



# STRATEGY CCUS

A viable **solution** for a **sustainable** future

## D5.6 Issues to facilitate the deployment of CCUS

Release Status: PUBLIC

Authors

Berenblyum R., Bell, R., Rocha P.

*FhG-ISI Team:* Sabine Preuß & Elisabeth Dütschke,

*Ebro Basin:* Canteli, P.,

*Greek Team:* Koukouzas N., Tyrologou, P., Karapanos, D., Karametou, R., Maraslidis, G., Karampetsou, E., and Christopoulou, M.,

*French team:* Dumas, C.; Gravaud, I.; Coussy, P.; Veloso, M.L., F.

*Polish team:* Sliwinska, A.,

*Portuguese team:* Rocha, P., Carneiro, J., Mesquita, P.,

*Croatian team:* Vulin, D., Jukic, L.

*Romanian team:* Dudu, A., Sava, C.

**Date:** 15 July 2022

**Filename and version:** STRATEGY-CCUS-Template-v7.docx

Project ID NUMBER 837754

STRATEGY CCUS (H2020-LC-SC3-2018-2019-2020/H2020-LC-SC3-2018-NZE-CC)

1



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 837754



## Document History

### Location

This document is stored in the following location:

Filename	D5.6 IssuesFacilitateCCUS
Location	<a href="https://www.strategyccus.eu/project-outputs">https://www.strategyccus.eu/project-outputs</a>

### Revision History

This document has been through the following revisions:

Version No.	Revision Date	Filename/Location stored:	Brief Summary of Changes
Draft 1	10 May 2022		First layout draft
Final draft	14 July 2022		Final draft

### Authorisation

This document requires the following approvals:

AUTHORISATION	Name	Signature	Date
WP Leader	Paula Coussy		18/07/22
Project Coordinator	Fernanda de Mesquita Lobo Veloso		19/07/22

### Distribution

This document has been distributed to:

Name	Title	Version Issued	Date of Issue
		PUBLIC	00/00/0000



© European Union, 2022

No third-party textual or artistic material is included in the publication without the copyright holder's prior consent to further dissemination by other third parties.

Reproduction is authorised provided the source is acknowledged.

Berenblyum R., Bell, R., Rocha P et al. 2022. D5.6 Issues to facilitate the deployment of CCUS, 44 p. Deliverable of EU H2020 STRATEGY CCUS Project. Grant Agreement 837754.

#### Disclaimer

The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.



## Executive summary

---

This deliverable summarizes the activities in previous tasks of work package 5 and presents the key issues and the possibly way forward for CCUS deployment in the 8 regions. In the analysis carried out the deployment issues were divided into three large groups: techno-economic, social and policies and government factors. The local teams carried out the analysis and the summary based on the 8 regions is given below:

- For techno-economic aspects:
  - Capture related technologies have few of the obstacles
  - Transport is mostly fine and well-advanced with few obstacles to overcome
  - Storage is struggling most of the regions with lack of availability and reliability of data as well as maturation of storage sites.
  - Multisectoral approach to CCUS is largely fine
  - Business models and costs are still a large issue for CCS implementation in the regions analysed.
- Social aspects look generally more advanced compared to techno-economic aspects:
  - Stakeholders that were identified as relevant for CCUS deployment have positive attitude toward CCUS
  - The liaisons between industry and stakeholders are also advanced in most regions
  - Society's awareness and knowledge about CCUS technologies is low and presents a major bottleneck to work on. In addition, the general awareness of the necessity of climate change mitigation in the general public could also be improved
  - The negative local impacts of CCUS on the environment presents a bottleneck in most regions
  - The potential of local public resistance needs to be considered carefully for the planning of CCUS in the regions
  - In contrast, the potential of CCUS to attract new industries including the maintenance or creation of jobs is advanced or moving slowly in all regions
- Finally, policy / regulations showed many issues as well:
  - Policy and regulations are largely an issue
  - Legal framework and availability of renewable energy is largely fine with some obstacles
  - Permitting, incentives and transboundary regulations are a large issue

Finally, national and territorial integration of CCUS into strategies varies across the regions from posing obstacles to being fine. None of the 8 regions analysed are issue free and all of them require future work to be done to facilitate CCUS deployment. Similarly in all three of techno-economic, social and policies and government factors there are issues identified.

4



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 837754



# Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>7</b>
<b>2</b>	<b>Key factors in facilitating CCUS deployment.....</b>	<b>8</b>
<b>2.1</b>	<b>Techno-economic factors.....</b>	<b>8</b>
<b>2.2</b>	<b>Social factors .....</b>	<b>9</b>
<b>2.3</b>	<b>Policies and governmental factors .....</b>	<b>11</b>
2.3.1	Capture .....	11
2.3.2	Transport .....	13
2.3.3	Storage.....	14
2.3.4	Health and safety.....	16
2.3.5	Environmental protection.....	17
<b>3</b>	<b>Regional status and way forward .....</b>	<b>20</b>
<b>3.1</b>	<b>Paris basin and Rhone Valley, France .....</b>	<b>20</b>
3.1.1	Paris Basin summary of the current status .....	20
3.1.2	Rhone valley summary of the current status.....	21
3.1.3	Suggested way forward for both regions in France.....	22
<b>3.2</b>	<b>Lusitanian basin, Portugal.....</b>	<b>23</b>
3.2.1	Summary of the current status .....	23
3.2.2	Suggested way forward .....	26
<b>3.3</b>	<b>Ebro basin, Spain .....</b>	<b>28</b>
3.3.1	Summary of the current status .....	28
3.3.2	Suggested way forward .....	30
<b>3.4</b>	<b>Upper Silesia, Poland .....</b>	<b>31</b>
3.4.1	Summary of the current status .....	31
3.4.2	Suggested way forward .....	31
<b>3.5</b>	<b>Northern Croatia .....</b>	<b>33</b>
3.5.1	Summary of the current status .....	33
3.5.2	Suggested way forward .....	33
<b>3.6</b>	<b>West Macedonia, Greece.....</b>	<b>34</b>

5



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 837754



3.6.1	Summary of the current status .....	34
3.6.2	Suggested way forward .....	34
<b>3.7</b>	<b>Galati area, Romania .....</b>	<b>36</b>
3.7.1	Summary of the current status .....	36
3.7.2	Suggested way forward .....	37
<b>3.8</b>	<b>Synthesis .....</b>	<b>38</b>
<b>4</b>	<b>Bibliography or Reference List .....</b>	<b>44</b>



# Issues to facilitate the deployment of CCUS

---

## 1 Introduction

The main goal of task 5.5 (*Identify issues to facilitate the deployment of CCUS in the most promising regions and prepare recommendations for the deployment of CCUS*) presented in this deliverable was to identify the main issues that need to be addressed to facilitate the development of the CCUS value chains designed in the project. The task relies on the work done in all other work packages from mapping the potential (WP2) to social acceptance and stakeholder engagement (WP3), methodological development (WP4) and establishing the plans and TEA (WP5). Scenario deployment issues were divided into three large groups: techno-economic, social and policies and government factors.

The key factors facilitating the CCUS deployment for each of the techno-economic, social and policies and government groups were put together by the project team and described in the first part of the report based on the activities in work packages 3 to 5.

The local teams were asked, based on their work with the scenario development and public engagement to describe the status in their countries as well as provide the key actions needed to facilitate the implementation of the developed scenarios. Finally, the status was synthesized into a traffic light type tables with key factors grouped into techno-economic, social and policies and government factors. An analysis of synthesised data was carried out to find common issues across the regions. The summary of the analysis can be found at the end of the report.

Maturity of storage, establishing good social awareness, policies, incentives and working with clarifying the regulations for CO<sub>2</sub> storage appear as cornerstone for enabling CCUS value chains across Europe.



## 2 Key factors in facilitating CCUS deployment

### 2.1 Techno-economic factors

Technical readiness level and economy of the CCUS value chain are among key factors for facilitating industry engagement in any industrial process. Activities in WP2 (data gathering), WP4 (LCA) and WP5 (scenarios deployment) are in their essence geared towards evaluating these factors.

WP4, deliverable 4.5 concluded two key elements in deployment of CCUS:

- **Storage maturity impact.** Achieving “bankable” status of storage requires investment of time and money in majority of the regions in Europe. While achieving the bankability can take up to 40% of storage costs, it is still minor portion of the total costs along the value chain. How costly and time consuming this would be depends rather heavily availability and reliability of storage assessment data for site characterisation. If resolved, it will provide a good benefit for small cost.
- Establishing **sound business models**, supported by policies and funding mechanisms is an extremely important factor.
- Existence and establishing of business models would heavily depend upon existence of the **industry with a vision of carbon neutrality**.
- The **capture** technologies should be ready for both **large** and **small** emitters therefore allowing to address the needs of different players in the most relevant sectors.
- Another technological factor vital for reducing the overall footprint of the whole value chain is **availability of “clean” energy**, such as, for example, waste heat or low enthalpy geothermal energy, renewable hydrogen, hydro-, wind- and solar power. This is of prime importance for high power demanding capture infrastructure.
- Mapped and diverse **utilisation** technologies are an important factor in reducing costs and therefore lowering threshold of the implementation.
- Linking capture facilities of different type and scale with utilisation and storage sites would require **multi-sectoral approach for deployment**, experience in **full-chain integrated solutions** for complex networks design, availability of the **mapped temporary storage sites** for CO<sub>2</sub> reutilization, **existence of flexible transportation solutions** and possibility of refurbishing some infrastructure for CO<sub>2</sub> transport and storage to reduce costs.

Large spectre of the techno-economic factors and span of required solutions for emitters of different types and scales as well as the range of utilization possibility and storage options create a challenging problem to find a solution too. The diversity of the solutions is best illustrated in outcomes of long-term scenarios (Fig. 0-1 in deliverable 5.3) also presented here in Figure 1.



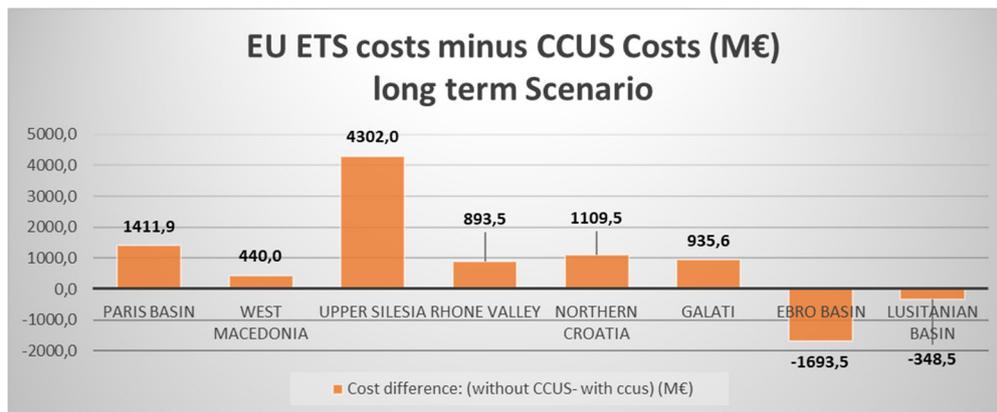


Figure 1. Financial gap between CCUS costs and EU ETS costs, with Upper Silesia being by far most attractive (cost wise) and Ebro Basin the most negative one.

Section 3 outlines the current state of the regions and suggested way forward, with a tabulated synthesis presented in section 3.9.

## 2.2 Social factors

Research has shown that the social acceptance of CCUS can be a major barrier for its implementation (Dütschke, 2011) based on various reasons (Dütschke et al., 2016; Oltra et al. 2012). Thus, considering social acceptance and the societal factors that are influenced by the implementation of CCUS in a region appears crucial. Since STRATEGY CCUS focuses on the planning of industrial clusters and potential preparations for the implementation of CCUS, the focus of the work regarding social acceptance (WP3) was on the relevant stakeholders. These stakeholders are part of and shape the social acceptance of CCUS: They also influence the public acceptance in the general population by acting as informants in the region that convey information about CCUS and its deployment as well as by presenting contacts in case of questions and insecurity within the general population. Based on the interviews (deliverable 3.2) that were conducted with the identified stakeholders, supported on an a priori stakeholder mapping (deliverable 3.1), the overall attitude of stakeholders toward the implementation of CCUS was positive; only very few stakeholders mentioned a more sceptical or neutral position regarding CCUS. In addition, the representative surveys conducted within the general population in France - Rhône Valley - and Spain - Ebro Basin - (for details see deliverable 3.3) show that the level of acceptance of CCUS was about 50% (with higher levels of acceptance for CCU compared to CCS and slightly higher levels in Spain than in France). Interestingly, the levels of acceptance did not differ largely when comparing the results from the regional surveys (n = around 1300 each in Spain and France) with the national surveys (same approximate sample size as on the regional level). Thus, we did not find clear NIMBY (i.e. Not In My BackYard) effects. Taken together, although the knowledge and familiarity of CCUS in the general population was low (compared to the knowledge of stakeholders), we also found medium levels of acceptance of CCUS in the general population in France and Spain.



Regarding benefits of CCUS, the interviewed stakeholders mentioned mainly (1) the climate change mitigation global benefit as well as (2) the potential for socio-economic benefits in the region such as job creation / preservation and economic growth / stability with new / existing industry (for details see deliverable 3.2). As risks or barriers of CCUS the stakeholders mentioned the economic feasibility, the required infrastructure for transport and storage as well as the administration and responsibility of the entire CCUS chain (e.g., who will have the responsibility and manage the CCUS system?). These barriers are more closely related to the other two pillars (techno-economical and governmental factors). The barriers relevant for the societal acceptance of CCUS – as mentioned by the stakeholders and identified in the WP3 research – are the potential risk for the environment, (including the fear of leakage) and the potential impact on existing natural and cultural heritage (a high identification of the general public with the region and the related industry is observed) as well as a lack of public awareness of climate change and more precisely of the relevance of CCUS to mitigate it. From existing CCUS research, we know that the lack of trust in stakeholders that act as informants can also present a barrier to CCUS implementation (L'Orange Seigo et al., 2014; Oltra et al., 2012). Thus, it is important to choose wisely who will communicate what and in which way.

Consequently, to avoid social resistance, it can help to integrate participatory formats and a social dialogue early on so that the public is heard and does not have a feeling of “the decision has already been made (without us)”. In addition, participatory formats and a social dialogue will help to educate the general public and spread information and knowledge about CCUS and its deployment. However, from a psychological perspective, we need to consider not only knowledge but also other factors, like emotions, shape attitudes and related behaviour. Thus, feelings of the general public that can be influenced by loud voices (sometimes raised by only a few people such as neighbourhood groups, influencers, or NGOs) can guide resistance or acceptance regarding the implementation of CCUS within a region.

To conclude, based on our research as well as existing literature, the following aspects present social bottlenecks for the implementation of CCUS and its acceptance:

- a lack of public awareness of climate change and more precisely,
- a lack of awareness regarding the relevance of and the knowledge about CCUS,
- stakeholders' attitudes toward CCUS,
- the potential risk for the environment including the danger of leakage, the potential impact on existing natural and cultural heritage,
- the potential lack of (local) public acceptance (e.g., due to a few loud voices and related emotions),
- a good liaison between industry and further stakeholders as well as
- to attract new industries (including jobs) and to maintain existing jobs that fit to a high identification of the general public with the region and the related industry.

In the following section 3, the regional perspective on these aspects will be outlined, followed by a synthesis across all studied regions in Chapter 3.8 of this deliverable.



## 2.3 Policies and governmental factors

The following sections list the key EU Directives and regulations that govern CCUS. For each Directive, Member States have some flexibility on how the legislation is implemented once transposed into national law. This section gives a summary of the purpose of the EU legislation, and its relevance to CCUS; Appendix A contains a list of the legislation transposing each Directive into national law for Croatia, France, Greece, Poland, Portugal, Romania, and Spain.

### 2.3.1 Capture

#### 2.3.1.1 *Industrial Emissions Directive*

Directive 2010/75/EU on industrial emissions (pollution prevention and control)<sup>1</sup> sets rules on integrated prevention and control of pollution arising from industrial activities.

It sets a requirement for industrial plants to have a permit, with conditions set by the relevant authority, and to operate in accordance with general principles, including:

- All the appropriate preventative measures are taken against pollution
- The best available techniques are applied
- No significant pollution is caused
- Energy is used efficiently
- The necessary measures are taken to prevent accidents and limit their consequences

The Directive is relevant to CCUS in three ways:

- It requires combustion plants over 300MW to be built carbon-capture ready (art. 36)
- It applies to CO<sub>2</sub>-emitting industries such as:
  - Energy industries
  - Production and processing of metals
  - Mineral industry
  - Chemical industry
  - Waste management
  - Other activities, including paper & pulp, textiles, industrial farming (see Annex I of the Directive for more details)
- It applies to CO<sub>2</sub> capture (regardless of whether the plant to which the capture equipment is attached is covered by the Directive)

---

<sup>1</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02010L0075-20110106>



This means that CCS is covered both by virtue of its being a Best Available Technique for decarbonisation (in order for plants to meet permit requirements) and by being a potential source of emissions in its own right (e.g. through the use of solvents in CO<sub>2</sub> separation).

### 2.3.1.2 Emissions Trading Directive

Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union establishes and governs the EU ETS.

It requires any Annex 1 installation to have a greenhouse gas emissions permit & to surrender allowances equal to the total emissions of the installation in each calendar year. Allowances must be surrendered for all greenhouse gases emitted from an installation. Allowances do not have to be surrendered for emissions that are captured and transported for permanent storage in accordance with the CCS directive, **but a few other possibilities are currently under discussion, namely CO<sub>2</sub> utilisation, based on the environmental integrity and positive balance they could provide.** The proposal for a revised EU Directive<sup>2</sup> will allow CO<sub>2</sub> utilisation that results in CO<sub>2</sub> being permanently chemically bound in a product to be treated in a similar way to geological CO<sub>2</sub> storage.

Annex 1 includes industrial sites (for which CCUS is a decarbonisation option) and CO<sub>2</sub> capture, transport and storage itself. The CO<sub>2</sub> Storage Directive requires that allowances must be surrendered for any leaked emissions.

The Directive requires that at least 50% of member states' revenues from auctioning allowances should be used for climate change-related activity: CCS is named as one such activity. The proposal for a revised EU ETS Directive<sup>3</sup> increases this requirement to 100%.

Article 10a establishes the Innovation Fund, which is available for environmentally safe CCU and CCS projects.

The ETS Directive only refers to CO<sub>2</sub> capture & transport for the purposes of CO<sub>2</sub> storage as being covered by the ETS – it says nothing about CO<sub>2</sub> capture & transport for the purposes of CO<sub>2</sub> utilisation.

---

<sup>2</sup> <https://www.cleanenergywire.org/factsheets/understanding-european-unions-emissions-trading-system>

<sup>3</sup> [https://ec.europa.eu/info/sites/default/files/revision-eu-ets\\_with-annex\\_en\\_0.pdf](https://ec.europa.eu/info/sites/default/files/revision-eu-ets_with-annex_en_0.pdf)



## 2.3.2 Transport

### 2.3.2.1 TEN-E Regulation

Regulation 347/2013 on Trans-European Networks – Energy<sup>4</sup> defines cross-border CO<sub>2</sub> transport projects as a class of Projects of Common Interest, provided they contribute to:

- The avoidance of CO<sub>2</sub> emissions while maintaining security of energy supply,
- The increase of the resilience and security of CO<sub>2</sub> transport,
- The efficient use of resources, by enabling the connection of multiple CO<sub>2</sub> sources and storage sites via common infrastructures and minimising environmental burdens and risks.

#### Regulation

A proper CO<sub>2</sub> transportation network is essential to allow the deployment of CCUS across EU regions, countries and the whole EU. The key objective of the TEN-E Regulation should be to foster and develop the energy carriers needed to achieve carbon neutrality. For many sectors, this involves the development of CO<sub>2</sub> transport infrastructure from scratch or repurposing existing infrastructures as well as the development of hydrogen networks and appropriate electricity infrastructures interconnected with CO<sub>2</sub> infrastructures. Altogether will play an important role in the overall CCUS deployment context and infrastructure needs, which should be coordinated at both an EU and member states level.

TEN-E future revision is a key opportunity to develop an EU CO<sub>2</sub> transport infrastructure that supports carbon neutrality for energy-intensive industries:

- It is critical that CCUS is maintained and enhanced as one of the 12 strategic TEN-E infrastructure priorities,
- The TEN-E Regulation should encompass all CO<sub>2</sub> transport modalities, including ships, barges, railways, trucks..., in addition to pipelines – thereby supporting the take-off of CCUS, including in regions where installing new pipelines may not be economical,
- The revised TEN-E Regulation should also support the repurposing and retrofitting of some natural gas pipeline networks for the transportation of CO<sub>2</sub>, in addition to “dedicated CO<sub>2</sub> pipelines”; such re-purposing of the gas network will become increasingly relevant given the future necessary changes of the EU energy mix,
- Beyond its storage, the utilisation of CO<sub>2</sub> should also be recognised in future TEN-E Regulation revision, as using the CO<sub>2</sub> will become an important part of CCUS projects in the future, namely, for plants located far from geological storage sites. In some industries, a number of projects look at using/converting CO<sub>2</sub>, either through mineralisation (permanent capture of CO<sub>2</sub> through

---

<sup>4</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02013R0347-20220428>



carbonation) or through the generation of chemicals and synthetic fuels (in mixture with hydrogen). Captured CO<sub>2</sub> will provide a cleaner source of carbon for chemical and refining industries for the future, replacing the current dependency of fossil-based feedstocks

- The next list of EU Projects of Common Interest (PCI) that will be developed through the TEN-E Regulation should be compliant with the objective of carbon neutrality by 2050 and therefore allow for the scaling-up of CO<sub>2</sub>, hydrogen and electricity transport infrastructure.
- The rollout of hydrogen and electricity infrastructures should also be considered and supported.

### 2.3.2.2 *London Protocol*

The 1996 London Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter currently prevents cross-border transport of CO<sub>2</sub>. In 2006 amendments to Annex I of the London Protocol were proposed by the UK, Norway and others to include CO<sub>2</sub> streams from carbon capture processes for storage to the list of wastes or other matter that may be considered for dumping and therefore to regulate “carbon-dioxide streams from CO<sub>2</sub> capture processes for sequestration”.

However an amendment to article 6 of the protocol, agreed in 2009, will allow CO<sub>2</sub> export for geological storage, once two thirds of the countries that are parties to the protocol have ratified it<sup>5</sup>. By late 2020, only six countries had done so: Norway, UK, Netherlands, Iran, Finland and Estonia<sup>6</sup>.

Under the London Protocol CO<sub>2</sub> Export Resolution, countries that have ratified the 2009 amendment can make bilateral agreements to transport CO<sub>2</sub> by ship between themselves<sup>15</sup>.

However, the 2009 export amendment is not yet in force since it needs to be ratified after being formally accepted by two-thirds of the Parties to the London Protocol. This process has been extremely slow with just six of the 53 Contracting Parties, Norway, UK, Netherlands, Iran, Finland and Estonia, having accepted the amendment by 2019. In face of this context, there are still legal barriers to exporting CO<sub>2</sub> from one country to another for offshore geological storage projects or other usages.

### 2.3.3 *Storage*

#### 2.3.3.1 *CO<sub>2</sub> Storage Directive / The CCS Directive*

Directive 2009/31/EC on the geological storage of CO<sub>2</sub><sup>7</sup> establishes a legal framework for the environmentally safe geological storage of CO<sub>2</sub>, for the purpose of permanent containment to reduce impacts on the environment and human health.

---

<sup>5</sup> <https://www.imo.org/en/OurWork/Environment/Pages/CCS-Default.aspx>

<sup>6</sup> <https://az659834.vo.msecnd.net/eventsairwesteuprod/production-ieaghg-public/02cfa769f5c47bf9739550164b96134>

<sup>7</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:02009L0031-20181224&from=EN>



This Directive establishes the permitting regime for geological CO<sub>2</sub> storage, and the long-term monitoring and management of sites. It requires member states to take a number of actions and put in place a number of procedures and processes, including:

- Undertake an assessment of storage capacity
- Put in place procedures for granting exploration permits, and for ensuring no conflicting uses of the potential storage complex while the permit is valid
- Put in place procedures for granting storage permits, and for ensuring no conflicting uses of the storage site while the permit is valid
- Ensure that storage operators only accept and inject CO<sub>2</sub> that reaches a certain level of purity
- Ensure that storage operators carry out monitoring
- Approve monitoring plan
- Determine frequency at which storage operators must report & additional information required in reports
- Organise a system of routine and non-routine inspections, and reporting thereon
- Ensure the operator notifies the competent authority of leakages or significant irregularities
- Agree post-closure plan with operator. Take on responsibility for monitoring and corrective measures if closure was due to the competent authority withdrawing the storage permit
- Determine the minimum period that must elapse before transfer of responsibility from storage operator to competent authority
- Ensure there is proof of the storage operator's financial stability
- Decide arrangements for the operator to make a financial contribution available to the competent authority
- Take the necessary measures to ensure that potential users are able to obtain access to transport networks and storage sites
- Put in place dispute settlement arrangements
- Designate a competent authority (or authorities). If more than one, establish arrangements for coordination of work
- Establish and maintain a register of storage permits granted, closed storage sites and surrounding storage complexes
- Make environmental information relating to CO<sub>2</sub> storage available to the public
- Report to the Commission every four years on implementation of the Directive
- Lay down rules on penalties for infringement



## 2.3.4 Health and safety

### 2.3.4.1 Seveso III Directive

Directive 2012/18/EU on the control of major accident hazards involving dangerous substances<sup>8</sup> requires operators of sites where dangerous substances are present to take measures to prevent major accidents, and take actions to limit the consequences of accidents that do occur.

Operators are required to:

- Notify the competent authority
- Produce a major-accident prevention policy
- Produce a safety report (upper-tier establishments)
- Produce an emergency plan (upper-tier establishments)

Member states are required to:

- Ensure the objectives of preventing major accidents and limiting the consequences of such accidents are taken into account in land-use planning.
- Make information permanently available to the public

The Directive does not cover CO<sub>2</sub> as it is not classified as a dangerous substance but may cover chemicals used in CO<sub>2</sub> capture such as amines.

It applies to onshore underground gas storage in natural strata, aquifers, salt cavities and disused mines.

It does not apply to:

- the offshore exploration and exploitation of minerals, including hydrocarbons,
- the storage of gas at underground offshore sites including both dedicated storage sites and sites where exploration and exploitation of minerals, including hydrocarbons are also carried out.

### 2.3.4.2 Offshore Oil and Gas Safety Directive

Directive 2013/30/EU on safety of offshore oil and gas operations<sup>9</sup> sets in place rules to prevent and deal with accidents in offshore installations.

---

<sup>8</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012L0018>

<sup>9</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02013L0030-20210101>



The Directive applies to non-production installations as well as production operations – this could be taken to apply to CO<sub>2</sub> storage, particularly well-drilling and operation. It appears to be the only EU Directive specifically addressing offshore safety issues.

### 2.3.5 Environmental protection

#### 2.3.5.1 Water Framework Directive

Directive 2000/60/EC establishing a framework for Community action in the field of water policy<sup>10</sup> requires member states to make river basin management plans and prevent and control pollution.

This Directive applies to inland surface waters, transitional waters, coastal waters and groundwater. The definition of groundwater in the Directive is “all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil” (art. 2) – it is not clear whether this just means groundwater under land and coastal waters, or below the marine area too – this means that it is not clear whether the requirements of the Directive apply to offshore CO<sub>2</sub> storage, or onshore storage only.

Member states must specify the conditions under which geological CO<sub>2</sub> storage may be authorised (art. 11).

#### 2.3.5.2 Marine Strategy Framework Directive

Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy<sup>11</sup> requires member states to develop marine strategies to achieve or maintain good environmental status.

Member states must take into account the impacts of offshore structures and human activities that will have an impact on the marine environment. Annex 3 provides an indicative list of uses and human activities in or affecting the marine environment. While it does not specifically mention CO<sub>2</sub> transport and storage, it does include offshore structures, transport infrastructure and industrial uses, as well as activities comparable to CCS such as oil and gas and renewables, so offshore CCS activities can be assumed to be covered by the Directive.

---

<sup>10</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02000L0060-20141120>

<sup>11</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02008L0056-20170607>



### 2.3.5.3 *Maritime Spatial Planning Directive*

Directive 2014/89/EU establishing a framework for maritime spatial planning<sup>12</sup> requires member states to draw up maritime spatial plans to map existing human activities in marine waters and identify their most effective future spatial development.

Although not explicitly mentioned in the Directive, this would include offshore CO<sub>2</sub> storage and related infrastructure in marine (not coastal) waters.

### 2.3.5.4 *Environmental Liability Directive*

Directive 2004/35/EC on environmental liability regarding the prevention and remedying of environmental damage<sup>13</sup> requires operators to prevent and remedy environmental damage caused by their activities. It requires the member state to designate a competent authority (or authorities) responsible for fulfilling the duties in the Directive.

This Directive applies to operators of CO<sub>2</sub> storage sites.

### 2.3.5.5 *Environmental Impact Assessment Directive*

Directive 2001/92/EU on the assessment of the effects of certain public and private projects on the environment<sup>14</sup> requires an environmental impact assessment to be carried out before development consent can be granted.

An environmental impact assessment (EIA) is required for<sup>15</sup>:

- Pipelines with a diameter of more than 800mm and a length of more than 40km for the transport of CO<sub>2</sub> for the purposes of geological storage, including associated booster stations
- CO<sub>2</sub> storage sites covered by the CO<sub>2</sub> Storage Directive
- Installations for the capture of CO<sub>2</sub> streams for the purposes of geological storage from installations covered by Annex I, or where the total yearly capture of CO<sub>2</sub> is 1.5megatonnes or more
  - Annex I includes:
    - Crude-oil refineries
    - Thermal and power stations
    - Iron and steel smelting, and production of non-ferrous crude metals
    - Integrated chemical installations

---

<sup>12</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0089>

<sup>13</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02004L0035-20190626>

<sup>14</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02011L0092-20140515>

<sup>15</sup> See art. 4 and Annex I for more details.



- Construction of roads and railways
- Inland waterways and ports
- Waste disposal installations
- Groundwater and transfer of water between river basins
- Wastewater treatment
- Oil and gas extraction
- Pulp and paper plants

It is for member states to decide whether projects in Annex II require an EIA:

- Installations for the capture of CO<sub>2</sub> streams for the purposes of geological storage from installations not covered by Annex I
- Pipelines for the transport of CO<sub>2</sub> streams for the purposes of geological storage (projects not included in Annex I)
- Projects referred to in article 4(2) include:
  - Energy industry
  - Production and processing of metals
  - Mineral industry
  - Chemical industry
  - Food industry
  - Textile, leather, wood and paper industries
  - Rubber industry
  - Infrastructure projects

#### 2.3.5.6 *Strategic Environmental Assessment Directive*

Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment<sup>16</sup> requires that an environmental assessment be carried out, and be taken into account in decision-making for plans and programmes for a number of sectors (including energy, industry, transport, waste management, town and country planning or land use) and which set the framework for development consent for projects covered by Annexes I & II of the EIA Directive (section 2.3.5.5).

Member states must either incorporate the requirements of the Directive into existing procedures for the adoption of plans and programmes, or establish new procedures.

Plans and programmes which set the framework for development consent for CCS projects and infrastructure must be subject to environmental assessment before they can be adopted.

---

<sup>16</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32001L0042>



## 3 Regional status and way forward

### 3.1 Paris basin and Rhone Valley, France

#### 3.1.1 Paris Basin summary of the current status

The STRATEGY CCUS scenario for the Paris basin considers, on the 2027-2035 period:

- capturing CO<sub>2</sub> from the 3 major carbon emitters in southern of Paris: 2 waste incineration plants and a chemical plant;
- transporting CO<sub>2</sub> by dedicated pipelines and storing it in a deep saline aquifer (Keuper Fm) in the southern part of the region;
- a cumulated amount of approximately 6 Mt of captured CO<sub>2</sub> by 2035 is planned.

On the long term (2035-2050), in addition to the previous plants:

- 4 emitters located on the route between Paris and the storage place would be connected to the CO<sub>2</sub> transport pipeline: a natural gas-fired cogeneration plant and 3 waste valorisation plants.
- A second storage infrastructure should be built to store the surplus of CO<sub>2</sub> in the same geological formation but reaching another sedimentary member.
- By 2050, approximately 36 Mt CO<sub>2</sub> would be captured and stored including 9.1 Mt of negative emissions. This would represent 18% of the French national objectives for CCUS.

On the techno-economic analysis, the STRATEGY CCUS scenario for Paris basin raised several challenges. Available space for building capture installations is a challenge for emitters located in the dense urban areas of the region. In addition, the size of the emitters, which are mainly small to medium emitters, raises economic issues for capture investments at site scale. Besides, most emitters belong to the waste-to-energy sector, which are not included in the EU-ETS, and which is very specific compared to other industrial sectors, as it provides a public service. From a geological point of view, the theoretical resources are proven, and this is a paramount driver for development of CCUS in the region.

On the social aspects, the survey conducted at national level within the general population in France - in WP3 of STRATEGY CCUS - demonstrated that the level of knowledge about the CCUS technology is very low, however, the public acceptance regarding the regional implementation of CCUS was at a medium level (CCU: 63%, CCS: 45%). At regional level, stakeholders' engagement in the project showed their awareness of the climate change issue and of the existence of the CCUS technology among low-carbon solutions.

From the political and regulatory perspective, although CCUS is mentioned in the national low carbon strategy, no clear national objectives have been set up. There is a lack of political support on this



technology at national and regional levels. No incentive exists to launch CCUS projects, except EU-ETS, and French waste-to-energy sector is currently not included.

### 3.1.2 Rhone valley summary of the current status

The STRATEGY CCUS scenario for the Rhone valley considers, on the 2026-2040 period:

- capturing CO<sub>2</sub> from 5 major carbon emitters in Marseille cluster: a steel plant, an oil refinery (and its associated hydrogen production unit produced by steam reforming of natural gas), a cement plant, and a chemical plant.
- A part of the CO<sub>2</sub> emitted by an energy from waste plant is considered for capture from 2040.
- These industrial sites are within less than 50km away from each other.

A key challenge lies in region's development of its own geological CO<sub>2</sub> storage capacity. A hundred Mt of onshore storage capacities have been identified as part of WP2 (in the shape of 4 deep saline aquifers), but they lie beneath the protected area of Camargue. Offshore storage capacities are foreseen off Marseille but are yet to be fully established. However, other options are identified as part of the project such as storage sites located in the Paris basin. Making use of these assets would involve transporting CO<sub>2</sub> over 700km approximately from the Marseille region to the Paris basin.

Over the 2026-2050 period:

- 50.5 Mt of CO<sub>2</sub> is captured;
- 29.4 Mt to be stored;
- 21.1 Mt to be used to produce ethanol.

Two scenarios have been considered for CO<sub>2</sub> storage:

- a "first storage" in Camargue is considered to hold the CO<sub>2</sub> to be stored until mid-2039 - in view of its characteristics. From mid-2039, CO<sub>2</sub> is then stored in the Donnemarie structure (Trias) in the Paris basin.
- A sole storage in the Paris basin (Donnemarie - Trias).

Given the distance between Marseille and Paris, the reuse of existing infrastructures (oil and gas pipelines and/or rail) is chosen.

On the economic assessment, the geographic density of emitters and the existence of many infrastructures are such that they should give rise to cost reduction regarding CO<sub>2</sub> transport (given the long distance to cover from Marseille to Paris).

On the social aspects, elements discussed in the Paris basin section (refer to 3.1.1) applies to the Rhone valley. Local survey results show, however, that knowledge and familiarity with CCUS is very low: only 1 respondent out of 10 has heard of CCUS before. Also, the general attitude is that CCUS is



considered as one option among many options to reduce CO<sub>2</sub> emissions and some interviews state that CCUS should play a limited role in the solution.

The points made in section 3.1.1 from the political and regulatory perspective are true at the national level. The Rhone valley challenge, i.e. a lack of identified storage capacities in the region induces that regulation concerning the reuse of existing pipelines (basically designed to carry hydrocarbons) to transport CO<sub>2</sub> may prove to be a central concern.

### 3.1.3 Suggested way forward for both regions in France

#### 3.1.3.1 Paris basin

Regarding CO<sub>2</sub> storage, Paris Basin has great potential to CO<sub>2</sub> storage. The next step to raise storage capacities maturity and get bankable resource is to drill an appraisal well and carry out an injection CO<sub>2</sub> test. In parallel, work on public acceptance needs to be taken forward with studies specific to storage in the Paris basin.

Developing capture technologies adapted to medium to small emitters and to areas with little space available would enable CCUS deployment in the Paris basin. Funding of the capture installations at the facilities is a challenge, in the absence of incentive. In particular, in the waste-to-energy public sector, state support and subsidies would be necessary.

Lastly, the region has a potential for negative emissions, since approximately half of the carbon emitted by waste incineration is biogenic. The setting up of a framework for accounting CO<sub>2</sub> negative emissions would encourage carbon capture on the waste-to-energy plants and the deployment of CCUS in this region.

#### 3.1.3.2 Rhone Valley

As it is the case for the Paris basin, storage characterization is a main issue for the Rhone valley. In particular, the eventuality of an offshore storage in the Mediterranean Sea is a determining factor considering the density of big emitters around the Marseille Fos port.

In this configuration, public support granted to pooled projects may turn out to be a key lever for CCUS deployment in the region. But more generally, Government's clear and consistent position about this technology is needed.



## 3.2 Lusitanian basin, Portugal

### 3.2.1 Summary of the current status

The opportunity and barriers for implementation of the CCUS scenarios developed for the Lusitanian basin were grouped into three pillars: i) techno-economic issues; ii) societal issues and iii) public policy /regulatory issues. The current status of those pillars is summarised in section 3.8 and described in detail hereafter.

#### 3.2.1.1 *Techno-economic pillar*

The scenarios developed for the Portuguese study region include the four components of the CCUS value chain, each with its own opportunities and challenges.

There is a small number of industrial sectors for which **CO<sub>2</sub> capture** is expected to become advantageous in the Lusitanian basin, namely the cement and the lime sectors, the glass sector and, accounting for the relevance of biogenic CO<sub>2</sub>, the pulp & paper sector. Technologies for CO<sub>2</sub> Capture at a full scale will be most probably available in Europe by 2030, however, they will not deliver any CO<sub>2</sub> reductions unless CO<sub>2</sub> transport and storage infrastructure is in place at the right time, in the right place and with the right capacity. It is widely known, for instance, that CCUS will be necessary for the cement industry to reduce its CO<sub>2</sub> emissions due to its hard-to-abate process emissions (representing 65% of total emissions) and to the fact of being a high enthalpy process with limited chances of electrification. Except for CO<sub>2</sub> sources in the glass sector, all other are large-scale sources for which the readiness of the capture technologies still faces some obstacles. They are expected to reach an adequate readiness level with full-scale industrial deployment expected only for the long-term (i.e., post-2035) scenario. The CO<sub>2</sub> emissions per unit in the glass sector are relatively smaller. Reaching cost-effectiveness of the capture technologies for such small-scale sources will also require further developments that may obstacle the implementation of capture technologies in that sector by 2028, as hypothesized in the pilot capture scenario for Portugal.

Nevertheless, all three relevant industrial sectors have a clear vision to reach carbon neutrality. The cement sector published a carbon neutrality roadmap that already envisions CO<sub>2</sub> capture in the sector. The pulp & paper sector relies mostly on biomass and so can reach neutrality even without CO<sub>2</sub> capture. The glass sector is actively looking for solutions for carbon neutrality, including transition to other energy sources, but plans are also being put forward for CO<sub>2</sub> capture pilots (ATIC, 2021; Navigator, 2020). Still, despite the carbon neutrality vision of the industry being “well advanced”, the same cannot be said for the development of sound business models. This is seen as a “major obstacle”, much due to the lack of a stable policy and regulatory environment that clarifies what are the mandatory medium- and long-term goals for the industry.

From the STRATEGY CCUS scenarios, it seems clear that CO<sub>2</sub> capture in the pulp & paper sector has in reach a business model for economic valuation of the CO<sub>2</sub> through reutilisation for producing synthetic



fuels in the scope of the national hydrogen strategy. In the long term, bioenergy with CO<sub>2</sub> capture and storage (BECCS) is also prone to provide an appealing business model.

**CO<sub>2</sub> utilisation** is indeed a major aspect of the long-term scenarios for the Lusitanian basin, with 22-32 Mt CO<sub>2</sub> from a total of 93 Mt CO<sub>2</sub> being captured in the main scenario and used for synthetic fuels production, in line with the National Hydrogen Strategy (EN-H2, 2020) vision. While this is a very positive factor, the mapping of other CO<sub>2</sub> utilisations opportunities (e.g. greenhouses, carbonation, chemical products, etc.) must be made if additional uses are to be considered. CO<sub>2</sub> capture can become the key source of carbon in the framework of a national circular economy. Whether some of these CO<sub>2</sub> utilisation options remove CO<sub>2</sub> from atmosphere permanently or for a long-time period, there should always be a global benefit when sourcing carbon from captured CO<sub>2</sub> instead of sourcing it from virgin fossil resources. However, some pathways for CO<sub>2</sub> utilisation will also require significant amounts of energy, often in the form of electricity, and this could become a constraint.

The **transport component** is considered “advanced” much due to the work conducted in the COMET (Boavida et al., 2013) and STRATEGY CCUS projects, which identified and provided high-level design of the transport alternatives, essentially through pipelines, but also addressing transport by train and ship due to their increased flexibility. The geographical arrangement of the main CO<sub>2</sub> fixed sources in the Lusitanian basin, aligned along a north-south axis, is a positive factor for building a relatively simple transport network. This network could benefit from being emplaced along the corridors of the existing natural gas pipeline networks. Some flexibility solutions based on existing railway or road infrastructures will have to be used at a very initial stage of these projects until a full-scale is attained.

Allowing carbon to be traded as a physical commodity between countries and regions in order to compensate the imbalance between emission sources and sinks is seen as an important aspect. Policies to foster this trade are required (like e.g. the TEN-E Regulation), as well as detailed source-sink mapping and creating opportunities for new industries and projects. This will require European level and international policy cooperation and responsibility sharing between EU and Member-States to attain the right match between CO<sub>2</sub> sources and sinks.

As for the **storage component**, there is moderate confidence that the country has enough geological storage capacity for its CO<sub>2</sub> permanent storage needs, taking into account the changes in the energy system that will take place to comply with the 2050 carbon neutrality objective. However, there is still a lack of sufficient geological data and information about deep saline aquifers. Thus, the existing storage assessments are at a low maturity level, seen as “theoretical”, and acquisition of new geological and geophysical information is a “moderate obstacle” that needs to be overcome to advance to at least “effective” or “practical” storage capacity assessments.

The implementation of STRATEGY CCUS scenarios in the Lusitanian basin faces “major obstacles” in the techno-economic component, due to the high capital costs required for the full CCUS chains (the main scenario having an annualized discounted CAPEX of 1,626 M€ until 2050), but also due to the relatively modest size of the Portuguese economy. The lack of infrastructures (pipelines or injection



wells) that could be refurbished for the transport or storage components also penalises the economic feasibility of the scenarios. The EU research programs need to help accelerate the identification of storage sites ready for CO<sub>2</sub> injection.

Apart from the required policy framework the country also needs sound business models that are effective for different phases of CCUS development (demonstration, pre-commercial and mature industry). A business perspective that will make these solutions attractive is necessary. It is key for policymakers to understand the potential business models relying on these technologies to develop all the required policies and other legislative work.

### *3.2.1.2 Societal pillar*

The studies conducted in WP3 of STRATEGY CCUS demonstrated that the level of knowledge about the CCUS technology among the general public and the local public administration is very low. This low society awareness and the lack of public surveys and communication strategies from credible sources are “moderate to major obstacles” that need to be overcome in the near future. Thus, a social dialogue must be developed, able to bring a “treaty of confidence” between generations and to promote the acceptance of infrastructure spending as a counterpoint to enabling decarbonisation of the economy.

On the positive side of the social pillar are the generally good liaisons between the industrial sectors considered in the STRATEGY CCUS scenarios and the local stakeholders and communities where the industries are emplaced, and that tend to be major employers. Such liaisons, together with the potential of the CCUS technologies to attract new industries and create new local jobs, may facilitate the abovementioned social dialogue, and prevent some of the almost inevitable NIMBY syndromes linked to new technologies.

### *3.2.1.3 Political / regulatory pillar*

Despite the challenges described in the techno-economic and social pillars, the Public Policies / Regulatory pillar is the one where more obstacles can be identified, and early progress is required. Although increasingly ambitious policies are defined by successive government in terms of decarbonisation goals, CCUS is not yet integrated in any of the official energy and climate policies. This, by itself, is a “major obstacle” for creating a rationale for public policy-based intervention. Moreover, this lack of visibility in the national public policies then spreads across the whole industrial, economic, and financial aspects required for deploying the STRATEGY CCUS scenarios.

Indeed, CCS & CCU technologies were not a noticeable part of the National Roadmap for Carbon Neutrality 2050 (RNC, 2019), nor of the National Energy-Climate Plan 2030 (NECP, 2020) although CCU is implicitly considered in the EN-H2. It is unfortunate, as having this signal in the RNC and NECP, and more directly stated in the EN-H2, would be paramount to create support and infrastructures for CCUS, as it is plain that these technologies are necessary for some industries to move along their carbon neutrality pathway. It then does not come as a surprise, that there is a lack of financial and



regulatory incentives for a faster deployment of the CCUS value chains, especially as regards CCS. The perspectives for carbon accounting when CO<sub>2</sub> is stored or utilised are still vague and un motivating for the industry to invest in CCUS, and the legal framework for CCUS infrastructure projects is, at best, unclear. Even for potential business models based on negative emissions, which may be relevant for those sources based on energy from biomass (such as the pulp & paper sector and partly the cement sectors), the lack of a framework for accounting negative emissions (for instance from BECCS) is a “major obstacle”.

The deployment of the full chain of CCUS technologies requires early incentives to CO<sub>2</sub> capture and their lack is detrimental to trigger investment in these technologies. While some of these “major obstacles” require the clarification of the carbon accounting criteria at an EU level, the willingness of national regulators to include CCUS in the decarbonisation plans and roadmaps is also essential for the industry to engage with these technologies.

There are some positive regulatory signals, such as the revision of the National Gas System that allows the injection of synthetic methane, and the existence of a permitting and liability framework and a national authority for CCS, stemming from transposition of the EU CC Directive. Nevertheless, there will be challenges, since permitting at local level or for offshore transport and storage may prove to be “moderate to major obstacles”, due to overlapping regulations for the marine environment.

### 3.2.2 Suggested way forward

The implementation of the long-term STRATEGY CCUS scenarios for the Lusitanian basin will require overcoming the obstacles previously mentioned in each of the three pillars. Some of these obstacles, e.g., the higher efficiency, cost decline, and technology readiness of CO<sub>2</sub> capture technologies, or the existence of a carbon accounting scheme in BECCS, are to be achieved at an international and EU scales. Other challenges must be addressed on a national level, such as financial support schemes or better regulatory framework. Anyway, implementing sound business models may only be possible after capital costs for CCUS decline and investment in geological and geophysical data acquisition is made to reach storage characterisation maturity.

This section focusses only on the way forward for those obstacles that depend mostly on the national initiative and/or are required in the near term to advance the multiple issues listed above. Four actions are recommended in the near term:

1. Clear integration of CCUS in the national decarbonisation plans and strategies. There is an excellent opportunity to be grasped here, as both the RNC and the NECP are entering revision phases. For CCU, these revisions are expected to consider the vision of the EN-H2, that already pointed, even if indirectly, to the need for CO<sub>2</sub> capture for producing synthetic methane based on renewable H<sub>2</sub> and CO<sub>2</sub>. Additionally, they need to contemplate the new goals under discussion in Fit for 55 package, such as the new targets for synthetic fuels in aviation. The value of the STRATEGY CCUS scenarios should be assessed in the national energy-emission models, and if proven cost-effective, taken into account in the national



policies. This should include declaring CCU and CCS value chains as strategic options for the country carbon neutrality goal, as well as setting targets and designing measures of financial and regulatory stimuli.

2. Implementation of a systematic and transparent communication about CCUS, primarily devoted to increase public and stakeholder awareness about these technologies' advantages, costs and risks. The communication should be based on information from credible sources in the academia, from the IPCC, and LCA and TEA studies. Social acceptance, or even better social support, is a key issue for the transport and storage components of the CCUS chain, and it requires proper engagement with the local industries, municipalities, NGOs, and general public.
3. Acquisition of detailed geological and geophysical data is essential to increase the maturity of the characterisation of geological CO<sub>2</sub> storage resources. The estimates made thus far in projects preceding STRATEGY CCUS, such as COMET (Boavida et al., 2013) and KTEJO (Carneiro et al., 2011), or in the ongoing PilotSTRATEGY project, are based on the database from oil & gas exploration efforts in Portugal. These were always limited and, as of the date of this report, are no longer available. This database is clearly insufficient to advance above the Tier 2 level (effective capacity). The scenarios developed in STRATEGY CCUS for the Lusitanian basin assume a storage capacity of at least 40 Mt in the onshore and 730 Mt in the offshore, but the level of uncertainty is very high and bankability of the storage resources is yet to be reached, implying that no business model can be developed for the storage component. Thus, a purposely devised campaign of seismic surveys and appraisal wells is necessary and directed to the target Deep Saline Aquifers. Deliverable 4.5 - *Cost-effectiveness of storage sites and comparison of promising regions* (Chen, 2022), of STRATEGY CCUS estimated the Pre-FID costs, including the characterisation of the storage complex to assess the site's containment, injectivity, capacity, integrity, hydrodynamics, and monitorability, to range from 19 M€ to 37 M€ for each onshore or offshore storage site. This amounts to less than 1% of the total costs for the CCUS chain and less than 6% of the total storage costs (undiscounted CAPEX+OPEX).
4. A CCUS Technology Platform Initiative should be developed by the private sector, research centres and universities, and could be partially funded by the government. This would help in attracting key players, developing attractive business models and de-risking investment in CO<sub>2</sub> transport and storage, also in capture and utilization, to make CCUS a reality in the Lusitanian Basin region and later on, in the entire mainland Portugal.



## 3.3 Ebro basin, Spain

### 3.3.1 Summary of the current status

Following the three pillars approach, i.e., i) techno-economic issues; ii) societal issues and iii) public policy /regulatory issues, the opportunities and barriers on the Ebro Basin region are here summarized.

#### 3.3.1.1 *Techno-economic pillar*

The Ebro Basin base scenario compiles the main industrials sector in the area (chemical and petrochemical industry, cement industry and power stations) up 85% of total recorded emissions. Both chemical-petrochemical sector and cement sector have a clear favourable position on the CCUS development, which is shown on their long-term strategy and experience on CCUS technologies.

The Chemical and petrochemical industry in Ebro Basin is represented by three international companies: both chemicals have experience on the CCUS technologies in USA and Canada, including blue hydrogen production, and huge potential (an interest) for CO<sub>2</sub> utilisation; the petrochemical industry has a strong presence (social and economic) in the area, and it is an international company of reference on the subsurface knowledge and technical capabilities of geological storage implementation.

The cement industry is presented in Ebro Basin with five cement plants. This sector is the first one including CCUS technologies on their sectorial strategy, and the only one mentioned on the national net zero strategy as potential CCUS user. The only one commercial capture plant in development in Spain (expected to be in operation on 2023) is from cement Carboneras Plant (Lafarge-Holcim), company also presents in Ebro Basin, bringing its experience from many other European projects.

On the other hand, power station sector presents some uncertainties at date: during first CCUS wave of interest (2007-2012), it was the main sector involved on the CCUS development. However, the current government announced their closure before 2040 and it was committed by the national decarbonization strategy: as a consequence, the sector lost any interest on CCUS. Currently, the situation is different due to the European energy crisis and the last approval from European Parliament about including natural gas as green energy, and those could also change the interest of the sector and reactivate their former interest.

Considering the transport network, the area has a very well-developed pipelines system, three international ports and other with potential to be reused such as the one built for the Castor natural gas storage and in abandonment process without use). The truck transport has been also considered in the area for those small emitters of the Barcelona area, avoiding the unnecessary pipeline costs.

Finally, the storage potential in the area is adequate to the level of emissions mainly thanks to a high-capacity storage site. It must be mentioned that the storage capacity included in this STRATEGY CCUS project only considers the public information of online storage potential owned by IGME. That means

28



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 837754



that it is possible the presence of other storage sites, mainly in the offshore area where several oil and gas reservoirs have been in production during the last 50 years and exists relevant subsurface information and infrastructure.

The barriers identified from the techno-economic point of view are mainly related to being the first in-kind implementation: there is not national experience on the full chain and many different stakeholders would be involved. In this type of megaprojects, with high investments and late income, inexperience does not create adequate confidence level for the industry, for the administration and for the society.

### 3.3.1.2 Societal pillar

Several studies have been carried out by WP3 in Ebro Basin and the conclusions so far are similar in other STRATEGY CCUS regions: the level of knowledge of the citizen in general is low. Based on these studies, a survey done in France and Ebro Basin, only 10% of the population consider themselves familiar about CCUS technologies. This report also mentions that in general there is a positive attitude towards CCUS technologies and points out the higher public concern: safety and tampering with nature associated to local CCS projects in the regions.

To complement this scenario, other element most be considered as potential barriers in Ebro Basin: the closure of Castor strategic offshore natural gas storage in the area due to induced seismicity events. The natural gas storage site started injection tests in 2013 and few weeks later several seismic events were registered on the onshore Ebro Basin, 20-30 km away. The storage site was put on hold until closure decision in 2017, and formal abandonment decision in 2020. This event was fully covered by national and regional news until December 2021, when judicially the cause was closed and the operating company was declared innocent, due to the social, political and economic implications.

### 3.3.1.3 Political / regulatory pillar

The main stopper for the CCUS implementation in Ebro Basin is the lack of political support both for regulatory development and incentives to promote CCUS technologies. The CO<sub>2</sub> Storage directive was transposed in 2010 and it is still pending the regulatory development to eliminate the undefinition and help to different administrations to provide permits for CO<sub>2</sub> storage. This situation creates a huge uncertainty on the potential operator and rejection on moving ahead.

On the other hand, and as it was mentioned earlier, this type of projects, with high investment and high level of risks (technical and economics), cannot start with no support from the administrations: this is the case of Northern Light on Norway, the recently approved decision by Danish Government to participate with a 20% on CCUS developments, or the 45Q of US tax credit for CCS projects. Different initiatives to promote CCS technologies implementation.

CCUS technologies are not considered as necessary contributor to the net zero goal by Spanish government and, at date, are not included as key technology to be developed.



### 3.3.2 Suggested way forward

Different ideas have been collected from our Regional Stakeholders as needs for CCUS development in Ebro Basin:

- i. It is fundamental to get political support: Political makers need to understand that CCUS technologies are key for the net zero objective, and we will not reach this goal without CCUS technologies. But CCUS is also vital for Ebro Basin industries such as cement industry, chemical and power stations: regional and national economy depend also on it. This dual dependency must be the base for a dialogue industry-policy maker. This support must be made visible through the national short-, medium- and long-term strategies for decarbonization.
- ii. Create a mix public-private working group to identify applicable regulation for the CCUS implementation, including regulatory lacks and regional differences, if any. The results must be a clear permit procedure. A white book could be a resulting product.

In this sense, the case of Hontomín pilot (under the Mining Law due to storage volume lower than 100.000 tonnes) is a good example of how to deal with this lack of regulation, where operator, regional administration and technical support from an independent technical organization (IGME in that case) could agree on the procedure thanks to mutual interest.

- iii. Create a common space for interaction of the different stakeholders: administration, industry and society. This group has to have clear goal: to promote CCUS development urgently. This space will bring up needs from different agents and identify expected outcomes and benefits for all of them: environmental, technical, economic and techno-social (employment and other industries development).
- iv. Implement communication and engagement activities for the citizens and administration to improve CCUS knowledge. These activities, better organized by public and independent organizations to avoid misinterpretations, should be focused on providing a proper overview of the CCUS (potential and limitations) and answering key questions of concerns to also improve their confidence level.
- v. Increased the maturity of resources evaluation, for the onshore and the offshore, to have a better overview of real potential for CO<sub>2</sub> storage in the area. The collaboration public research - industry in key for the knowledge transfer and it must be promoted by specific programs.



## 3.4 Upper Silesia, Poland

### 3.4.1 Summary of the current status

Although there are many emitters of carbon dioxide in Upper Silesia, and the annual emission exceeds 33 Mt, there are many very large emitters - power plants, heat plants, steelwork, coking plant. More than 90% of emissions in the region come from 15 facilities owned by large companies that can undertake such expensive investments.

The long-term scenario developed in the project assumes the construction of infrastructure related to the capture, transport and storage of carbon dioxide mainly from new coal and gas power plants. Capture technology costs are high, so it is reasonable to implement them in new power plants with an expected useful life that will allow a return on investment. Moreover, under EU law, new power plants are designed to be CCUS-ready, which has the additional benefit of reducing implementation costs.

The long-term scenario for the Upper Silesia region starts in 2030 and ends in 2050. It includes seven emitters (large power plants and heating plants), storage in two DSAs, use in two methanol plants, and transport mainly by pipelines, taking into account the possibility of transport small volumes of CO<sub>2</sub> by rail or road. The largest share of the total cost of the CCS chain is related to capture installations, while the share of transportation cost is the lowest. The main problem encountered during the development of the scenario was the insufficient capacity of the storage sites, therefore the possibilities of CO<sub>2</sub> transport to other regions of Poland as well as abroad were considered - to the North Sea or to the south, to Croatia.

The main obstacles for development of CCUS technologies in the region are: lack of an appropriate legal framework promoting development of CCUS, lack of funding possibility and insufficient knowledge about technology in different stakeholder groups.

### 3.4.2 Suggested way forward

Considering the main obstacles to the development of CCUS technology, the most important actions to be taken are in the areas of law, financing and education.

Neither national, nor regional strategies include CCUS technologies. The legislation in Poland partially covers the CCUS technology, including regulations related to the transport network of CO<sub>2</sub> and mining areas related to the storage of CO<sub>2</sub>. At the same time, only the offshore CO<sub>2</sub> storage and its capture from pilot installations is permitted. Further steps should take into account including CCUS in national law and in national and regional plans and strategies as well as ensuring the legal stability which is necessary to undertake investments with a long payback period.

Another important factor is national and European financial support. Further steps should include a reliable assessment of investment costs (feasibility study), as well as development of financial framework - creating funds for investments in the area of CCUS and determining the benefits for

31



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 837754



stakeholders. Funding should cover support for investments related to CO<sub>2</sub> capture, but also costs associated with geological survey of potential deposits in the region carried out to reduce the investment risk.

The third important area of activity should be education and increasing social awareness. Further steps should include environmental risk assessment, regulation of monitoring issues, social research, construction of clusters composed of stakeholders with a similar profile. Actions aimed at increasing people awareness of the benefits of the development of CCUS technologies should be undertaken. Information campaigns should include the potential benefits related to environmental protection, acquiring know-how in the region, income for local communities, creating new jobs and the economic development of Upper Silesia. It is equally important addressing the topic of possible threats that may be feared by residents, e.g. those associated with potential CO<sub>2</sub> leakage.



## 3.5 Northern Croatia

### 3.5.1 Summary of the current status

The Northern Croatia region's main long-term scenario covers the 2025-2050 period, and it is assumed that after 2050 the whole infrastructure remains in place for further use. All scenarios showed somewhat unrealistically low capturing costs, mostly due to low operating costs compared to storage operating costs (which may be ascribed to very small distance between emitters and storage sites, and low initial investment, because the most of infrastructure already exists; also, CO<sub>2</sub>-EOR site started with operation very early, and was optimised for CO<sub>2</sub> storage and not for oil recovery), and this resulted in the main long-term scenario being profitable even under the current EU ETS price of CO<sub>2</sub>. Transport costs account for 5-7% of the total costs of CCUS value chain.

Techno-economic aspect can be considered the main driver for accelerating CCUS deployment due to sufficient storage capacities, existing transportation solutions, experience with CO<sub>2</sub> injection for enhanced oil recovery, and industry stakeholders' interest to decarbonize their activities. Although the general awareness and knowledge on CCS and CCUS is low, societal factors are rather neutral, mostly due to long tradition of industry activities, especially related to oil and gas exploitation in Northern Croatia.

On the other hand, regulatory and policy aspects are those that hinder the implementation of CCUS the most, because the current legal framework barely covers CCS, and the only strategic document even mentioning CCUS is the Low Carbon Strategy, but this is not nearly enough as no permitting nor liabilities are clearly addressed. Furthermore, funding options are limited, and financial incentives encouraging further development are rather low (considering the biorefinery project and fertilizer production at the petrochemical company).

### 3.5.2 Suggested way forward

Considering the lack of knowledge about CCUS technologies, unclear legal framework, inefficient funding and financial schemes, among first steps is legal documents revision and harmonization, where explicit and consistent LCCA procedures, as well as consistent TRL estimations should be required. A permitting flowchart should be created, and a foundation for transparent and financially secure CCUS system should be developed.

Public awareness should be also increased, emphasizing the impact, i.e., CO<sub>2</sub> removed, jobs created, and jobs secured through CCUS projects. Engaging policymakers is essential to increasing public awareness since they frequently appear in media with wide audience (TV, radio, most popular online portals).

Further steps should include clustering of smaller emitters, cross-border cooperation and information sharing which will help assembling critical mass of stakeholders with similar interests.



## 3.6 West Macedonia, Greece

### 3.6.1 Summary of the current status

The Western Macedonia region's medium-term scenario starts in 2030 and ends in 2040. The CCS chain total cost and transport have the largest share while storage is the smallest, as the CO<sub>2</sub> sales and ETS savings generate regional revenues and significantly reduce total costs. Therefore, the mid-term scenario is financially and environmentally profitable for the West Macedonia area. The long-term scenario for the Western Macedonia region will begin in 2036 and lasts until 2050. The CCS chain total cost and capture have the largest share, while storage the smallest one. Implementing a long-term scenario will result in a very high amount of revenues from CO<sub>2</sub> sales and ETS savings in the West Macedonia region.

From social and policy factors, the citizens of Western Macedonia are not familiar with CCUS technologies. At this point, it should be mentioned that there is a complete lack of CCUS projects in Greece. The only stakeholders that are knowledgeable and more familiar with CCUS is the scientific community as well as the regional government together with PPC Renewables SA.

Although, there are no projects in Greece in which CCUS technologies are used, there is a genuine interest to learn about CCUS which encourages future social acceptance. This is attributed to the industrial legacy of the area. In particular, the majority of Western Macedonia citizens have shown high interest in learning more about CCUS and are open to the existence of this kind of project in this area. Furthermore, most of them strongly believe that the area benefits from a CCUS project implementation are significant, such as environment protection, know-how acquisition, creation of new jobs, and Western Macedonia economic development. On the other hand, many citizens are reluctant to have a CCUS project in the area due to the fact that they state that several risks are involved such as leakage of CO<sub>2</sub>, high costs, triggering and not available storage potential.

In addition, a CCUS project in Western Macedonia depends on policymakers who have to act and give specific directions to utilities and investors. Policy actions must also consider the Western Macedonia regional power market characteristics. In order to for CCUS implementation in Greece to take out it is important, for the Greek government to take political decision and create specific policies to enable it.

### 3.6.2 Suggested way forward

The first step towards CCUS implementation in Western Macedonia is to create the right conditions for public awareness, engagement, and social acceptance. The local communities, investors, and the companies that will take over the project should co-operate to plan and create a viable CCUS project. In addition, there should be independent non-profitable parties-institutes/universities with validity, which will assist and consult during the procedure of the environmental study.



Public awareness can arise with local regional meetings and workshops, stating the benefits of carbon capture, and discussing various concerns of the people. Major role can play the offering of motivations and benefits to the local communities by the Greek government.

In techno-economically terms, generous funding must be given by the European Union and Greek government, for Public Power Corporation and the stakeholders committee to carry out such a big project for the first time in Greece. A few more steps to help turn the area into a Pilot are a feasibility study, geological surveys, a Strategic Environmental Impact Assessment and an amendment of the national legislation, mainly concerning storage in aquifers.



## 3.7 Galati area, Romania

### 3.7.1 Summary of the current status

The main scenario of the Galati region starts in 2025 and ends in 2050, assuming deployment in Galati sub-cluster from 2025 and from Tulcea sub-cluster from 2030. From the total cost of the CCS chain, the capture costs are the largest, although capture is envisioned only at 4 sources, 3 currently in operation and one gas-fired power plant planned/announced to be built. The results of the economic analysis, presented also to the stakeholders, are unrealistic. The total cost per ton of CO<sub>2</sub> avoided is 42 EURO, suggesting a very profitable business for the emitters, especially with the rise of CO<sub>2</sub> allowances. It is worth mentioning that the costs used as input for the analysis are mainly from literature and that the storage part of the assessment is based solely on public data.

The region is in an economic decline in the past years, which was observed through closing of several industrial installations, initially in the database of CO<sub>2</sub> sources built within WP2 of STRATEGY CCUS. The main emitter, in fact the largest CO<sub>2</sub> emitter from Romania, is Liberty Steel Galati, the largest integrated steel company from the country, which is also responsible for 90% of CO<sub>2</sub> emissions in the region. The initial steel plant dates back to 1968, when the first batch of steel was produced in Galati.

The scenarios related to implementation of Galati region all assume that Liberty Steel Galati will include CCUS in its plans toward decarbonization. There is no commitment to CCUS in this moment. Their commitment is to become carbon neutral until 2030, through a change in technology. There is also the plan to build as a joint venture with Romgaz a new gas-fired powerplant to replace Electrocentrale Galati, which went into bankruptcy and was fuelling the steel plant in the past. In the future it is envisioned also switching the fuel to hydrogen, but no details were communicated on this plan. It is our strong belief that the decarbonization plans, especially in the lack of hydrogen supply, will not be met through a change in technology without CCUS. For this reason, we assumed that 25% of 2020 CO<sub>2</sub> emissions will be left for CO<sub>2</sub> capture, utilisation, and storage.

From a social point of view, the citizens of Galati region, most probably are not familiar with CCUS technologies. No prior public survey related with CCUS awareness was made for this region. We have observed also that the awareness is low also within the stakeholder group. The good part is that the region is an old oil and gas province, and that people are very familiar with O&G operations which may represent an opportunity for development of future projects involving use of the underground and gas transport.

From a regulatory point of view, the national legal framework for CO<sub>2</sub> geological storage exists, mainly through transposition of CCS Directive and the issuing of procedures for granting exploration and storage permits. There are efforts in the last period to fully harmonize the petroleum legislation with the CO<sub>2</sub> legislation, since this is mandatory in order to allow the use of depleted hydrocarbon fields and maybe of related infrastructure to be used in CO<sub>2</sub> storage operations.



In the last years, at a national level, we have observed an increased interest for CCUS from emitters and some oil and gas companies, who could become future CO<sub>2</sub> geological storage operators. Still, CCUS is not mentioned in the national strategies for energy and/or climate change mitigation. There is no mention also on a regional level for Galati. More interest from policy makers is expected to facilitate the emergence of CCUS projects. There is no CCUS project in Romania at the moment, the only project that we can recall was GETICA CCUS project proposal which was stalled indefinitely in 2012 after the failure of NER 300 program and after losing support from the Romanian government.

### 3.7.2 Suggested way forward

In order to make an update on the techno-economic assessment for deployment of CCUS in the Galati region, with more realistic results, we need more actual data, real data from emitters and reservoir data. Data sharing is very important for increasing the level of storage capacity assessment, but data sharing in Romania is very restricted. All data related with oil and gas operations are classified and access to it, even basic reservoir information, is very difficult. A change has to be made for increasing the easiness of sharing data and for access of the research to data.

A strategy for CCUS is also needed. This should be issued at a governmental level. But the policy makers should be convinced that CCUS is the only available technology that could help us achieve a zero emissions future. This could be made through intense lobbying made by research and non-governmental organizations or think-tankers.

Liberty Steel should also be convinced that no decarbonizations can be made without CCUS. The discussions and meetings with them should continue long after STRATEGY CCUS will end. Their commitment to CCUS is essential for implementing the technology in the region. An opportunity for CCUS can be represented also by Romgaz, if the plans to build a new gas-fired powerplant will move forward after the Feasibility Study.

With respect to financing, Innovation fund could represent a very good opportunity for implementing CCS.

A public survey assessing the awareness and acceptance of CCS in the region should be made in order to prepare for new projects.



### 3.8 Synthesis

Each regions status related to the three identified pillars (techno-economic, social, political / regulatory) have been compiled into a summary table presented below.

Techno-economic	PT	ES	FRp	FRr	RO	HR	PL	GR
Readiness of CO <sub>2</sub> capture large-scale technologies readiness for the most relevant sectors (EII)	Yellow	Yellow	Yellow	Yellow	Grey	Yellow	Grey	Yellow
Waste heat or low enthalpy geothermal energy available in industry for CO <sub>2</sub> capture	Grey	Grey	(5) Green	Grey	Grey	(3) Green	Red	Grey
Sufficient storage capacity exists	Light Green	Light Green	Light Green	Red	Light Green	Green	Red	Red
Initial and provisional flexible transportation solutions exist (railway, ship)	Green	Green	Dark Green	Dark Green	Light Green	Dark Green	Green	Yellow
Industry with a vision of carbon neutrality and carbon neutrality roadmaps including CCUS technologies already exist	Dark Green	Dark Green	Dark Green	Dark Green	Green	Green	Light Green	Light Green
Storage assessment data available and reliable for detailed geo-characterization	Red	Light Green	Red	Red	Dark Red	Yellow	Red	Dark Red
Experience available in CCUS full-chain integrated solutions for complex networks design	Red	Red	Yellow	Yellow	Dark Red	Red	Dark Red	Dark Red
Possibility of refurbishing some infrastructure for CO <sub>2</sub> transport and storage (e.g., off-service NG pipelines and injection wells available)	Dark Red	Red	Light Green	Yellow	Dark Red	Light Green	Dark Red	Dark Red



Techno-economic	PT	ES	FRp	FRr	RO	HR	PL	GR
Maturity of storage sites is adequate	Red	Yellow	Red	Dark Red	Grey	Red	Red	Red
Need of a multi-sectoral approach for deployment	Grey	Light Green	Light Green	Green	Grey	Green	Grey	Yellow
Sound business models in place	Dark Red	Red	Red	Yellow	Dark Red	Yellow	Dark Red	Red
Availability of renewable energy, water and green-H <sub>2</sub>	Light Green	Light Green	(1)	(2)	Grey	(3)	Red	Light Green
H <sub>2</sub> strategy and projects in place aiming at developing a hydrogen infrastructure	Green	Dark Green	Green	Green	Dark Red	Red	Red	Light Green
Available cost-effective CO <sub>2</sub> capture technologies for small-scale emitters	Red	Grey	Grey	Grey	Grey	Dark Red	Dark Red	Red
Mapped CO <sub>2</sub> utilisation opportunities	Red	Yellow	Red	Green	Dark Red	Dark Red	Dark Red	Red
Mapped temporary storage sites for CO <sub>2</sub> reutilization	Green	Green	Green	Dark Red	Grey	Dark Red	Dark Red	Yellow
High capital costs for CCUS (capture, pumping, temporary storage, definitive storage)	Dark Red	Dark Red	Red	Dark Red	Grey	Red	Dark Red	Dark Red



Societal factors	PT	ES	FRp	FRr	RO	HR	PL	GR
General awareness in the population that climate change mitigation is necessary	Yellow	Yellow	Yellow	Yellow	Red	Red	Dark Red	Yellow
Society's awareness and knowledge on CCUS technologies	Red	Red	Red	Red	Red	Red	Red	Red
Stakeholders' attitudes toward CCUS (stakeholders that were identified as relevant for CCUS deployment)	Green	Green	Green	Green	Green	Green	Green	Green
Negative local impacts on the environment (e.g., danger of leakages, impacts on natural/cultural habitat through necessary infrastructure, high identification with the region and the related economy)	Red	Yellow	Red	Red	Red	Red	Yellow	Yellow
Potential of local public resistance	Dark Red	Yellow	Yellow	Yellow	Yellow	Yellow	Red	Yellow
Good liaisons between industry and stakeholders on decarbonisation technologies	Green	Green	Light Green	Light Green	Yellow	Yellow	Yellow	Yellow
Potential of CCUS to attract new industries (incl. jobs) and/or maintain existing ones	Light Green	Light Green	Light Green	Light Green	Green	Light Green	Dark Green	Green



Political / Regulatory	PT	ES	FRp	FRr	RO	HR	PL	GR
CCUS integrated into national Carbon Neutrality strategies for creating a rationale for public policy-based intervention	Red	Red	Green	Green	Red	Yellow	Red	Red
Permitting and liabilities are clearly addressed in legislation	Light Green	Yellow	Red	Red	Yellow	Yellow	Yellow	Red
Incentives leading to slow progress in CCUS technologies chain demonstration	Red	Red	Red	Red	Red	Red	(4)	Red
Proper incentives for CO <sub>2</sub> capture, whether subsequently stored or used (definition of CO <sub>2</sub> accounting criteria)	Red	Red	Red	Red	Grey	Red	Red	Red
Policies allowing trans-European CO <sub>2</sub> transport, use and storage (matching sources / sinks). EU level and international policy cooperation required	Grey	Red	Red	Red	Red	Red	Grey	Red
Legal framework for CCUS infrastructure projects	Yellow	Yellow	Yellow	Yellow	Light Green	Yellow	Yellow	Yellow
Signal to market for creating an enabling framework for CO <sub>2</sub> -based products (clear incentives for new products and infant industries)	Red	Red	Red	Light Green	Red	Grey	Grey	Red
Existence of abundant and affordable renewable energy supply (an enabler)	Light Green	Green	Light Green	Light Green	Green	Yellow	Red	Light Green
Permitting at national and local level is a well-established and fast process for transport and storage infrastructures	Red	Red	Red	Red	Red	Red	Grey	Red
CCUS integrated into Territory Special Planning tools mapping several infrastructure options to support convincing deep decarbonisation solutions	Light Green	Grey	Light Green	Light Green	Red	Red	Red	Yellow



Political / Regulatory	PT	ES	FRp	FRr	RO	HR	PL	GR
Existence of national strategy and a legal framework for hydrogen	Advanced	n.a.	n.a.	n.a.	Moderate obstacles	n.a.	Moving slowly	n.a.
Existence of CO2 negative emissions accounting framework (e.g., BECCS, DAC)	Moderate obstacles	n.a.	Moderate obstacles	Moderate obstacles	n.a.	n.a.	n.a.	n.a.
Incentives in the form of co-financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	Moderate obstacles	n.a.
Risk of Carbon Leakage in a few EII and large-emitting industries (due high investment costs)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	Moderate obstacles	Moderate obstacles
Legal and economic stability for all the stakeholders and transparency of CCUS	Moderate obstacles	Moderate obstacles	n.a.	n.a.	n.a.	Moderate obstacles	Moderate obstacles	Moderate obstacles

**NOTES:** (1) Water scarcity (FRp); (2) Offshore Wind projects (FRr); (3) Geothermal energy availability (HR); (4) CO<sub>2</sub> storage lack of support (PL); (5) CO<sub>2</sub> capture systems can be highly integrated with the plant systems for successful widespread deployment as retrofits to large power plants (FRp);

Well advanced
Advanced
Moving slowly
Few obstacles but still obstacles
Moderate obstacles
Major obstacles
n.a.



Generally, the following could be said based on the analysis of the 8 regions:

For techno-economic aspects:

- Capture related technologies have few of obstacles
- Transport is mostly ok ranging from few obstacles to dominating “advanced” status
- Storage is struggling most of the regions with availability and reliability of data as well as maturation of storage sites
- Multisectoral approach to CCUS is largely fine
- Business models and costs are still a large issue for CCS implementation in the regions analysed
- Social aspects look generally more advanced compared to techno-economic aspects:
  - Stakeholders that were identified as relevant for CCUS deployment have positive attitude toward CCUS
  - The liaisons between industry and stakeholders are also advanced in most regions
  - Society’s awareness and knowledge about CCUS technologies is low and presents a major bottleneck to work on. In addition, the general awareness of the necessity of climate change mitigation in the general public could also be improved
  - The negative local impacts of CCUS on the environment presents a bottleneck in most regions
  - The potential of local public resistance needs to be considered carefully for the planning of CCUS in the regions
  - In contrast, the potential of CCUS to attract new industries including the maintenance or creation of jobs is advanced or moving slowly in all regions

Finally, policy / regulations showed a large number of issues as well:

- Policy and regulations are largely red
- Legal framework and availability of renewable energy is largely ok with some obstacles
- Permitting, incentives and transboundary regulations are a large issue
- Finally, national and territorial integration of CCUS into strategies varies across the regions from posing obstacles to being ok

Based on this analysis maturity of storage, establishing good social awareness, policies, incentives and working with clarifying the regulations for CO<sub>2</sub> storage appear as cornerstone for enabling CCUS value chains across Europe.



## 4 Bibliography or Reference List

Dütschke, E., Wohlfarth, K., Höller, S., Viebahn, P., Schumann, D., & Pietzner, K. (2016). Differences in the public perception of CCS in Germany depending on CO<sub>2</sub> source, transport option and storage location. *International Journal of Greenhouse Gas Control*, 53, 149-159.

Oltra, C., Upham, P., Riesch, H., Boso, À., Brunsting, S., Dütschke, E., & Lis, A. (2012). Public responses to CO<sub>2</sub> storage sites: lessons from five European cases. *Energy & Environment*, 23(2-3), 227-248.

Dütschke, E. (2011). What drives local public acceptance—comparing two cases from Germany. *Energy Procedia*, 4, 6234-6240.

L'Orange Seigo, Selma; Dohle, Simone; Siegrist, Michael (2014): Public perception of carbon capture and storage (CCS). A review. In *Renewable and Sustainable Energy Reviews* 38, pp. 848–863. DOI: 10.1016/j.rser.2014.07.017.

Oltra, Christian; Upham, Paul; Riesch, Hauke; et al. (2012): Public Responses to CO<sub>2</sub> Storage Sites: Lessons from Five European Cases. In *energy & environment* 23 (2&3), pp. 227–248.

ATIC (2021). Roteiro da Indústria Cimenteira Nacional para a Neutralidade Carbónica em 2050. Associação Técnica da Indústria do Cimento. [National Cement Industry Roadmap for Carbon Neutrality in 2050. Technical Association of the Cement Industry] Lisbon, Portugal. Available at: <https://www.atic.pt/wp-content/uploads/2021/03/Roteiro.pdf>

Carneiro, J., Boavida, D., Pereira, N., & Sardinha, M. (2011). Project KTEJO - Technical-scientific final report. Feasibility of CO<sub>2</sub> capture and storage at the Pego Coal Power Plant. [in portuguese]. Évora, 130 pp.

EN-H2 (2020). Estratégia Nacional para o Hidrogénio [National Strategy for Hydrogen] Ministerial Resolution no. 63/2020.

Navigator (2020). Relatório de Sustentabilidade 2020 [Sustainability Report 2020]. Lisbon, Portugal. Available at: <http://www.thenavigatorcompany.com/external/agenda2030/docs/navigator-relatorio-de-sustentabilidade-2020.pdf>

Boavida, D., Carneiro, J., Tosato, G., Martinez, G., Van den Broek, M., & Gastine, M. (2013). Final report - COMET, Integrated infrastructure for CO<sub>2</sub> transport and storage in the west Mediterranean. Lisbon, 89 pp.

NECP (2020). Plano Nacional integrado Energia e Clima 2030 [National Energy-Climate Plan 2030] Ministerial Resolution no. 53/2020.

RNC (2019). Roteiro de Neutralidade Carbónica 2050 [National Roadmap for Carbon Neutrality 2050]. Ministerial Resolution no. 107/2019.



# 1 Appendix: National laws transposing relevant EU directives

## 1.1 Industrial Emissions Directive

Member state	Laws transposing the Industrial Emissions Directive
Croatia	<p>Zakon o općem upravnom postupku</p> <p>Zakon o upravnim sporovima</p> <p>Zakon o izmjenama i dopunama Zakona o upravnim sporovima</p> <p>Uredba o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša</p> <p>Pravilnik o načinima i uvjetima termičke obrade otpada</p> <p>Uredba o postupku utvrđivanja objedinjenih uvjeta zaštite okoliša</p> <p>Zakon o zaštiti okoliša</p> <p>Zakon o vodama (NN 153/2009)</p> <p>Zakon o izmjenama i dopunama Zakona o vodama (NN 130/2011)</p> <p>Zakon o izmjenama i dopunama Zakona o vodama (NN 56/2013)</p> <p>Zakon o izmjeni Zakona o vodama (NN 14/2014)</p> <p>Uredba o okolišnoj dozvoli</p> <p>Uredba o graničnim vrijednostima sadržaja hlapivih organskih spojeva u određenim bojama i lakovima koji se koriste u graditeljstvu i proizvodima za završnu obradu vozila</p> <p>Pravilnik o gospodarenju otpadom</p> <p>Ispravak Pravilnika o gospodarenju otpadom</p> <p>Pravilnik o registru onečišćavanja okoliša</p> <p>Uredba o procjeni utjecaja zahvata na okoliš</p> <p>Pravilnik o gospodarenju otpadom iz proizvodnje titan-dioksida</p> <p>Pravilnik o izmjenama i dopunama Pravilnika o gospodarenju otpadom</p> <p>Ispravak Pravilnika o izmjenama i dopunama Pravilnika o gospodarenju otpadom</p> <p>Pravilnik o termičkoj obradi otpada</p> <p>Uredba o izmjenama i dopunama Uredbe o procjeni utjecaja zahvata na okoliš</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Zakon o izmjenama i dopunama Zakona o vodama</p> <p>Zakon o zaštiti zraka 127/19</p>

Member state	Laws transposing the Industrial Emissions Directive
	<p>Pravilnik o graničnim vrijednostima emisija otpadnih voda NN 26/2020</p> <p>Uredba o graničnim vrijednostima emisija onečišćujućih tvari u zrak iz nepokretnih izvora (NN 42-2021)</p> <p>Pravilnik o praćenju emisija onečišćujućih tvari u zrak iz nepokretnih izvora (NN 47 - 2021)</p> <p>Pravilnik o praćenju emisija onečišćujućih tvari u zrak iz nepokretnih izvora (NN 47 - 2021)</p> <p>Zakon o gospodarenju otpadom 84/2021</p>
France	<p>Arrêté du 23 juillet 2010 relatif aux chaudières présentes dans les installations de combustion d'une puissance thermique supérieure ou égale à 20 MWth autorisées ou modifiées à compter du 1er novembre 2010</p> <p>Ordonnance n°2012-7 du 5 janvier 2012 portant transposition du chapitre II de la directive 2010/75/UE du Parlement européen et du Conseil du 24 novembre 2010 relative aux émissions industrielles (prévention et réduction intégrées de la pollution)</p> <p>Arrêté du 18 décembre 2012 modifiant l'arrêté du 20 septembre 2002 relatif aux installations d'incinération et de co-incinération de déchets non dangereux et aux installations incinérant des déchets d'activités de soins à risques infectieux et l'arrêté du 20 septembre 2002 relatif aux installations d'incinération et de co-incinération de déchets dangereux</p> <p>Arrêté du 28 février 2013 portant transposition des chapitres V et VI de la directive 2010/75/UE du Parlement européen et du Conseil du 24 novembre 2010 relative aux émissions industrielles (prévention et réduction intégrées de la pollution)</p> <p>Décret no 2013-374 du 2 mai 2013 portant transposition des dispositions générales et du chapitre II de la directive 2010/75/UE du Parlement européen et du Conseil du 24 novembre 2010 relative aux émissions industrielles (prévention et réduction intégrées de la pollution) NOR : DEVP1238371D</p> <p>Décret no 2013-375 du 2 mai 2013 modifiant la nomenclature des installations classées</p> <p>Arrêté du 2 mai 2013 modifiant l'arrêté du 29 juin 2004 relatif au bilan de fonctionnement prévu à l'article R. 512-45 du code de l'environnement</p> <p>Arrêté du 2 mai 2013 modifiant l'arrêté du 15 décembre 2009 fixant certains seuils et critères mentionnés aux articles R. 512-33, R. 512-46-23 et R. 512-54 du code de l'environnement</p> <p>Arrêté du 2 mai 2013 relatif aux définitions, liste et critères de la directive 2010/75/UE du Parlement européen et du Conseil du 24 novembre 2010 relative aux émissions industrielles (prévention et réduction intégrées de la pollution)</p>

Member state	Laws transposing the Industrial Emissions Directive
	<p>Arrêté du 26 août 2013 relatif aux installations de combustion d'une puissance supérieure ou égale à 20 MW soumises à autorisation au titre de la rubrique 2910 et de la rubrique 2931</p> <p>Arrêté du 29 mai 2017 modifiant l'arrêté du 2 mai 2013 relatif aux définitions, liste et critères de la directive 2010/75/UE du Parlement européen et du Conseil du 24 novembre 2010 relative aux émissions industrielles (prévention et réduction intégrées de la pollution)</p>
Greece	<p>Καθορισμός πλαισίου κανόνων, μέτρων και διαδικασιών για την ολοκληρωμένη πρόληψη και τον έλεγχο της ρύπανσης του περιβάλλοντος από βιομηχανικές δραστηριότητες, σε συμμόρφωση προς τις διατάξεις της οδηγίας 2010/75/ΕΕ «περί βιομηχανικών εκπομπών (ολοκληρωμένη πρόληψη και έλεγχος της ρύπανσης)» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 24ης Νοεμβρίου 2010.</p> <p>Τροποποίηση της αριθμ. 36060/1155/Ε.103/ 13.6.2013 απόφασης των Υπουργών Οικονομίας και Ανάπτυξης και Περιβάλλοντος και Ενέργειας «Καθορισμός πλαισίου κανόνων, μέτρων και διαδικασιών για την ολοκληρωμένη πρόληψη και τον έλεγχο της ρύπανσης του περιβάλλοντος από βιομηχανικές δραστηριότητες, σε συμμόρφωση προς τις διατάξεις της οδηγίας 2010/75/ΕΕ “περί βιομηχανικών εκπομπών (ολοκληρωμένη πρόληψη και έλεγχος της ρύπανσης)” του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 24ης Νοεμβρίου 2010» (Β' 1450), όπως ισχύει.</p> <p>Τροποποίηση της υπ' αρ. 36060/1155/13.6.2013 κοινής υπουργικής απόφασης με θέμα: «Καθορισμός πλαισίου κανόνων, μέτρων και διαδικασιών για την ολοκληρωμένη πρόληψη και τον έλεγχο της ρύπανσης του περιβάλλοντος από βιομηχανικές δραστηριότητες, σε συμμόρφωση προς τις διατάξεις της οδηγίας 2010/75/ΕΕ “περί βιομηχανικών εκπομπών (ολοκληρωμένη πρόληψη και έλεγχος της ρύπανσης)” του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 24ης Νοεμβρίου 2010» (Β' 1450), όπως ισχύει.</p>
Poland	<p>Rozporządzenie Ministra Gospodarki z dnia 21 marca 2002 r. w sprawie wymagań dotyczących prowadzenia procesu termicznego przekształcania odpadów</p> <p>Rozporządzenie Ministra Środowiska z dnia 8 października 2002 r. w sprawie składowisk odpadów oraz miejsc magazynowania odpadów pochodzących z procesów wytwarzania dwutlenku tytanu oraz z przetwarzania tych odpadów</p> <p>Rozporządzenie Ministra Środowiska z dnia 21 października 2002 r. w sprawie odpadów pochodzących z procesów wytwarzania dwutlenku tytanu oraz z przetwarzania tych odpadów, które nie mogą być unieszkodliwiane przez ich składowanie</p>

Member state	Laws transposing the Industrial Emissions Directive
	<p>Rozporządzenie Ministra Zdrowia z dnia 23 grudnia 2002 r. w sprawie dopuszczalnych sposobów i warunków unieszkodliwiania odpadów medycznych i weterynaryjnych</p> <p>Ustawa z dnia 14 grudnia 2012 r. o odpadach</p> <p>Ustawa z dnia 11 lipca 2014 r. o zmianie ustawy - Prawo ochrony środowiska oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Środowiska z dnia 27 sierpnia 2014 r. w sprawie rodzajów instalacji mogących powodować znaczne zanieczyszczenie poszczególnych elementów przyrodniczych albo środowiska jako całości</p> <p>Rozporządzenie Ministra Środowiska z dnia 30 października 2014 r. w sprawie wymagań w zakresie prowadzenia pomiarów wielkości emisji oraz pomiarów ilości pobieranej wody</p> <p>Rozporządzenie Ministra Środowiska z dnia 4 listopada 2014 r. w sprawie standardów emisyjnych dla niektórych rodzajów instalacji, źródeł spalania paliw oraz urządzeń spalania lub współspalania odpadów</p> <p>Rozporządzenie Ministra Środowiska z dnia 18 listopada 2014 r. w sprawie warunków, jakie należy spełnić przy wprowadzaniu ścieków do wód lub do ziemi, oraz w sprawie substancji szczególnie szkodliwych dla środowiska wodnego</p> <p>Rozporządzenie Ministra Środowiska z dnia 19 stycznia 2015 r. w sprawie odpadów pochodzących z procesów wytwarzania dwutlenku tytanu oraz z przetwarzania tych odpadów, które nie mogą być unieszkodliwiane przez ich składowanie</p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 27 lutego 2015 r. w sprawie ogłoszenia jednolitego tekstu ustawy – Prawo wodne</p> <p>Ustawa z dnia 9 października 2015 r. o zmianie ustawy o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Rozwoju z dnia 21 stycznia 2016 r. w sprawie wymagań dotyczących procesu termicznego przekształcania odpadów oraz sposobów postępowania z odpadami powstałymi w wyniku tego procesu</p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 22 września 2016 r. w sprawie ogłoszenia jednolitego tekstu ustawy o Inspekcji Ochrony Środowiska</p> <p>Ustawa z dnia 14 czerwca 1960 r. Kodeks postępowania administracyjnego</p> <p>ustawa z dnia 4 lipca 2019 r. o zmianie ustawy o systemie handlu uprawnieniami do emisji gazów cieplarnianych oraz niektórych innych ustaw</p>

Member state	Laws transposing the Industrial Emissions Directive
	Ustawa z dnia 19 lipca 2019 r. o zmianie ustawy o utrzymaniu czystości i porządku w gminach oraz niektórych innych ustaw
Portugal	<p>Decreto-Lei n.º 127/2013. D.R. n.º 167, Série I de 2013-08-30 Ministério da Agricultura, do Mar, do Ambiente e do Ordenamento do Território Estabelece o regime de emissões industriais aplicável à prevenção e ao controlo integrados da poluição, bem como as regras destinadas a evitar e ou reduzir as emissões para o ar, a água e o solo e a produção de resíduos, transpondo a Diretiva n.º 2010/75/UE, do Parlamento Europeu e do Conselho, de 24 de novembro de 2010, relativa às emissões industriais (prevenção e controlo integrados da poluição)</p> <p>Declaração de Retificação n.º 45-A/2013. D.R. n.º 209, 2.º Suplemento, Série I de 2013-10-29 Presidência do Conselho de Ministros - Secretaria-Geral Retifica o Decreto-Lei n.º 127/2013, de 30 de agosto, do Ministério da Agricultura, do Mar, do Ambiente e do Ordenamento do Território, que estabelece o regime de emissões industriais aplicável à prevenção e ao controlo integrados da poluição, bem como as regras destinadas a evitar e ou reduzir as emissões para o ar, a água e o solo e a produção de resíduos, transpondo a Diretiva n.º 2010/75/UE, do Parlamento Europeu e do Conselho, de 24 de novembro de 2010, relativa às emissões industriais (prevenção e controlo integrados da poluição), publicado no Diário da República n.º 167, 1.ª Série, de 30 de agosto de 2013</p>
Romania	<p>Lege privind emisiile industriale</p> <p>Ordonanța de urgență a Guvernului nr.101/2017 pentru modificarea și completarea Legii nr.278/2013 privind emisiile industriale</p> <p>Lege nr. 144/2018 privind aprobarea Ordonanței de urgență a Guvernului nr.101/2017 pentru modificarea și completarea Legii nr. 278/2013 privind emisiile industriale</p>
Spain	<p>Ley 5/2013, de 11 de junio, por la que se modifican la Ley 16/2002, de 1 de julio, de prevención y control integrados de la contaminación y la Ley 22/2011, de 28 de julio, de residuos y suelos contaminados</p> <p>Real Decreto 815/2013, de 18 de octubre, por el que se aprueba el Reglamento de emisiones industriales y de desarrollo de la Ley 16/2002, de 1 de julio, de prevención y control integrados de la contaminación</p> <p>Real Decreto Legislativo 1/2016, de 16 de diciembre, por el que se aprueba el texto refundido de la Ley de prevención y control integrados de la contaminación</p>

## 1.2 Emissions Trading Directive

Member state	Laws transposing the Emissions Trading Directive
Croatia	<p><b>Directive 2003/87/EC</b></p> <p>Zakon o zaštiti okoliša</p> <p>Zakon o zaštiti okoliša</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Uredba o načinu trgovanja emisijskim jedinicama stakleničkih plinova</p> <p>Zakon o klimatskim promjenama i zaštiti ozonskog sloja NN 127/19</p> <p>Zakon o zaštiti zraka (NN 127/2019)</p> <p><b>Directive 2004/101/EC</b></p> <p>Uredba o provedbi fleksibilnih mehanizama Kyotskog protokola</p> <p>Uredba o načinu trgovanja emisijskim jedinicama stakleničkih plinova</p> <p>Zakon o klimatskim promjenama i zaštiti ozonskog sloja NN 127/19</p> <p>Zakon o zaštiti zraka (NN 127-2019)</p> <p><b>Directive 2008/101/EC</b></p> <p>Uredba o načinu trgovanja emisijskim jedinicama stakleničkih plinova</p> <p>Zakon o klimatskim promjenama i zaštiti ozonskog sloja NN 127/19</p> <p>Zakon o zaštiti zraka (NN 127/2019)</p> <p><b>Directive 2009/29/EC</b></p> <p>Zakon o Fondu za zaštitu okoliša i energetske učinkovitost</p> <p>Zakon o izmjenama i dopunama Zakona o Fondu za zaštitu okoliša i energetske učinkovitost</p> <p>Odluka o visini jedinične naknade na emisije stakleničkih plinova za operatere postrojenja isključenih iz sustava trgovanja emisijskim jedinicama za 2013. godinu</p> <p>Uredba o načinu trgovanja emisijskim jedinicama stakleničkih plinova</p> <p>Zakon o klimatskim promjenama i zaštiti ozonskog sloja NN 127/19</p> <p>Zakon o zaštiti zraka (NN 127/2019)</p> <p><b>Directive 2018/410</b></p> <p>Zakon o klimatskim promjenama i zaštiti ozonskog sloja NN 127/19</p> <p>Pravilnik o načinu besplatne dodjele emisijskih jedinica postrojenjima i o praćenju, izvješćivanju i verifikaciji izvješća o emisijama stakleničkih plinova iz postrojenja i zrakoplova</p> <p>Uredba o načinu trgovanja emisijskim jedinicama stakleničkih plinova</p>

Member state	Laws transposing the Emissions Trading Directive
	<p>Zakon o zaštiti okoliša (NN 80-2013)</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša (NN 78-2015)</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša (NN 12-2018)</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša (NN 118-2018)</p>
France	<p><b>Directive 2003/87/EC</b></p> <p>Ordonnance n° 2004-330 du 15 avril 2004 portant création d'un système d'échange de quotas d'émission de gaz à effet de serre</p> <p>Décret n° 2004-1412 du 23/12/2004 relatif au registre national des quotas d'émission de gaz à effet de serre prévu par l'article L. 229-16 du code de l'environnement.</p> <p>Décret n° 2005-190 du 25 février 2005 approuvant le plan national d'affectation des quotas d'émission de gaz à effet de serre établi pour la période 2005-2007</p> <p>Décret n° 2004-189 du 25 février 2005 modifiant le décret n° 2004-832 du 19 août 2004 pris pour l'application des articles L.229-5 à L.229-19 du code de l'environnement et relatif au système d'échange de quotas d'émission de gaz à effet de serre</p> <p>Arrêté du 25 février 2005 fixant la liste des exploitants auxquels sont affectés des quotas d'émission de gaz à effet de serre et le montant des quotas affectés</p> <p><b>Directive 2004/101/EC</b></p> <p>Loi n° 2005-1319 du 26/10/2005 portant diverses dispositions d'adaptation au droit communautaire dans le domaine de l'environnement.</p> <p>Décret n° 2006-622 du 29 mai 2006 pris pour l'application des articles L. 229-20 à L. 229-24 du code de l'environnement et portant transposition de la directive 2004/101/CE du Parlement européen et du Conseil du 27 octobre 2004 modifiant la directive 2003/87/CE établissant un système d'échange de quotas d'émission de gaz à effet de serre dans la Communauté au titre des mécanismes de projet du protocole de Kyoto</p> <p>Arrêté du 29 mai 2006 pris pour l'application des articles 3 et 4 du décret n° 2006-622 du 29 mai 2006 pris pour l'application des articles L. 229-20 à L. 229-24 du code de l'environnement et portant transposition de la directive 2004/101/CE du Parlement européen et du Conseil du 27 octobre 2004 modifiant la directive 2003/87/CE établissant un système d'échange de quotas d'émission de gaz à effet de serre dans la Communauté au titre des mécanismes de projet du protocole de Kyoto</p> <p><b>Directive 2008/101/EC</b></p> <p>Ordonnance no 2010-1232 du 21 octobre 2010 portant diverses dispositions d'adaptation au droit de l'Union européenne en matière d'environnement</p>

**Member state****Laws transposing the Emissions Trading Directive**

- article 1er de la LOI no 2011-12 du 5 janvier 2011 portant diverses dispositions d'adaptation de la législation au droit de l'Union européenne

Décret no 2011-90 du 24 janvier 2011 portant intégration des activités aériennes dans le système communautaire d'échange de quotas d'émission de gaz à effet de serre

- Arrêté du 26 janvier 2011 relatif à l'intégration des activités aériennes dans le système communautaire d'échange de quotas d'émission de gaz à effet de serre

Décret n° 2015-995 du 17 août 2015 relatif au système communautaire d'échange de quotas d'émission de gaz à effet de serre, notamment à l'intégration des activités aériennes dans ce système

Article 46 de la loi n° 2015-992 du 17 août 2015 relative à la transition énergétique pour la croissance verte (1)

**Directive 2009/29/EC**

Décret no 2010-300 du 22 mars 2010 relatif à la préparation de l'extension du système d'échange de quotas d'émission de gaz à effet de serre

Arrêté du 1er avril 2010 fixant les modalités de la déclaration et de la vérification des émissions des installations entrant à compter du 1er janvier 2013 dans le système d'échange de quotas d'émission de gaz à effet de serre

article 2 de la LOI no 2011-12 du 5 janvier 2011 portant diverses dispositions d'adaptation de la législation au droit de l'Union européenne

Ordonnance no 2012-827 du 28 juin 2012 relative au système d'échange de quotas d'émission de gaz à effet de serre (période 2013-2020)

Décret no 2012-1343 du 3 décembre 2012 relatif au système d'échange de quotas d'émission de gaz à effet de serre (période 2013-2020) et à la mise en oeuvre des activités de projets

Décret n° 2015-995 du 17 août 2015 relatif au système communautaire d'échange de quotas d'émission de gaz à effet de serre, notamment à l'intégration des activités aériennes dans ce système

**Directive 2018/410**

Décret no 2016-1095 du 11 août 2016 relatif à l'aide en faveur des entreprises exposées à un risque significatif de fuite de carbone en raison des coûts du système d'échange de quotas d'émission de gaz à effet de serre répercutés sur les prix de l'électricité

Arrêté du 11 août 2016 relatif aux modalités de gestion de l'aide en faveur des entreprises exposées à un risque significatif de fuite de carbone en raison des coûts du système d'échange de quotas d'émission de gaz à effet de serre répercutés sur les prix de l'électricité

Member state	Laws transposing the Emissions Trading Directive
	<p>Article L122-8 du code de l'énergie, modifié par LOI n°2016-1918 du 29 décembre 2016 - art. 141</p> <p>Arrêté du 25 septembre 2017 fixant le prix du quota carbone utilisé dans le calcul de l'aide accordée au titre de 2016 aux entreprises exposées à un risque significatif de fuite de carbone en raison des coûts du système d'échange de quotas d'émission de gaz à effet de serre répercutés sur les prix de l'électricité</p> <p>Arrêté du 20 mars 2018 fixant le prix du quota carbone utilisé dans le calcul de l'aide accordée au titre de 2017 aux entreprises exposées à un risque significatif de fuite de carbone en raison des coûts du système d'échange de quotas d'émission de gaz à effet de serre répercutés sur les prix de l'électricité</p> <p>Ordonnance no 2019-1034 du 9 octobre 2019 relative au système d'échange de quotas d'émissions de gaz à effet de serre (2021-2030)</p> <p>Décret no 2019-1035 du 9 octobre 2019 relatif au système d'échange de quotas d'émission de gaz à effet de serre (2021-2030)</p>
Greece	<p><b>Directive 2003/87/EC</b></p> <p>Τροποποίηση και κωδικοποίηση της υπ' αριθμ. Η.Π. 54409/2632/2004 κοινής υπουργικής απόφασης «Σύστημα εμπορίας δικαιωμάτων εκπομπής αερίων θερμοκηπίου σε συμμόρφωση με τις διατάξεις της οδηγίας 2003/87/ΕΚ "σχετικά με τη θέσπιση συστήματος εμπορίας δικαιωμάτων εκπομπής αερίων θερμοκηπίου εντός της Κοινότητας και την τροποποίηση της οδηγίας 96/61/ΕΚ του Συμβουλίου" του Συμβουλίου της 13ης Οκτωβρίου 2003 και άλλες διατάξεις», (Β' 1931) όπως αυτή έχει τροποποιηθεί και ισχύει.</p> <p><b>Directive 2004/101/EC</b></p> <p>Τροποποίηση της υπ' αριθμ. 54409/2632/2004 κοινής υπουργικής απόφασης (Β' 1931), σε συμμόρφωση με τις διατάξεις της οδηγίας 2004/101/ΕΚ "για την τροποποίηση της οδηγίας 2003/87/ΕΚ σχετικά με την θέσπιση συστήματος εμπορίας δικαιωμάτων εκπομπής αερίων θερμοκηπίου εντός της Κοινότητας, όσον αφορά τους μηχανισμούς έργων του Πρωτοκόλλου του Κιότο" του Συμβουλίου της 27ης Οκτωβρίου 2004.</p> <p><b>Directive 2008/101/EC</b></p> <p>ΓΙΑ ΤΗΝ ΠΡΟΣΤΑΣΙΑ ΤΟΥ ΠΕΡΙΒΑΛΛΟΝΤΟΣ.</p> <p>Σύστημα εμπορίας δικαιωμάτων εκπομπής αερίων θερμοκηπίου σε συμμόρφωση με τις διατάξεις της οδηγίας 2003/87/ΕΚ "σχετικά με τη θέσπιση συστήματος εμπορίας δικαιωμάτων εκπομπής αερίων θερμοκηπίου εντός της Κοινότητας και την τροποποίηση της οδηγίας 96/61/ΕΚ του Συμβουλίου της 13ης Οκτωβρίου 2003 και άλλες διατάξεις.</p> <p>Τροποποίηση της υπ' αριθμ. 54409/2632/2004 κοινής υπουργικής απόφασης (Β' 1931), σε συμμόρφωση με τις διατάξεις της οδηγίας 2004/101/ΕΚ «για την τροποποίηση της οδηγίας 2003/87/ΕΚ σχετικά με την θέσπιση συστήματος εμπορίας δικαιωμάτων εκπομπής αερίων θερμοκηπίου εντός της Κοινότητας,</p>

**Member state****Laws transposing the Emissions Trading Directive**

όσον αφορά τους μηχανισμούς έργων του Πρωτο κόλλου του Κιότο» του Συμβουλίου της 27ης Οκτωβρίου 2004.

Τροποποίηση της υπ' αριθ. 54409/2632/2004 ΚΥΑ «Σύστη- μα εμπορίας δικαιωμάτων εκπομπής αερίων θερμο- κηπίου σε συμμόρφωση με τις διατάξεις της οδηγίας 2003/87/ΕΚ ..... κλπ» (Β' 1931), όπως ισχύει, σε συμ- μόρφωση με τις διατάξεις της οδηγίας 2008/101/ΕΚ «για την τροποποίηση της οδηγίας 2003/87/ΕΚ ώστε να ενταχθούν οι αεροπορικές δραστηριότητες στο σύστημα εμπορίας δικαιωμάτων εκπομπής αερίων θερμοκηπίου εντός της Κοινότητας» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 19ης Νοεμβρί- ου 2008 καθώς και με τις διατάξεις των παραγράφων 10 και 13 του άρθρου 1 της οδηγίας 2009/29/ΕΚ «για τροποποίηση της οδηγίας 2003/87/ΕΚ με στόχο τη βελτίωση και την επέκταση του συστήματος εμπορί- ας δικαιωμάτων εκπομπής αερίων θερμοκηπίου της Κοινότητας» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 23ης Απριλίου 2009».

Ποινική προστασία του περιβάλλοντος – Εναρμόνιση με την Οδηγία 2008/99/ΕΚ – Πλαίσιο παραγωγής και διαχείρισης αποβλήτων – Εναρμόνιση με την Οδηγία 2008/98/ΕΚ – Ρύθμιση θεμάτων Υπουργείου Περιβάλλοντος, Ενέργειας και Κλιματικής Αλλαγής.

**Directive 2009/29/EC**

Τροποποίηση της υπ' αριθ. 54409/2632/2004 ΚΥΑ «Σύστη- μα εμπορίας δικαιωμάτων εκπομπής αερίων θερμο- κηπίου σε συμμόρφωση με τις διατάξεις της οδηγίας 2003/87/ΕΚ ..... κλπ» (Β' 1931), όπως ισχύει, σε συμ- μόρφωση με τις διατάξεις της οδηγίας 2008/101/ΕΚ «για την τροποποίηση της οδηγίας 2003/87/ΕΚ ώστε να ενταχθούν οι αεροπορικές δραστηριότητες στο σύστημα εμπορίας δικαιωμάτων εκπομπής αερίων θερμοκηπίου εντός της Κοινότητας» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 19ης Νοεμβρί- ου 2008 καθώς και με τις διατάξεις των παραγράφων 10 και 13 του άρθρου 1 της οδηγίας 2009/29/ΕΚ «για τροποποίηση της οδηγίας 2003/87/ΕΚ με στόχο τη βελτίωση και την επέκταση του συστήματος εμπορί- ας δικαιωμάτων εκπομπής αερίων θερμοκηπίου της Κοινότητας» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 23ης Απριλίου 2009».

**Directive 2018/410**

Τροποποίηση της κοινής υπουργικής απόφασης υπ' αριθμ. ΑΠΕΗΛ/οικ. 21906/2014 (Β' 3304) καθώς και της κοινής υπουργικής απόφασης υπ' αριθμ. 181478/965/2017 (Β' 3763), σε συμμόρφωση με τα άρθρα 3 (παρ. 1, εδάφιο 3) και 1 (παρ. 14, στοιχείο στ) της Οδηγίας 2018/410/ΕΕ «για την τροποποίηση της Οδηγίας 2003/87/ΕΚ με σκοπό την ενίσχυση οικονομικά αποδοτικών μειώσεων των εκπομπών και την προώθηση επενδύσεων χαμηλών ανθρακούχων εκπομπών και της απόφασης (ΕΕ) 2015/1814» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 14ης Μαρτίου 2018.

Τροποποίηση της κοινής υπουργικής απόφασης υπ' αριθμ. ΑΠΕΗΛ/οικ. 21906/2014 (Β' 3304) καθώς και της κοινής υπουργικής απόφασης υπ' αριθμ.

Member state	Laws transposing the Emissions Trading Directive
	<p>181478/965/2017 (B' 3763), σε συμμόρφωση με τα άρθρα 3 (παρ. 1, εδάφιο 3) και 1 (παρ. 14, στοιχείο στ) της Οδηγίας 2018/410/ ΕΕ «για την τροποποίηση της Οδηγίας 2003/87/ ΕΚ με σκοπό την ενίσχυση οικονομικά αποδοτικών μειώσεων των εκπομπών και την προώθηση επενδύσεων χαμηλών ανθρακούχων εκπομπών και της απόφασης (ΕΕ) 2015/1814» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 14ης Μαρτίου 2018.</p> <p>Τροποποίηση της 181478/965/2017 κοινής υπουργικής απόφασης (B'3763), όπως ισχύει, σε συμμόρφωση με την Οδηγία (ΕΕ) 2018/410 «για την τροποποίηση της οδηγίας 2003/87/ΕΚ με σκοπό την ενίσχυση οικονομικά αποδοτικών μειώσεων των εκπομπών και την προώθηση επενδύσεων χαμηλών ανθρακούχων εκπομπών και της απόφασης (ΕΕ) 2015/1814» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 14ης Μαρτίου 2018.</p>
Poland	<p><b>Directive 2003/87/EC</b></p> <p>Ustawa z dnia 22 grudnia 2004 r. o handlu uprawnieniami do emisji do powietrza gazów cieplarnianych i innych substancji</p> <p>Rozporządzenie Ministra Środowiska z dnia 13 września 2005 r. w sprawie wyznaczenia Krajowego Administratora Systemu Handlu Uprawnieniami do Emisji</p> <p>Rozporządzenie Ministra Środowiska z dnia 30 września 2005 r. w sprawie rodzajów instalacji objętych wspólnotowym systemem handlu uprawnieniami do emisji na lata 2005-2007</p> <p>Ustawa z dnia 28 kwietnia 2011 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Ustawa z dnia 12 czerwca 2015 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p><b>Directive 2004/101/EC</b></p> <p>Ustawa z dnia 22 grudnia 2004 r. o handlu uprawnieniami do emisji do powietrza gazów cieplarnianych i innych substancji</p> <p>Ustawa z dnia 17 lipca 2009 r. o systemie zarządzania emisjami gazów cieplarnianych i innych substancji</p> <p>Ustawa z dnia 28 kwietnia 2011 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Ustawa z dnia 12 czerwca 2015 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p><b>Directive 2008/101/EC</b></p> <p>Ustawa z dnia 28 kwietnia 2011 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p>

Member state	Laws transposing the Emissions Trading Directive
	<p>Rozporządzenie Ministra Środowiska z dnia 27 września 2011 r. w sprawie procentowego udziału uprawnień do emisji, jakie w okresie rozliczeniowym rozpoczynającym się od dnia 1 stycznia 2013 r. mogą zostać przyznane instalacjom objętym systemem handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Ustawa z dnia 12 czerwca 2015 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p><b>Directive 2009/29/EC</b></p> <p>Ustawa z dnia 28 kwietnia 2011 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Rozporządzenie Ministra Środowiska z dnia 27 września 2011 r. w sprawie procentowego udziału uprawnień do emisji, jakie w okresie rozliczeniowym rozpoczynającym się od dnia 1 stycznia 2013 r. mogą zostać przyznane instalacjom objętym systemem handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Ustawa z dnia 12 czerwca 2015 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Ustawa z dnia 27 września 2013 r. o zmianie ustawy – Prawo geologiczne i górnicze oraz niektórych innych ustaw</p> <p>Ustawa z dnia 28 kwietnia 2011 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych (tekst ujednolicony)</p> <p>Rozporządzenie Ministra Środowiska z dnia 25 lipca 2011 r. w sprawie informacji wymaganych do opracowania krajowego planu rozdziału uprawnień do emisji</p> <p>Rozporządzenie Ministra Środowiska z dnia 27 września 2011 r. w sprawie procentowego udziału uprawnień do emisji, jakie w okresie rozliczeniowym rozpoczynającym się od dnia 1 stycznia 2013 r. mogą zostać przyznane instalacjom objętym systemem handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Rozporządzenie Ministra Środowiska z dnia 6 lutego 2013 r. w sprawie szczegółowego sposobu przeprowadzenia aukcji uprawnień do emisji</p> <p>Rozporządzenie Rady Ministrów z dnia 31 marca 2014 r. w sprawie wykazu instalacji innych niż wytwarzające energię elektryczną, objętych systemem handlu uprawnieniami do emisji gazów cieplarnianych w okresie rozliczeniowym rozpoczynającym się od dnia 1 stycznia 2013 r., wraz z przyznaną im liczbą uprawnień do emisji_część 1</p> <p>Rozporządzenie Rady Ministrów z dnia 31 marca 2014 r. w sprawie wykazu instalacji innych niż wytwarzające energię elektryczną, objętych systemem handlu uprawnieniami do emisji gazów cieplarnianych w okresie</p>

Member state	Laws transposing the Emissions Trading Directive
	<p>rozliczeniowym rozpoczynającym się od dnia 1 stycznia 2013 r., wraz z przyznaną im liczbą uprawnień do emisji_część 2</p> <p>Rozporządzenie Rady Ministrów z dnia 8 kwietnia 2014 r. w sprawie wykazu instalacji wytwarzających energię elektryczną, objętych systemem handlu uprawnieniami do emisji gazów cieplarnianych w okresie rozliczeniowym rozpoczynającym się od dnia 1 stycznia 2013 r., wraz z przyznaną im liczbą uprawnień do emisji</p> <p>Ustawa z dnia 12 czerwca 2015 r. o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p><b>Directive 2018/410</b></p> <p>Ustawa z dnia 19 lipca 2019 r. o systemie rekompensat dla sektorów i podsektorów energochłonnych</p> <p>ustawa o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 22 stycznia 2021 r. w sprawie ogłoszenia jednolitego tekstu ustawy o systemie handlu uprawnieniami do emisji gazów cieplarnianych</p> <p>Ustawa z dnia 15 kwietnia 2021 r. o zmianie ustawy o systemie handlu uprawnieniami do emisji gazów cieplarnianych oraz niektórych innych ustaw</p>
Portugal	<p><b>Directive 2003/87/EC</b></p> <p>Estabelece o regime de comércio de licenças de emissão de gases com efeito de estufa na Comunidade Europeia, transpondo para a ordem interna a Directiva n.º 2003/87/CE, do Parlamento Europeu e do Conselho, de 13 de Outubro</p> <p>Altera o regime do comércio de licenças de emissão de gases com efeito de estufa na Comunidade Europeia, aprovado pelo Decreto-Lei n.º 233/2004, de 14 de Dezembro</p> <p><b>Directive 2004/101/EC</b></p> <p>Ministério do Ambiente, do Ordenamento do Território e do Desenvolvimento Regional-Terceira alteração ao regime do comércio de licenças de emissão de gases com efeito de estufa, aprovado pelo Decreto-Lei n.º 233/2004, de 14 de Dezembro, transpondo para a ordem jurídica nacional a Directiva n.º 2004/101/CE, do Parlamento Europeu e do Conselho, de 27 de Outubro.</p> <p>Procede à quarta alteração ao regime jurídico do comércio de licenças de emissão de gases com efeito de estufa, aprovado pelo Decreto-Lei n.º 233/2004, de 14 de Dezembro, transpondo para a ordem jurídica interna a Directiva n.º 2004/101/CE, do Parlamento Europeu e do Conselho, de 27 de Outubro</p> <p><b>Directive 2008/101/EC</b></p> <p>Ministério do Ambiente e do Ordenamento do Território-Estabelece o regime</p>

**Member state****Laws transposing the Emissions Trading Directive**

de comércio de licenças de emissão de gases com efeito de estufa das actividades da aviação, transpondo a Directiva n.º 2008/101/CE, do Parlamento Europeu e do Conselho, de 19 de Novembro, que altera a Directiva n.º 2003/87/CE, do Parlamento Europeu e do Conselho, de 13 de Outubro .

**Directive 2009/29/EC**

Ministério do Ambiente e do Ordenamento do Território Quinta alteração ao regime jurídico do comércio de licenças de emissão de gases com efeito de estufa, aprovado pelo Decreto-Lei n.º 233/2004, de 14 de Dezembro, transpondo parcialmente para a ordem jurídica interna a Directiva n.º 2009/29/CE, do Parlamento Europeu e do Conselho, de 23 de Abril

Decreto-Lei n.º 252/2012. D.R. n.º 228, Série I de 2012-11-26 Ministério da Agricultura, do Mar, do Ambiente e do Ordenamento do Território Procede à alteração do regime jurídico do comércio de licenças de emissão de gases com efeito estufa, aprovado pelo Decreto-Lei n.º 233/2004, de 14 de dezembro, transpondo parcialmente a Directiva n.º 2009/19/CE, do Parlamento Europeu e do Conselho, de 23 de abril

Decreto-Lei n.º 38/2013. D.R. n.º 53, Série I de 2013-03-15 Ministério da Agricultura, do Mar, do Ambiente e do Ordenamento do Território Regula o regime de comércio de licenças de emissão de gases com efeito de estufa a partir de 2013, concluindo a transposição da Directiva n.º 2009/29/CE, do Parlamento Europeu e do Conselho, de 23 de abril de 2009, a fim de melhorar e alargar o regime comunitário de comércio de licenças de emissão de gases com efeito de estufa

DECRETO-LEI N.º 195/2015 - DIÁRIO DA REPÚBLICA N.º 179/2015, SÉRIE I DE 2015-09-14 Ministério do Ambiente, Ordenamento do Território e Energia Procede à primeira alteração ao Decreto-Lei n.º 93/2010, de 27 de julho, que transpõe a Directiva n.º 2003/87/CE, do Parlamento Europeu e do Conselho, de 13 de julho de 2003, relativa à criação de um regime de comércio de licenças de emissão de gases com efeito de estufa, concluindo a transposição, no que diz respeito às actividades de aviação, da Directiva n.º 2009/29/CE, do Parlamento Europeu e do Conselho, de 23 de abril de 2009

**Directive 2018/410**

Decreto-Lei n.º 10/2019 de 18 de janeiro - Altera o regime de comércio de licenças de emissão de gases com efeito de estufa

Decreto-Lei n.º 12/2020 de 6 de abril - Estabelece o regime jurídico aplicável ao comércio de licenças e emissão de gases com efeito de estufa, transpondo a Directiva (UE) 2018/410

Decreto-Lei n.º 114/2021, de 15 de dezembro, Diário da República n.º 241/2021, Série I de 2021-12-15, páginas 14 - 38, que Procede à alteração ao Fundo Ambiental e à orgânica da Secretaria-Geral do Ministério do Ambiente

Member state	Laws transposing the Emissions Trading Directive
Romania	<p><b>Directive 2003/87/EC</b></p> <p>Ordonanță de urgență privind controlul integrat al poluării</p> <p>Ordonanță de urgență privind protecția mediului</p> <p>Lege pentru aprobarea Ordonanței de urgență a Guvernului nr. 152/2005 privind prevenirea și controlul integrat al poluării</p> <p>Hotărâre privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p>Lege pentru aprobarea Ordonanței de urgență a Guvernului nr. 195/2005 privind protecția mediului</p> <p>Ordin pentru modificarea Ordinului ministrului sănătății nr. 1448/2005 privind categoriile de produse cosmetice și listele cuprinzând substanțele ce pot fi utilizate în compoziția produselor cosmetice</p> <p>Hotărârea Guvernului pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p>Hotărârea Guvernului pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p>Hotărârea Guvernului pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p>Ordin al ministrului mediului și pădurilor privind aprobarea alocării certificatelor de emisii de gaze cu efect de seră cu titlu gratuit pentru activitățile de aviație, pentru anul 2012 și perioada 2013-2020</p> <p>Hotărârea Guvernului nr. 578/2015 pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră, precum și a unor dispoziții din Hotărârea Guvernului nr. 204/2013 pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p><b>Directive 2004/101/EC</b></p> <p>Ordonanță de urgență privind prevenirea și controlul integrat al poluării</p> <p>Ordonanță de urgență privind protecția mediului</p> <p>Lege pentru aprobarea Ordonanței de urgență a Guvernului nr. 152/2005 privind prevenirea și controlul integrat al poluării</p> <p>Hotărâre privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p>

Member state	Laws transposing the Emissions Trading Directive
	<p>Lege pentru aprobarea Ordonanței de urgență a Guvernului nr. 195/2005 privind protecția mediului</p> <p>Hotărârea Guvernului pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p><b>Directive 2008/101/EC</b></p> <p>Hotărârea Guvernului pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p>Ordin al ministrului mediului și pădurilor privind aprobarea alocării certificatelor de emisii de gaze cu efect de seră cu titlu gratuit pentru activitățile de aviație, pentru anul 2012 și perioada 2013-2020</p> <p>Hotărârea Guvernului nr. 578/2015 pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră, precum și a unor dispoziții din Hotărârea Guvernului nr. 204/2013 pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p><b>Directive 2009/29/EC</b></p> <p>Hotărârea Guvernului pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p>Hotărârea Guvernului pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p>Hotărârea Guvernului pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p> <p><b>Directive 2018/410</b></p> <p>Hotărârea Guvernului nr.393/2020 pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră, precum și pentru modificarea art. II din Hotărârea Guvernului nr. 204/2013 pentru modificarea și completarea Hotărârii Guvernului nr. 780/2006 privind stabilirea schemei de comercializare a certificatelor de emisii de gaze cu efect de seră</p>
Spain	<p><b>Directive 2003/87/EC</b></p> <p>REAL DECRETO LEY 5/2004, de 27 de agosto, por el que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero</p>

**Member state****Laws transposing the Emissions Trading Directive**

Resolución de 26 de enero de 2005, de la Subsecretaría, por la que se dispone la publicación del Acuerdo del Consejo de Ministros, de 21 de enero de 2005, por el que se aprueba la asignación individual de derechos de emisión a las instalaciones incluidas en el ámbito de aplicación del Real Decreto Ley 5/2004, de 27 de agosto, por el que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero.

LEY 1/2005, de 9 de marzo, por la que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero

Real DECRETO LEY 5 /2005, de 11 de marzo, de reformas urgentes para el impulso a la productividad y para la mejora de la contratación pública

Real Decreto 1315/2005, de 4 de noviembre, por el que se establecen las bases de los sistemas de seguimiento y verificación de emisiones de gases de efecto invernadero en las instalaciones incluidas en el ámbito de aplicación de la Ley 1/2005, de 9 de marzo, por la que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero

Real Decreto 1370/2006, de 24/11/2006, por el que se aprueba el Plan Nacional de Asignación de derechos de emisión de gases de efecto invernadero, 2008-2012.

**Directive 2004/101/EC**

LEY 1/2005, de 9 de marzo, por la que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero

Real DECRETO LEY 5 /2005, de 11 de marzo, de reformas urgentes para el impulso a la productividad y para la mejora de la contratación pública

Texto consolidado Ley 1/2005

**Directive 2008/101/EC**

Ley 5/2009, de 29 de junio, por la que se modifican la Ley 24/1988, de 28 de julio, del mercado de valores, la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito y el texto refundido de la Ley de ordenación y supervisión de los seguros privados, aprobado por Real Decreto Legislativo 6/2004, de 29 de octubre, para la reforma del régimen de participaciones significativas en empresas de servicios de inversión, en entidades de crédito y en entidades aseguradoras.

Ley 13/2010, de 5 de julio, por la que se modifica la Ley 1/2005, de 9 de marzo, por la que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero, para perfeccionar y ampliar el régimen general de comercio de derechos de emisión e incluir la aviación en el mismo

**Directive 2009/29/EC**

Ley 5/2009, de 29 de junio, por la que se modifican la Ley 24/1988, de 28 de julio, del mercado de valores, la Ley 26/1988, de 29 de julio, sobre disciplina e intervención de las entidades de crédito y el texto refundido de la Ley de

Member state	Laws transposing the Emissions Trading Directive
	<p>ordenación y supervisión de los seguros privados, aprobado por Real Decreto Legislativo 6/2004, de 29 de octubre, para la reforma del régimen de participaciones significativas en empresas de servicios de inversión, en entidades de crédito y en entidades aseguradoras.</p> <p>El Reino de España considera que el apartado 13 del artículo 1 de la Directiva 2009/29/CE no necesita de ninguna medida legal de transposición por cuanto que se trata de una obligación que la Directiva impone a los Estados y que la Administración deberá cumplir de acuerdo con los plazos que el propio artículo establece, pero sin que sea necesaria su transposición en norma legal.</p> <p>Ley 13/2010, de 5 de julio, por la que se modifica la Ley 1/2005, de 9 de marzo, por la que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero, para perfeccionar y ampliar el régimen general de comercio de derechos de emisión e incluir la aviación en el mismo</p> <p><b>Directive 2018/410</b></p> <p>Real Decreto 18/2019, de 25 de enero, por el que se desarrollan aspectos relativos a la aplicación del régimen de comercio de derechos de emisión de gases de efecto invernadero en el periodo 2021-2030</p> <p>Real Decreto 18/2019, de 25 de enero, por el que se desarrollan aspectos relativos a la aplicación del régimen de comercio de derechos de emisión de gases de efecto invernadero en el periodo 2021-2030</p> <p>Real Decreto 1089/2020, de 9 de diciembre, por el que se desarrollan aspectos relativos al ajuste de la asignación gratuita de derechos de emisión de gases de efecto invernadero en el periodo 2021-2030</p> <p>Real Decreto 1089/2020, de 9 de diciembre, por el que se desarrollan aspectos relativos al ajuste de la asignación gratuita de derechos de emisión de gases de efecto invernadero en el periodo 2021-2030</p> <p>Ley 9/2020, de 16 de diciembre, por la que se modifica la Ley 1/2005, de 9 de marzo, por la que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero, para intensificar las reducciones de emisiones de forma eficaz en relación con los costes.</p> <p>Ley 9/2020, de 16 de diciembre, por la que se modifica la Ley 1/2005, de 9 de marzo, por la que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero, para intensificar las reducciones de emisiones de forma eficaz en relación con los costes.</p>

### 1.3 CO<sub>2</sub> Storage Directive

Member state	Laws transposing the CO <sub>2</sub> Storage Directive
Croatia	Ordonnance no 2010-1232 du 21 octobre 2010 portant diverses dispositions d'adaptation au droit de l'Union européenne en matière d'environnement

Member state	Laws transposing the CO <sub>2</sub> Storage Directive
	<p>Zakon o izmjenama i dopunama Zakona o vodama (NN 130/11)</p> <p>Zakon o izmjenama i dopunama Zakona o vodama (NN 56/13)</p> <p>Pravilnik o sadržaju Plana upravljanja vodnim područjima (NN 74/13)</p> <p>Zakon o održivom gospodarenju otpadom</p> <p>Zakon o zaštiti okoliša</p> <p>Zakon o izmjeni Zakona o vodama (NN 14/2014)</p> <p>Uredba o odgovornosti za štete u okolišu</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Pravilnik o izmjenama i dopunama Pravilnika o sadržaju Plana upravljanja vodnim područjima (NN 53/2016)</p> <p>Zakon o izmjenama i dopunama zakona o održivom gospodarenju otpadom</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>„Zakon o izmjenama i dopunama Zakona o vodama“</p> <p>Zakon o istraživanju i eksploataciji ugljikovodika</p> <p>Pravilnik o izmjenama i dopunama Pravilnika o sadržaju Plana upravljanja vodnim područjima</p> <p>Pravilnik o trajnom zbrinjavanju ugljikova dioksida u geološkim strukturama</p> <p>Zakon o izmjenama Zakona o održivom gospodarenju otpadom NN 98-19</p> <p>Uredba o izmjeni i dopunama Uredbe o odgovornosti za štete u okolišu (NN 50 - 2020)</p> <p>Zakon o izmjenama i dopunama Zakona o istraživanju i eksploataciji ugljikovodika (NN 30-21)</p>
France	<p>Article 80 de la LOI n° 2010-788 du 12 juillet 2010 portant engagement national pour l'environnement</p> <p>Ordonnance no 2010-1232 du 21 octobre 2010 portant diverses dispositions d'adaptation au droit de l'Union européenne en matière d'environnement</p> <p>Ordonnance no 2010-1232 du 21 octobre 2010 portant diverses dispositions d'adaptation au droit de l'Union européenne en matière d'environnement</p>
Greece	<p>Μέτρα και όροι για την αποθήκευση διοξειδίου του άνθρακα σε γεωλογικούς σχηματισμούς –Τροποποίηση της υπ' αριθμ. 29457/1511/2005 (Β' 992) κοινής υπουργικής απόφασης, του Π.Δ. 51/2007 (Α' 54) και του Π.Δ. 148/2009 (Α'90), σε συμμόρφωση προς τις διατάξεις της οδηγίας 2009/31/ΕΚ του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 23ης Απριλίου 2009 «σχετικά με την αποθήκευση διοξειδίου του άνθρακα σε γεωλογικούς σχηματισμούς και για την τροποποίηση της οδηγίας 85/337/ΕΟΚ του Συμβουλίου, των οδηγιών του</p>

Member state	Laws transposing the CO <sub>2</sub> Storage Directive
	<p>Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου 200/60/ΕΚ, 2001/80/ΕΚ, 2004/35/ΕΚ και 2008/1/ΕΚ και του Κανονισμού (ΕΚ) αριθ.1013/2006.</p> <p>Κατάταξη δημόσιων και ιδιωτικών έργων και δραστηριοτήτων σε κατηγορίες και υποκατηγορίες σύμφωνα με το Άρθρο 1 παράγραφος 4 του Ν. 4014/21.09.2011 (Φ.Ε.Κ. Α΄209/2011)».</p> <p>Ποινική προστασία του περιβάλλοντος – Εναρμόνιση με την Οδηγία 2008/99/ΕΚ – Πλαίσιο παραγωγής και διαχείρισης αποβλήτων – Εναρμόνιση με την Οδηγία 2008/98/ΕΚ – Ρύθμιση θεμάτων Υπουργείου Περιβάλλοντος, Ενέργειας και Κλιματικής Αλλαγής.</p> <p>Καθορισμός πλαισίου κανόνων, μέτρων και διαδικασιών για την ολοκληρωμένη πρόληψη και τον έλεγχο της ρύπανσης του περιβάλλοντος από βιομηχανικές δραστηριότητες, σε συμμόρφωση προς τις διατάξεις της οδηγίας 2010/75/ΕΕ «περί βιομηχανικών εκπομπών (ολοκληρωμένη πρόληψη και έλεγχος της ρύπανσης)» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 24ης Νοεμβρίου 2010.</p>
Poland	<p>Ustawa z dnia 27 września 2013 r. o zmianie ustawy – Prawo geologiczne i górnicze oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Środowiska z dnia 8 maja 2014 r. w sprawie szczegółowych wymagań, jakim powinien odpowiadać plan zagospodarowania podziemnego składowiska dwutlenku węgla</p> <p>Rozporządzenie Ministra Środowiska z dnia 8 maja 2014 r. w sprawie dokumentacji hydrogeologicznej i dokumentacji geologiczno-inżynierskiej</p> <p>Rozporządzenie Ministra Środowiska z dnia 27 sierpnia 2014 r. w sprawie rodzajów instalacji mogących powodować znaczne zanieczyszczenie poszczególnych elementów przyrodniczych albo środowiska jako całości</p> <p>Rozporządzenie Ministra Środowiska z dnia 16 października 2014 r. w sprawie rejestru obszarów górniczych i zamkniętych podziemnych składowisk dwutlenku węgla</p> <p>Rozporządzenie Ministra Środowiska z dnia 8 grudnia 2017 r. w sprawie planów ruchu zakładów górniczych</p> <p>Ustawa z dnia 15 czerwca 2018 r. o zmianie ustawy – Prawo geologiczne i górnicze oraz niektórych innych ustaw</p>
Portugal	<p>Ministério da Economia e do Emprego Transpõe a Diretiva n.º 2009/31/CE, do Parlamento Europeu e do Conselho, de 23 de abril, e estabelece o regime jurídico da atividade de armazenamento geológico de dióxido de carbono (CO<sub>2</sub>(índice 2))</p>
Romania	<p>Ordonanță de urgență privind prevenirea și controlul integrat al poluării</p>

Member state	Laws transposing the CO <sub>2</sub> Storage Directive
	<p>Hotarare a Guvernului privind evaluarea impactului anumitor proiecte publice si private asupra mediului</p> <p>Hotărâre privind stabilirea unor măsuri pentru limitarea emisiilor în aer ale anumitor poluanți proveniți de la instalațiile mari de ardere</p> <p>Lege privind aprobarea Ordonanței de urgență a Guvernului nr. 40/2010 pentru modificarea Ordonanței de urgență a Guvernului nr. 152/2005 privind prevenirea și controlul integrat al poluării</p> <p>Ordonanța de urgență privind stocarea geologică a dioxidului de carbon</p> <p>Hotarare a Guvernului pentru modificarea si completarea Hotararii Guvernului nr. 445/2009 privind evaluarea impactului anumitor proiecte publice si private asupra mediului</p> <p>Lege pentru aprobarea Ordonantei de urgenta a Guvernului nr. 64/2011 privind stocarea geologica a dioxidului de carbon</p>
Spain	<p>Ley 40/2010, de 29 de diciembre, de almacenamiento geológico de dióxido de carbono.</p> <p>Ley 22/1973, de 21 de julio, de Minas. (if CO2 volume is lower than 100.000 tonnes)</p> <p>Real Decreto 2857/1978, de 25 de agosto, por el que se aprueba el Reglamento General para el Régimen de la Minería (under the Ley 22/1973 de Minas)</p>

#### 1.4 Seveso III Directive

Member state	Laws transposing the Seveso III Directive
Croatia	<p>Uredba o sprječavanju velikih nesreća koje uključuju opasne tvari</p> <p>ZAKON O ZAŠTITI OKOLIŠA</p> <p>ZAKON O IZMJENAMA I DOPUNAMA ZAKONA O ZAŠTITI OKOLIŠA</p> <p>Uredba o sprječavanju velikih nesreća koje uključuju opasne tvari</p> <p>Pravilnik o registru postrojenja u kojima su prisutne opasne tvari i o očevidniku prijavljenih velikih nesreća</p> <p>Pravilnik o Stručnom vijeću</p> <p>Kazneni zakon</p> <p>Zakon o izmjenama i dopunama Kaznenog zakona</p> <p>Zakon o izmjenama i dopunama Kaznenog zakona</p> <p>Ispravak Zakona o izmjenama i dopunama Kaznenog zakona</p> <p>ZAKON O SUSTAVU CIVILNE ZAŠTITE</p>

Member state	Laws transposing the Seveso III Directive
	<p>Zakon o prostornom uređenju</p> <p>Uredba o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša</p> <p>Uredba o procjeni utjecaja zahvata na okoliš</p> <p>Uredba o izmjenama i dopunama Uredbe o procjeni utjecaja zahvata na okoliš</p> <p>Uredba o izmjenama i dopunama Uredbe o sprječavanju velikih nesreća koje uključuju opasne tvari</p> <p>Zakon o izmjenama i dopunama Zakona o Zaštiti okoliša</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Zakon o izmjenama Zakona o sustavu civilne zaštite</p> <p>Pravilnik o nositeljima, sadržaju i postupcima izrade planskih dokumenata u civilnoj zaštiti te načinu informiranja javnosti u postupku njihovog donošenja</p> <p>Pravilnik o mjerama zaštite od elementarnih nepogoda i ratnih opasnosti u prostornom planiranju i uređivanju prostora</p> <p>Pravilnik o izmjenama i dopunama Pravilnika o mjerama zaštite od elementarnih nepogoda i ratnih opasnosti u prostornom planiranju i uređivanju prostora</p> <p>Pravilnik o izmjenama i dopunama Pravilnika o mjerama zaštite od elementarnih nepogoda i ratnih opasnosti u prostornom planiranju i uređivanju prostora</p> <p>Zakon o dopuni Zakona o sustavu civilne zaštite</p> <p>Zakon o izmjenama i dopunama Zakona o sustavu civilne zaštite</p> <p>Pravilnik o nositeljima, sadržaju i postupcima izrade planskih dokumenata u civilnoj zaštiti te načinu informiranja javnosti o postupku njihovog donošenja</p>
France	<p>LOI no 2013-619 du 16 juillet 2013 portant diverses dispositions d'adaptation au droit de l'Union européenne dans le domaine du développement durable</p> <p>Décret no 2014-284 du 3 mars 2014 modifiant le titre Ier du livre V du code de l'environnement</p> <p>Décret no 2014-285 du 3 mars 2014 modifiant la nomenclature des installations classées pour la protection de l'environnement</p> <p>Décret n° 2014-285 du 3 mars 2014 modifiant la nomenclature des installations classées pour la protection de l'environnement</p> <p>Décret n° 2014-284 du 3 mars 2014 modifiant le titre Ier du livre V du code de l'environnement</p>

Member state	Laws transposing the Seveso III Directive
	<p>Décret no 2015-1652 du 11 décembre 2015 modifiant les dispositions relatives aux plans particuliers d'intervention prises en application de l'article L. 741-6 du code de la sécurité intérieure</p> <p>Arrêté du 16 novembre 2021 portant modification de l'arrêté du 5 janvier 2006 relatif aux informations nécessaires à l'élaboration du plan particulier d'intervention, pris en application de l'article R. 741-21 du code de la sécurité intérieure (NOR : INTE2132003A) JORF n°0283 du 5 décembre 2021</p> <p>Arrêté du 16 novembre 2021 portant modification de l'arrêté du 10 mars 2006 relatif à l'information des populations pris en application de l'article R. 741-30 du code de la sécurité intérieure (NOR : INTE2132009A) JORF n°0283 du 5 décembre 2021</p>
Greece	<p>Καθορισμός κανόνων, όρων και προϋποθέσεων για την εναλλακτική διαχείριση των αποβλήτων ειδών ηλεκτρικού και ηλεκτρονικού εξοπλισμού (ΑΗΗΕ), σε συμμόρφωση με τις διατάξεις της Οδηγίας 2012/19/ΕΚ «σχετικά με τα απόβλητα ηλεκτρικού και ηλεκτρονικού εξοπλισμού (ΑΗΗΕ)», του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 4ης Ιουλίου 2012 και άλλες διατάξεις.</p> <p>Καθορισμός κανόνων, μέτρων και όρων για την αντιμετώπιση κινδύνων από ατυχήματα μεγάλης έκτασης σε εγκαταστάσεις ή μονάδες, λόγω της ύπαρξης επικίνδυνων ουσιών, σε συμμόρφωση με τις διατάξεις της οδηγίας 2012/18/ΕΕ «για την αντιμετώπιση των κινδύνων μεγάλων ατυχημάτων σχετιζόμενων με επικίνδυνες ουσίες και για την τροποποίηση και στη συνέχεια την κατάργηση της οδηγίας 96/82/ΕΚ του Συμβουλίου» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 4ης Ιουλίου 2012. Αντικατάσταση της υπ' αριθ. 12044/613/2007 (Β' 376), όπως διορθώθηκε (Β' 2259/2007).</p>
Poland	<p>Rozporządzenie Ministra Gospodarki z dnia 10 października 2013 r. w sprawie rodzajów i ilości substancji niebezpiecznych, których znajdowanie się w zakładzie decyduje o zaliczeniu go do zakładu o zwiększonym ryzyku albo zakładu o dużym ryzyku wystąpienia poważnej awarii przemysłowej</p> <p>Ustawa z dnia 23 lipca 2015 r. o zmianie ustawy – Prawo ochrony środowiska oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 2 grudnia 2015 r. w sprawie szczegółowego zakresu informacji wymaganych do podania do publicznej wiadomości przez właściwe organy Państwowej Straży Pożarnej</p> <p>Rozporządzenie Ministra Rozwoju z dnia 29 stycznia 2016 r. w sprawie rodzajów i ilości znajdujących się w zakładzie substancji niebezpiecznych, decydujących o zaliczeniu zakładu do zakładu o zwiększonym lub dużym ryzyku wystąpienia poważnej awarii przemysłowej</p>

Member state	Laws transposing the Seveso III Directive
	<p>Rozporządzenie Ministra Rozwoju z dnia 23 lutego 2016 r. w sprawie raportu o bezpieczeństwie zakładu o dużym ryzyku</p> <p>Ustawa z dnia 3 października 2008 r. o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko</p> <p>Rozporządzenie Ministra Środowiska z dnia 18 maja 2016 r. zmieniające rozporządzenie w sprawie poważnych awarii objętych obowiązkiem zgłoszenia do Głównego Inspektora Ochrony Środowiska</p> <p>Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 8 czerwca 2016 r. w sprawie wymagań, jakim powinny odpowiadać plany operacyjno-ratownicze</p>
Portugal	<p>Decreto-Lei n.º 42/2014. D.R. n.º 54, Série I de 2014-03-18 Ministério do Ambiente, Ordenamento do Território e Energia Procede à primeira alteração ao Decreto-Lei n.º 254/2007, de 12 de julho, transpondo o artigo 30.º da Diretiva n.º 2012/18/CE, do Parlamento Europeu e do Conselho, de 4 de julho de 2012, relativa ao controlo dos perigos associados a acidentes graves que envolvem substâncias perigosas, que altera e subsequentemente revoga a Diretiva n.º 96/82/CE do Conselho</p> <p>DECRETO-LEI N.º 150/2015 - DIÁRIO DA REPÚBLICA N.º 151/2015, SÉRIE I DE 2015-08-05 Ministério do Ambiente, Ordenamento do Território e Energia Estabelece o regime de prevenção de acidentes graves que envolvem substâncias perigosas e de limitação das suas consequências para a saúde humana e para o ambiente, transpondo a Diretiva n.º 2012/18/UE, do Parlamento Europeu e do Conselho, de 4 de julho de 2012, relativa ao controlo dos perigos associados a acidentes graves que envolvem substâncias perigosas</p>
Romania	<p>Hotărâre a Guvernului pentru completarea anexei nr.1 la Hotărârea Guvernului nr. 804/2007 privind controlul asupra pericolelor de accident major în care sunt implicate substanțe periculoase</p> <p>Legea nr.59/2016 privind controlul asupra pericolelor de accident major în care sunt implicate substanțe periculoase</p>
Spain	<p>Orden PRE/1206/2014, de 9 de julio, por la que se modifica el anexo I del Real Decreto 1254/1999, de 16 de julio, por el que se aprueban medidas de control de los riesgos inherentes a los accidentes graves en los que intervengan sustancias peligrosas.</p> <p>Real Decreto 840/2015, de 21 de septiembre, por el que se aprueban medidas de control de los riesgos inherentes a los accidentes graves en los que intervengan sustancias peligrosas</p> <p>Real Decreto 989/2015, de 30 de octubre, por el que se aprueba el Reglamento de artículos pirotécnicos y cartuchería</p>

Member state	Laws transposing the Seveso III Directive
	Orden PRE/2476/2015, de 20 de noviembre, por la que se actualiza la Instrucción Técnica Complementaria número 10, "Prevención de accidentes graves", del Reglamento de explosivos, aprobado por Real Decreto 230/1998, de 16 de febrero.

## 1.5 Offshore Oil and Gas Safety Directive

Member state	Laws transposing the Offshore Oil and Gas Safety Directive
Croatia	<p>Zakon o sigurnosti pri odobalnom istraživanju i eksploataciji ugljikovodika NN 78 15</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>ZAKON O ZAŠTITI OKOLIŠA</p> <p>Uredba o koordinaciji za sigurnost pri odobalnom istraživanju i eksploataciji ugljikovodika</p> <p>Uredba o odgovornosti za štete u okolišu</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>„Zakon o istraživanju i eksploataciji ugljikovodika“</p> <p>Zakon o izmjenama Zakona o istraživanju i eksploataciji ugljikovodika (NN 52-19)</p> <p>Plan intervencija kod iznenadnih onečišćenja mora NN 92-08</p> <p>Sporazum o Subregionalnom planu intervencija za sprječavanje, spremnost za i reagiranje na iznenadna onečišćenja Jadranskog mora većih razmjera NN MU 7/2008</p> <p>Zakon o izmjenama i dopunama Zakona o sigurnosti pri odobalnom istraživanju i eksploataciji ugljikovodika (NN 50-2020)</p> <p>Uredba o izmjeni i dopunama Uredbe o odgovornosti za štete u okolišu (NN 50 - 2020)</p> <p>Uredba o izmjenama i dopunama Uredbe o Koordinaciji za sigurnost pri odobalnom istraživanju i eksploataciji ugljikovodika (NN 14-21)</p> <p>Zakon o izmjenama i dopunama Zakona o istraživanju i eksploataciji ugljikovodika (NN 30-21)</p>
France	<p>LOI no 2015-1567 du 2 décembre 2015 portant diverses dispositions d'adaptation au droit de l'Union européenne dans le domaine de la prévention des risques</p> <p>Décret n° 2016-1303 du 4 octobre 2016 relatif aux travaux de recherches par forage et d'exploitation par puits de substances minières, et abrogeant l'annexe intitulée « Titre Recherche par forage, exploitation de fluides par puits</p>

Member state	Laws transposing the Offshore Oil and Gas Safety Directive
	<p>et traitement de ces fluides » du décret n° 80-331 du 7 mai 1980 portant règlement général des industries extractives -</p> <p>Décret n° 2016-1304 du 4 octobre 2016 relatif aux travaux miniers conduits à terre et en mer</p> <p>Arrêté du 14 octobre 2016 relatif aux travaux de recherches par forage et d'exploitation par puits de substances minières</p>
Greece	<p>Πλαίσιο για την ασφάλεια στις υπεράκτιες εργασίες έρευνας και εκμετάλλευσης υδρογονανθράκων, ενσωμάτωση της Οδηγίας 2013/30/ΕΕ, τροποποίηση του Π.δ. 148/2009 και άλλες διατάξεις.</p>
Poland	<p>Ustawa z dnia 31 sierpnia 2012 r. o Państwowej Komisji Badania Wypadków Morskich</p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 21 czerwca 2013 r. w sprawie ogłoszenia jednolitego tekstu ustawy o obszarach morskich Rzeczypospolitej Polskiej i administracji morskiej</p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 14 kwietnia 2014 r. w sprawie ogłoszenia jednolitego tekstu ustawy o dostępie do informacji publicznej</p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 30 stycznia 2015 r. w sprawie ogłoszenia jednolitego tekstu ustawy - Prawo geologiczne i górnicze</p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 27 lutego 2015 r. w sprawie ogłoszenia jednolitego tekstu ustawy o zapobieganiu zanieczyszczaniu morza przez statki</p> <p>Obwieszczenie Marszałka Sejmu z dnia 8 kwietnia 2015 r. w sprawie ogłoszenia jednolitego tekstu ustawy o swobodzie działalności gospodarczej</p> <p>Rozporządzenie Ministra Transportu, Budownictwa i Gospodarki Morskiej z dnia 22 czerwca 2012 r. w sprawie szczegółowej organizacji Morskiej Służby Poszukiwania i Ratownictwa</p> <p>Ustawa z dnia 3 października 2008 r. o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko</p> <p>Ustawa z dnia 25 maja 2017 r. o zmianie ustawy – Prawo geologiczne i górnicze oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Energii z dnia 18 sierpnia 2017 r. w sprawie minimalnej zawartości sprawozdania z realizacji planu ruchu zakładu górniczego</p> <p>Rozporządzenie Rady Ministrów z dnia 8 sierpnia 2017 r. w sprawie sposobu organizacji zwalczania zagrożeń i zanieczyszczeń na morzu</p>

Member state	Laws transposing the Offshore Oil and Gas Safety Directive
	<p>ROZPORZĄDZENIE MINISTRA ENERGII z dnia 16 października 2017 r. w sprawie szczegółowego zakresu polityki korporacyjnej w zakresie zapobiegania niebezpiecznym zdarzeniom oraz wypadkom</p> <p>Rozporządzenie Ministra Środowiska z dnia 8 grudnia 2017 r. w sprawie planów ruchu zakładów górniczych</p>
Portugal	<p>DECRETO-LEI N.º 13/2016 - DIÁRIO DA REPÚBLICA N.º 48/2016, SÉRIE I DE 2016-03-09 Economia Estabelece disposições em matéria de segurança de operações de petróleo e gás no offshore de petróleo e gás, transpondo a Diretiva n.º 2013/30/UE, do Parlamento Europeu e do Conselho, de 12 de junho de 2013</p>
Romania	<p>Legea petrolului nr.238/2004</p> <p>Hotărârea Guvernului nr. 2075/2004 nr. 2.075/ 2004 privind aprobarea Normelor metodologice pentru aplicarea Legii petrolului nr. 238/2004</p> <p>Legea nr. 165/2016 privind siguranța operațiunilor petroliere offshore</p> <p>Hotărârea Guvernului nr.688/2017 privind aprobarea Regulamentului de organizare și funcționare a Autorității Competente de Reglementare a Operațiunilor Petroliere Offshore la Marea Neagră.</p>
Spain	<p>Real Decreto 2362/1976, de 30 de julio, por el que se aprueba el Reglamento de la Ley sobre Investigación y Explotación de Hidrocarburos de 27 de junio de 1974</p> <p>Ley 26/2007, de 23 de octubre, de Responsabilidad Medioambiental.</p> <p>Ley 21/2013, de 9 de diciembre, de evaluación ambiental.</p> <p>Ley 11/2014, de 3 de julio, por la que se modifica la ley 26/2007, de 23 de octubre, de Responsabilidad Medioambiental</p> <p>Ley 33/2015, de 21 de septiembre, por la que se modifica la Ley 42/2007, de 13 de diciembre, del Patrimonio Natural y de la Biodiversidad.</p> <p>Real Decreto-ley 16/2017, de 17 de noviembre, por el que se establecen disposiciones de seguridad en la investigación y explotación de hidrocarburos en el medio marino.</p> <p>Real Decreto 1339/2018, de 29 de octubre, por el que se desarrolla el Real Decreto-ley 16/2017, de 17 de noviembre, por el que se establecen disposiciones de seguridad en la investigación y explotación de hidrocarburos en el medio marino.</p> <p>Ley 7/2021, de 20 de mayo, de cambio climático y transición energética. (art 9: no admitted any new exploratory or exploitation permit for hydrocarbons, onshore and offshore).</p>

## 1.6 Water Framework Directive

Member state	Laws transposing the Water Framework Directive
Croatia	<p><b>Directive 2000/60/EC</b></p> <p>Zakon o financiranju vodnoga gospodarstva (NN 153/09)</p> <p>Zakon o izmjenama i dopunama Zakona o financiranju vodnoga gospodarstva (NN 56/13)</p> <p>Pravilnik o sadržaju Plana upravljanja vodnim područjima (NN 74/13)</p> <p>Pravilnik o sadržaju, postupku i metodologiji donošenja Strategije upravljanja vodama i Plana upravljanja vodnim područjima, načinu konzultiranja i informiranja javnosti i sastavu Savjeta vodnog područja</p> <p>Uredba o mjerilima ekonomičnog poslovanja isporučitelja vodnih usluga (NN 112/10)</p> <p>Uredba o najnižoj osnovnoj cijeni vodnih usluga i vrsti troškova koje cijena vodnih usluga pokriva (NN 112/10)</p> <p>Pravilnik o uvjetima za utvrđivanje zona sanitarne zaštite izvorišta (NN 66/11)</p> <p>Pravilnik o izmjenama Pravilnika o uvjetima za utvrđivanje zona sanitarne zaštite izvorišta (NN 47/13)</p> <p>Odluka o granicama vodnih područja (NN 79/10)</p> <p>Pravilnik o granicama područja podslivova, malih slivova i sektora (NN 97/10)</p> <p>Pravilnik o izmjenama i dopunama Pravilnika o granicama područja podslivova, malih slivova i sektora (NN 31/13)</p> <p>Plan upravljanja vodnim područjima (NN 82/13)</p> <p>Pravilnik o načinu konzultiranja i informiranja javnosti o nacrtu strategije upravljanja vodama i plana upravljanja vodnim područjima NN 48/2014</p> <p>Uredba o izmjenama i dopunama Zakona o financiranju vodnoga gospodarstva (NN 119/15)</p> <p>Pravilnik o izmjenama i dopunama Pravilnika o sadržaju Plana upravljanja vodnim područjima (NN 53/2016)</p> <p>Zakon o izmjenama i dopunama Zakona o financiranju vodnoga gospodarstva</p> <p>Zakon o istraživanju i eksploataciji ugljikovodika</p> <p>Pravilnik o izmjenama i dopunama Pravilnika o sadržaju Plana upravljanja vodnim područjima</p> <p>Zakon o izmjenama i dopunama Pomorskog zakonika (NN 17/19)</p> <p>Zakon o izmjenama i dopunama Zakona o financiranju vodnoga gospodarstva (NN 66/2019)</p> <p>Zakon o vodama (NN 66-2019)</p>

Member state	Laws transposing the Water Framework Directive
	<p>Uredba o standardu kakvoće vode NN 96/2019</p> <p>Pravilnik o graničnim vrijednostima emisija otpadnih voda NN 26/2020</p> <p>Zakon o izmjenama Zakona o vodama (Narodne novine, broj 84/21)</p> <p><b>Directive 2013/39/EU</b></p> <p>Uredba o standardu kakvoće vode 96-2019</p> <p><b>Directive 2014/101/EU</b></p> <p>Odluka o donošenju metodologije monitoringa ocjenjivanja hidromorfoloških pokazatelja</p> <p>Odluka o donošenju metodologije uzorkovanja laboratorijskih analiza i određivanja omjera ekološke kakvoće i bioloških elemenata</p> <p>Uredba o standardu kakvoće vode NN 96/2019</p>
France	<p><b>Directive 2000/60/EC</b></p> <p>Loi n° 2004-338 du 21 avril 2004 portant transposition de la directive 2000/60/CE du Parlement européen et du Conseil du 23 octobre 2000 établissant un cadre pour une politique communautaire dans le domaine de l'eau</p> <p>Décret n° 2005-475 du 16/5/2005 relatif aux schémas directeurs d'aménagement et de gestion des eaux.</p> <p>Arrêté du 16/5/2005 portant délimitation des bassins ou groupements de bassins en vue de l'élaboration et de la mise à jour des schémas directeurs d'aménagement et de gestion des eaux.</p> <p>Arrêté du 12 janvier 2010 relatif aux méthodes et aux critères à mettre en oeuvre pour délimiter et classer les masses d'eau et dresser l'état des lieux prévu à l'article R. 212-3 du code de l'environnement</p> <p>Arrêté du 25 janvier 2010 établissant le programme de surveillance de l'état des eaux en application de l'article R. 212-22 du code de l'environnement</p> <p>Arrêté du 25 janvier 2010 relatif aux méthodes et critères d'évaluation de l'état écologique, de l'état chimique et du potentiel écologique des eaux de surface pris en application des articles R. 212-10, R. 212-11 et R. 212-18 du code de l'environnement</p> <p><b>Directive 2013/39/EU</b></p> <p>Décret n°2014-1510 du 15 décembre 2014 portant diverses modifications des procédures d'élaboration des schémas directeurs d'aménagement et de gestion des eaux et d'octroi de l'autorisation prévue par le II de l'article L.411-3 du code de l'environnement</p> <p>Décret no 2014-1510 du 15 décembre 2014 portant diverses modifications des procédures d'élaboration des schémas directeurs d'aménagement et de</p>

Member state	Laws transposing the Water Framework Directive
	<p>gestion des eaux et d'octroi de l'autorisation prévue par le II de l'article L.411-3 du code de l'environnement</p> <p>Arrêté du 18 décembre 2014 modifiant l'arrêté du 17 mars 2006 relatif au contenu des schémas directeurs d'aménagement et de gestion des eaux</p> <p>Arrêté du 7 août 2015 modifiant l'arrêté du 25 janvier 2010 établissant le programme de surveillance de l'état des eaux en application de l'article R. 212-22 du code de l'environnement</p> <p>Arrêté du 27 juillet 2015 modifiant l'arrêté du 25 janvier 2010 relatif aux méthodes et critères d'évaluation de l'état écologique, de l'état chimique et du potentiel écologique des eaux de surface pris en application des articles R. 212-10, R. 212-11 et R. 212-18 du code de l'environnement</p> <p>Arrêté du 7 septembre 2015 modifiant l'arrêté du 8 juillet 2010 établissant la liste des substances prioritaires et fixant les modalités et délais de réduction progressive et d'élimination des déversements, écoulements, rejets directs ou indirects respectivement des substances prioritaires et des substances dangereuses visées à l'article R. 212-9 du code de l'environnement</p> <p>Avis relatif aux limites de quantification des couples «paramètre-matrice» de l'agrément des laboratoires effectuant des analyses dans le domaine de l'eau et des milieux aquatiques</p> <p>Arrêté du 24 décembre 2015 modifiant l'arrêté du 11 janvier 2007 modifié relatif au programme de prélèvements et d'analyses du contrôle sanitaire pour les eaux fournies par un réseau de distribution, pris en application des articles R. 1321-10, R. 1321-15 et R. 1321-16 du code de la santé publique</p> <p>Arrêté du 28 juin 2016 modifiant l'arrêté du 25 janvier 2010 relatif aux méthodes et critères d'évaluation de l'état écologique, de l'état chimique et du potentiel écologique des eaux de surface pris en application des articles R. 212-10, R. 212-11 et R. 212-18 du code de l'environnement</p> <p><b>Directive 2014/101/EU</b></p> <p>Arrêté du 7 août 2015 modifiant l'arrêté du 25 janvier 2010 établissant le programme de surveillance de l'état des eaux en application de l'article R. 212-22 du code de l'environnement</p>
Greece	<p><b>Directive 2000/60/EC</b></p> <p>Καθορισμός μέτρων και διαδικασιών για την ολοκληρωμένη προστασία και διαχείριση των υδάτων σε συμμόρφωση με τις διατάξεις της Οδηγίας 2000/60/ΕΚ "για τη θέσπιση πλαισίου κοινοτικής δράσης στον τομέα της πολιτικής των υδάτων" του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 23ης Οκτωβρίου 2000.</p> <p><b>Directive 2013/39/EC</b></p>

Member state	Laws transposing the Water Framework Directive
	<p>Τροποποίηση της υπ' αριθ. 51354/2641/E103/2010 κοινής υπουργικής απόφασης (Β' 1909), σε συμμόρφωση με τις διατάξεις της οδηγίας 2013/39/ΕΕ «για την τροποποίηση των οδηγιών 2000/60/ΕΚ και 2008/105/ΕΚ όσον αφορά τις ουσίες προτεραιότητας στον τομέα της πολιτικής των υδάτων» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 12ης Αυγούστου 2013 και άλλες συναφείς διατάξεις».</p> <p><b>Directive 2014/101/EU</b></p> <p>Τροποποίηση του Παραρτήματος ΙΙΙ του άρθρου 19 του Προεδρικού διατάγματος 51/2007 (Α'54), όπως τροποποιήθηκε με το άρθρο πέμπτο του Ν. 4117/2013 (Α' 29), σε συμμόρφωση με την οδηγία 2014/101/ΕΕ «για την τροποποίηση της οδηγίας 2000/60/ΕΚ του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου για τη θέσπιση πλαισίου κοινοτικής δράσης στον τομέα της πολιτικής υδάτων» της Ευρωπαϊκής Επιτροπής της 30ης Οκτωβρίου 2014.</p>
Poland	<p><b>Directive 2000/60/EC</b></p> <p>Plan gospodarowania wodami na obszarze dorzecza Odry</p> <p>Plan gospodarowania wodami na obszarze dorzecza Wisły</p> <p>Plan gospodarowania wodami na obszarze dorzecza Dniestru</p> <p>Plan gospodarowania wodami na obszarze dorzecza Dunaju</p> <p>Plan gospodarowania wodami na obszarze dorzecza Jarft</p> <p>Plan gospodarowania wodami na obszarze dorzecza Łaby</p> <p>Plan gospodarowania wodami na obszarze dorzecza Niemna</p> <p>Plan gospodarowania wodami na obszarze dorzecza Pregoty</p> <p>Plan gospodarowania wodami na obszarze dorzecza Świeżej</p> <p>Plan gospodarowania wodami na obszarze dorzecza Ücker</p> <p>Ustawa z dnia 27 kwietnia 2001 r. Prawo ochrony środowiska.</p> <p>Rozporządzenie Ministra Infrastruktury z dnia 20 lipca 2002 r. w sprawie sposobu realizacji obowiązków dostawców ścieków przemysłowych oraz warunków wprowadzania ścieków do urządzeń kanalizacyjnych</p> <p>Rozporządzenie Ministra Środowiska z dnia 4 października 2002 r. w sprawie wymagań, jakim powinny odpowiadać wody śródlądowe będące środowiskiem życia ryb w warunkach naturalnych</p> <p>Rozporządzenie Ministra Środowiska z dnia 4 października 2002 r. w sprawie wymagań, jakim powinny odpowiadać morskie wody wewnętrzne i wody przybrzeżne będące środowiskiem życia skorupiaków i mięczaków</p> <p>Rozporządzenie Ministra Zdrowia z dnia 16 października 2002 r. w sprawie wymagań, jakim powinna odpowiadać woda w kąpieliskach</p>

Member state	Laws transposing the Water Framework Directive
	<p>Rozporządzenie Ministra Zdrowia z dnia 19 listopada 2002 r. w sprawie wymagań dotyczących jakości wody przeznaczonej do spożycia przez ludzi</p> <p>Rozporządzenie Ministra Środowiska z dnia 29 listopada 2002 r. w sprawie warunków jakie należy spełnić przy wprowadzaniu ścieków do wód lub do ziemi, oraz w sprawie substancji szczególnie szkodliwych dla środowiska wodnego</p> <p>Rozporządzenie Rady Ministrów z dnia 23 grudnia 2002 r. w sprawie granic między śródlądowymi wodami powierzchniowymi a morskimi wodami wewnętrznymi i wodami morza terytorialnego</p> <p>Rozporządzenie Ministra Środowiska z dnia 23 grudnia 2002 r. w sprawie szczegółowych wymagań, jakim powinny odpowiadać programy działań mających na celu ograniczenie odpływu azotu ze źródeł rolniczych</p> <p>Rozporządzenie Ministra Środowiska z dnia 17 czerwca 2003 r. w sprawie określenia wzoru publicznie dostępnego wykazu danych o dokumentach zawierających informacje o środowisku i jego ochronie</p> <p>Rozporządzenie Ministra Środowiska z dnia 4 sierpnia 2003 r. w sprawie standardów emisyjnych z instalacji</p> <p>Rozporządzenie Ministra Środowiska z dnia 11 lutego 2004 r. w sprawie klasyfikacji dla prezentowania stanu wód powierzchniowych i podziemnych, sposobu prowadzenia monitoringu oraz sposobu interpretacji wyników i prezentacji stanu tych wód</p> <p>Ustawa z dnia 20 kwietnia 2004 r. o zmianie i uchyleniu niektórych ustaw w związku z uzyskaniem przez Rzeczpospolitą Polską członkostwa w Unii Europejskiej</p> <p>Rozporządzenie Ministra Środowiska z dnia 28 kwietnia 2004 r. w sprawie zakresu i trybu opracowywania planów gospodarowania wodami na obszarach dorzeczy oraz warunków korzystania z wód regionu wodnego</p> <p>Rozporządzenie Rady Ministrów z dnia 8 grudnia 2004 r. zmieniające rozporządzenie w sprawie granic między śródlądowymi wodami powierzchniowymi a morskimi wodami wewnętrznymi i wodami morza terytorialnego</p> <p>Ustawa z dnia 3 czerwca 2005 r. o zmianie ustawy - Prawo wodne oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Środowiska z dnia 3 października 2005 r. w sprawie szczegółowych wymagań, jakim powinny odpowiadać dokumentacje hydrogeologiczne i geologiczno-inżynierskie</p> <p>Rozporządzenie Ministra Środowiska z dnia 10 listopada 2005 r. w sprawie wykazu substancji priorytetowych w dziedzinie polityki wodnej</p>

Member state	Laws transposing the Water Framework Directive
	<p>Rozporządzenie Rady Ministrów z dnia 20 grudnia 2005 r. w sprawie opłat za korzystanie ze środowiska</p> <p>Rozporządzenie Rady Ministrów z dnia 20 grudnia 2005 r. w sprawie wysokości jednostkowych stawek kar za przekroczenia warunków wprowadzania ścieków do wód lub do ziemi</p> <p>Rozporządzenie Rady Ministrów z dnia 27 czerwca 2006 r. w sprawie przebiegu granic obszarów dorzeczy i regionów wodnych</p> <p>Rozporządzenie Ministra Budownictwa z dnia 28 czerwca 2006 r. w sprawie określania taryf, wzoru wniosku o zatwierdzenie taryf oraz warunków rozliczeń za zbiorowe zaopatrzenie w wodę i zbiorowe odprowadzanie ścieków</p> <p>Rozporządzenie Ministra Budownictwa z dnia 14 lipca 2006 r. w sprawie sposobu realizacji obowiązków dostawców ścieków przemysłowych oraz warunków wprowadzania ścieków do urządzeń kanalizacyjnych</p> <p>Rozporządzenie Ministra Środowiska z dnia 24 lipca 2006 r. w sprawie warunków, jakie należy spełnić przy wprowadzaniu ścieków do wód lub do ziemi, oraz w sprawie substancji szczególnie szkodliwych dla środowiska wodnego</p> <p>Rozporządzenie Ministra Zdrowia z dnia 29 marca 2007 r. w sprawie jakości wody przeznaczonej do spożycia przez ludzi</p> <p>Rozporządzenie Ministra Środowiska z dnia 23 lipca 2008 r. w sprawie kryteriów i sposobu oceny stanu wód podziemnych</p> <p>Rozporządzenie Ministra Środowiska z dnia 20 sierpnia 2008 r. w sprawie sposobu klasyfikacji stanu jednolitych części wód powierzchniowych</p> <p>Rozporządzenie Ministra Środowiska z dnia 13 maja 2009 r. w sprawie form i sposobu prowadzenia monitoringu jednolitych części wód powierzchniowych i podziemnych</p> <p>Rozporządzenie Rady Ministrów z dnia 18 czerwca 2009 r. w sprawie szczegółowego zakresu opracowywania planów gospodarowania wodami na obszarach dorzeczy</p> <p>Rozporządzenie Ministra Środowiska z dnia 22 lipca 2009 r. w sprawie klasyfikacji stanu ekologicznego, potencjału ekologicznego i stanu chemicznego jednolitych części wód powierzchniowych</p> <p>Ustawa z dnia 5 stycznia 2011 r. o zmianie ustawy - Prawo wodne oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Środowiska z dnia 15 listopada 2011 r. w sprawie form i sposobu prowadzenia monitoringu jednolitych części wód powierzchniowych i podziemnych</p>

Member state	Laws transposing the Water Framework Directive
	<p>Rozporządzenie Ministra Środowiska z dnia 9 listopada 2011 r. w sprawie klasyfikacji stanu ekologicznego, potencjału ekologicznego i stanu chemicznego jednolitych części wód powierzchniowych</p> <p>Rozporządzenie Ministra Środowiska z dnia 6 listopada 2008 r. w sprawie standardowych procedur zbierania i przetwarzania informacji przez państwową służbę hydrologiczno-meteorologiczną oraz państwową służbę hydrogeologiczną</p> <p>Rozporządzenie Ministra Środowiska z dnia 21 listopada 2013 r. zmieniające rozporządzenie w sprawie form i sposobu prowadzenia monitoringu jednolitych części wód powierzchniowych i podziemnych</p> <p>Ustawa z dnia 30 maja 2014 r. o zmianie ustawy - Prawo wodne oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Środowiska z dnia 22 października 2014 r. w sprawie sposobu klasyfikacji stanu jednolitych części wód powierzchniowych oraz środowiskowych norm jakości dla substancji priorytetowych</p> <p>Rozporządzenie Ministra Środowiska z dnia 21 lipca 2016 r. w sprawie sposobu klasyfikacji stanu jednolitych części wód powierzchniowych oraz środowiskowych norm jakości dla substancji priorytetowych</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Ücker</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Wisły</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Dniestru</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Dunaju</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Jarft</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Świeżej</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Niemna</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Łaby</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Pregoty</p> <p>Rozporządzenie Rady Ministrów z dnia 18 października 2016 r. w sprawie Planu gospodarowania wodami na obszarze dorzecza Odry</p>

Member state	Laws transposing the Water Framework Directive
	<p>Rozporządzenie Rady Ministrów z dnia 14 listopada 2016 r. zmieniające rozporządzenie w sprawie szczegółowego zakresu opracowywania planów gospodarowania wodami na obszarach dorzeczy</p> <p>Ustawa z dnia 20 lipca 2017 r. - Prawo wodne</p> <p>Rozporządzenie Ministra Gospodarki Morskiej i Żeglugi Śródlądowej z dnia 1 marca 2019 r. w sprawie wykazu substancji priorytetowych</p> <p>Rozporządzenie Ministra Gospodarki Morskiej i Żeglugi Śródlądowej z dnia 9 października 2019 r. w sprawie form i sposobu prowadzenia monitoringu jednolitych części wód powierzchniowych i jednolitych części wód podziemnych</p> <p>Rozporządzenie Ministra Gospodarki Morskiej i Żeglugi Śródlądowej z dnia 11 października 2019 r. w sprawie kryteriów i sposobu oceny stanu jednolitych części wód podziemnych</p> <p>Rozporządzenie Ministra Gospodarki Morskiej i Żeglugi Śródlądowej z dnia 11 października 2019 r. w sprawie klasyfikacji stanu ekologicznego, potencjału ekologicznego i stanu chemicznego oraz sposobu klasyfikacji stanu jednolitych części wód powierzchniowych, a także środowiskowych norm jakości dla substancji priorytetowych</p> <p>Rozporządzenie Rady Ministrów z dnia 4 października 2019 r. w sprawie szczegółowego zakresu opracowywania planów gospodarowania wodami na obszarach dorzeczy</p> <p><b>Directive 2013/39/EU</b></p> <p>Ustawa z dnia 16 grudnia 2015 r. o zmianie ustawy – Prawo wodne oraz ustawy o zmianie ustawy – Prawo wodne oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Środowiska z dnia 19 lipca 2016 r. w sprawie form i sposobu prowadzenia monitoringu jednolitych części wód powierzchniowych i podziemnych</p> <p>Rozporządzenie Ministra Środowiska z dnia 21 lipca 2016 r. w sprawie sposobu klasyfikacji stanu jednolitych części wód powierzchniowych oraz środowiskowych norm jakości dla substancji priorytetowych</p> <p>Rozporządzenie Rady Ministrów z dnia 14 listopada 2016 r. zmieniające rozporządzenie w sprawie szczegółowego zakresu opracowywania planów gospodarowania wodami na obszarach dorzeczy</p> <p>Rozporządzenie Ministra Gospodarki Morskiej i Żeglugi Śródlądowej z dnia 1 marca 2019 r. w sprawie wykazu substancji priorytetowych</p> <p><b>Directive 2014/101/EU</b></p> <p>Rozporządzenie Ministra Środowiska z dnia 19 lipca 2016 r. w sprawie form i sposobu prowadzenia monitoringu jednolitych części wód powierzchniowych i podziemnych</p>

Member state	Laws transposing the Water Framework Directive
Portugal	<p><b>Directive 2000/60/EC</b></p> <p>Assembleia da República-Aprova a Lei da Água, transpondo para a ordem jurídica nacional a Directiva n.º 2000/60/CE, do Parlamento Europeu e do Conselho, de 23 de Outubro, e estabelecendo as bases e o quadro institucional para a gestão sustentável das águas</p> <p>Assembleia da República De ter sido rectificada a Lei n.º 58/2005, de 29 de Dezembro, que aprova a Lei da Água, transpondo para a ordem jurídica nacional a Directiva n.º 2000/60/CE, do Parlamento Europeu e do Conselho, de 23 de Outubro, e estabelecendo as bases e o quadro institucional para a gestão sustentável das águas</p> <p>Ministério do Ambiente, do Ordenamento do Território e do Desenvolvimento Regional-complementa a transposição da Directiva n.º 2000/60/CE, do Parlamento Europeu e do Conselho, de 23 de Outubro, que estabelece um quadro de acção comunitária no domínio da política da água, em desenvolvimento do regime fixado na Lei n.º 58/2005, de 29 de Dezembro.</p> <p>Decreto-Lei n.º 130/2012. D.R. n.º 120, Série I de 2012-06-22 Ministério da Agricultura, do Mar, do Ambiente e do Ordenamento do Território Procede à segunda alteração à Lei n.º 58/2005, de 29 de dezembro, que aprova a Lei da Água, transpondo a Diretiva n.º 2000/60/CE, do Parlamento Europeu e do Conselho, de 23 de outubro, e estabelecendo as bases e o quadro institucional para a gestão sustentável das águas</p> <p><b>Directive 2013/39/EU</b></p> <p>Decreto-Lei n.º 218/2015 - Diário da República n.º 196/2015, Série I de 2015-10-0770476206 Ministério do Ambiente, Ordenamento do Território e Energia Procede à segunda alteração ao Decreto-Lei n.º 103/2010, de 24 de setembro, que estabelece as normas de qualidade ambiental no domínio da política da água, transpondo a Diretiva n.º 2013/39/UE, do Parlamento Europeu e do Conselho, de 12 de agosto de 2013, no que respeita às substâncias prioritárias no domínio da política da água</p> <p><b>Directive 2014/101/EU</b></p> <p>DECRETO-LEI N.º 42/2016 - DIÁRIO DA REPÚBLICA N.º 146/2016, SÉRIE I DE 2016-08-01 Ambiente Altera as normas respeitantes à monitorização dos elementos de qualidade das águas superficiais, das águas subterrâneas e das zonas protegidas relativos ao estado ecológico, procedendo à segunda alteração ao Decreto-Lei n.º 77/2006, de 30 de março, e transpondo a Diretiva 2014/101/UE da Comissão, de 30 de outubro de 2014, que altera a Diretiva 2000/60/CE do Parlamento Europeu e do Conselho, de 23 de outubro de 2000</p>
Romania	<p><b>Directive 2000/60/EC</b></p> <p>Legea apelor</p>

Member state	Laws transposing the Water Framework Directive
	<p>Hotărâre privind organizarea și funcționarea Ministerului Mediului și Gospodăririi Apelor</p> <p>Lege pentru modificarea și completarea Legii apelor nr. 107/1996</p> <p>Hotărâre privind aprobarea Programului de eliminare treptată a evacuărilor, emisiilor și pierderilor de substanțe prioritare periculoase</p> <p>Hotărâre pentru aprobarea Normelor speciale privind caracterul și mărimea zonelor de protecție sanitară și hidrologică</p> <p>Lege pentru modificarea și completarea Legii apelor nr. 107/1996</p> <p>Hotărâre pentru modificarea și completarea Hotărârii Guvernului nr. 408/2004 privind organizarea și funcționarea Ministerului Mediului și Gospodăririi Apelor</p> <p>Ordonanță de urgență pentru modificarea și completarea unor acte normative care transpun acquis-ul comunitar în domeniul protecției mediului</p> <p>Ordonanță de urgență pentru modificarea și completarea Legii apelor nr. 107/1996</p> <p>Hotărâre pentru aprobarea Planului național de management aferent porțiunii din bazinul hidrografic internațional al fluviului Dunărea care este cuprinsă în teritoriul României</p> <p>Legea nr. 196/2015 pentru modificarea și completarea Legii apelor nr. 107/1996.</p> <p>OUG nr. 78/2017 pentru modificarea și completarea Legii apelor nr. 107/1996</p> <p>Lege nr. 141/2018 pentru aprobarea Ordonanței de urgență nr.94/2016 pentru modificarea și completarea Legii apelor nr. 107/1996</p> <p><b>Directive 2013/39/EU</b></p> <p>Legea nr. 196/2015 pentru modificarea și completarea Legii apelor nr. 107/1996</p> <p>Hotărârea Guvernului nr.570/2016 privind aprobarea Programului de eliminare treptată a evacuărilor, emisiilor și pierderilor de substanțe prioritare periculoase și alte măsuri pentru principalii poluanți.</p> <p><b>Directive 2014/101/EU</b></p> <p>Legea nr. 196/2015 pentru modificarea și completarea Legii apelor nr. 107/1996</p> <p>Ordonanța de urgență nr. 94/2016 pentru modificarea și completarea Legii apelor nr. 107/1996.</p> <p>Lege nr. 141/2018 pentru aprobarea Ordonanței de urgență nr.94/2016 pentru modificarea și completarea Legii apelor nr. 107/1996</p>
Spain	<b>Directive 2000/60/EC</b>

Member state	Laws transposing the Water Framework Directive
	<p>Ley 62 de 30/12/2003, de medidas fiscales administrativas y de orden social. BOE n° 313 de 31/12/2003 p. 46874</p> <p>Correccion de errores y errata de la Ley 62 de 30/12/2003, de medidas fiscales administrativas y de orden social. BOE n° 79 de 01/04/2004 p. 13787 (SG(2004)A/03938 du 13/04/2004)</p> <p>Decreto 380/2006, de 10 de octubre, por el que se aprueba el Reglamento de la planificación hidrológica</p> <p>REAL DECRETO 907/2007, de 6 de julio, por el que se aprueba el Reglamento de la Planificación Hidrológica</p> <p>Acuerdo GOV/128/2008, de 3 de junio, por el que se aprueba el Programa de seguimiento y control del Distrito de cuenca hidrográfica o luvial de Cataluña</p> <p>Decreto 31/2009, de 24 de febrero, por el que se delimita el ámbito territorial del Distrito de Cuenca Hidrográfica o Fluvial de Cataluña y se modiica el Reglamento de la planiicación hidrológica, aprobado por el Decreto 380/2006, de 10 de octubre</p> <p>Real Decreto 1514/2009, de 2 de octubre, por el que se regula la protección de las aguas subterráneas contra la contaminación y el deterioro.</p> <p>Decreto 188/2010, de 23 de noviembre, de aprobación del Plan de gestión del distrito de cuenca luvial de Cataluña.</p> <p>Acuerdo GOV/238/2010, de 23 de noviembre, por el que se aprueba el Programa de Medidas del Plan de Gestión del Distrito de Cuenca Fluvial de Cataluña</p> <p>Real Decreto 29/2011, de 14 de enero, por el que se modifican el Real Decreto 125/2007, de 2 de febrero, por el que se fija el ámbito territorial de las demarcaciones hidrográficas, y el Real Decreto 650/1987, de 8 de mayo, por el que se definen los ámbitos territoriales de los Organismos de cuenca y de los planes hidrológicos</p> <p>Real Decreto 60/2011, de 21 de enero, sobre las normas de calidad ambiental en el ámbito de la política de aguas.</p> <p>Acuerdo GOV/139/2013, de 15 de octubre, por el que se aprueba el Programa de seguimiento y control del Distrito de cuenca fluvial de Cataluña para el periodo 2013-2018.</p> <p>Decreto Ley 3/2014, de 5 de diciembre, de medidas urgentes destinadas a potenciar la calidad, la competitividad y la desestacionalización turística en las Islas Baleares</p> <p>Orden de 15 de diciembre de 2014, de la Consejería de Medio Ambiente y Ordenación del Territorio, por la que se declaran de aplicación en las Demarcaciones Hidrográficas Intracomunitarias de Andalucía la Instrucción de Planificación Hidrológica aprobada por la Orden ARM/2656/2008, de 10 de septiembre y modificada por la Orden ARM/1195/2011, de 11 de mayo, para</p>

Member state	Laws transposing the Water Framework Directive
	<p>dar cumplimiento a la sentencia de 24 de octubre de 2013, del Tribunal de Justicia de la Unión Europea</p> <p>LEY 14/2014, de 26 de diciembre, de Armonización y Simplificación en materia de Protección del Territorio y de los Recursos Naturales</p> <p>DECRETO 1/2015, de 15 de enero, por el que se aprueba el Reglamento de la planificación en materia de aguas de Galicia y se regulan determinadas cuestiones en desarrollo de la Ley 9/2010, de 4 de noviembre, de aguas de Galicia.</p> <p>Orden de 11 de marzo de 2015, por la que se aprueba la Instrucción de Planificación Hidrológica para las Demarcaciones Hidrográficas Intracomunitarias de Andalucía.</p> <p>Decreto Ley 1/2015, de 10 de abril, por el que se aprueba la Instrucción de Planificación Hidrológica para la demarcación hidrográfica intracomunitaria de las Illes Balears</p> <p>Instrucción 2/2015, de 17 de abril, de planificación hidrológica de la demarcación hidrográfica de Galicia-Costa</p> <p>DECRETO 165/2015, de 3 de julio, por el que se aprueba la Instrucción de Planificación Hidrológica para las Demarcaciones Hidrográficas Intracomunitarias de la Comunidad Autónoma de Canarias.</p> <p>Real Decreto 817/2015, de 11 de septiembre, por el que se establecen los criterios de seguimiento y evaluación del estado de las aguas superficiales y las normas de calidad ambiental</p> <p>Corrección de errores del Decreto 165/2015, de 3 de julio, por el que se aprueba la Instrucción de Planificación Hidrológica para las Demarcaciones Hidrográficas Intracomunitarias de la Comunidad Autónoma de Canarias</p> <p>Real Decreto 1075/2015, de 27 de noviembre, por el que se modifica el anexo II del Real Decreto 1514/2009, de 2 de octubre, por el que se regula la protección de las aguas subterráneas contra la contaminación y el deterioro.</p> <p><b>Directive 2013/39/EU</b></p> <p>Real Decreto 817/2015, de 11 de septiembre, por el que se establecen los criterios de seguimiento y evaluación del estado de las aguas superficiales y las normas de calidad ambiental</p> <p><b>Directive 2014/101/EU</b></p> <p>Real Decreto 817/2015, de 11 de septiembre, por el que se establecen los criterios de seguimiento y evaluación del estado de las aguas superficiales y las normas de calidad ambiental</p>

## 1.7 Marine Strategy Framework Directive

Member state	Laws transposing the Marine Strategy Framework Directive
Croatia	<p><b>Directive 2008/56/EC</b></p> <p>Uredba o uspostavi okvira za djelovanje Republike Hrvatske u zaštiti morskog okoliša</p> <p>Zakon o zaštiti okoliša</p> <p>Uredba o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša</p> <p>Zakon o zaštiti okoliša 80/13</p> <p>Uredba o izradi i provedbi dokumenata Strategije upravljanja morskim okolišem i obalnim područjem</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Uredba o izmjenama i dopuni Uredbe o izradi i provedbi dokumenata Strategije upravljanja morskim i obalnim područjem</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Uredba o izmjenama Uredbe o izradi i provedbi dokumenata Strategije upravljanja morskim okolišem i obalnim područjem</p> <p><b>Directive (EU) 2017/845</b></p> <p>Uredba o izmjenama Uredbe o izradi i provedbi dokumenata Strategije upravljanja morskim okolišem i obalnim područjem</p>
France	<p><b>Directive 2008/56/EC</b></p> <p>Article 166 de la LOI no 2010-788 du 12 juillet 2010 portant engagement national pour l'environnement</p> <p>Article 166 de la LOI no 2010-788 du 12 juillet 2010 portant engagement national pour l'environnement</p> <p>LOI no 2010-874 du 27 juillet 2010 de modernisation de l'agriculture et de la pêche</p> <p>Décret no 2011-492 du 5 mai 2011 relatif au plan d'action pour le milieu marin</p> <p><b>Directive (EU) 2017/845</b></p> <p>Article R. 219-5 du code de l'environnement créé par le Décret n° 2011-492 du 5 mai 2011 relatif au plan d'action pour le milieu marin</p>
Greece	<p><b>Directive 2008/56/EC</b></p> <p>Εθνική στρατηγική για την προστασία και διαχείριση του θαλάσσιου περιβάλλοντος – Εναρμόνιση με την Οδηγία 2008/56/ΕΚ του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 17ης Ιουνίου 2008 και άλλες διατάξεις</p> <p>Εκσυγχρονισμός της Χωροταξικής και Πολεοδομικής Νομοθεσίας και άλλες διατάξεις.</p>

Member state	Laws transposing the Marine Strategy Framework Directive
	<p><b>Directive (EU) 2017/845</b></p> <p>Τροποποίηση του παραρτήματος ΙΙΙ του άρθρου 22 του ν. 3983/2011 (Α' 144), σε συμμόρφωση με τις διατάξεις της οδηγίας (ΕΕ) 2017/845 της Ευρωπαϊκής Επιτροπής της 17ης Μαΐου 2017 «για την τροποποίηση της οδηγίας 2008/56/ΕΚ του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου όσον αφορά τους ενδεικτικούς καταλόγους στοιχείων που πρέπει να λαμβάνονται υπόψη για την εκπόνηση των θαλάσσιων στρατηγικών» .</p>
Poland	<p><b>Directive 2008/56/EC</b></p> <p>ustawa z dnia 16 kwietnia 2004 r. o ochronie przyrody</p> <p>Ustawa z dnia 20 lipca 1991 r. o Inspekcji Ochrony Środowiska</p> <p>Ustawa z dnia 27 kwietnia 2001 r. - Prawo ochrony środowiska</p> <p>Ustawa z dnia 4 stycznia 2013 r. o zmianie ustawy – Prawo wodne oraz niektórych innych ustaw</p> <p>Ustawa z dnia 20 lipca 2017 r. - Prawo wodne</p> <p>Rozporządzenie Rady Ministrów z dnia 11 grudnia 2017 r. w sprawie przyjęcia Krajowego programu ochrony wód morskich</p> <p><b>Directive (EU) 2017/845</b></p> <p>Ustawa z dnia 11 września 2019 r. o zmianie ustawy – Prawo wodne oraz niektórych innych ustaw</p>
Portugal	<p><b>Directive 2008/56/EC</b></p> <p>Ministério do Ambiente e do Ordenamento do Território Estabelece o regime jurídico das medidas necessárias para garantir o bom estado ambiental do meio marinho até 2020, transpondo a Directiva n.º 2008/56/CE, do Parlamento Europeu e do Conselho, de 17 de Junho</p> <p>Decreto-Lei n.º 201/2012. D.R. n.º 165, Série I de 2012-08-27 Ministério da Agricultura, do Mar, do Ambiente e do Ordenamento do Território Proceda à primeira alteração ao Decreto-Lei n.º 108/2010, de 13 de outubro, que define o regime jurídico das medidas necessárias para garantir o bom estado ambiental do meio marinho até 2020</p> <p>Decreto-Lei n.º 136/2013. D.R. n.º 193, Série I de 2013-10-07 Ministério da Agricultura e do Mar Proceda à segunda alteração ao Decreto-Lei n.º 108/2010, de 13 de outubro, que define o regime jurídico das medidas necessárias para garantir o bom estado ambiental do meio marinho até 2020, transpondo a Diretiva n.º 2008/56/CE, do Parlamento Europeu e do Conselho, de 17 de junho</p> <p>DECRETO-LEI N.º 143/2015 - DIÁRIO DA REPÚBLICA N.º 148/2015, SÉRIE I DE 2015-07-31 Ministério da Agricultura e do Mar Proceda à terceira alteração ao Decreto-Lei n.º 108/2010, de 13 de outubro, que estabelece o regime jurídico</p>

Member state	Laws transposing the Marine Strategy Framework Directive
	<p>das medidas necessárias para garantir o bom estado ambiental do meio marinho até 2020, que transpôs a Diretiva 2008/56/CE, do Parlamento Europeu e do Conselho, de 17 de junho</p> <p><b>Directive (EU) 2017/845</b></p> <p>Decreto-Lei nº 137/2017 de 8 de novembro - Transpõe diversas diretivas de adaptação ao progresso técnico em matéria de géneros alimentícios, organismos prejudiciais aos vegetais e produtos vegetais, embalagens de aerossóis, elaboração de estratégias marinhas, segurança de brinquedos e utilização de certas substâncias em vidros</p>
Romania	<p><b>Directive 2008/56/EC</b></p> <p>Ordonanță de urgență privind stabilirea strategiei pentru mediul marin</p> <p>Lege pentru aprobarea Ordonanței de urgență a Guvernului nr. 71/2010 privind stabilirea strategiei pentru mediul marin</p> <p>Lege pentru modificarea Ordonanței de urgență a Guvernului nr. 71/2010 privind stabilirea strategiei pentru mediul marin</p> <p><b>Directive (EU) 2017/845</b></p> <p>Legea nr. 279 din 26 noiembrie 2018 pentru modificarea anexei nr. 3 la Ordonanța de urgență a Guvernului nr. 71/2010 privind stabilirea strategiei pentru mediul marin</p>
Spain	<p><b>Directive 2008/56/EC</b></p> <p>Ley 41/2010, de 29 de diciembre, de protección del medio marino</p> <p><b>Directive (EU) 2017/845</b></p> <p>Real Decreto 957/2018, de 27 de julio, por el que se modifica el anexo I de la Ley 41/2010, de 29 de diciembre, de protección del medio marino.\'.0</p>

## 1.8 Maritime Spatial Planning Directive

Member state	Laws transposing the Maritime Spatial Planning Directive
Croatia	<p>Zakon o prostornom uređenju</p> <p>Zakon o izmjenama i dopunama Zakona o prostornom uređenju NN 65/17</p>
France	<p>LOI n° 2016-1087 du 8 août 2016 pour la reconquête de la biodiversité, de la nature et des paysages (article 123)</p> <p>Décret n° 2017-724 du 3 mai 2017 intégrant la planification maritime et le plan d'action pour le milieu marin dans le document stratégique de façade</p>

Member state	Laws transposing the Maritime Spatial Planning Directive
Greece	<p>Hellenic Competent Authority for the implementation of the Directive 2014/89/EE</p> <p>Οργανισμός Υπουργείου Περιβάλλοντος, Ενέργειας και Κλιματικής Αλλαγής</p> <p>Οργανισμός Υπουργείου Περιβάλλοντος και Ενέργειας (Υ.Π.ΕΝ)</p> <p>Ενσωμάτωση στην ελληνική νομοθεσία της Οδηγίας 2014/89/ΕΕ «περί θεσπίσεως πλαισίου για το θαλάσσιο χωροταξικό σχεδιασμό» και άλλες διατάξεις.</p> <p>Εκσυγχρονισμός της Χωροταξικής και Πολεοδομικής Νομοθεσίας και άλλες διατάξεις.</p>
Poland	<p>Ustawa z dnia 4 marca 2010 r. o infrastrukturze informacji przestrzennej</p> <p>Ustawa z dnia 21 marca 1991 r. o obszarach morskich Rzeczypospolitej Polskiej i administracji morskiej</p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 26 sierpnia 2013 r. w sprawie ogłoszenia jednolitego tekstu ustawy o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko</p> <p>Ustawa z dnia 5 sierpnia 2015 r. o zmianie ustawy o obszarach morskich Rzeczypospolitej Polskiej i administracji morskiej oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Transportu, Budownictwa i Gospodarki Morskiej i Ministra Rozwoju Regionalnego z dnia 5 sierpnia 2013 r. w sprawie planów zagospodarowania przestrzennego polskich obszarów morskich</p> <p>Ustawa z dnia 24 lutego 2017 r. o zmianie ustawy o zapobieganiu zanieczyszczaniu morza przez statki oraz niektórych innych ustaw</p> <p>Rozporządzenie Ministra Gospodarki Morskiej i Żeglugi Śródlądowej oraz Ministra Infrastruktury i Budownictwa z dnia 17 maja 2017 r. w sprawie wymaganego zakresu planów zagospodarowania przestrzennego morskich wód wewnętrznych, morza terytorialnego i wyłącznej strefy ekonomicznej</p> <p>Rozporządzenie Rady Ministrów z dnia 14 kwietnia 2021 r. w sprawie przyjęcia planu zagospodarowania przestrzennego morskich wód wewnętrznych, morza terytorialnego i wyłącznej strefy ekonomicznej w skali 1:200 000</p>
Portugal	<p>DECRETO-LEI N.º 38/2015 - DIÁRIO DA REPÚBLICA N.º 50/2015, SÉRIE I DE 2015-03-12 Ministério da Agricultura e do Mar Desenvolve a Lei n.º 17/2014, de 10 de abril, que estabelece as Bases da Política de Ordenamento e de Gestão do Espaço Marítimo Nacional</p> <p>DECRETO-LEI N.º 139/2015 - DIÁRIO DA REPÚBLICA N.º 147/2015, SÉRIE I DE 2015-07-30 Ministério da Agricultura e do Mar Procede à primeira alteração ao Decreto-Lei n.º 38/2015, de 12 de março, que desenvolve a Lei n.º 17/2014, de 10 de abril, que estabelece as Bases da Política de Ordenamento e de Gestão</p>

Member state	Laws transposing the Maritime Spatial Planning Directive
	do Espaço Marítimo Nacional, e transpõe a Diretiva n.º 2014/89/UE, do Parlamento Europeu e do Conselho, de 23 de julho de 2014, que estabelece um quadro para o ordenamento do espaço marítimo
Romania	Ordonanța Guvernului nr. 18/2016 privind amenajarea spațiului maritim Legea nr.88/2017 pentru aprobarea Ordonanței Guvernului nr.18/2016 privind amenajarea spațiului maritim
Spain	Real Decreto 363/2017, de 8 de abril, por el que se establece un marco para la ordenación del espacio marítimo.

## 1.9 Environmental Liability Directive

Member state	Laws transposing the Environmental Liability Directive
Croatia	Uredba o načinu utvrđivanja šteta u okolišu Pravilnik o mjerama otklanjanja šteta u okolišu i sanacijskim programima Zakon o zaštiti okoliša Zakon o zaštiti okoliša 80/13 Uredba o odgovornosti za štete u okolišu Zakon o izmjenama i dopunama Zakona o zaštiti okoliša Zakon o izmjenama i dopunama Zakona o zaštiti okoliša Uredba o izmjeni i dopunama Uredbe o odgovornosti za štete u okolišu NN 50 - 2020
France	LOI no 2008-757 du 1er août 2008 relative à la responsabilité environnementale et à diverses dispositions d'adaptation au droit communautaire dans le domaine de l'environnement (1) Décret no 2009-468 du 23 avril 2009 relatif à la prévention et à la réparation de certains dommages causés à l'environnement
Greece	Περιβαλλοντική ευθύνη .....εναρμόνιση με την οδηγία 2004/35/EK.....
Poland	Ustawa z dnia 13 kwietnia 2007 r. o zapobieganiu szkodom w środowisku i ich naprawie Rozporządzenie Ministra Środowiska z dnia 30 kwietnia 2008 r. w sprawie kryteriów oceny wystąpienia szkody w środowisku Rozporządzenie Ministra Środowiska z dnia 4 czerwca 2008 r. w sprawie rodzajów działań naprawczych oraz warunków i sposobu ich prowadzenia Ustawa z dnia 10 lipca 2008 r. o odpadach wydobywczych

Member state	Laws transposing the Environmental Liability Directive
	Ustawa z dnia 3 października 2008 r. o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko
Portugal	<p>Ministério do Ambiente, do Ordenamento do Território e do Desenvolvimento Regional Estabelece o regime jurídico da responsabilidade por danos ambientais e transpõe para a ordem jurídica interna a Directiva n.º 2004/35/CE, do Parlamento Europeu e do Conselho, de 21 de Outubro, que aprovou, com base no princípio do poluidor-pagador, o regime relativo à responsabilidade ambiental aplicável à prevenção e reparação dos danos ambientais, com a alteração que lhe foi introduzida pela Directiva n.º 2006/21/CE, do Parlamento Europeu e do Conselho, relativa à gestão de resíduos da indústria extractiva.</p> <p>Decreto-Lei n.º 60/2012. D.R. n.º 53, Série I de 2012-03-14 Ministério da Economia e do Emprego Transpõe a Directiva n.º 2009/31/CE, do Parlamento Europeu e do Conselho, de 23 de abril, e estabelece o regime jurídico da atividade de armazenamento geológico de dióxido de carbono (CO(índice 2))</p>
Romania	<p>Ordonanță de urgență privind răspunderea de mediu cu referire la prevenirea și repararea prejudiciului asupra mediului</p> <p>Lege pentru aprobarea Ordonanței de Urgență a Guvernului nr. 68/2007 privind răspunderea de mediu cu referire la prevenirea și repararea prejudiciului asupra mediului.</p> <p>Ordonanță de urgență pentru modificarea și completarea Ordonanței de urgență a Guvernului nr. 68/2007 privind răspunderea de mediu cu referire la prevenirea și repararea prejudiciului asupra mediului</p> <p>Lege pentru modificarea Ordonanței de urgență a Guvernului nr. 68/2007 privind răspunderea de mediu cu referire la prevenirea și repararea prejudiciului asupra mediului</p>
Spain	<p>LEY 26/2007, de 23 de octubre, de Responsabilidad Medioambiental.</p> <p>Real Decreto-ley 7/2021, de 27 de abril, de transposición de directivas de la Unión Europea en las materias de competencia, prevención del blanqueo de capitales, entidades de crédito, telecomunicaciones, medidas tributarias, prevención y reparación de daños medioambientales, desplazamiento de trabajadores en la prestación de servicios transnacionales y defensa de los consumidores.</p>

## 1.10 Environmental Impact Assessment Directive

Member state	Laws transposing the Environmental Impact Assessment Directive
Croatia	<b>Directive 2011/92/EU</b>

Member state	Laws transposing the Environmental Impact Assessment Directive
	<p>Zakon o zaštiti okoliša</p> <p>Uredba o procjeni utjecaja zahvata na okoliš</p> <p>Uredba o izmjenama i dopunama Uredbe o procjeni utjecaja zahvata na okoliš</p> <p>Uredba o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša</p> <p>Zakon o zaštiti okoliša 80/13</p> <p>Uredba o procjeni utjecaja zahvata na okoliš</p> <p>Uredba o izmjenama i dopunama Uredbe o procjeni utjecaja zahvata na okoliš</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Zakon o izmjenama i dopunama Zakona o istraživanju i eksploataciji ugljikovodika (NN 30-21)</p> <p>Zakon o izmjenama Zakona o vodama (Narodne novine, broj 84/21)</p> <p><b>Directive 2014/52/EU</b></p> <p>Uredba o izmjenama i dopunama Uredbe o procjeni utjecaja zahvata na okoliš</p> <p>Uredba o procjeni utjecaja zahvata na okoliš</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Zakon o zaštiti okoliša</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p> <p>Zakon o izmjenama i dopunama Zakona o istraživanju i eksploataciji ugljikovodika (NN 30-21)</p> <p>Zakon o izmjenama Zakona o vodama (Narodne novine, broj 84/21)</p>
France	<p><b>Directive 2014/52/EU</b></p> <p>article 106 de la loi n° 2015-990 du 6 août 2015 pour la croissance, l'activité et l'égalité des chances économiques</p> <p>Décret n° 2015-1614 du 9 décembre 2015 modifiant et simplifiant le régime des installations classées pour la protection de l'environnement et relatif à la prévention des risques</p> <p>Ordonnance n° 2016-1058 du 3 août 2016 relative à la modification des règles applicables à l'évaluation environnementale des projets, plans et programmes</p> <p>Ordonnance n° 2016-1060 du 3 août 2016 portant réforme des procédures destinées à assurer l'information et la participation du public à l'élaboration de certaines décisions susceptibles d'avoir une incidence sur l'environnement</p>

Member state	Laws transposing the Environmental Impact Assessment Directive
	<p>Décret n° 2016-1110 du 11 août 2016 relatif à la modification des règles applicables à l'évaluation environnementale des projets, plans et programmes</p> <p>Arrêté du 12 janvier 2017 fixant le modèle du formulaire de la « demande d'examen au cas par cas » en application de l'article R. 122-3 du code de l'environnement</p> <p>Ordonnance n° 2017-80 du 26 janvier 2017 relative à l'autorisation environnementale</p> <p>Décret n° 2017-626 du 25 avril 2017 relatif aux procédures destinées à assurer l'information et la participation du public à l'élaboration de certaines décisions susceptibles d'avoir une incidence sur l'environnement et modifiant diverses dispositions relatives à l'évaluation environnementale de certains projets, plans et programmes</p>
Greece	<p><b>Directive 2014/52/EU</b></p> <p>Περιβαλλοντική αδειοδότηση έργων και δραστηριοτήτων, ρύθμιση αυθαιρέτων σε συνάρτηση με δημιουργία περιβαλλοντικού ισοζυγίου και άλλες διατάξεις αρμοδιότητας Υπουργείου Περιβάλλοντος,</p> <p>Προδιαγραφές περιεχομένου Αποφάσεων Έγκρισης Περιβαλλοντικών Όρων (Α.Ε.Π.Ο.) για έργα και δραστηριότητες κατηγορίας Α΄ της υπ΄ αριθμ. 1958/13-1-2012 απόφασης του Υπουργού Περιβάλλοντος, Ενέργειας και Κλιματικής Αλλαγής (Β΄ 21), όπως ισχύει, σύμφωνα με το άρθρο 2 παρ. 7 του Ν. 4014/2011 (Α΄ 209)».</p> <p>Εξειδίκευση των διαδικασιών και των ειδικότερων κριτηρίων περιβαλλοντικής αδειοδότησης των έργων και δραστηριοτήτων των άρθρων 3, 4, 5, 6 και 7 του Ν. 4014/2011, σύμφωνα με τα οριζόμενα στο άρθρο 2 παράγραφος 13 αυτού, των ειδικών εντύπων των ανωτέρω διαδικασιών, καθώς και κάθε άλλου σχετικού με τις διαδικασίες αυτές θέματος.</p> <p>Εξειδίκευση των περιεχομένων των φακέλων περιβαλλοντικής αδειοδότησης έργων και δραστηριοτήτων της Κατηγορίας Α΄ της απόφασης του Υπουργού Περιβάλλοντος, Ενέργειας και Κλιματικής Αλλαγής με αρ. 1958/2012 (Β΄ 21) όπως ισχύει, σύμφωνα με το άρθρο 11 του ν. 4014/2011 (Α΄ 209), καθώς και κάθε άλλης σχετικής λεπτομέρειας.</p> <p>Τροποποίηση των υπ΄ αριθμ. 48963/2012 (Β΄ 2703) κοινής υπουργικής απόφασης, υπ΄ αριθμ. 167563/ 2013 (Β΄ 964) κοινής υπουργικής απόφασης και υπ΄ αριθμ. 170225/2014 (Β΄ 135) υπουργικής απόφασης, που έχουν εκδοθεί κατ΄ εξουσιοδότηση του ν. 4014/2011 (Α΄ 209), σε συμμόρφωση με την Οδηγία 2014/52/ΕΕ «για την τροποποίηση της οδηγίας 2011/92/ΕΕ σχετικά με την εκτίμηση των επιπτώσεων ορισμένων σχεδίων δημόσιων και ιδιωτικών έργων στο περιβάλλον» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 16ης Απριλίου 2014 .</p> <p>Φορείς Διαχείρισης Προστατευόμενων Περιοχών και άλλες διατάξεις.</p>

Member state	Laws transposing the Environmental Impact Assessment Directive
	<p>Τροποποίηση των παραρτημάτων του ν. 4014/ 2011 (Α' 209), σύμφωνα με το άρθρο 36Α του νόμου αυτού, σε συμμόρφωση με την Οδηγία 2014/52/ΕΕ «για την τροποποίηση της οδηγίας 2011/92/ΕΕ σχετικά με την εκτίμηση των επιπτώσεων ορισμένων σχεδίων δημόσιων και ιδιωτικών έργων στο περιβάλλον» του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 16ης Απριλίου 2014.</p>
Poland	<p><b>Directive 2011/92/EU</b></p> <p>Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 7 czerwca 2018 r. w sprawie ogłoszenia jednolitego tekstu ustawy – Prawo o postępowaniu przed sądami administracyjnymi</p> <p>ustawa o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko</p> <p>ustawa – Kodeks postępowania administracyjnego</p> <p>Ustawa z dnia 19 lipca 2019 r. o zmianie ustawy o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko oraz niektórych innych ustaw</p> <p>Rozporządzenie Rady Ministrów z dnia 10 września 2019 r. w sprawie przedsięwzięć mogących znacząco oddziaływać na środowisko</p> <p>Rozporządzenie Ministra Środowiska z dnia 22 września 2010 r. w sprawie wzoru oraz zawartości i układu publicznie dostępnego wykazu danych o dokumentach zawierających informacje o środowisku i jego ochronie</p> <p>Ustawa z dnia 20 kwietnia 2004 r. o zmianie i uchyleniu niektórych ustaw w związku z uzyskaniem przez Rzeczpospolitą Polską członkostwa w Unii Europejskiej</p> <p><b>Directive 2014/52/EU</b></p> <p>Ustawa z dnia 9 października 2015 r. o zmianie ustawy o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko oraz niektórych innych ustaw</p> <p>Ustawa z dnia 14 czerwca 1960 r. - Kodeks postępowania administracyjnego</p> <p>Ustawa z dnia 3 października 2008 r. o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko</p> <p>Ustawa z dnia 16 grudnia 2015 r. zmieniająca ustawę o zmianie ustawy o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko oraz niektórych innych ustaw</p>

Member state	Laws transposing the Environmental Impact Assessment Directive
Portugal	<p><b>Directive 2011/92/EU</b></p> <p>Decreto-Lei n.º 151-B/2013. D.R. n.º 211, 2.º Suplemento, Série I de 2013-10-31 Ministério da Agricultura, do Mar, do Ambiente e do Ordenamento do Território Estabelece o regime jurídico da avaliação de impacte ambiental (AIA) dos projetos públicos e privados suscetíveis de produzirem efeitos significativos no ambiente, transpondo a Diretiva n.º 2011/92/UE, do Parlamento Europeu e do Conselho, de 13 de dezembro, relativa à avaliação dos efeitos de determinados projetos públicos e privados no ambiente</p> <p>Decreto-Lei n.º 47/2014. D.R. n.º 58, Série I de 2014-03-24 Ministério do Ambiente, Ordenamento do Território e Energia Procedê à primeira alteração ao Decreto-Lei n.º 151-B/2013, de 31 de outubro, que estabelece o regime jurídico de avaliação de impacte ambiental (AIA) dos projetos públicos e privados suscetíveis de produzirem efeitos significativos no ambiente, transpondo a Diretiva n.º 2011/92/UE, do Parlamento Europeu e do Conselho, de 13 de dezembro de 2011, relativa à avaliação dos efeitos de determinados projetos públicos e privados no ambiente</p> <p>Decreto-Lei n.º 179/2015 - Diário da República n.º 167/2015, Série I de 2015-08-27 0128887 Ministério do Ambiente, Ordenamento do Território e Energia Procedê à segunda alteração ao Decreto-Lei n.º 151-B/2013, de 31 de outubro, que estabelece o regime jurídico da avaliação de impacte ambiental dos projetos públicos e privados suscetíveis de produzirem efeitos significativos no ambiente, transpondo para a ordem jurídica interna a Diretiva n.º 2011/92/UE, do Parlamento Europeu e do Conselho, de 13 de dezembro de 2011, relativa à avaliação dos efeitos de determinados projetos públicos e privados no ambiente</p> <p><b>Directive 2014/52/EU</b></p> <p>Decreto-Lei n.º 151-B/2013, de 31 de outubro que estabelece o regime jurídico da avaliação de impacte ambiental (AIA) dos projetos públicos e privados suscetíveis de produzirem efeitos significativos no ambiente, transpondo a Diretiva n.º 2011/92/UE, do Parlamento Europeu e do Conselho, de 13 de dezembro, relativa à avaliação dos efeitos de determinados projetos públicos e privados no ambiente</p> <p>Decreto-Lei n.º 47/2014, de 24 de março, que procede à primeira alteração ao Decreto-Lei n.º 151-B/2013, de 31 de outubro, que estabelece o regime jurídico de avaliação de impacte ambiental (AIA) dos projetos públicos e privados suscetíveis de produzirem efeitos significativos no ambiente, transpondo a Diretiva n.º 2011/92/UE, do Parlamento Europeu e do Conselho, de 13 de dezembro de 2011, relativa à avaliação dos efeitos de determinados projetos públicos e privados no ambiente</p> <p>Decreto-Lei n.º 179/2015, de 27 de agosto, procede à segunda alteração ao Decreto-Lei n.º 151-B/2013, de 31 de outubro, que estabelece o regime jurídico da avaliação de impacte ambiental dos projetos públicos e privados</p>

Member state	Laws transposing the Environmental Impact Assessment Directive
	<p>suscetíveis de produzirem efeitos significativos no ambiente, transpondo para a ordem jurídica interna a Diretiva n.º 2011/92/UE, do Parlamento Europeu e do Conselho, de 13 de dezembro de 2011, relativa à avaliação dos efeitos de determinados projetos públicos e privados no ambiente</p> <p>Lei n.º 37/2017, de 2 de junho, que torna obrigatória a avaliação de impacte ambiental nas operações de prospeção, pesquisa e extração de hidrocarbonetos, procedendo à terceira alteração ao Decreto-Lei n.º 151-B/2013, de 31 de outubro, que estabelece o regime jurídico da avaliação de impacte ambiental dos projetos públicos e privados suscetíveis de produzirem efeitos significativos no ambiente</p> <p>Decreto-Lei n.º 152-B/2017 de 11 de dezembro - Altera o regime jurídico da avaliação de impacte ambiental dos projetos públicos e privados suscetíveis de produzirem efeitos significativos no ambiente, transpondo a Diretiva n.º 2014/52/UE</p>
Romania	<p><b>Directive 2014/52/EU</b></p> <p>Legea nr. 292 privind evaluarea impactului anumitor proiecte publice și private asupra mediului</p>
Spain	<p><b>Directive 2011/92/EU</b></p> <p>Ley 21/2013, de 9 de diciembre, de evaluación ambiental.</p> <p><b>Directive 2014/52/EU</b></p> <p>Ley 9/2018, de 5 de diciembre, por la que se modifica la Ley 21/2013, de 9 de diciembre, de evaluación ambiental, la Ley 21/2015, de 20 de julio, por la que se modifica la Ley 43/2003, de 21 de noviembre, de Montes y la Ley 1/2005, de 9 de marzo, por la que se regula el régimen del comercio de derechos de emisión de gases de efecto invernadero.</p>

### 1.11 Strategic Environmental Assessment Directive

Member state	Laws transposing the Strategic Environmental Assessment Directive
Croatia	<p>Zakon o zaštiti okoliša</p> <p>Uredba o strateškoj procjeni utjecaja plana i programa na okoliš</p> <p>Uredba o informiranju i sudjelovanju javnosti i zainteresirane javnosti u pitanjima zaštite okoliša</p> <p>Pravilnik o Povjerenstvu za stratešku procjenu</p> <p>Zakon o zaštiti okoliša 80/13</p> <p>Uredba o strateškoj procjeni utjecaja strategije, plana i programa na okoliš</p> <p>Zakon o izmjenama i dopunama Zakona o zaštiti okoliša</p>

Member state	Laws transposing the Strategic Environmental Assessment Directive
	Zakon o izmjenama i dopunama Zakona o zaštiti okoliša
France	<p>Ordonnance n° 2004-489 du 3 juin 2004 portant transposition de la directive 2001/42/CE du Parlement européen et du Conseil du 27 juin 2001 relative à l'évaluation des incidences de certains plans et programmes sur l'environnement</p> <p>RECTIFICATIF à l'Ordonnance n° 2004-489 du 3 juin 2004 portant transposition de la directive 2001/42/CE du Parlement européen et du Conseil du 27 juin 2001 relative à l'évaluation des incidences de certains plans et programmes sur l'environnement</p> <p>Décret n° 2005-613 du 27/05/2005 pris pour l'appliocation de l'Ordonnance n° 2004-489 du 3 juin 2004 relative à l'évaluation des incidences de certains plans et programmes sur l'environnement.</p> <p>Décret n° 2005-608 du 27/05/2005 relative à l'évaluation des incidences des documents d'urbanisme sur l'environnement et modifiant le code de l'urbanisme.</p> <p>LOI no 2010-788 du 12 juillet 2010 portant engagement national pour l'environnement</p> <p>Ordonnance n° 2016-1058 du 3 août 2016 relative à la modification des règles applicables à l'évaluation environnementale des projets, plans et programmes</p> <p>Décret n° 2016-1110 du 11 août 2016 relatif à la modification des règles applicables à l'évaluation environnementale des projets, plans et programmes</p>
Greece	<p>Εκτίμηση των περιβαλλοντικών επιπτώσεων ορισμένων σχεδίων και προγραμμάτων, σε συμμόρφωση με τις διατάξεις της οδηγίας 2001/42/ΕΚ "σχετικά με την εκτίμηση των περιβαλλοντικών επιπτώσεων ορισμένων σχεδίων και προγραμμάτων" του Ευρωπαϊκού Κοινοβουλίου και του Συμβουλίου της 27ης Ιουνίου 2001</p>
Poland	<p>Ustawa z dnia 27 kwietnia 2001 r. Prawo ochrony środowiska.</p> <p>Rozporządzenie Ministra Środowiska z dnia 14 listopada 2002 r. w sprawie szczegółowych warunków, jakim powinna odpowiadać prognoza oddziaływania na środowisko dotycząca projektów miejscowych planów zagospodarowania przestrzennego</p> <p>ustawa z dnia 16 kwietnia 2004 r. o ochronie przyrody</p> <p>Ustawa z dnia 20 kwietnia 2004 r. o zmianie i uchyleniu niektórych ustaw w związku z uzyskaniem przez Rzeczpospolitą Polską członkostwa w Unii Europejskiej</p> <p>Ustawa z dnia 18 maja 2005 r. o zmianie ustawy - Prawo ochrony środowiska oraz niektórych innych ustaw</p>

Member state	Laws transposing the Strategic Environmental Assessment Directive
	Ustawa z dnia 9 października 2015 r. o zmianie ustawy o udostępnianiu informacji o środowisku i jego ochronie, udziale społeczeństwa w ochronie środowiska oraz o ocenach oddziaływania na środowisko oraz niektórych innych ustaw
Portugal	Ministério do Ambiente, do Ordenamento do Território e do Desenvolvimento Regional-Estabelece o regime a que fica sujeita a avaliação dos efeitos de determinados planos e programas no ambiente, transpondo para a ordem jurídica interna as Directivas n.os 2001/42/CE, do Parlamento Europeu e do Conselho, de 27 de Junho, e 2003/35/CE, do Parlamento Europeu e do Conselho, de 26 de Maio.
Romania	Hotărâre privind stabilirea procedurii de realizare a evaluării de mediu pentru planuri și programe
Spain	LEY 9/2006, de 28 de abril, sobre evaluación de los efectos de determinados planes y programas en el medio ambiente Ley 21/2013, de 9 de diciembre, de evaluación ambiental.