

THE ENVIRONMENT
AND CLIMATE
CHANGE LAW
REVIEW

FOURTH EDITION

Editor
Theodore L Garrett

THE LAWREVIEWS

THE ENVIRONMENT
AND CLIMATE
CHANGE LAW
REVIEW

FOURTH EDITION

Reproduced with permission from Law Business Research Ltd
This article was first published in March 2020
For further information please contact Nick.Barette@thelawreviews.co.uk

Editor
Theodore L Garrett

THE LAWREVIEWS

PUBLISHER

Tom Barnes

SENIOR BUSINESS DEVELOPMENT MANAGER

Nick Barette

BUSINESS DEVELOPMENT MANAGER

Joel Woods

SENIOR ACCOUNT MANAGERS

Pere Aspinall, Jack Bagnall

ACCOUNT MANAGERS

Olivia Budd, Katie Hodgetts, Reece Whelan

PRODUCT MARKETING EXECUTIVE

Rebecca Mogridge

RESEARCH LEAD

Kieran Hansen

EDITORIAL COORDINATOR

Gavin Jordan

PRODUCTION AND OPERATIONS DIRECTOR

Adam Myers

PRODUCTION EDITOR

Hilary Scott

SUBEDITOR

Janina Godowska

CHIEF EXECUTIVE OFFICER

Nick Brailey

Published in the United Kingdom

by Law Business Research Ltd, London

Meridian House, 34-35 Farringdon Street, London, EC4A 4HL, UK

© 2020 Law Business Research Ltd

www.TheLawReviews.co.uk

No photocopying: copyright licences do not apply.

The information provided in this publication is general and may not apply in a specific situation, nor does it necessarily represent the views of authors' firms or their clients. Legal advice should always be sought before taking any legal action based on the information provided. The publishers accept no responsibility for any acts or omissions contained herein. Although the information provided was accurate as at January 2020, be advised that this is a developing area.

Enquiries concerning reproduction should be sent to Law Business Research, at the address above.

Enquiries concerning editorial content should be directed to the Publisher – tom.barnes@lbresearch.com

ISBN 978-1-83862-451-4

Printed in Great Britain by

Encompass Print Solutions, Derbyshire

Tel: 0844 2480 112

ACKNOWLEDGEMENTS

The publisher acknowledges and thanks the following for their assistance throughout the preparation of this book:

ALLEN & OVERY

ANKURA

BAKER MCKENZIE

BASHAM, RINGE & CORREA, SC

BRIGARD URRUTIA

COVINGTON & BURLING LLP

HENGELER MUELLER PARTNERSCHAFT VON RECHTSANWÄLTEN MBB

HUGLO LEPAGE AVOCATS

JINGTIAN & GONGCHENG

KHAITAN & CO

MATTOS FILHO, VEIGA FILHO, MARREY JR E QUIROGA ADVOGADOS

NAGASHIMA OHNO & TSUNEMATSU

SCHULTZ CARRASCO BENITEZ

SKS CONFIDENCE LAW FIRM

STUDIO LEGALE VILLATA DEGLI ESPOSTI E ASSOCIATI – VILDE

URÍA MENÉNDEZ

VIEIRA DE ALMEIDA

WHITE & CASE LLP

CONTENTS

PREFACE.....	v
<i>Theodore L Garrett</i>	
Chapter 1	AUSTRALIA..... 1
<i>Ilona Millar, Guy Dwyer, Roopa Varadharajan and Sophie Whitehead</i>	
Chapter 2	BRAZIL..... 16
<i>Lina Pimentel Garcia, Viviane Otsubo Kwon, Marcelo Schwartzmann and Giovanna Rodrigues Cavalari</i>	
Chapter 3	CANADA..... 25
<i>Jonathan Cocker</i>	
Chapter 4	CHILE..... 38
<i>Edesio Carrasco, Rodrigo Benítez and Ana Sas</i>	
Chapter 5	CHINA..... 48
<i>Cheng Xiaofeng, Hu Ke and Jiang Xinyan</i>	
Chapter 6	COLOMBIA..... 59
<i>Guillermo Tejeiro Gutiérrez, Juana Valentina Micán, Liliana Marcela Rubiano, Camila Harmelly Bermúdez and Andrés Lafaurie Bornacelli</i>	
Chapter 7	EUROPEAN UNION..... 68
<i>Jacquelyn F MacLennan and Tallat S Hussain</i>	
Chapter 8	FRANCE..... 87
<i>Christian Huglo</i>	
Chapter 9	GERMANY..... 97
<i>Dirk Uwer and Moritz Rademacher</i>	

Contents

Chapter 10	INDIA	108
	<i>Sanjeev Kapoor and Nawneet Vibhaw</i>	
Chapter 11	ITALY	119
	<i>Andreina Degli Esposti</i>	
Chapter 12	JAPAN	132
	<i>Hiroshi Fujiwara</i>	
Chapter 13	MEXICO	142
	<i>Ricardo Eloy Evangelista Garcia and Mariana Arrieta Maza</i>	
Chapter 14	NETHERLANDS	159
	<i>Marinus Winters, Seppe Stax, Rob van der Hulle, Marjet van Bezooijen and Jasper Strijder</i>	
Chapter 15	PORTUGAL	174
	<i>Manuel Gouveia Pereira</i>	
Chapter 16	PUERTO RICO	190
	<i>Jorge L San Miguel</i>	
Chapter 17	RUSSIA	200
	<i>Sergey Kozlov</i>	
Chapter 18	SPAIN	215
	<i>Carlos de Miguel and Bárbara Fernández</i>	
Chapter 19	UNITED KINGDOM	226
	<i>Tallat S Hussain</i>	
Chapter 20	UNITED STATES	249
	<i>Theodore L Garrett</i>	
Appendix 1	ABOUT THE AUTHORS	273
Appendix 2	CONTRIBUTORS' CONTACT DETAILS	289

PREFACE

Environmental law is global in its reach. Multinational companies make business plans based on the laws and regulations of the countries in which they are headquartered and have manufacturing facilities as well as the countries in which they distribute and sell their products. Moreover, multinational companies have global environmental, health and safety goals and practices that tend to be worldwide in their scope for reasons of policy and operational consistency.

For these and other reasons, this fourth edition of *The Environment and Climate Change Law Review* is timely and significant. This book offers a review, by leading environmental lawyers, of significant environmental laws and issues in their respective countries around the world, with updates since last year's edition.

Climate change continues to dominate international environmental efforts, and we have also witnessed efforts to promote sustainability. Many countries are making efforts to promote conservation and renewable or green energy. Changes in reliance on coal and nuclear energy have an impact on the demand for other energy sources. All of these changes affect efforts to reduce greenhouse gases.

Environmental law continues to change and evolve, as new regulations are adopted and existing rules are amended or challenged in courts or interpreted by agencies. In the United States, for example, 2017 witnessed the inauguration of a new President and the beginning of an administration that has different priorities in the related areas of environment and energy. Future editions of this book will continue to focus on changes and developments around the globe.

This book presents an overview and, of necessity, omits many details. The book should thus be viewed as a starting point rather than a comprehensive guide. Each chapter of this book, including mine, represents the views of the author in his or her individual capacity, and does not necessarily reflect the views of the authors' firms or clients, or the authors of other chapters, or my views as the editor. This book does not provide legal advice, which should be obtained from the reader's own lawyers.

I wish to thank the many authors who contributed their time and expertise to the preparation of the various chapters to this book. I also wish to thank the editors at Law Business Research for their continued attention to this project. We hope this book helps you to gain a better understanding of the international scope of environmental law.

Theodore L Garrett
Covington & Burling LLP
United States
January 2020

PORTUGAL

*Manuel Gouveia Pereira*¹

I INTRODUCTION

According to the Executive Summary of the OECD's Economic Survey for Portugal in 2019, economic conditions have improved markedly over the past few years. GDP is now back to its pre-crisis levels and the unemployment rate has declined 10 percentage points since 2013 to below 7 per cent, one of the largest reductions in any OECD country over the past decade. Nevertheless, legacies of the crisis remain, with the poverty rate of the working age population still elevated and perceptions of subjective wellbeing below pre-crisis levels. As regards green growth indicators, the OECD highlights that although Portugal's CO₂ emissions per unit of GDP are below the OECD average, the country has not made further progress in decoupling emissions from GDP in recent years, transport accounting for a large share of pollution and emissions and reducing its environmental impact at a slower pace than other sectors in the economy.

The legal regimes focused on environmental issues published since the end of 2018, originate, in their vast majority, from EU law or were published to comply with EU targets and objectives.

In this context, during 2019, the most relevant legal framework included the new legal regime of production of water for reuse, obtained from the treatment of waste water, the Climate Change Adaptation Action Programme, the new law on the ban of single-use plastics in the catering and beverage sector and in retail trade, the new law on the ban of ultra-lightweight plastic bags and of plastic and polystyrene food containers at bread, fruit and vegetable points of sale, the new law on reducing the impact of cigarette and cigar ends or other cigarettes on the environment and the revision of the 2020 Urban Waste Strategic Plan, now renamed PERSU 2020+.

As regards planned legislative initiatives, the new legal regime on contaminated land is still awaited and has been a promise since 2015.

II LEGISLATIVE FRAMEWORK

Environmental protection and climate change laws and regulations originate mainly from three sources: international treaties or conventions, EU law and national law.

¹ Manuel Gouveia Pereira is managing associate at Vieira de Almeida.

International treaties and conventions, once signed, must see their ratification approved by a resolution of Parliament and ratification itself shall occur by means of a decree of the President of the Republic. Portugal is a party to all of the main treaties and conventions regarding environmental protection and climate change.

EU law is one of the main sources of environmental legislation, consisting mainly of regulations and directives. Regulations are directly enforceable in domestic law and do not need to be enacted. However, it is very common for a decree-law to be published to ensure the execution of the obligations of the regulation into Portuguese law. Directives are subject to enactment into Portuguese law within a specific time frame. Many directives, however, are enacted after the term has elapsed. Enactment occurs by means of publication of a decree-law in the Portuguese Official Gazette. The main legal regimes on environmental protection, including climate change, are a result of the enactment of EU directives and of EU regulations.

In relation to national law, the Constitution of Portugal establishes that both Parliament and the government have legislative powers divided according to the specific matter at stake. While certain matters are of the exclusive competence of Parliament, others are of the competence of the government, exclusively or subject to a legislative authorisation granted by Parliament. As regards the legislative acts themselves, laws are issued by Parliament while decree-laws, regulations, resolutions, regulation decrees, ministerial orders and ministerial dispatches, among other acts, are issued by the government. Legislative acts are published in the Portuguese Official Gazette.

III THE REGULATORS

The main regulatory agencies responsible for enforcing environmental legal framework are the following.

i The General Inspection of Agriculture, Sea, Environment and Spatial Planning

The General Inspection of Agriculture, Sea, Environment and Spatial Planning (IGAMAOT) is the main environmental inspection body. It carries out inspections regarding all activities and all public and private entities with environmental relevance, imposing the measures that prevent or eliminate situations of severe danger to human health, safety of persons, of goods and of the environment. The IGAMAOT carries out specific functions equivalent to those of a criminal police body whenever an environmental crime may be at stake and may also initiate and decide misdemeanour procedures according to the Environmental Misdemeanour Framework Law. It may act and carry out inspections without previously being informed by other entities of a possible breach of environmental legislation and may enter any premises and carry out the inspections it deems necessary. It is normal for industrial operators to have their installations inspected without previous notice at least once every three years. The IGAMAOT is hierarchically dependent of the Deputy Minister to the Prime Minister, of the Minister of the Environment and Climate Action, of the Minister of Agriculture and of the Minister of the Sea.

ii The Portuguese Environment Agency

The Portuguese Environment Agency (APA)'s mission is to propose, develop and monitor the integrated and participated management of environmental and sustainable development policies, in tandem with other sectorial policies and in cooperation with public and private

entities seeking the same purpose taking into view a high level of environmental protection and the rendering of high-quality services to citizens. The main functions of this regulatory body are to:

- a* propose, develop and monitor environmental policies, especially as regards climate change, management of water resources, waste, ozone layer protection, air quality, recovery and remediation of contaminated sites, integrated pollution prevention and control, noise prevention and control, prevention of major industrial accidents risks, environmental and population safety, ecological labelling, voluntary environmental compliance systems, as well as environmental impact assessment and environmental assessment of plans and programmes;
- b* act as national water, waste and dam authority;
- c* develop and ensure the implementation strategic options, policies and measures envisaging a low-carbon economy, in particular the mitigation of greenhouse gas emissions and adaptation to climate change, and to act as national authority for the EU emissions trading system and as national authority for the implementation of the Kyoto Protocol;
- d* act as national authority for integrated pollution prevention and control and for strategic environmental assessment; and
- e* act as competent authority for the environmental liability regime. As regards the enforcement of climate change policies, the APA and the IGAMAOT are the most important agencies. The APA is subject to the control of the Minister of the Environment and Climate Action.

iii The Water and Waste Regulatory Authority

The Water and Waste Regulatory Authority (ERSAR) ensures the regulation and supervision of the water and waste services and aims to increase the efficiency and effectiveness of the provision of these services. It is responsible for establishing the water and waste tariffs and for ensuring the regulation of quality of service rendered to end users by management entities. ERSAR is an independent administrative agency according to the Regulatory Entity Framework Law and is not subject to governmental control.

iv The Institute for Nature Conservation and Forests

The Institute for Nature Conservation and Forests (ICNF)'s mission is to propose, develop and ensure the execution of nature conservation and forests policies, taking into view the conservation, sustainable use, recovery, use and recognition of the natural assets. Its main functions are to act as a national authority for nature and biodiversity conservation and as a national forest authority; and to ensure the management of the national network of protected areas and the implementation of the Natura 2000 network, including marine protected areas. The ICNF is subject to the control of the Minister of the Environment and Climate Action, the Minister of Agriculture and the Minister of the Sea.

v Regional spatial planning commissions

There are five regional spatial planning commissions (CCDRs) within the Portuguese continental territory. Their mission is to execute the environment, planning, cities and regional development policies. They are responsible for executing, assessing and inspecting, at a regional level, the environmental and planning policies, in tandem with the other regulatory bodies of the Ministry of Environment and Climate Action. As regards environmental

issues, their competences include, at a regional level, environmental assessment of projects, industrial licensing, soil decontamination operations, licensing of waste operations, air quality management and air pollution prevention, noise prevention, integrated pollution prevention and control, environmental assessment and licensing of quarries. The CCDRs are subject to the control of the Minister of Planning and the Minister of the Environment and Climate Action.

vi The Directorate-General for Natural Resources and for Maritime Services and Safety

The mission of the Directorate-General for Natural Resources and for Maritime Services and Safety (DGRM) is to execute the policies for preservation and knowledge of natural marine resources, for fisheries, aquaculture, transformation industry and related activities, development of maritime services and safety, including the maritime ports sector. Some of its competences are:

- a* to ensure a framework of knowledge regarding the available marine resources within the Portuguese territory, regarding inventory, use and planning of the maritime space;
- b* to authorise and license structures and productive activities regarding maritime fishing and aquiculture;
- c* to exercise its functions regarding the prevention of pollution from ships;
- d* to propose, in tandem with the ICNF, the creation of protected marine areas; and
- e* to license and inspect the use of waters located in protected marine areas.

The DGRM is subject to the control of the Minister of the Environment and Climate Action and of the Minister of the Sea.

As regards the enforcement of environmental legislation by the courts, Portuguese courts traditionally tend to be somewhat lenient and often reduce the amount of the fines determined by public regulatory authorities or of the criminal sentence proposed by the Public Prosecutor's Office, whenever they consider said amount or sentence to be exaggerated. Furthermore, environmental misdemeanour procedures and crimes deal with matters that are of a very technical nature and the courts are not always comfortable deciding based on very specific technical and scientific details. Finally, as regards environmental misdemeanours, the courts may decide differently from the regulatory authority that applied the fine and decide to apply a fine of a higher amount considering that the prohibition on imposing a heavier or stricter decision does not apply to the environmental misdemeanour procedures of the Environmental Misdemeanour Framework Law.

IV ENFORCEMENT

Whenever a violation of environmental laws and regulations occurs, different types of liability may arise.

As regards civil liability, the applicable regime under the Civil Code establishes that whoever, with wilful misconduct or negligence, causes damage to a third party must pay compensation to that party. Therefore, should any action resulting from an industrial operator, any individual or any activity cause damage to a third party, the latter will be entitled to request compensation. According to the causality principle under the civil liability regime, a causal link between the damage caused and the action or activity at stake must always exist. Strict liability will only apply whenever expressly foreseen by the law.

Administrative liability in relation to the state due to pollution or damage caused to the environment will also exist. Considering the 'polluter pays' principle, the liability and the recovery principles established in the Environmental Framework Law, any person or industrial operator that causes pollution or environmental damage will be liable for the damage caused, must bear the costs related to said damage, including the costs associated with any prevention and control measures, must pay compensation whenever foreseen in the law and must also restore the environment to its previous state. Further, for the purposes of administrative liability, the environmental liability regime is a key piece of legislation that must be taken into account. According to this legal regime, which enacted EU Directive 2004/35/EC, whenever environmental damage or the imminent threat of environmental damage occurs, the liable party must adopt prevention and repair measures and bear the associated costs. Strict liability will apply whenever the damage caused by the operator was a result of an activity listed in Annex III of the legal regime that contains a list of the activities considered to present a greater risk to the environment and to be more susceptible to causing environmental damage or threats. Additionally, mandatory financial guarantees must be put in place by operators that carry out the activities listed in Annex III to guarantee said measures. Third parties are also entitled to request compensation under the general rules of civil liability.

Misdemeanour liability due to pollution or environmental damage must also be taken into account. The vast majority of misdemeanours due to environmental damage are governed by the Environmental Misdemeanour Framework Law. According to this law, environmental misdemeanours can be considered light, serious or very serious, depending on the gravity of the infraction.

For very serious environmental misdemeanours, the applicable fine ranges between €10,000 to €200,000 for individuals, and between €24,000 to €5 million for companies. Whenever the presence, emission or release of one or more hazardous substances seriously affects the health, safety of persons and goods and the environment, the minimum and maximum limits of the above-mentioned fines may be elevated to double the amount.

For serious environmental misdemeanours, the applicable fine ranges between €2,000 and €40,000 for individuals, and between €12,000 and €216,000 for companies.

In the case of light environmental misdemeanours, the applicable fine ranges between €200 and €4,000 for individuals, and between €2,000 and €36,000 for companies.

Ancillary penalties can also be applied alongside very serious and serious environmental misdemeanours, comprising, among other things, the following:

- a* the prohibition to apply for subsidies and public benefits;
- b* the prohibition to participate in public tenders;
- c* the suspension of licences and authorisations;
- d* the closing down of industrial establishments or sites subject to authorisation or licence issued by a public authority;
- e* the sealing of equipment; and
- f* the seizure of animals.

As regards the misdemeanour procedure itself, once an individual or operator is notified of an environmental misdemeanour procedure, he or she must present his or her defence to the regulatory authority that initiated the procedure within a maximum term of 15 working days. The final decision of the regulatory authority may be challenged in court.

Finally, the Criminal Code establishes the situations where criminal liability may arise owing to the practice of environmental crimes as a result of damage to the environment or to nature. The environmental crimes section of the Criminal Code establishes the following crimes:

- a* Crime of damage to nature (Article 278): damage to biodiversity and serious damage to subsoil resources is punished with up to five years of imprisonment. Further, the trading of protected wild fauna or flora species, alive or dead, is punished with imprisonment of up to a maximum of two years or with a fine of up to 360 days. The possession of said species is punished with imprisonment of up to a maximum of one year or with a fine of up to 240 days.
- b* Crime of pollution (Article 279): if the agent pollutes the air, the water and the soil, he or she will be punished with up to five years of imprisonment. If the conduct of the agent does not cause pollution but is susceptible of affecting the air, water or soil quality or fauna or flora, it will be punished up to a maximum of three years of imprisonment or with a fine of up to 600 days.
- c* Crime of dangerous activities to the environment (Article 279-A):
 - if the agent executes shipments of waste in breach of Regulation (EC) No. 1013/2016, on shipments of waste, he or she will be punished with up to three years of imprisonment or with a fine of up to 600 days. In the case of negligence, the agent will be punished with up to one year of imprisonment or with a fine; and
 - if the agent, in breach of the applicable legislation, produces, imports, exports, places in the market or uses ozone-depleting substances, he or she will be punished up to a maximum of one year of imprisonment or with a fine of up to 240 days. In the case of negligence, the agent will be punished with up to six months of imprisonment or with a fine of up to 120 days.
- d* Crime of pollution with common danger (Article 280): whenever a conduct foreseen in Article 279 causes danger created to life or to the physical integrity, to other people's assets with a high value or to cultural or historical monuments, it will be punished with imprisonment ranging from one to eight years if the conduct and the creation of danger is intentional and of up to a maximum of six years if the conduct is intentional and the creation of danger is due to negligence.

Companies and not only individuals may be considered subject to criminal liability owing to the practice of an environmental crime under the terms foreseen in the Criminal Code.

V REPORTING AND DISCLOSURE

Portuguese law does not contain a general rule or procedure regarding the disclosure of permit violation, contamination or climate change. However, the main environmental legal regimes establish the obligation to report any breach, violation or malfunction to the competent authorities and to adopt all necessary measures to prevent or repair environmental damage.

Any industrial operator holder of an environmental licence (integrated pollution and prevention control) under the Industrial Emissions Regime must report to the authorities any breach or violation of legislation or of the applicable emission limit values (including emissions to water, soil or air), any malfunction of the industrial establishment or any complaint received. Further, these operators are under the obligation to send to the APA,

until 30 April each year, an annual environmental report containing all information regarding the functioning of the industrial installation in the previous year, any breaches of legislation, malfunctions, complaints and any other information related to environmental compliance. The Industrial Emissions Regime establishes that any event that may significantly affect the environment must be notified to the authorities within 48 hours.

Under the environmental liability regime, whenever an imminent threat of environmental damage occurs, the operator must immediately adopt, irrespective of any notification or request by the authorities, the necessary and adequate prevention measures and inform the APA immediately of all details associated to said threat and of the measures taken. If environmental damage occurs, the legal regime foresees a maximum term of 24 hours within which the APA must be informed of all details related to the occurrence and the operator must immediately adopt, irrespective of any notification or request by the authorities, all feasible measures to control, contain, eliminate or manage pollution and contamination.

As regards the sale and purchase of property where pollution and contamination exist, there are no legal duties to disclose potential liabilities to purchasers. However, under the Civil Code there is an obligation to negotiate and execute contracts according to good faith principles. There is no legal obligation to disclose environmental liabilities in financial statements or reports.

VI ENVIRONMENTAL PROTECTION

i Air quality

The legal framework regarding air quality is set forth in Decree-Law No. 39/2018, which establishes the regime on prevention and control of pollutant emissions into the air and is applicable to:

- a* combustion installations with a rated thermal input ranging between 1MW and 50MW (medium combustion installations (MIC));
- b* complexes of new MIC;
- c* industrial activities in accordance to Annex I, Part 2;
- d* combustion installations that burn refinery fuel for the production of energy within oil and gas refineries; and
- e* furnaces and burners of industrial activities with a rated thermal input ranging between 1MW and 50MW.

According to this new legal regime, the APA shall issue an air emissions title for installations that are subject to the continuous monitoring of at least one pollutant. This title is integrated in and is part of the single environmental licence.

The emission limit values regarding emissions to air are set forth in Annex III of this legal regime.

Two new ministerial orders were published in 2018, further to the publication of Decree-Law No. 39/2018:

- a* Ministerial Order 190-A/2018, setting the height of chimneys and its calculation; and
- b* Ministerial Order 190-B/2018, setting the emission limit values for specific industrial sectors.

The following three ministerial orders were revoked in 2018:

- a Ministerial Order 80/2006 (as amended), setting the minimum and maximum mass thresholds that define the monitoring conditions of emissions of pollutants to the atmosphere;
- b Ministerial Order 675/2009 (as amended), setting the general emission limit values applicable to the majority of installations and establishments; and
- c Ministerial Order 677/2009 (as amended), setting the emission limit values for combustion installations.

Monitoring obligations may be periodic or continuous. Whenever the mass flow emission is inferior or equal to maximum mass thresholds set forth in Part 1 of Annex II and above or equal to the average exceeds mass thresholds set forth in Part 1 of Annex II, monitoring will be periodic and must occur twice a year or, in certain particular situations, according to a different schedule. Continuous monitoring of atmospheric emissions is mandatory whenever the mass flow emission exceeds the maximum mass thresholds set forth in Part 1 of Annex II or whenever the licence or title for the functioning of the industrial establishment expressly determines that this type of monitoring must be carried out.

For combustion installations whose capacity is superior to 50MW, the applicable emission limit values are the ones set in the Industrial Emissions Regime, which enacted Directive 2010/75/EU.

The Industrial Emissions Regime contains the emission limit values regarding emissions to the air to be complied with in relation to combustion installations whose capacity is more than 50MW, installations that use organic solvents and issue organic volatile compounds and installations that produce titanium dioxide.

Decree-Law No. 39/2018 only applies to installations subject to the Industrial Emissions Regime on a subsidiary basis, regarding matters not regulated by said regime.

According to the polluter pays principle, an operator that causes damage to the environment through air pollution is under an obligation to pay compensation to the state and may also have to pay compensation to third parties under civil liability rules. The breach of this legal regime is an environmental misdemeanour, which can be considered light or serious depending on its gravity, and determines the payment of fines, along with possible ancillary penalties.

The General Inspector of IGAMAOT and the CCDR, whenever a situation of serious danger to the environment or to human health is at stake, may adopt the necessary measures to prevent or eliminate the danger situation, such as the suspension of activity, closing down of the totality or part of the installation or seizure of all or of part of the equipment.

Whenever the breach refers to emission limit values contained in an environmental licence issued under the Industrial Emissions Regime, an environmental misdemeanour will be at stake and fines will apply, alongside with possible ancillary penalties.

The environmental liability legal regime does not apply directly to damages caused to the air.

Finally, emission limit values for air emissions are considered to be quite strict and it is not rare for operators to have difficulties in complying with the applicable legal framework.

ii Water quality

The Water Law (Law 58/2005), which enacted the EU Water Framework Directive (Directive 2000/60/EC) and the Water Use Legal Regime (Decree-Law 226-A/2007) are the two key legal regimes regarding water management, use and protection.

As regards quality standards, Decree-Law 236/98 establishes the rules, criteria and quality objectives with the purpose of protecting water quality. The annexes of this legal regime contain:

- a* the emission limit values to be observed in relation to the discharge of waste water to the water or to the soil taking into view their protection against pollution;
- b* the maximum values for the different parameters in water considering its use; and
- c* the environmental objectives for water resources.

Quality standards vary according to the type of water (surface water, groundwater, bathing water, fishing water, etc.) and to its purpose (e.g., human consumption). Annex XVIII contains the emission limit values for the discharge of wastewater.

These standards generally apply to all industries and activities and are in line with EU water quality standards set forth in EU Directives.

In relation to permits, the use of water resources and the occupation of the public hydric domain is subject to the previous obtainment of a water use title, which, depending on the type of use, can be a licence, a concession or an authorisation, issued by the APA, which is the National Water Authority. The discharge of wastewater is normally subject to a licence. In the case of industrial installations, subject to an environmental licence under the Industrial Emissions Regime, the use of water resources demands the separate obtainment of a water use title that will be annexed to the environmental licence.

According to the Water Law and to the Water Use Legal Regime, the following activities are prohibited:

- a* use of water resources without the necessary title. Deliberate dilution of wastewater so as to comply with emission limit value;
- b* discharge of sludge in superficial or in underground waters;
- c* immersion of waste in breach of the environmental objectives for the water bodies;
- d* abandonment or unauthorised discharge of radioactive waste in superficial, underground, transition, coastal and sea waters and in wastewater drainage systems; and
- e* according to Decree-Law 236/98, the direct discharge into groundwater of certain hazardous substances is also prohibited.

A new National Water Plan was published under Decree-Law 76/2016. This plan is foreseen in the Water Law and its purpose is to establish the strategic options of the national water policy to be implemented by the river basin management plans for the 2016–2021 period and by the associated specific measure programmes. Water management under this plan envisages three main objectives: the protection and recovery of the status of aquatic ecosystems and also land ecosystems and wetlands dependent therefrom, as regards water necessities; the promotion of a sustainable, balanced and equal use of water of a good-quality status, considering its various uses and its economic value, based on a long-term use of available water resources; and the mitigation of the effects of flood and droughts.

The contents of this new plan will most probably determine, in the short run, the stricter amendment of water quality standards to ensure that Portugal meets water quality standards set at the EU level.

Account should also be taken of the new legal regime on water quality for human consumption, published through Decree-Law 152/2017. This establishes new rules for water quality control techniques and defines new parameters. The frequency according to which

the quality of the water intended for human consumption is controlled becomes flexible in certain situations, provided there is no risk for human health. Entities managing the water supply for human consumption may be exempted from certain rules of the water quality control programmes as long as risk assessments are made and approved by the Water and Waste Regulatory Authority. There will be strong emphasis on laboratories carrying out water tests to comply with internationally agreed procedures and to use validated methods. The mentioned entities will also be required to draft a plan for communication and response regarding water quality emergencies.

Decree-Law 152/2017 came into effect on 1 January 2018, and the rule on the mandatory plan for communicating emergency situations related to water quality came into effect on 1 January 2019.

As regards reuse of water, a new legal regime was recently published, addressing this issue for the first time. Decree-Law 119/2019 established the legal regime of production of water for reuse, obtained from the treatment of waste water, as well as its use.

The scope of this Decree-Law includes the reuse of water from domestic, urban and industrial waste water treatment plants (ETAR) for uses compatible with its quality, such as irrigation, landscape use, urban and industrial use.

A prior risk assessment regarding production and use of water for reuse, the issue of production and use licences, and requirements for water quality and monitoring are foreseen to ensure the safe reuse of water for human health and for the environment.

Finally, mechanisms to provide transparency and access to information are established as fundamental issues to ensure the confidence of users and of the general public regarding the safety of water reuse.

Additionally, Ministerial Order 266/2019 established the information and symbols to be used by producers and users of water for reuse, as well as the standardisation of the symbol for the identification of water for reuse, and the information to be available to the public and to employees who operate in the places of production and use of this type of water.

iii Chemicals

Decree-Law 82/2003 (as amended) approved the Regulation on Classification, Labelling, Packaging and Safety Data Sheets of Dangerous Mixtures. According to the Regulation, the mixtures can only be placed on the market if they are classified, labelled or packaged under the terms of the Decree-Law and of the Regulation.

This Decree-Law also establishes the obligation to provide information to the Directorate General for Economic Activities, to the Poison Information Centre and to the National Institute for Medical Emergency, to be carried out by the person or entity responsible for the placement of the mixture in the market.

Decree-Law 98/2010 establishes the regime on Classification, Labelling, Packaging of Hazardous Substances for human health or the environment taking into view their placement in the market. This legal regime (1) transposes Directive 2006/121/EC to adapt it to the Council Regulation (EC) No. 1907/2006 of 18 December related to the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation); (2) guarantees the execution of Article 55 of Regulation EC 1272/2008 of 16 December regarding the classification, labelling and packaging of substances and mixtures (CLP Regulation); and (3) enacts, in part, Directive 2008/112/EC.

Further, Decree-Law 293/2009 ensures the implementation and execution of the obligations arising from REACH Regulation, which establishes a European Chemicals

Agency and aims to ensure a high level of protection of human health and of the Environment, including the promotion of alternative methods for assessment of hazards of substances, as well as the free circulation of substances in the internal market while enhancing competitiveness and innovation.

REACH lays down some specific duties and obligations on manufacturers, importers and downstream users of substances on their own, in preparations and in articles. This Regulation is based on the principle that it is for manufacturers, importers and downstream users to ensure that they manufacture, place on the market and use such substances that do not adversely affect human health or the environment. Its provisions are underpinned by the precautionary principle.

REACH sets out procedures for the registration, evaluation, authorisation and restriction of chemicals, as follows.

The registration provisions should require manufacturers and importers to generate data on the substances they manufacture or import, to use said data to assess the risks related to these substances and to develop and recommend appropriate risk management measures. Registered substances should be allowed to circulate on the internal market.

The evaluation provisions should provide for follow-up to registration, by allowing for checks on whether registrations are in compliance with the requirements of REACH and if necessary by allowing for generation of more information on the properties of substances.

The authorisation provisions should ensure the good functioning of the internal market while assuring that the risks from substances of very high concern are properly controlled. For these purposes and to ensure that substances of very high concern are progressively replaced by suitable alternative substances or technologies, all manufacturers, importers and downstream users applying for authorisations shall analyse the availability of alternatives and consider their risks, and the technical and economic feasibility of substitution.

The restriction provisions should allow the manufacturing, placing on the market and use of substances presenting risks that need to be addressed, to be made subject to total or partial bans or other restrictions, based on an assessment of those risks. Manufacturers and importers are also obliged to register relevant information in a central database (the European Chemicals Agency).

REACH entered into force in 2007 and its provisions are being phased in over 11 years. As regards national requirements, according to the REACH Regulation, the person or entity responsible for the placement of dangerous substances in the market shall provide relevant information on those substances to the Poison Information Centre and to the National Institute for Medical Emergency, prior to placing them in the market; and make the relevant information on the substances classified as hazardous available to the IGAMAOT and to the Authority for Economic and Food Safety.

All permit applications must be complete and truthful and all permit requirements carefully followed. Required environmental controls and equipment shall not be neglected (except as allowed by and in compliance with the law).

iv Solid and hazardous waste

The Waste Management Legal Regime (Decree-Law 73/2011 as amended) is the framework legal regime regarding waste management, applicable to both hazardous and non-hazardous waste.

Waste management activities are subject to a licensing procedure directed by the APA or by the CCDRs.

Whenever a waste management activity is carried out in installations included in the thresholds of Annex I of the Environmental Impact Assessment Legal Regime the licensing authority will be the APA. In all other situations, including soil decontamination operations, the licensing authority will be the CCDR. A specific licence will be issued in relation to the waste management activity (e.g., collection, transportation, recovery and elimination).

As regards waste elimination, operators of landfill sites must obtain an environmental licence according to the Industrial Emissions Regime, as well as two insurances: (1) insurance to cover closure and post-closure obligations; and (2) insurance to cover accidental pollution events. These operators must also have a fully paid up share capital of at least €250,000 (for inert waste landfills); and €1 million (for hazardous or non-hazardous waste landfills).

The elimination of hazardous waste in specific facilities is subject to an autonomous legal regime.

Further, operators that carry out the collection, transportation, recovery and elimination of hazardous waste must hold a financial guarantee to cover their environmental liability under the environmental liability regime.

As regards waste streams, a new legal regime named Unilex was published through Decree-Law 152-D/2017, setting new rules for the management of waste streams and enacting Directive 2015/720/EU on lightweight plastic carrier bags and Directives 2016/774/EU and 2017/2096/EU on end-of-life vehicles.

All the rules on the management of specific waste streams (packaging, used oils, used tyres, electrical and electronic equipment, batteries and accumulators, and end-of-life vehicles) have been grouped together in this new legal regime.

Individual and collective waste management systems are responsible for ensuring the appropriate treatment of waste to achieve Portugal's agreed recycling and recovery targets.

Decree-Law 152-D/2017 is intended to contribute to more sustainable production and consumption by empowering the different participants in a product's life cycle (production, marketing, consumption and waste management), reducing the amount of waste to be disposed of, using resources more efficiently, recovering raw materials with economic value and making managing procedures of these wastes more effective. This Decree-Law came into effect on 1 January 2018.

During 2018, new licences for various waste management entities responsible for specific waste streams were published and determine that all existing agreements entered into with waste producers or other entities must be reviewed to guarantee conformity with the new licences.

The most recent legislative initiatives on waste production prevention include, in 2019, Law 77/2019, on the ban of single-use plastics in the catering and/or beverage sector and in retail trade, Law 76/2019, on the ban of ultra-lightweight plastic bags and of plastic and polystyrene food containers at bread, fruit and vegetable points of sale, and Law 88/2019 on reducing the impact of cigarette and cigar ends or other cigarettes on the environment.

v Contaminated land

Although this matter has been extensively discussed by various governments and by various sectors of society, Portugal does not have a specific legal regime for contaminated land. Whenever it is necessary to carry out soil decontamination operations they will be subject to previous licensing under the Waste Management Legal Regime by the CCDRs.

In 2011, the APA issued a non-binding guide regarding the assessment of imminent threat and environmental damage according to the Environmental Liability Regime

(Decree-Law 147/2008). The guide contains a specific chapter on how to assess damage to soil and soil contamination situations, including prevention measures, risk analysis and repair and monitoring plans. The Ontario Rules for soil decontamination are the reference used to assess the level of contaminants in the soil.

During 2019, three new guides for contaminated soils were issued by APA: (1) Soil reference values; (2) Sampling Plan and Soil Monitoring Plan; and (3) Risk Analysis and Risk Acceptability Criteria; and are available on its website.

Landowners are not required by law to investigate and assess the contamination level of their property although regulatory authorities can order assessments and clean-up operations whenever a pollution or contamination event is verified or comes to their knowledge.

However, specific provisions are starting to be inserted in municipal zoning plans (e.g., the Lisbon Municipal Master Plan) to render mandatory a site risk assessment in relation to plots of land where, owing to past activities, it is considered likely that the soil is contaminated with hazardous substances to human health or the environment. In these cases, a mandatory decontamination plan must be drafted and executed to restore the environment to an acceptable status as determined by the competent authorities.

According to the polluter pays principle, the operator responsible for causing pollution or environmental damage is liable and must carry out and pay the costs associated to environmental damage and clean-up, adopting the necessary measures to prevent further threats and damage to the environment. However, where the owner of the land was not the polluter, if there is an imminent threat or serious danger to the environment, authorities can demand that the current owner carry out the environmental investigation and clean-up, including prevention and remediation measures. In these cases, the owner shall have a right of redress in relation to the liable party. Public authorities may also carry out the clean-up and decontamination operations directly with right of redress in relation to the liable party.

The majority of the environmental legal framework applicable to activities that are most likely to cause pollution demand operators to hold financial guarantees to cover their liability in relation to pollution events, including the Environmental Liability Regime. Whenever environmental damage is caused and this legal regime applies the operator must adopt prevention and remediation measures. If the operator does not have the capacity or know-how to carry out in situ decontamination, he or she may hire a specialised company to carry out the operation or, alternatively, remove the contaminated soil from the site or installation and deliver it to a duly licensed waste management operator. The failure to adopt prevention or remediation measures when directly determined by the APA is a very serious environmental misdemeanour. The failure to immediately adopt prevention or remediation measures, when an imminent threat or environmental damage occurs, is also a serious environmental misdemeanour.

In September 2015, the APA disclosed a legislative proposal regarding a legal regime for the prevention of soil contamination and for soil remediation, and launched a public hearing open to all citizens. At the time of writing, however, there has been no news from public authorities or from the Ministry of Environment and Climate Action regarding the approval of this proposal by the government.

vi Environmental impact assessment

The environmental impact assessment legal regime underwent two amendments in 2017. First, Law 37/2017 rendered environmental impact assessment mandatory for all activities pertaining to the exploration of hydrocarbons. Second, Decree-Law 152-B/2017 enacted Directive 2014/52/EU on the assessment of the effects of certain public and private projects on the environment. The amendments introduced apply as of 1 January 2018.

VII CLIMATE CHANGE

Portugal's carbon trading scheme is set forth in Decree-Law 38/2013 (as amended), enacting Directive 2004/101/EC, amending Directive 2003/87/EC and establishing a scheme for greenhouse gas emission allowance trading within the European Community (the Amended Emissions Trading Directive).

Operators subject to this legal regime must hold a permit allowing them to emit greenhouse gases (GHG). GHG emissions must be monitored and certified annually and this information sent to the APA. The permit is annexed to the environmental licence of the operator issued under the Industrial Emissions Regime. The auctioning of allowances is also foreseen and is carried out according to the EU Emissions Trading Scheme Auctioning Regulation (EU Regulation No. 1031/2010).

According to the Climate and Energy Package 2020 for the 2013 to 2020 period, Portugal must limit the increase of GHG emissions for the sectors not included in the EU Emissions Trading Scheme to 1 per cent in relation to 2005. For renewable energies in the raw final consumption of energy, a new goal of 31 per cent has been adopted, 10 per cent of which is allocated to transport. A general goal to reduce the consumption of primary energy to 25 per cent and a specific goal for the public administration of reduction to 30 per cent has also been adopted.

Portugal approved the Green Growth Commitment, imposing certain goals to be achieved in 2020 and 2030. For 2030, the main goals are the following:

- a* to reduce GHG emissions between 30 and 40 per cent (52.7 to 61.5 million metric tonnes of carbon dioxide equivalent (MtCO₂e)) in relation to 2005;
- b* to increase the share of renewable energies in the final consumption of energy to 40 per cent; and
- c* to increase energy efficiency through a reduction of 30 per cent over the energy baseline in 2030 translated into an energetic intensity of 101 tep/MEUR GDP.

The Strategic Framework for the Climate Policy, approved in 2015, provides that Portugal must reduce its GHG emissions to values of -18 to -23 per cent in 2020 and to -30 to -40 per cent in 2030, compared with 2005 values, depending on the results of European negotiations.

Portugal has also created the National Action Plan for Renewable Energies, establishing the goals regarding the share of Portugal's energy supply from renewable sources for energy consumption in 2020, as well as the National Action Plan for Energy Efficiency.

Regarding energy efficiency, Portugal has implemented an energy certification system for buildings (destined for housing or commercial purposes), with the purpose of improving the energy performance of buildings and making the obtainment of energy certificates mandatory.

Additionally, through the EU 2020 funding programme, Portugal approved an Operational Programme of Sustainability and Efficiency in the Use of Resources, that focuses, among other issues, on available funding to achieve the goal to increase energy efficiency in the housing sector and to reduce the annual estimated GHG emissions, limiting, for 2023, the value of GHG emissions to 80.640T CO₂e.

The National Air Strategy was approved by Resolution of the Council of Ministers 46/2016, focusing on the improvement of air quality, by protecting human health, the quality of life for citizens and ensuring the preservation of the ecosystems. It imposes the following goals:

- a* compliance with the emissions and air quality goals in 2020;
- b* compliance with air-quality improvement targets in 2020;
- c* establishment of a plan to achieve the air-quality goals recommended by the World Health Organization in the long term; and
- d* cooperation with climate policy to ensure that the measures concerning air pollutants and greenhouse gas emissions will benefit the air quality and climate change.

The Paris Agreement on climate change was adopted in December 2015, and entered into force on 1 November 2016. Its central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.52°C. The Paris Agreement also aims to strengthen the ability of countries to deal with the impacts of climate change. Portugal ratified the Paris Agreement on 30 September 2016.

In December 2018, the government presented the National Road Map for Low Carbon (RNBC 2050). This document aims to guarantee that Portugal reaches carbon neutrality in 2050.

To do so, the RNBC 2050 defined the areas that will play a key role, such as energy, transportation, waste, agriculture and forests, and circular economy, and some measures to achieve it, such as increasing the use of electrification of the economy to 65 per cent, solar energy production, the reduction of greenhouse gases from the industry in 70 per cent or from the production of urban solid waste in 25 per cent.

The RNBC 2050 also mentions that the next decade will be decisive for Portugal. As a result, and in line with this consideration, Portugal will have more economic sectors using electricity produced from renewal energy sources that will be key to reduce greenhouse gases between 85 per cent to 99 per cent in comparison to 2005.

In conclusion, by 2030, RNBC 2050 envisaged that 80 per cent of the energy produced in Portugal will come from renewable sources, to progressively achieve 100 per cent 20 years later. The most significant reduction of greenhouse gases is expected to occur between 2020 and 2023.

More recently, following an update and revision of the targets on reduction of GHG emissions set forth in RNBC 2050, the government published Ministerial Order 107/2019 and approved the National Road Map for Carbon Neutrality (RNC 2050).

This document provides a neutral balance between greenhouse gas (GHG) emissions and carbon capture through land and forests use, further establishing the objective of reducing GHG emissions for Portugal between 85 per cent and 90 per cent by 2050, in relation to 2005, and offsetting the remaining emissions through the land and forests use, to be attained through a reduction in emissions of between 45 per cent and 55 per cent until 2030, and between 65 per cent and 75 per cent until 2040, in relation to 2005.

Finally, the National Energy-Climate Plan (PNEC) 2030 was presented in January 2019 as the main instrument of energy policy for the decade of 2021-2030. According to PNEC 2030, renewable energy sources should represent 47 per cent of the national electricity consumption in 2030, with the prevision of an increase of the installed capacity up to 28.8 GW.

This new aim of PNEC 2030 is key to reduce Portugal's energetic dependence on the exterior sources and ensure the reduction of greenhouse gas emissions in line with the objective of attaining carbon neutrality in 2050.

This plan aims to comply with the new Renewable Energy Directive (RED II), which required Member States to present their energy-climate plan until the end of 2019, addressing decarbonisation, energy efficiency, energy security, internal energy market and research, innovation and competitiveness.

VIII ENVIRONMENTAL EDUCATION

The National Environmental Education Strategy was approved by Resolution of the Council of Ministers 100/2017, focusing on the improvement of the environmental literacy, to guarantee a society that is more conscientious, innovative and entrepreneurial, and a national debate of the values of sustainable development.

The main goals of this strategy are the decarbonisation of the economy and of society, the support of circular economy and the enhancement of the territory.

IX OUTLOOK AND CONCLUSIONS

We anticipate that one of the greatest challenges for Portugal will be to implement the revision of the PERSU 2020+, recently presented by the Ministry of Environment and Climate Action, to achieve a significant reduction of waste production, including landfill diversion, as well as a significant improvement of selective collection targets. The achievement of the new targets and objectives of the EU Circular Economy Action Plan and of National Circular Economy Plan 2017–2020, approved by the Resolution of the Council of Ministers 190-A/2017 and amended by the Resolution of the Council of Ministers 108/2019, is also a big challenge, owing to the lack of financial incentives that are key for the successful implementation of public policies. The implementation of RNC 2050 will play a key role in the decarbonisation of the Portuguese economy.

Although this is a matter that tends to be controversial considering the financial impacts for the industry and for landowners, we expect that in the short term a specific legal regime for the prevention of soil contamination and for soil remediation will be published. Finally, the new legal regime, recently approved by the government, regarding production of water for reuse, obtained from the treatment of waste water, if effectively implemented, will be key to save water and achieve a more sustainable use of water basins considering that droughts and water shortage are increasingly affecting the Portuguese territory each year.

ABOUT THE AUTHORS

MANUEL GOUVEIA PEREIRA

Vieira de Almeida

Manuel Gouveia Pereira is a managing associate at the planning and environment practice at VdA. He has a law degree from Lusíada University of Lisbon, Faculty of Law, a master's degree in administrative law from the University of Lisbon, Faculty of Law and a postgraduate degree in planning and environmental law from the University of Coimbra, Faculty of Law. He teaches environmental law in the seminar of politics and innovation in environment, in the integrated master's course of environmental engineering, and at the sciences and technology faculty of the New University of Lisbon. He also teaches the planning law module in the postgraduate course on real estate management and assessment at the Portuguese Institute for Development and Economic, Financial and Corporate Studies.

He is frequently invited to talk to the press on environmental matters, being a commentator on waste issues, and is the coordinator of VdA's Green Project, the firm's environmental sustainability project. Before joining the firm, he worked as legal adviser to two cabinets of the Minister of the Environment and Spatial Planning, between 2007 and 2011. He is actively involved in several transactions in Portugal and abroad, focused on environmental compliance, namely in the waste and water sectors, energy (including renewables), oil and gas, mining, aquaculture, agriculture, economy of the sea, circular economy and environmental sustainability goals and issues.

VIEIRA DE ALMEIDA

Rua Dom Luís I, 28
1200-151 Lisbon
Portugal
Tel: +351 21 311 34 00
Fax: +351 21 311 34 06
mgp@vda.pt
www.vda.pt

an LBR business

ISBN 978-1-83862-451-4