose a

reduction of EU emissions by at least 55 per cent by 2030 as a legal obligation. The national policies introduced by the Portuguese government over the years have aimed at adopting and complying with these targets.

Law stated - 25 January 2023

GHG emission permits or approvals

Are there any requirements for obtaining GHG emission permits or approvals? If so, describe the main requirements.

Pursuant to Decree-Law No. 12/2020 of 6 April 2020, the operators of installations performing activities identified in its Annex II and resulting in the emission of GHG listed in Annex I must obtain a GHG Emissions Title, which allows the facility to emit GHGs, and must comply with monitoring and information obligations regarding GHG emissions. These activities include, among others:

- fuel-burning in facilities with a nominal thermal power of over 20MW;
- · facilities refining mineral oil;
- facilities producing steel that have a production capacity of over 2.5 tonnes per hour;
- · facilities producing paper pulp from timber or similar fibrous materials; and
- facilities producing cement clinker in rotary kilns that have a production capacity of over 50 tonnes per day.

The operator requesting the issuance of the GHG Emissions Title must evidence that it is able to monitor and communicate information regarding GHG emissions in accordance with Regulation (EU) No. 601/2012 of 21 June 2012.

Failure to obtain a GHG Emissions Title, when mandatory, is an administrative offence.

Law stated - 25 January 2023

Oversight of GHG emissions

How are GHG emissions monitored, reported and verified?

Pursuant to Decree-Law No. 12/2020 of 6 April 2020, operators requesting the issuance of an GHG emission title must describe the methodology of monitoring and communicating the information on emissions, as well as all elements required pursuant to Regulation (EU) No. 601/2012 of 21 June 2012. Under this regulation, it is incumbent on operators to comply with their monitoring and communication obligations pursuant to the principles of exhaustiveness, coherence, comparableness, transparency, accuracy, integrity and continuous improvement.

The monitoring plans proposed by operators are verified by certified auditors who determined if the monitoring plan is satisfactory or not. If the Portuguese Environment Agency (APA) considers it necessary, it may also analyse the monitoring plan to determine whether it is indeed satisfactory.

Operators must report to the APA all GHG emissions from a given calendar year before 31 March of the following year. This report is submitted to the National System for the Estimation of Emissions by Sources and Removals by Sinks and Air Pollutants (SNIERPA). The rules applicable to the SNIERPA were restructured by Resolution of the Council of Ministers No. 20/2015 of 14 April 2015, which granted additional powers to the APA. The APA is the coordinator of the SNIERPA and the entity in charge of preparing, drafting and submitting the national inventory of air emissions data to European and international institutions.

Law stated - 25 January 2023



GHG EMISSION ALLOWANCES (OR SIMILAR EMISSION INSTRUMENTS)

Regime

Is there a GHG emission allowance regime (or similar regime) in your country? How does it operate?

The operators of installations that perform activities encompassed in Annex II of Decree-Law No. 12/2020 of 6 April 2020 and resulting in the emission of greenhouse gasses (GHGs) listed in its Annex I must obtain a GHG Emissions Title.

Decree-Law No. 12/2020 also sets forth the Portuguese GHG emission allowances regime. Emission allowances are defined as the right to emit an equivalent to one tonne of carbon dioxide during a given period.

These allowances may be transferred and sold. Said allowances may be freely awarded by the relevant entity or obtained through an auction. Cost-free allowances to power generators, carbon dioxide capture installations, carbon dioxide transport pipelines or carbon dioxide storage sites are prohibited, with the exception of installations designed for heating or cooling.

The auctioning of allowances and its procedure foreseen in Decree-Law No. 12/2020 is in line with Regulation (EU) No. 1031/2010 of 12 November 2010, as amended by Regulation (EU) No. 1210/2011 of 23 November 2011; Regulation (EU) No. 784/2012 of 30 August 2012; Regulation (EU) No. 1042/2012 of 7 November 2012; Regulation (EU) No. 1143/2013 of 13 November 2013; Regulation (EU) No. 176/2014 of 25 February 2014; Regulation (EU) No. 2017/1902 of 18 October 2017; Regulation (EU) 2019/7 of 30 October 2018; and Regulation (EU) 2019/1868 of 28 August 2019 (the EU Emissions Trading Scheme Auctioning Regulation). Portugal was accepted to the EU common auction platform in November 2012.

Notwithstanding the new auction-based system, there will be a progressive phase-out from the cost-free system to the auction system between 2013 and 2027 based on EU benchmarking. In fact, GHG emission allowance auctions quickly became the rule for the energy sector. For the remaining industrial sectors, the cost-free system should be totally set aside by 2027.

Portuguese operators eligible to participate in GHG emission auctions are granted access to the Com Xerv EUA Primary Auction Service.

Law stated - 25 January 2023

Registration

Are there any GHG emission allowance registries in your country? How are they administered?

GHG emission allowances are registered with the Portuguese Registry of Emission Allowances, which is administered by the Portuguese Environment Agency (APA). It is integrated with the Union Registry of GHG emission allowances issued under the EU emissions trading system, managed by the European Commission.

Law stated - 25 January 2023

Obtaining, possessing and using GHG emission allowances

What are the requirements for obtaining GHG emission allowances? How are allowances held, cancelled, surrendered and transferred? Can rights in favour of third parties (eg, a pledge) be created on allowances?



The operators of installations performing activities encompassed in Annex II of Decree-Law No. 12/2020 of 6 April 2020 and resulting in the emission of GHGs listed in its Annex I must obtain a GHG Emissions Title.

Title holders are then either granted the cost-free allowances per sector of activity or are granted access to the EU auction scheme operating under the EU Emissions Trading Scheme Auctioning Regulation.

Emission allowances issued from 1 January 2013 onwards are valid for an undetermined period, whereas emission allowances issued from 1 January 2021 onwards shall make reference to a 10-year period from 1 January 2021 and are valid for emissions generated from the first year of this period.

Pursuant to Decree-Law No. 12/2020, the following rules apply to GHG emission allowances:

- the surrender of GHG emission allowances corresponding to the total emissions of the previous year of the
 relevant facility is made by the operator by 30 April of the year subsequent to the emissions and, upon receiving
 such allowances, the APA subsequently cancels them;
- non-compliance by the holder of a GHG emission allowance with certain rules of Decree-Law No. 12/2020 entails
 the surrender of the GHG emission allowance to the national deposit account;
- · the holder of a GHG emission allowance may request its cancellation at any time;
- the holder of a GHG emission allowance may be a legal or natural person;
- the transfer of GHG emission allowances is permitted between persons:
 - within the European Union; and
 - within the European Union and persons from third countries with which the European Union has entered into mutual recognition agreements concerning emission allowances; and
- the formalities pertaining to the transfer, certification, surrender and cancellation are defined by Regulation (EU) No. 389/2013.

The pledge of GHG emission allowances is not a clear matter, as it is not expressly permitted nor forbidden under the applicable legislation. There have been no relevant events in this regard in Portugal.

The issuance, ownership, transfer, surrender, delivery and cancellation of emission allowances must be registered at the Portuguese Registry of Emission Allowances.

Law stated - 25 January 2023

TRADING OF GHG EMISSION ALLOWANCES (OR SIMILAR EMISSION INSTRUMENTS)

Emission allowances trading

What GHG emission trading systems or schemes are applied in your country?

According to Decree-Law No. 12/2020, greenhouse gas (GHG) emission allowances may be transferred and sold. These allowances may be freely awarded by the relevant entity or obtained through an auction.

The auctioning of allowances and its procedure foreseen in Decree-Law No. 12/2020 is in line with Regulation (EU) No. 1031/2010 of 12 November 2010, as amended, which details the auctioning requirements for the EU emissions trading scheme.

Moreover, pursuant to Decree-Law No. 12/2020, the transfer of GHG emission allowances is permitted between persons:

- · within the European Union; and
- · within the European Union and persons from third countries with which the European Union has entered into

mutual recognition agreements concerning emission allowances.

Law stated - 25 January 2023

Trading agreements

Are any standard agreements on GHG emissions trading used in your country? If so, describe their main features and provisions.

GHG emissions trading agreements generally follow either the International Swaps and Derivatives Association or the International Emissions Trading Association models without any relevant amendments.

Law stated - 25 January 2023

SECTORAL REGULATION

Energy sector

Give details of (non-renewable) energy production and consumption in your country. Describe any regulations on GHG emissions. Describe any obligations on the state and private persons for minimising energy consumption and improving energy efficiency. Describe the main features of any scheme for registration of energy savings and for trade of related accounting units or credits.

According to 2021 data from the Portuguese energy network operator, REN - Rede Eléctrica Nacional SA, non-renewable energy accounted for 31 per cent of the energy generation mix, which comprises coal (1 per cent), natural gas (29 per cent) and other sources of energy (1 per cent).

In 2021, electricity consumption amounted to 49.5TWh. Gas consumption was 63.8TWh, which represents a decrease of 4.6 per cent compared to 2020 and was 8 per cent below the historical maximum recorded in 2017.

Portugal has several statutes in place in respect of minimising energy consumption and improving energy efficiency, namely in respect of public and private buildings.

Law stated - 25 January 2023

Other sectors

Describe, in general terms, any regulation on GHG emissions in connection with other sectors.

Decree-Law No. 84/2022 of 9 December 2022, which transposed Directive (EU) 2018/410 of 14 March 2018, sets out several measures including the criteria for the reduction of greenhouse gas (GHG) emissions resulting from the use of biofuels and biogas used in the transport sector as well as bioliquids. In particular, it foresees that GHG emissions reduction must correspond to at least:

- 50 per cent if their production derives from facilities that started operating before 5 October 2015;
- 60 per cent if their production derives from facilities that started operating as of 6 October 2015 until 31 December 2020; and
- 65 per cent if their production derives from facilities that started operating on or after 1 January 2021.



This law also sets forth that the reduction of GHG emissions for the production of electricity, heating and cooling from biomass fuels must, in comparison to the fuel they aim to replace, correspond to at least:

- 70 per cent for facilities that started or will start operating from 1 January 2021 until 31 December 2025; and
- 80 per cent for facilities that start operating from 1 January 2026 onwards.

Moreover, the reduction of GHG emissions resulting from the use of liquid fuels and renewable gaseous fuels of non-biological origin for transport must, in comparison to the fuel they aim to replace, correspond to at least 70 per cent.

For the purposes of verifying the GHG emissions reduction criteria defined in Decree-Law No. 84/2022, producers and importers of low-carbon-content fuels for transport and bioliquids must demonstrate their compliance through a mass balance mechanism.

The verification of compliance with the sustainability criteria and reduction of GHG emissions is performed by the Portuguese National Energy and Geology Laboratory.

In this context, the National Plan for Energy and Climate 2020–2030 (PNEC 2030) sets forth the following targets for GHG emissions reduction for specific sectors to be achieved by 2030, compared to 2005 levels:

- · 70 per cent in the services sector;
- 35 per cent in the residential sector;
- · 40 per cent in the transport sector;
- · 11 per cent in the agriculture sector; and
- · 30 per cent in the waste and waste water sectors.

The PNEC 2030 further details action measures to be implemented for the aforementioned sectoral targets to be achieved.

Law stated - 25 January 2023

RENEWABLE ENERGY AND CARBON CAPTURE

Renewable energy consumption, policy and general regulation

Give details of the production and consumption of renewable energy in your country. What is the policy on renewable energy? Describe any obligations on the state and private parties for renewable energy production or use. Describe the main provisions of any scheme for registration of renewable energy production and use and for trade of related accounting units or credits.

According to the 2022 data from the Portuguese energy network operator REN - Rede Eléctrica Nacional SA (REN), renewable energy accounted for approximately 57 per cent of electricity production in Portugal, distributed across the following sources:

· wind: 29.3 per cent;

· hydro: 14.4 per cent;

· biomass: 7.5 per cent; and

· solar: 5.7 per cent.

Renewable energy sources benefit from an offtake right. Hence, all energy produced by these facilities is output to the grid. This system is also behind the increasing relevance of green energy in Portugal's energy generation mix.

In addition, Portuguese law provides for the issuance of tradeable guarantees of origin certificates. These certificates are electronic documents, issued by REN as the responsible entity, that provide end consumers with proof that a given amount of power was generated from renewable energy sources. The first guarantees of origin auction took place in July 2021 and was held by REN. The scope of the auction was the sale of guarantees of origin submitted by renewable energy producers to the Directorate-General for Energy and Geology (DGEG).

Law stated - 25 January 2023

Wind energy

Describe, in general terms, any regulation of wind energy.

Wind energy has been on the rise in Portugal since mid-2000, with several public tenders for the awarding of injection capacity taking place.

The Portuguese regulations on wind energy are contained in the following statutes:

- Decree-Law No. 15/2022 of 14 January 2022, which set forth the legal framework for the organisation of the national electric system, including rules on attribution of injection capacity to the public service electric grid and licensing, over-equipment and repowering of electric facilities, and self-consumption; and
- Decree-Law No. 189/88 of 27 May 1988 (as amended by Decree-Law No. 168/99 of 19 May 1999, Decree-Law No. 339-C/2001 of 29 December 2001, Decree-Law No. 33-A/2005 of 16 February 2005, Decree-Law No. 225/2007 of 31 May 2007), which outlined the rules applicable to licensing and tariffs of renewable energy facilities (despite having been revoked, the feed-in tariff support scheme defined therein remained applicable to power plants whose licensing rights were granted while it was in force).

Wind energy is currently remunerated through a market pool scheme (without prejudice to wind farms licensed in the past that are potentially benefiting from a feed-in tariff).

In general, wind farms must be awarded a grid injection capacity title by the relevant grid operator, and production and operation licences by the DGEG following either a public tender or legally established administrative procedures. In addition, wind farms may have to be subject to environmental licensing procedures.

It is also worth noting that the Portuguese government is currently working on the launch of the first offshore wind auction for an award of 10GW of grid capacity, which is expected to take place in 2023.

Law stated - 25 January 2023

Solar energy

Describe, in general terms, any regulation of solar energy.

Solar energy is a field of recent development in Portugal, notably subsequent to the 2010 public tender for the award of 150MVA of injection capacity in 44 different predetermined areas of Portugal. Additionally, the Portuguese government launched solar auctions in 2019 and 2020 that resulted in the award of a total of 1,292MW and 670MW of grid capacity, respectively.

In 2021, the government launched auctions for the award of grid injection capacity through floating solar photovoltaic plants to be installed in seven water reservoirs in Portugal.



Decree-Law No. 15/2022 of 14 January 2022 and Decree-Law No. 189/88 of 27 May 1988 (as amended by Decree-Law No. 168/99 of 19 May 1999, Decree-Law No. 339-C/2001 of 29 December 2001, Decree-Law No. 33-A/2005 of 16 February 2005, Decree-Law No. 225/2007 of 31 May 2007) apply to solar projects, as the licensing and operation procedures are the same as those applicable to wind farms. In addition to these, Decree-Law No. 132-A/2010 of 21 December 2010, regulating the awarding of 150MVA of injection capacity in the public grid, is also noteworthy.

Solar plants do not currently benefit from feed-in tariffs (without prejudice to solar plants licensed in the past that are potentially benefiting from a feed-in tariff).

Law stated - 25 January 2023

Hydropower, geothermal, wave and tidal energy

Describe, in general terms, any regulation of hydropower, geothermal, wave or tidal energy.

In addition to Decree-Law No. 15/2022 of 14 January 2022, the following laws apply to hydro, geothermal, wave and tidal energy:

- Decree-Law No. 110/2010 of 14 October 2010 sets out hydraulicity accounting and indexes;
- Decree-Law No. 226-A/2007 of 31 May 2007, as amended by Decree-Law No. 97/2018 of 31 May 2018, sets out the water resources use framework; and
- Decree-Law No. 23/2010 of 25 March 2010, as amended by Decree-Law No. 68-A/2015 of 30 April 2015 and Decree-Law No. 64/2020 of 10 September 2020, sets out the legal and remuneration regime applicable to cogeneration.

In addition to the applicable electric and environmental licensing procedures, the operation of, for example, hydropower plants also requires a water use title (authorisation, licence or concession), to be issued by the Portuguese Environment Agency.

The Portuguese government's current macro policy for the energy and climate sector is set out in the National Plan for Energy and Climate 2020–2030. Among other objectives, the government aims to accelerate electricity production from renewable sources by fostering the use of ocean renewables and increasing the use of geothermal energy.

Moreover, Decree-Law No. 15/2022 of 14 January 2022 introduced the creation of Technological Free Zones, including an offshore zone for the generation of electricity through renewable energy from an oceanic source or location, which benefit from grid tariff exemptions and simplified licensing regimes.

Law stated - 25 January 2023

Waste-to-energy

Describe, in general terms, any regulation of production of energy based on waste.

Depending on the nature of the waste, the general rules, licensing and remuneration regimes on the power generation industry referred to in the regimes set forth by Decree-Law No. 15/2022 and Decree-Law No. 64/2017 of 12 June 2017, as amended, apply to the waste-to-energy sector. The specific legislation on urban waste treatment and disposal also applies.

Law stated - 25 January 2023



Biofuels and biomass

Describe, in general terms, any regulation of biofuel for transport uses and any regulation of biomass for generation of heat and power.

Decree-Law No. 84/2022 of 9 December 2022 is the main legislative instrument in the field of biofuels, establishing:

- national targets regarding the consumption of energy from renewable sources;
- · sustainability criteria for the production and use of biofuels; and
- mechanisms for the promotion of biofuels and biogas in transport, partially transposing Directive (EU) 2018/2001 of 11 December 2018.

Under Decree-Law No. 84/2022:

- the minimum share of renewable sources in the transport sector for 2030 should be 29 per cent;
- fuel suppliers have an obligation to incorporate low-carbon-content fuels (11.5 per cent from 2023 and 16 per cent from 2029) and, specifically, advanced biofuels (0.7 per cent from 2023 and 10 per cent from 2030) in the fuels supplied; and
- the incorporation of biofuels in the market is evidenced by Biofuel Titles, which can be simple or subsidised depending on the raw materials they were produced from.

For biofuels to be eligible for the issuance of Biofuel Titles and to meet the targets above, they must be sustainable. The sustainability criteria are set out in Decree-Law No. 84/2022, there being two types of criteria: criteria for the reduction of greenhouse gases and soil use criteria.

Further, under Decree-Law No. 84/2022, economic operators must be registered with the Coordinating Body for Compliance with the Sustainability Criteria for Biofuels and Bioliquids through an electronic platform, the Balcão Único de Energia. Decree-Law No. 89/2008 of 30 May 2008 provides for the conditions for the marketing of blends of biofuels with petrol and diesel, and Decree-Law No. 267/2002 of 26 November 2002 provides for the licensing procedure applicable to biofuel storage installations.

Decree-Law No. 84/2022 provides for a category of fuel producers (small, dedicated producers) that enjoy tax benefits including, under Decree-Law No. 73/2010 of 21 June 2010, an exemption from tax on petroleum products up to the global maximum limit of 40,000 tonnes per year, provided that the biofuels produced meet certain criteria. Additionally, the places of production of these types of biofuels are considered tax warehouses.

Currently, the licencing and operation of biomass power plants are regulated by:

- Decree-Law No. 15/2022 of 14 January 2022, which sets forth the legal framework for the organisation of the national electric system; and
- , as amended notably by Decree-Law No. 73/2022 of 24 October 2022, which sets forth a special legal regime applicable to the installation and operation of biomass power plants by:
 - · municipalities;
 - · intermunicipal entities;
 - · associations of municipalities with specific purposes; and
 - private or public operators to whom concessions were awarded.



The remuneration scheme applicable to biomass power plants varies depending on the regime they are subject to, these being a market remuneration or special remuneration regime (eg, feed-in tariffs or market prices added by market premiums).

Law stated - 25 January 2023

Carbon capture and storage

Describe, in general terms, any policy on and regulation of carbon capture and storage.

Decree-Law No. 60/2012 of 14 March 2012 establishes the legislation and requirements for the storage of carbon in Portuguese soil, which is an activity subject to standard and environmental licensing procedures.

Law stated - 25 January 2023

CLIMATE MATTERS IN TRANSACTIONS

Climate matters in M&A transactions

What are the main climate matters and regulations to consider in M&A transactions and other transactions?

In merger or acquisition transactions, climate matters are most important when the companies involved operate facilities that surpass the capacity thresholds set out in Decree-Law No. 12/2020 of 6 April 2020. These facilities require a GHG Emissions Title, must be registered with the Portuguese Registry of Emission Allowances and must hold adequate GHG emission allowances. Other relevant obligations include monitoring, reporting and updating information on GHG emissions.

Failure to comply with the provisions of Decree-Law No. 12/2020 constitutes an administrative offence, which may result in the application of severe fines and ancillary penalties, such as the shutdown of facilities. In some circumstances, the administrative offence may also be publicly displayed.

Law stated - 25 January 2023

UPDATE AND TRENDS

Emerging trends

Are there any emerging trends or hot topics that may affect climate regulation in your country in the foreseeable future?

On 5 January 2023, the Corporate Sustainability Reporting Directive (CSRD) entered into force, strengthening the rules on the social and environmental information that companies have to report and broadening the spectrum of companies subject to reporting obligations. As an EU member state, Portugal will have until July 2024 to transpose the CSRD into national legislation, consequently furthering the regulatory regimes related to environmental, social and governance matters in Portugal.

Additionally, future trends in Portugal revolve around the renewable energy field. One of the National Plan for Energy and Climate 2020–2030 (PNEC 2030) objectives is to ensure that the share of renewable energies in gross final energy consumption by 2030 amounts to 47 per cent. To achieve this goal, the government has resorted to launching auctions in the solar energy field in recent years for the award of injection capacity in the public grid (eg, the 2019 and 2020 solar auctions and the 2021 solar floating auctions). Furthermore, the launch of the first offshore wind auction for the

award of 10GW of injection capacity in the public grid is expected to take place in 2023.

In light of the PNEC 2030's mandatory revision that is currently in progress and scheduled to take place in 2023, new objectives and governmental measures are expected, which should lead to further development of climate regulation at the national level.

Law stated - 25 January 2023

Jurisdictions

Australia	Johnson Winter Slattery
European Union	Allen & Overy LLP
France	Huglo Lepage Avocats
Germany	Enderle Environmental Law
• India	Shardul Amarchand Mangaldas & Co
Indonesia	SSEK Law Firm
† Malta	Camilleri Preziosi
Netherlands	Van der Feltz attorneys
Portugal	Uría Menéndez
Taiwan	Lee and Li Attorneys at Law
USA	Beveridge & Diamond PC