

EU Environmental Targets and Objectives

2015 – 2050



European Environment Agency
European Topic Centre on Waste and
Materials in a Green Economy



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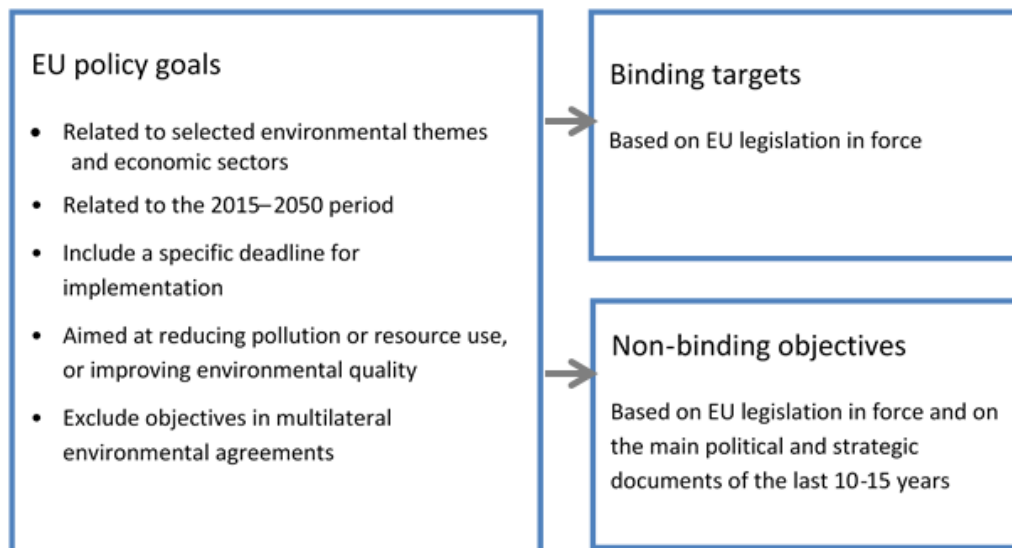
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1 Scope and limitations of the study

The present work, building on EEA Reports No 08/2013 ('Towards a green economy in Europe') and No 17/2016 ('Environmental taxation and EU environmental policies'), provides an updated overview of the environmental objectives and targets in EU policy and legislation for the period 2015-2050. In particular, as the above-mentioned reports, it is based on the following **definitions and limitations** (Figure 1.1):

Figure 1.1: Objectives and targets addressed in this report



Source: own elaboration based on EEA, 2013 and 2016

- Targets are binding goals established by EU legislation (regulations, directives and decisions) and European Council Presidency conclusions.
- All other goals are classified as non-binding objectives. This broad category includes goals set out in Commission communications and environmental action programmes. They can also be shaped by European Council Presidency conclusions or EU legislation, including indicative targets, target values or targets subject to subsequent confirmation. Non-binding objectives are, therefore, quite heterogeneous and can vary greatly in their stringency and political strength.
- Exclusions:
 - The reported objectives and targets are directly aimed at reducing pollution and resource use and improving environmental quality. Objectives/targets concerned with other indirect measures, such as collecting information and data, registration or classification procedures, monitoring, or establishing programmes and plans (which all play an important role in EU environmental policy and legislation) are outside the scope of the study.
 - Only targets and objectives provided with a specific deadline for implementation are taken into account.¹ Where targets or objectives are set by legislation, the update only includes those that are set for a future date, i.e. after the date of entry into force or of transposition (where necessary).

¹ The deadline indicates the year since when the target/objective has to/should be implemented (that means that the target/objective is applied from then on).

- The analysis does not present the objectives and targets of multilateral environmental agreements (MEAs) to which the EU or its Member States are party, or those established by related protocols and decisions of the executive organs of those agreements, except where they have been integrated into EU policy. However, a list of the most important MEAs related to each environmental theme is provided by Annex I.
- The review is based on a broad analysis of the EU legislation in force and the main political and strategic documents of the past decade. Some relevant executive acts are also taken into account. The most important sources include the European Commission's Summaries of EU legislation (EC, 2018), the websites of the Commission's directorates-general (for environment, mobility and transport, energy, climate action, agriculture, etc.) and EEA reports. The paper was also consulted with EEA thematic and sectoral experts during its development.
- The EU's environmental objectives and targets are continually being supplemented and adjusted. The cut-off dates for the present study are 31st December 2018 with regard to SOER environmental themes and 31st March 2018 with regard to SOER economic sectors (see Par. 2).

While EEA Reports No 08/2013 and No 17/2016 classified environmental targets and objectives under nine environmental and resource policy areas, relative to, respectively, the 2010-2050 and 2013-2050 periods, the update is based on the 2020 Status of Environment Report (SOER) structure (see Par. 2) and covers the 2015-2050 period.

2 Selection of environmental themes and sectors

Compared to EEA Reports No 08/2013 and No 17/2016, the scope of the work is partially different, because it was decided that it should reflect the choice of themes and sectors that will structure Part 2 of the EEA's State and Outlook of the Environment Report 2020 (SOER 2020). In particular, objectives/targets are classified according to the ten SOER environmental themes (to which a cross-cutting environmental area has been added), instead of the nine environmental and resource policy areas used in the two above-mentioned reports. Moreover, the analysis has been extended so as to cover six SOER economic sectors, which were only partially addressed by the previous analysis (Table 2.1).

First, Annex I tables (section 1) provide, for each **SOER 2020 environmental theme** (including the cross-cutting environmental area), a list of the environmental **targets and objectives relevant to the 2015-2050 period**, according to the following methodology:

- All the targets/objectives, identified by EEA Reports No 8/2013 and No 17/2016, that are still in force and relevant to the 2015-2050 period, have been allocated to the new SOER environmental themes, based on the matrix below (Table 2.2, blue cells);
- New targets/objectives have been identified for all SOER environmental themes and a 'complete analysis' (addressing all the legislation in force and the political/strategic documents of the last 10-15 years) has been carried out for 'Noise', which had only been partially covered by EEA Report 17/2016;
- Each environmental target/objective has been allocated only to one environmental theme. Since for some targets/objectives it was not possible to identify a single reference theme, a 'cross-cutting environmental area' has been added to the ten SOER environmental themes. This area mainly includes sustainable consumption and production (SCP) targets/objectives.

Table 2.1 Environmental/resources policy areas, SOER environmental themes, SOER economic sectors

Environmental and resource policy areas analysed by EEA Reports 8/2013 and 17/2016	SOER Part 2 environmental themes	SOER Part 2 economic sectors
<ul style="list-style-type: none"> • Energy • GHG emissions and ozone depleting substances • Air quality/pollution • GHG emissions & air pollution in transport and noise • Waste • Sustainable Consumption and Production (SCP) • Water • Chemicals • Biodiversity and land use 	<ul style="list-style-type: none"> • Biodiversity and nature • Freshwater • Land and soil • Marine • Climate change • Air pollution • Noise • Waste and resources • Chemical pollution • Industrial pollution + Cross-cutting environmental area 	<ul style="list-style-type: none"> • Energy • Industry • Transport • Agriculture • Forestry • Fisheries and aquaculture

Source: own elaboration

It has also to be noted that some environmental themes partially overlap, so that the following choices have been made:

- ‘Industrial pollution’ (which overlaps, to a different extent, with e.g. ‘climate change’, ‘air pollution’, ‘chemical pollution’, ‘freshwater’, etc.) only includes specific industrial-related targets/objectives, i.e. those established by the Industrial Emissions Directive 2010/75/EU (EU, 2010; addressing both air and water pollution), as well as the new targets introduced by Directive 2015/2193/EU (EU, 2015) for medium combustion plants. Other environmental targets/objectives, that are relevant to industrial pollution, have been classified under other SOER environmental themes.
- ‘Land & soil’ (which partially overlaps with ‘biodiversity & nature’, as improvements in soil protection often positively impact on biodiversity and viceversa), only includes land/soil specific targets/objectives, while considering ‘biodiversity & nature’ as a more general theme. The same type of relationship (specific vs general) has been identified between ‘freshwater’ and ‘marine’ on the one side and ‘biodiversity & nature’ on the other.

The allocation of the environmental targets/objectives listed by EEA Reports No 8/2013 and No 17/2016 to SOER environmental themes and their update (cut-off date: 31st December 2018) is provided by Annex I (section 1).

Table 2.2: Relationships matrix: environmental/resource policy areas and SOER environmental themes/sectors

		PREVIOUS ENVIRONMENTAL/RESOURCE POLICY AREAS									SOER sector of destination/ SOER environmental theme of origin	Not fully covered by previous analysis
		Energy	GHG emissions and ozone depleting substance	Air pollution and air quality	GHG emissions, air pollution and noise from transport	Water	Waste	SCP and resource efficiency	Chemicals	Biodiversity and land use		
SOER ENVIRONMENTAL THEMES	Biodiversity and nature (BIO)									X	AGR, FR, FSH	
	Freshwater (FRW)					X					AGR	
	Land use and soil (LAND)									X		
	Marine (MR)					X				X	FSH	
	Climate change (CC)	X	X		X						TR, IND, E	
	Air pollution (Air Po)			X	X						TR	
	Noise (NO)				X						TR	X
	Waste and resources (WS)						X	X			IND	
	Chemical pollution (CH)								X		IND	
	Industrial pollution (IND Po)			X		X					E, IND	
Cross-cutting env. area							X		X			
SOER ECONOMIC	Energy (E)	X		X							CC, IND Po	X
	Industry (IND)		X	X		X	X		X		CC, WS, CH, IND Po	X
	Transport (TR)				X						CC, Air Po, NO	X
	Agriculture (AGR)					X				X	BIO, FRW	X
	Forestry (FR)									X	BIO	X
	Fishery and aquaculture (FSH)									X	BIO, MR	X

Source: own elaboration

Second, Annex II tables (section 1) indicate, for each **SOER economic sector**, the environmental **targets and objectives relevant to the 2015-2050 period**, according to the following methodology:

- Provided that not all the targets/objectives under SOER environmental themes have to be necessarily classified under SOER economic sectors, a lot of them can be allocated to SOER sectors. Moving from SOER environmental themes to SOER economic sectors proves, however, to be problematic, since sectors partially overlap and most targets/objectives under SOER environmental themes have a cross-cutting nature in terms of sectors (i.e. they are relevant and can be destined to multiple sectors). For instance, all SOER sectors can play a role in reducing GHG emissions or avoiding the overexploitation of renewable natural resources and most sectors (e.g. industry, energy, agriculture, etc.) can contribute to managing waste as a resource. The relationship between targets/objectives under SOER themes and SOER sectors is illustrated by the column 'SOER sector' in Annex I tables (section 1) and it is summarized by Table 2.2 above (green cells). The column 'SOER sector' in Annex I tables (section 1) has been filled only when a one-to-one relationship could be identified (i.e. one target/objective under a SOER environmental theme allocated to one economic sector) and excluding targets/objectives adopted between 31st March 2018 and 31st December 2018 (see last indent below). When sectoral allocation is provided, the related target/objective is consistently reported by Annex II tables on SOER sectors (section 1). Environmental targets/objectives under SOER themes that are characterized by multiple destinations in terms of sectors are, instead, not reported by Annex II tables (section 1). It has, therefore, to be highlighted that some sectors (such as agriculture and forestry) are characterized by a low number of targets/objectives, not because there are no targets/objectives relevant to them, but because targets/objectives relevant to those sectors are also relevant to other sectors (multi-sectoral destination). All the environmental targets and objectives listed under the 'cross-cutting environmental area' are multi-sectoral by definition.
- Annex II tables (section 1) also list the environmental targets/objectives set by non-environmental sectoral legislation, i.e. by legislation, addressing SOER economic sectors, other than the environmental legislation regulating SOER environmental themes (and establishing the related targets/objectives listed in Annex I). The identification of environmental targets/objectives within non-environmental legislation is based on the standard framework for analysis (illustrated by Paragraph 1). In particular, the general definition of targets/objectives applies, pursuant to which targets/objectives are those *directly aimed at reducing pollution and resource use and improving environmental quality* (thus excluding 'indirect targets/objectives') and *provided with a deadline for implementation*. The eco-design requirements established by Commission Regulations implementing Directive 2009/125/EC (EU, 2009; see Annex II tables – 'Industry') provide for a relevant example of environmental targets/objectives established by non-environmental sectoral legislation. In this case, eco-design requirements related to energy efficiency, emissions of pollutants, noise etc. have to be implemented for different product types by specific deadlines.
- The cut-off date of Annex II tables is 31st March 2018. A subsequent update has been prepared (cut-off date: 31st December 2018) with regard to Annex I tables (SOER environmental themes), but all the targets/objectives, set by environmental legislation/policy documents, identified during this step (i.e. targets/objectives that have been adopted between 31st March 2018 and 31st December 2018) have not been allocated to any economic sector.

Apart from the list of targets and objectives relevant to the 2015-2050 period (section 1), the tables related to SOER environmental themes (Annex I) and economic sectors (Annex II), also include (when relevant) the following sections:

- List of environmental targets/objectives set by legislative proposals presented, but not yet adopted, by 31st December 2018 with regard to SOER environmental themes and by 31st March 2018 with regard to SOER economic sectors (section 2).
- List of targets/objectives set by legislation in force (at 31st December 2018 with regard to SOER environmental themes and at 31st March 2018 with regard to SOER economic sectors) with a deadline before 2015 (section 3). Objectives shaped by policy documents with a deadline before 2015 are not reported.
- List of the most important political and legislative documents analysed which do not set any environmental target/objective (section 4). Some of these documents are accompanied by concise footnotes explaining their environmental relevance to the related theme/sector. The decision to introduce this section in Annex I and Annex II tables has been taken not only for the sake of completeness, but also because many measures established by policy and legislative documents, although relevant to the environment, do not meet the definition of target/objective on which this work is based. Think, for instance, within CAP, about good agricultural and environmental conditions, agri–environmental-climate measures, requirements for organic production set by Council Regulation (EC) No 834/2007 (EU, 2007), etc. Moreover, with regard to Annex I, section 4 of the tables also lists the main multilateral/international environmental agreements, addressing each environmental theme, to which the EU and/or most of its Member States are party (indeed, as stated in Paragraph 1, the related targets/objectives are covered by the other sections of Annex I tables, only when integrated into EU legislation).

In the case of Annex II tables, sections 2-4 have been filled by only taking into account of non-environmental policy documents and legislation (while for targets/objectives established by environmental legislation, please refer to Annex I tables).

3 Characterisation of targets/objectives

For each environmental target/objective reported under SOER environmental themes and economic sectors, the following information is provided by Annex I and Annex II tables:

- Short description of the target/objective;
- Deadline for implementation (transitional periods eventually applying to the targets have not been reported);
- Whether the target/objective is staged, so that final and interim targets/objectives can be distinguished;
- Geographical scale, i.e. whether a single EU target/objective applies at EU level or each Member State has its own national target/objective;
- Legislative/policy reference;
- For targets/objectives relevant to the 2015-2050 period listed under SOER environmental themes (Annex I tables, section 1): allocation to economic sectors, when a one-to-one relationship could be identified and excluding environmental targets/objectives adopted between 31st March 2018 and 31st December 2018. For targets/objectives relevant to the 2015-2050 period listed under SOER economic sectors (Annex II tables, section 1): environmental theme under which the target/objective is listed. Otherwise, the target/objective is marked as 'sectoral', meaning that it has been established by non-environmental legislation/policy documents.

Further details on how to read Annex I and II tables are provided in the next pages.

During the preliminary discussion that has prepared the carrying out of this work, other possible characterizations of targets/objectives, listed in the 2018 Action Plan, have been considered, but they have been deemed unfeasible. This further characterization included, e.g., the overview of selected types of implementation mechanisms (e.g. market-based instruments, information-based, etc.) and/or of procedural requirements (e.g. binding requirements for action plans and programs).

4 Results

A total of 159 legally binding targets and 87 non-binding objectives have been identified across the 11 environmental themes for the 2015–2050 period. Most of the binding targets are to be reached in the 2015-2020 period (104 targets). The environmental theme with the highest number of targets is climate change (51 targets), followed by chemical pollution (27 targets) and waste and resources (23 targets). Compared to previous analysis and excluding noise (only partially addressed by EEA Report No 17/2016), a relevant number of new targets has been established in the climate change and waste & resources areas. In particular, new targets have been set for climate change by the Energy Efficiency Directive (EU, 2018a) and the revised Renewable Energy Directive (EU, 2018b) and, for waste & resources, by the amendments to several waste directives, based on the 2015 Circular Economy Package.

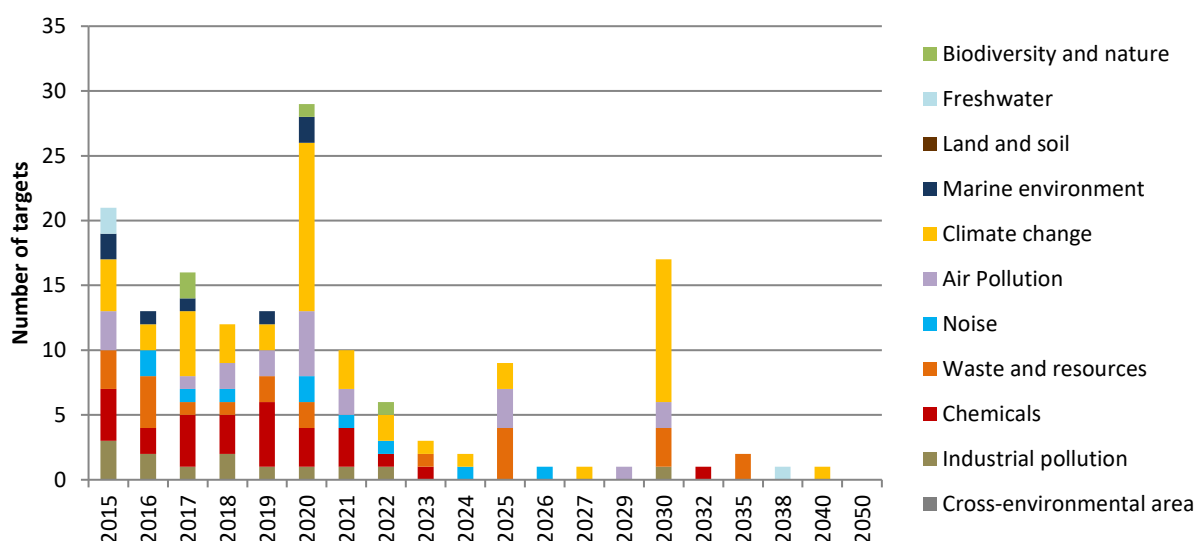
Environmental legislation in force sets a relevant number of targets with a deadline before 2015 (but still in force) especially for freshwater (10 targets), air pollution (9 targets), chemical pollution (8 targets) and waste and resources (8 targets).

Legislative proposals presented, but not yet adopted, by 31st December 2018 (if not amended during the decision-making process) will set new targets for climate change (4 targets) and waste and resources (2 targets).

Of the total 87 non-binding objectives identified for the eleven environmental themes, the great majority is set for 2020 (58 objectives). Again, climate change plays the largest role (23 objectives in total), followed by biodiversity and nature (12 objectives) and air pollution and waste and resources (11 objectives).

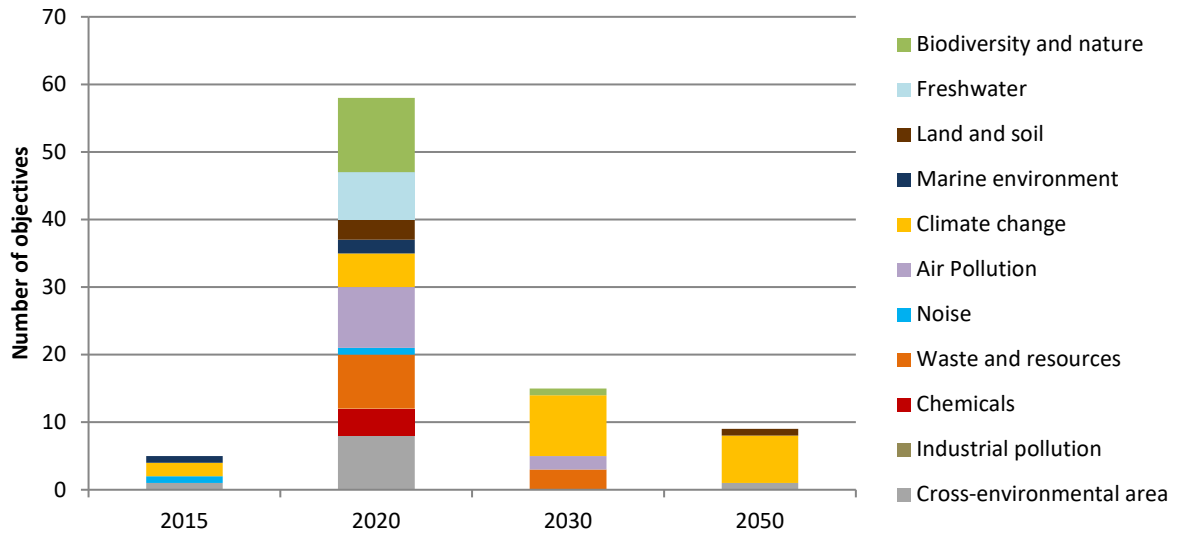
The economic sectors with the highest number of environmental objectives and targets are industry (2 objectives and 97 targets) and transport (14 objectives and 35 targets). These data are to be carefully considered, since the number of objectives and targets, established by environmental legislation and policy, per economic sector depends on the possibility of allocating them to a single reference sector. Moreover, as explained above, many environmental measures relevant to some economic sectors (e.g. agriculture, forestry and fishery and aquaculture) do not meet the definition of objective/target used in this paper.

Figure 4.1: Binding environmental targets 2015-2050



Source: own elaboration

Figure 4.2: Non-binding environmental objectives 2015-2050



Source: own elaboration

References

EC, 2018, 'Summaries of EU legislation', ([http:// europa.eu/legislation_summaries/index_en.htm](http://europa.eu/legislation_summaries/index_en.htm))

EEA, 2013, *Towards a green economy in Europe — EU environmental policy targets and objectives 2010–2050*, EEA Report No 8/2013, European Environment Agency, Copenhagen.

EEA, 2016, *Environmental taxation and EU environmental policies*, EEA Report No 17/2016, European Environment Agency, Copenhagen.

EU, 2007, Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91 (OJ L 189, 20.7.2007, p. 1–23).

EU, 2009, Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of eco-design requirements for energy-related products (OJ L 285, 31.10.2009, p. 10–35).

EU, 2010, Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17–119).

EU, 2015, Directive 2015/2193 of the European Parliament and the Council of 25 November 2015 on the limitation of emissions of certain pollutants into the air from medium combustion plants (OJ L 313, 28.11.2015, p. 1–19).

EU, 2018a, Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending Directive 2012/27/EU on energy efficiency (OJ L 328, 21.12.2018, p. 210–230).

EU, 2018b, Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82–209).

List of acronyms and abbreviations

A.:	adopted
AGR:	Agriculture as a SOER economic sector
Air Po:	Air pollution as a SOER environmental theme
As:	arsenic
BAT:	Best Available Technique
BIO:	Biodiversity and nature as a SOER environmental theme
CAP:	Common Agriculture Policy
CC:	Climate change as a SOER environmental theme
Cd:	cadmium
CH:	Chemical pollution as a SOER environmental theme
CH ₄ :	methane
CO ₂ :	carbon dioxide
Cr:	chromium
DBT:	dibutyltin
DNT:	dinitrotoluene
E:	Energy as a SOER economic sector
EEE:	Electrical and Electronic Equipment
E.F.:	entered into force
ELV:	End-of-Life Vehicle
EQS:	Environmental Quality Standards
ETS:	Emission Trading Scheme
FIN:	final
FR:	Forestry as a SOER economic sector
FRW:	Freshwater as a SOER environmental theme
FSH:	Fishery and aquaculture as a SOER economic sector
GHG:	Greenhouse Gas
GMO:	Genetically Modified Organism
GWP:	Global Warming Potential
HFC:	Hydrofluorocarbon
Hg:	mercury
IED:	Industrial Emissions Directive
IFR:	Instrument Flight Rules
IND:	Industry as a SOER economic sector
IND Po:	Industrial pollution as a SOER environmental theme
INT:	interim
IPPC:	Integrated Pollution Prevention and Control
LAND:	Land use and soil as a SOER environmental theme
LNG:	Liquefied Natural Gas
LULUCF:	Land Use, Land Use Change and Forestry
MEA:	Multilateral Environmental Agreement
MR:	Marine as a SOER environmental theme
MS:	Member States
MSY:	Maximum Sustainable Yield
NH ₃ :	ammonia

Ni:	nickel
NO:	Noise as a SOER environmental theme
NO ₂ :	nitrogen dioxide
NO _x :	nitrogen oxides
ODS:	Ozone Depleting Substances
Pb:	lead
PBB:	polybrominated biphenyls
PBDE:	polybrominated diphenyl ethers
PCB:	polychlorinated biphenyls
p.e.:	population equivalent
PFOA:	perfluorooctanoic acid
PM _{2.5} :	particulate matter
PPA:	previous environmental and resource policy areas
PVR:	Petrol Vapour Recovery
REACH:	Regulation on the <i>registration, evaluation, authorisation and restriction of chemicals</i>
RES:	Renewable Energy Sources
SCP:	Sustainable Consumption and Production
SDG:	Sustainable Development Goal
SO ₂ :	sulphur dioxide
SO _x :	sulphur oxides
SVHC:	Substance of Very High Concern
TR:	Transport as a SOER economic sector
TSI:	Technical Specification for Interoperability
VOC:	Volatile Organic Compound
WEEE:	Waste Electrical and Electronic Equipment
WHO:	World Health Organisation
WS:	Waste and resources as a SOER environmental theme

Annexes

How to read tables in Annex I and II

For each environmental theme (including the cross-cutting environmental area) and economic sector, a table has been provided, comprising (when relevant) the following sections:

1. **Targets and objectives relevant to the 2015-2050 period**, established by the main policy documents of the last 10-15 years and legislation in force (cut-off date: 31st December 2018 with reference to SOER environmental themes and 31st March 2018 with reference to SOER economic sectors). With regard to Annex II, this section of tables covers both environmental legislation/policy documents (when the related target/objective in section 1 of Annex I tables has been allocated to a single economic sector) and non-environmental legislation/policy documents.
2. **Targets/objectives set by legislative proposals** presented, but not yet adopted, by 31st December 2018 with reference to SOER environmental themes and by 31st March 2018 with reference to SOER economic sectors. This section of Annex II tables only covers non-environmental legislation/policy documents.
3. **Targets/objectives set by legislation in force** (at 31st December 2018 with reference to SOER environmental themes and at 31st March 2018 with reference to SOER economic sectors) with a deadline before 2015 (objectives with a deadline before 2015 shaped by policy documents are not reported). This section of Annex II tables only covers non-environmental legislation/policy documents.
4. **Most important policy documents of the last 10-15 years and legislation in force which have been analysed, but which do not set any environmental target/objective**. Some of these documents are accompanied by concise footnotes explaining their environmental relevance to the related theme/sector. With regard to Annex I, this section of the tables also lists the main multilateral/international environmental agreements, addressing each environmental theme, to which the EU and/or most of its Member States are party. This section of Annex II tables only covers non-environmental legislation/policy documents.

Table excerpt

Reference	Target/Objective – deadline + geo	SOER Sector
European Council, 2006 Review of the EU Sustainable Development Strategy	Improve management and avoid overexploitation of renewable natural resources (2015)	
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in EEE	No heavy metals (Pb, Hg, Cd, hexavalent Cr, PBB and PBDE) in new electrical and electronic equipment (2019)	Industry

For each target/objective the following information is provided:

- **‘Reference’**: political or legislative document setting the target/objective. The same target/objective can be set by multiple documents.
- **‘Target/Objective – deadline + info’**: it shortly describes the target/objective, indicates the related deadline for implementation and provides for the following additional information:
 - **Distinction between binding targets** (red rows) and **non-binding objectives** (blue rows);
 - **Geographical scale**: a symbol (△) indicates whether national targets/objectives apply (otherwise there is a single EU target/objective);

- In case of staged objectives/targets, **interim ('INT')** and **final ('FIN')** targets/objectives are distinguished. Within the category of staged targets/objectives, the following is included: 1) targets/objectives that are identical but show an increasing level (e.g. percentages) of application over time; 2) targets/objectives that are explicitly staged by legislation, e.g. by indicating different implementation phases.
- **'SOER Sector'** (only applicable to section 1 of Annex I tables): this column indicates the allocation of single targets/objectives to SOER economic sectors, when a one-to-one relationship could be identified and excluding targets/objectives adopted between 31st March 2018 and 31st December 2018 (these targets/objectives are reported in italics in section 1 of Annex I). Environmental targets/objectives allocated **to a single SOER sector** are consistently reported in Annex II tables (section 1) concerning objectives relevant to the 2015-2050 period.
- **'SOER Environmental Theme'** (only applicable to section 1 of Annex II tables): this column indicates the environmental theme under which the target/objective is reported in Annex I tables. Within this column, the abbreviation 'SEC' means 'sectoral', i.e. that the target/objective is established by non-environmental legislation/policy documents (and, therefore, is not reported in section 1 of Annex I tables).

Sometimes sections of Annex I and Annex II tables are divided in sub-sections (as it was in EEA Reports No 8/2013 and No 17/2016) for reasons of clarity.

In each section (or within the related sub-sections), targets/objectives are listed in chronological order of the deadlines for implementation, not for their relevance. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

Annex I – SOER Environmental Themes – Cut-off data: 31st December 2018

BIODIVERSITY AND NATURE

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms	MS in which GMOs are cultivated take appropriate measures in border areas of their territory to avoid possible cross-border contamination into neighbouring MS in which the cultivation of those GMOs is prohibited (2017)	Agriculture
Directive 2010/63/EU on the protection of animals used for scientific purposes	Application of care and accommodation standards for selected species of animals used for scientific purposes ² (2017)	
COM(2011)244, EU Biodiversity Strategy (COM(2011) 571 Roadmap to a resource efficient Europe)	Halt the loss of biodiversity and the degradation of ecosystem services (2020)	
COM(2011)244, EU Biodiversity Strategy (COM(2011) 571 Roadmap to a resource efficient Europe)	Natural capital and ecosystem services are properly valued (2020)	
COM(2011)244, EU Biodiversity Strategy	Target 1: Achieve a significant and measurable improvement in the status of species and habitats covered by EU nature legislation (2020)	
COM(2011)244, EU Biodiversity Strategy	Target 2: Better protection/restoration of ecosystems and their services (15% of degraded ecosystems are to be restored) and greater use of green infrastructure (2020)	
COM(2011)244, EU Biodiversity Strategy	Target 3a: Maximise areas under agriculture across grasslands, arable land and permanent crops, covered by biodiversity-related measures under CAP, to bring a measurable improvement in the conservation status of species/habitats depending or affected by agriculture (2020)	Agriculture
COM(2011)244, EU Biodiversity Strategy	Target 3b: Forests management plans are in place for all forest that are publicly owned and for forests above a certain size, to bring a measurable improvement in the conservation status of forests ecosystems and species (2020)	Forestry
COM(2011)244, EU Biodiversity Strategy	Target 4: Better management of EU fish stocks (2020)	Fishery

² Mice, rats, gerbils, hamsters, guinea pigs, rabbits, cats, dogs, ferrets, marmosets and tamarins, squirrel monkeys, macaques and vervets, baboons, cattle, sheep and goats, pigs, equines, domestic fowl, domestic turkeys, quails, ducks and geese, pigeons, zebra finches, aquatic urodeles, anurans, aquatic chelonians, snakes.

COM(2011)244, EU Biodiversity Strategy	Target 5: Tighter controls of invasive alien species (2020)	
COM(2011)244, EU Biodiversity Strategy	Target 6: Greater EU contribution to averting global biodiversity loss (2020)	
COM(2013)659, A new EU Forest Strategy: for forests and the forest-based sector	Ensure that all forests in the EU are sustainably managed and that the EU's contribution to promoting sustainable forest management and reducing deforestation at global level is strengthened, thus: - contributing to balancing various forest functions, meeting demands, and delivering vital ecosystem services; - providing a basis for forestry and the whole forest-based value chain to be competitive and viable contributors to the bio-based economy (2020)	
Decision 1386/2013/EU (7 th EAP)	Innovative approaches for urban biodiversity conservation (2020).	
Directive 2008/56/EC, Marine Strategy Framework Directive	Biodiversity in the marine environment is maintained (2020)	
Directive 2010/63/EU on the protection of animals used for scientific purposes	MS shall ensure that the non-human primates may be used in procedures only where they are the offspring of non- human primates which have been bred in captivity or where they are sourced from self-sustaining colonies (2022) ³	
COM(2008)645, Communication on deforestation	Halt global forest cover loss (2030)	Forestry
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE		
Reference	Target/objective + deadline and info	
Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms	Phasing out of antibiotic resistance markers in GMOs placed on the market, which may have adverse effects on human health and the environment (2004)	
Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms	Phasing out of antibiotic resistance markers in GMOs deliberately released, which may have adverse effects on human health and the environment (2008)	
Directive 2010/63/EU on the protection of animals used for scientific purposes	MS shall ensure that the specified non-human primates (Marmoset - Callithrix jacchus) may be used in procedures only where they are the offspring of non- human primates which have been bred in captivity or where they are sourced from self-sustaining colonies (2013)	
4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS		
The environmental theme 'Biodiversity and nature' is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:		

³ Five years after the publication of the feasibility study referred to in Article 10.1, fourth subparagraph (to be adopted at latest, by 10 November 2017) provided the study does not recommend an extended period.

- ✓ Policy documents: **Commission Communication COM(2005)670, Thematic Strategy on the sustainable use of natural resources**; Commission Communication **COM(2008)645, Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss**; **Commission Communication COM(2008)789, EU Strategy on Invasive Species**; Commission Communication COM(2013)249, Green Infrastructure— Enhancing Europe’s Natural Capital; Commission Communication **COM(2016)87, EU Action Plan against Wildlife Trafficking**.⁴
- ✓ Environmental legislation in force: Habitats Directive [92/43/EEC](#); **Directive 2009/41/EC on the contained use of genetically modified micro-organisms**; Directive 2009/147/EC on the conservation of wild birds; [Regulation \(EC\) No 1829/2003 on genetically modified food and feed](#)⁵; [Regulation \(EC\) No 1830/2003 on the traceability and labelling of genetically modified organisms \(GMOs\) and the traceability of food and feed products produced from GMOs](#); **Regulation (EU) No 1143/2014 on the prevention and management of the introduction and spread of invasive alien species**.

It is also worth noting that many multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to ‘Biodiversity and nature’, although they fall outside the scope of this research work. The most important agreements include, for instance: the Ramsar Convention on Wetlands (A: 02.02.1971, E.F.: 21.12.1975); the Paris Convention Concerning the Protection of the World Cultural and Natural Heritage (A: 16.11.1972, E.F.: 17.12.1975); the Convention on International Trade of Endangered Species of Wild Fauna and Flora (A: 03.03.1973, E.F.: 01.07.1975); the Bonn Convention on the Conservation of Migratory Species of Wild Animals (A: 23.06.1979; E.F.: 01.11.1983; ratified by the EU); the Convention on the Conservation of European Wildlife and Natural Habitats (A: 19.09.1979; E.F.: 01.06.1982; ratified by the EU); the Alpine Convention (A: 07.11.1991; E.F.: 06.03.1995; ratified by the EU); the Rio Convention on Biological Diversity (A: 05.06.1992; E.F.: 29.12.1993; ratified by the EU); the International Treaty on Plant Genetic resources for Food and Agriculture (A: 03.11.2001, E.F.: 29.06.2004; ratified by the EU); the International Tropical Timber Agreement 2006 (A: 27.01.2006, E.F.: 07.12.2011; ratified by the EU).

Also the UN Sustainable Development Goals (SDGs) address biodiversity and nature, particularly SDG 15: ‘Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss’.

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.
 ‘A’: adopted; ‘E.F.’: entered into force.

FRESHWATER

Some of the targets and objectives listed under ‘Industrial pollution’ are also relevant to ‘Freshwater’

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2000/60/EC, Water Framework Directive	All surface and groundwater bodies in river basins achieve ‘good status’ (2015) ⁶	
Directive 2006/7/EC, Bathing Water Directive	Bathing waters ⁷ achieve a classification of at least ‘sufficient’ (2015)	

⁴ The action plan comprises 32 measures to be carried out between 2016 and 2020 by the EU, which will be carried out by each of the 28 EU countries. It focuses on three key aspects: 1) Preventing trafficking and reducing supply and demand of illegal wildlife products; 2) Better implementation of existing rules and combating organised crime more effectively; 3) Strengthening cooperation between source, destination and transit countries.

⁵ The EC has proposed to amend the Regulation (Communication COM(2015)176 final – Reviewing the decision-making process on genetically modified organisms) as the current system for the authorisation of genetically modified food and feed in the EU does not fully take into account the individual concerns of democratically elected national, regional and local governments.

⁶ Good status is comprised of four separate status assessments: good ecological and chemical status of surface waters, and good quantitative and chemical status of groundwater.

⁷ The Directive applies to any element of surface water where the competent authority expects a large number of people to bathe and has not imposed a permanent bathing prohibition, or issued permanent advice against bathing.

COM(2011) 571, Roadmap to a Resource Efficient Europe	Keep water abstraction below 20% of available renewable water resources (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Alternative water supply options are only relied upon when all cheaper savings opportunities have been taken (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	The impacts of droughts and floods are minimized (2020)	
Decision 1386/2013/EU (7 th EAP)	Significantly reduce the impact of pressures on transitional, coastal and freshwaters (2020)	
Decision 1386/2013/EU (7 th EAP)	Manage the nutrient cycle in a more sustainable and resource-efficient way (2020)	Agriculture
Decision 1386/2013/EU (7 th EAP)	Prevent or significantly reduce water stress (2020)	
Decision 1386/2013/EU (7 th EAP)	High standards for safe drinking waters (2020)	
Directive 2008/105/EC, Environmental Quality Standards	Priority hazardous substances under Directive 2008/105/EC are completely eliminated from surface waters (2028-2038) ⁸	
2 TARGETS/OBJECTIVES IN LEGISLATIVE PROPOSALS (PRESENTED BUT NOT YET ADOPTED BY 31st DECEMBER 2018)		
Reference	Target/objective + deadline and info	
COM(2017)753 Proposal for a Revised Drinking Water Directive	Member States shall ensure that water intended for human consumption meets the minimum requirements set out for chromium and lead by [10 years after the entry into force of the Directive].	
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE		
Reference	Target/objective + deadline and info	
Directive 91/271/EEC on Urban Waste Water Treatment	For urban wastewater discharging into 'sensitive areas', MS shall ensure that collection systems are provided for agglomerations of more than 10,000 p.e. and that wastewater is subject to secondary + tertiary treatment (1998)	
Directive 91/271/EEC on Urban Waste Water Treatment	The disposal of sludge from urban wastewater treatment plants is subject to general rules or registration or authorization (1998)	
Directive 91/271/EEC on Urban Waste Water Treatment	Phase out of the disposal of sludge to surface waters by dumping from ships, by discharge from pipelines or by other means (1998)	
Directive 91/271/EEC on Urban Waste Water Treatment	Agglomerations with a population equivalent (p.e.) of more than 15,000 are provided with collecting systems for urban waste water and secondary treatment is applied (2000)	
Directive 91/271/EEC on Urban Waste Water Treatment	Direct discharges of industrial biodegradable wastewater from plants (belonging to the industrial sectors listed in Annex III)	

⁸ Directive 2008/105/EC also introduced environmental quality standards (EQS) for all the 33 priority substances and for eight other pollutants that were already regulated under existing EU legislation (listed in Directive 76/464/EEC and Annex IX of the Water Framework Directive, Directive 2000/60/EC). Thirteen of the 33 priority substances have been classified as hazardous (metals, organic pollutants, pesticides, etc.). The WFD requires the Commission to propose controls for the cessation or phase-out of emissions, discharges and losses of such substances and a time limit of 20 years is set out to achieve the cessation or phase-out, from the date of adoption of the controls. As a consequence, the 13 hazardous priority hazardous substances must be completely eliminated by 2028 at the latest.

Directive 2013/39/EU has amended Directive 2008/105/EC, updating the EQS for seven of the 33 original priority substances in line with the latest scientific and technical knowledge concerning the properties of the substances and identifying 12 new priority substances. The revised EQS for those seven existing priority substances must be taken into account for the first time in Member States' river basin management plans from 22 December 2015, with the aim of achieving good surface water chemical status in relation to those substances by 22 December 2021. The 12 newly identified priority substances and their EQS should be taken into account in the establishment of supplementary monitoring programmes and in preliminary programmes of measures to be submitted by the end of 2018, with the aim of achieving good surface water chemical status in relation to those substances by 22 December 2027. Provided that controls are established by 2018, pursuant to the WFD, the 12 new priority substances should be phased out by 2038.

	representing 4,000 p.e. or more shall respect conditions established in prior regulations and/or specific authorization (2000)
Council Directive 98/83/EC on the quality of water intended for human consumption	Quality of water intended for human consumption complies at least with values set out in Annex I (or with more stringent values, 2003)
Directive 91/271/EEC on Urban Waste Water Treatment	Agglomerations with a population equivalent (p.e.) of between 2,000 and 15,000 are provided with collecting systems for urban waste water (2005)
Directive 91/271/EEC on Urban Waste Water Treatment	Secondary treatment of waste waters coming from agglomerations between 10,000 and 15,000 p.e. (2005)
Directive 91/271/EEC on Urban Waste Water Treatment	Secondary treatment of waste waters coming from agglomerations of between 2,000 and 10,000 p.e. discharging to fresh waters and estuaries (2005)
Directive 91/271/EEC on Urban Waste Water Treatment	Member States shall ensure urban waste water entering collecting systems shall before discharge be subject to appropriate treatment for: <ul style="list-style-type: none"> - discharges to freshwater and estuaries from agglomerations of less than 2,000 p.e.; - discharges to coastal waters from agglomerations of less than 10,000 p.e. (2005)

4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS

The environmental theme 'Freshwater' is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:

- ✓ Policy documents: Commission Communication **COM(2007)414, Addressing the challenge of water scarcity and droughts in the European Union**; Commission Communication COM(2011)244, EU Biodiversity Strategy and Commission Communication COM(2012)673, A Blueprint to Safeguard Europe's Water Resources.
- ✓ Environmental legislation in force: **Directive (Council Directive) 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources**; [Groundwater Directive \(2006/118/EC\)](#); and [Directive 2007/60/EC on the assessment and management of flood risks](#).

It is also worth noting that many multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to 'Freshwater', although they fall outside the scope of this research work. The most important agreements include, for instance, the Convention on the International Commission for the Protection of the Elbe (A: 08.10.1990, E.F.: 30.10.1992; ratified by the EU); the Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes (A: 17.03.1992; E.F.: 06.10.1996; ratified by the EU); the Danube River Protection Convention (A: 29.06.1994; E.F.: 22.10.1998; ratified by the EU); the Convention on the International Commission for the Protection of the Oder (A: 11.04.1996, E.F.: 26.04.1999; ratified by the EU); the Convention on the Protection of the Rhine (A: 12.04.1999; EF: 01.01.2003; ratified by the EU); the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (A: 26.05.2000, E.F.: 29.02.2008).

Also the UN Sustainable Development Goals (SDGs) address freshwater, particularly SDG 6: 'Ensure access to water and sanitation for all'.

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

LAND AND SOIL

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
Reference	Target/objective + deadline and geo	SOER Sector
COM(2011)571, Roadmap to a resource efficient Europe	Reduce soil erosion and the rate of land take, increase soil organic matter (2020)	
COM(2011)571, Roadmap to a resource efficient Europe	EU policies take into account their direct and indirect impact on land use (2020)	

Decision 1386/2013/EU (7 th EAP)	Manage land sustainably, soil is adequately protected and the remediation of contaminated sites is well underway (2020)	
COM(2011)571, Roadmap to a resource efficient Europe	No net land take (2050)	
4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS		
The environmental theme 'Land and soil' is addressed by several policy documents not setting any target/objective, including the following:		
✓ Commission Communication COM(2006)31, Soil Thematic Strategy and European Council, 2006, Review of the Sustainable Development Strategy.		
It is also worth noting that many multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to 'Land and soil', although they fall outside the scope of this research work. Most of the agreements listed under 'Biodiversity and nature' are also relevant to 'Land and soil'.		
Also the UN Sustainable Development Goals (SDGs) address land and soil, particularly SDG 15: 'Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss'.		

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

MARINE ENVIRONMENT

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
Reference	Target/objective + deadline and info	SOER Sector
COM(2006)360, Implementing sustainability in EU fisheries through maximum sustainable yield; Directive 2008/56/EC, Marine Strategy Framework Directive; COM(2011) 571, Roadmap to a resource efficient Europe; COM(2011)244, EU biodiversity strategy to 2020	Fishing within MSY (2015)	Fishery
Directive 2006/7/EC, Bathing Water Directive	Bathing waters achieve a classification of at least 'sufficient' (2015)	
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Landing obligation for specified commercial fisheries (2015)	Fishery
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Landing obligation for specified commercial fisheries (2016)	Fishery
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Landing obligation for specified commercial fisheries (2017)	Fishery
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Landing obligation for specified commercial fisheries (2019)	Fishery
Decision 1386/2013/EU (7 th EAP)	Reduce the impact of pressures on marine waters (2020)	
Decision 1386/2013/EU (7 th EAP)	High standards for bathing waters (2020)	
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Fishing within maximum sustainable yield exploitation rate for all stocks (2015-2020)	Fishery
Directive 2008/56/EC, Marine Strategy Framework Directive	'Good environmental status' is achieved or maintained in the marine environment (2020) ⬆	
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE		
Reference	Target/objective + deadline and info	
Regulation (EC) No 782/2003 on the prohibition of organotin compounds on ships	Ships flying the flag of a MS or operating under its authority or entering a port or offshore terminal of a MS shall either not bear organotin compounds which act as biocides in anti-fouling systems on their hulls/external parts and surfaces, or	

	bear a coating that forms a barrier to such compounds leaching from the underlying non-compliant anti-fouling system (2008)
Regulation (EC) No 2187/2005 for the conservation of fishery resources through technical measures in the Baltic Sea, the Belts and the Sound	It shall be prohibited to keep on board, or use for fishing, driftnets – Applying to the Baltic Sea, the Belts and the Sound (2008)
4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS	
<p>The environmental theme ‘Marine environment’ is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:</p> <ul style="list-style-type: none"> ✓ Policy documents: Commission Communication COM(2007)39, Improving fishing capacity and effort indicators under the common fisheries policy; Commission Communication COM(2007)136, A policy to reduce unwanted by-catches and eliminate discards in European fisheries; Commission Communication COM(2007)604, Destructive fishing practices in the high seas and the protection of vulnerable deep sea ecosystems; and Commission Communication COM(2009)162, A new impetus for the Strategy for the Sustainable Development of European Aquaculture. ✓ Environmental legislation in force: Regulation (Council Regulation) (EC) No 1936/2001 laying down control measures applicable to fishing for certain stocks of highly migratory fish; Regulation (Council Regulation) (EC) No 812/2004 laying down measures concerning incidental catches of cetaceans in fisheries and amending Regulation (EC) No 88/98; Regulation (Council Regulation) (EC) No 708/2007 concerning use of alien and locally absent species in aquaculture; Regulation (EC) No 734/2008 — protecting vulnerable marine ecosystems; and Regulation (Council Regulation) (EC) No 1005/2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing. <p>It is also worth noting that many multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to ‘Marine environment’, although they fall outside the scope of this research work. The most important agreements include, for instance, the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (A: 13.11.1972, E.F.: 30.08.1975); the International Convention for the Prevention of Pollution from Ships (MARPOL; A: 02.11.1977, not entered into force and replaced by the 1978 Protocol MARPOL 73/78: A: 17.02.1978, E.F.: 02.10.1983); the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution (A: 16.02.1976; E.F.: 12.02.1978; ratified by the EU); the United Nations Convention on the Law of the Sea (A: 10.12.1982, E.F.: 16.11.1994; ratified by the EU); the Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances (A: 13.09.1983; E.F.: 01.09.1989; ratified by the EU); the International Convention on Oil Pollution Preparedness, Response and Co-operation (A: 30.11.1990, E.F.: 13.05.1995); the Convention on the Protection of the Marine Environment of the Baltic Sea Area (HELCOM; A: 09.04.1992; E.F.: 17.01.2000; ratified by the EU); the Convention on the Protection of the Black Sea Against Pollution (A: 21.04.1992, E.F.: 15.01.1994); the Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR; A: 22.09.1992; E.F.: 25.03.1998; ratified by the EU); the International Convention on Civil Liability for Bunker Oil Pollution Damage (A: 23.03.2001, E.F.: 21.11.2008); the International Convention on the Control of Harmful Anti-Fouling Systems on Ships (A: 05.10.2001, E.F.: 17.09.2008).</p> <p>Also the UN Sustainable Development Goals (SDGs) address marine, particularly SDG 14: ‘Conserve and sustainably use the oceans, seas and marine resources’.</p>	

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.
‘A’: adopted; ‘E.F.’: entered into force.

CLIMATE CHANGE

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
1a GHG emissions and ODS in general		
Reference	Target/objective + deadline and info	SOER Sector
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of fluorinated greenhouse gases shall be prohibited (2015)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of domestic refrigerators and freezers that contain HFCs	Industry

	with global warming potential (GWP) of ≥ 150 shall be prohibited (2015)	
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of fire protection equipment containing HFC-23 shall be prohibited (2016)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 93% (2016) INT	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	Refrigeration, air conditioning and heat pump equipment charged with HFCs shall not be placed on the market unless accounted for within the quota system (2017)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of technical aerosols that contain HFCs with GWP ≥ 150 shall be prohibited (2018)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The use of sulphur hexafluoride in magnesium die-casting and in the recycling of magnesium die-casting alloys in installations using a quantity of sulphur hexafluoride below 850 kilograms per year is prohibited (2018)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 63% (2018) INT	Industry
Regulation (EC) 1005/2009 on substances that deplete the ozone layer	Stop producing HCFCs (2019)	Industry
Decision 1386/2013/EU (7 th EAP)	Decisive progress in adapting to the impact of climate change (2020)	
Council Conclusions 8/9 March 2007: '20-20-20' targets; COM(2010)2020, Europe 2020 strategy	Reduce GHG emissions by 20% compared to 1990 levels (2020)	
Directive 2009/29/EC establishing a scheme for greenhouse gas emission allowance trading within the Community so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community	Reduce GHG emissions by 21% below the 2005 level in sectors falling under the EU Emissions Trading System (EU ETS; 2020)	
Decision 406/2009/EC – Effort Sharing Decision	MS GHG emissions reduction targets, entailing approximately a 10% reduction compared to 2005 levels in the EU in sectors not covered by ETS, excluding LULUCF (2020) △	
Regulation (EU) 517/2014 on fluorinated greenhouse gases	Ban on the placing on the market of specific equipments containing HCFCs ⁹ (2020)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The use of fluorinated greenhouse gases, with a GWP $\geq 2\ 500$ to service or maintain refrigeration equipment with a charge size ≥ 40 tonnes of CO ₂ equivalent shall be prohibited (2020)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market	Industry

⁹ The placing on the market of the following shall be prohibited:

- refrigerators and freezers for commercial use containing HFCs with GWP $\geq 2\ 500$;
- stationary refrigeration equipment containing HFCs with GWP $\geq 2\ 500$;
- movable room air-conditioning equipment containing HFCs with GWP ≥ 150 ;
- foams containing HFCs with GWP ≥ 150 – extruded polystyrene.

	and corresponding quotas shall be 45% (2021) INT	
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of a) refrigerators/freezers for commercial use containing HFCs with GWP \geq 150 and b) multipack centralised refrigeration systems for commercial use with a rated capacity \geq 40 kW containing fluorinated greenhouse gases with GWP \geq 150 shall be prohibited (2022)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of foams containing HFCs with GWP \geq 150 shall be prohibited (2023)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 31% (2024) INT	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of single split air-conditioning systems containing less than 3 kg of fluorinated greenhouse gases that contain fluorinated greenhouse gases with GWP \geq 750 shall be prohibited (2025)	Industry
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 24% (2027) INT	Industry
COM(2011)21, A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy; COM(2011)112, Roadmap for a low carbon economy; COM(2013)169, Green paper on 2030 framework	Reduce GHG emissions by 40% compared to 1990 levels (2030) INT	
Directive 2018/410 EU amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments and Decision (EU) 2015/1814	To achieve the new target set by the 2030 climate and energy policy framework (- 40% by 2030 compared to 1990), the ETS cap will be lowered by 2.2% (linear reduction factor) per year from 2021 (2021- 2030 period)	
<i>Regulation (EU) 2018/841 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU.</i>	<i>Binding commitment for each Member State to ensure that accounted emissions (CO₂, CH₄ and N₂O) from land use are entirely compensated by an equivalent removal of CO₂ from the atmosphere (2021-2030 period)</i>	
<i>Regulation (EU) 2018/842 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreement and amending Regulation (EU) No 525/2013</i>	<i>Binding annual GHG targets for MS for the period 2021–2030 to meet commitments under the Paris Agreement \triangle</i>	
Council Conclusion, October 2014	Reduce GHG emissions by 40% compared to 1990 levels (with the reductions in the ETS and non-ETS sectors amounting to 43% and 30% by 2030 compared to 2005, respectively; 2030)	
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 21% (2030) FIN	Industry
COM(2011)112, Roadmap for a low carbon economy; Council Conclusion October 2009	Reduce GHG emissions by 80%-95% compared to 1990 levels (2050) FIN	

1b GHG emissions from transport		
Reference	Target/objective + deadline and info	SOER Sector
Regulation (EC) 443/2009 setting emission performance standards for new passenger cars	Limit fleet average CO ₂ emissions from new cars to 130 g/km (2012– 2015) ¹⁰ INT	Transport
Regulation (EU) 510/2011, Emission performance standards for new light commercial vehicles as part of the Union’s integrated approach to reduce CO₂ emissions from light-duty vehicles	Average specific emissions from light commercial vehicles running on alternative fuels, composed of 85% bioethanol (‘E85’) must be reduced by 5% by 31 December 2015	Transport
Directive 2006/40/EC relating to emissions from air conditioning systems in motor vehicles	Phase out mobile air conditioning systems designed to use F-gases with global warming potential >150 for new vehicles (2017) FIN	Transport
Directive 2006/40/EC relating to emissions from air conditioning systems in motor vehicles	Air-conditioning systems designed to contain fluorinated greenhouse gases with a GWP higher than 150 shall not be retrofitted to any vehicles (2017) FIN	Transport
Directive 2006/40/EC relating to emissions from air conditioning systems in motor vehicles	Air conditioning systems in all vehicles shall not be filled with fluorinated greenhouse gases with a GWP higher than 150 (2017) FIN	Transport
Regulation (EU) 510/2011, Emission performance standards for new light commercial vehicles as part of the Union’s integrated approach to reduce CO₂ emissions from light-duty vehicles	Limit fleet average CO ₂ emissions from new light commercial vehicles to 175 g/km (2014– 2017) INT	Transport
COM(2010)186 final, European strategy on clean and energy efficient vehicles	Limit fleet average CO ₂ emissions from new cars to 95 g/km (2020)	Transport
Regulation (EU) 510/2011, Emission performance standards for new light commercial vehicles as part of the Union’s integrated approach to reduce CO₂ emissions from light-duty vehicles	Limit fleet average CO ₂ emissions from new light commercial vehicles to 147 g/km (2020) FIN	Transport
Regulation (EC) 443/2009 setting emission performance standards for new passenger cars	Limit average emissions for the new car fleet to 95g CO ₂ /km (2020 end) FIN	Transport
Directive 98/70/EC relating to the quality of petrol and diesel fuels	Reduce life cycle GHG emissions per unit of energy from fuel and energy supplied by at least 6% compared to a fuel baseline standard (2020)	Transport
COM(2011)144 final, Roadmap to a single European transport area	Reduce CO ₂ emissions from the transport sector by 20% compared to 2008 levels (2030)	Transport
COM(2011)144 final, Roadmap to a single European transport area	Reduce conventionally fuelled cars in cities by 50% (2030)	Transport
COM(2011)144 final, Roadmap to a single European transport area	Major urban centers achieve essentially CO ₂ -free city logistics (2030)	Transport
COM(2011)144 final, Roadmap to a single European transport area	Shift 30% of road freight over 300 km to rail/waterborne transport (2030)	Transport
COM(2016)501, A European Strategy for Low-Emission Mobility	Zero- and low-emission vehicles will need to be deployed and gain significant market share by 2030	Transport
COM(2011)144 final, Roadmap to a single European transport area	Reduce CO ₂ emissions from the transport sector by 60% compared to 1990 levels (2050)	Transport
COM(2011)144 final, Roadmap to a single European transport area	Completely phase out conventionally fuelled cars in cities (2050)	Transport

¹⁰ For every year in that period, the percentage of a manufacturer’s cars that must comply with the limit increases. From 2015, 100% of cars must comply (compared to 75% in 2013 and 80% in 2014).

COM(2011)144 final, Roadmap to a single European transport area	Shift 50% of road freight over 300 km to rail/waterborne transport (2050)	Transport
COM(2011)144 final, Roadmap to a single European transport area	Shift the majority of long- and medium-distance passenger road transport to rail (2050)	Transport
COM(2011)144 final, Roadmap to a single European transport area	Airlines increase their use of low carbon fuels by 40% (2050)	Transport
COM(2011)144 final, Roadmap to a single European transport area	Reduce carbon emissions from shipping by 40% compared to 2005 levels (2050)	Transport
1c Energy efficiency		
Reference	Target/Objective – deadline + info	SOER Sector
Directive 2010/31/EU on the energy performance of buildings	All new buildings occupied and owned by public authorities are 'nearly zero-energy' buildings (2019)	Energy
Directive 2012/27/EU, Energy Efficiency Directive; COM(2011)109, Energy efficiency action plan; European Council 8/9 March 2007: '20-20-20' targets; COM(2010) 2020, Europe 2020 strategy	Reduce consumption of primary energy by 20% compared to energy consumption projections for 2020 (2020) ¹¹	Energy
Decision 1386/2013 (7 th EAP)	Innovative approaches for sustainable buildings and energy efficiency (2020)	Energy
<i>Directive 2012/27/EU and following amendments (Directive EU 2018/2002), Energy Efficiency Directive</i>	<i>MS shall achieve cumulative end-use energy savings at least equivalent to: new savings each year from 1 January 2014 to 31 December 2020 of 1.5% of annual energy sales to final customers by volume, averaged over the most recent three-year period prior to 1 January 2013 (2014-2020) INT</i>	
Directive 2010/31/EU on the energy performance of buildings	All new buildings are 'nearly zero-energy' buildings (end 2020)	Energy
Directive 2012/27/EU and following amendments, Energy Efficiency Directive	Cumulative end-use energy savings target for energy distributors/energy sales companies (2020)	Energy
COM(2014)15, Policy framework for climate and energy 2020-2030	Increase energy savings of 25% (2030)	Energy
COM(2014)520, Energy Efficiency Communication (see also COM(2016)860, Clean energy for all Europeans)	Increase energy savings of 30% (2030)	Energy
Council Conclusion, October 2014; COM(2014)15, Policy framework for climate and energy 2020-2030	27% increase in efficiency compared to projections of future energy consumption (2030)	Energy
<i>Directive 2012/27/EU and following amendments (Directive EU 2018/2002), Energy Efficiency Directive</i>	<i>MS shall achieve cumulative end-use energy savings at least equivalent to: new savings each year from 1 January 2021 to 31 December 2030 of 0.8 % of annual final energy consumption, averaged over the most recent three-year period prior to 1 January 2019 (2021-2030) INT</i>	
<i>Directive 2012/27/EU and following amendments (Directive EU 2018/2002), Energy Efficiency Directive</i>	<i>32.5% energy efficiency target (2030)</i>	

¹¹ Each Member State shall set an indicative national energy efficiency target, based on either primary or final energy consumption, primary or final energy savings or energy intensity.

Directive 2012/27/EU and following amendments (Directive EU 2018/2002), Energy Efficiency Directive	Cumulative end-use energy savings to be achieved by MS: MS shall continue to achieve new annual savings of 0.8% for ten year periods after 2030, unless otherwise decided (2031-2040) ¹² FIN	
1d Renewable Energy		
Reference	Target/Objective – deadline + info	SOER Sector
European Council, 2006 Review of the EU Sustainable Development Strategy	Increase renewable energy to 15% of total energy consumption (2015)	Energy
Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources	Each Member State shall endeavour to increase the share of renewable energy in in the heating and cooling sector by an indicative 1.3% as an annual average calculated for the periods 2021-2025 and 2026-2030, starting from the share of renewable energy in the heating and cooling sector in 2020.	
Directive 2009/28/EC, Renewable Energy Directive	Increase the share of energy from renewable sources to at least 10% of the final consumption of energy in transport (2020)	Energy
Directive 2009/28/EC, Renewable Energy Directive	Increase renewable energy to at least 20% of final energy consumption (2020) △	Energy
Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources	The share of energy from RES in each Member State's gross final consumption of energy ¹³ shall not be lower than the baseline share consisting of 2020 national RES targets (January 2021). △	
Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources	The GHG emissions savings from the use of renewable liquid and gaseous transport fuels of non- biological origin shall be at least 70% from 1 January 2021.	
Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources	Within the RES target for the transport sector, the contribution of advanced biofuels and biogas produced from specified feedstock as a share of final consumption of energy in the transport sector shall be at least 0.2 % in 2022. INT	
Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources	Within the RES target for the transport sector (2030), the contribution of advanced biofuels and biogas produced from specified feedstock as a share of final consumption of energy in the transport sector shall be at least 1% in 2025. INT	
Council Conclusion, October 2014	Increase renewable energy to 27% of EU energy consumption (EU-28) (2030)	Energy

¹² More specifically, Art. 7.1 of the Directive establishes that 'Member States shall continue to achieve new annual savings in accordance with point (b) of the first subparagraph for ten-year periods after 2030, unless reviews by the Commission by 2027 and every 10 years thereafter conclude that this is not necessary to achieve the Union's long-term energy and climate targets for 2050'.

¹³ The gross final consumption of energy from renewable sources in each Member State shall be calculated as the sum of: (a) gross final consumption of electricity from renewable sources; (b) gross final consumption of energy from renewable sources in the heating and cooling sector; and (c) final consumption of energy from renewable sources in the transport sector. For the calculation of Member States gross final consumption of energy from RES, special rules apply to biofuels, bioliquids and biomass fuels produced from food and feed crops.

<i>Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources</i>	<i>Increase the share of energy from renewable sources to at least 32% of the Union's gross final consumption (2030) \triangle¹⁴</i>	
<i>Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources</i>	<i>Each Member State shall set an obligation on fuel suppliers to ensure that the share of renewable energy within the final consumption of energy in the transport sector¹⁵ is at least 14 % by 2030</i>	
<i>Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources</i>	<i>Within the RES target for the transport sector, the contribution of advanced biofuels and biogas produced from specified feedstock as a share of final consumption of energy in the transport sector shall be at least 3.5% in 2030 FIN</i>	
1e Biofuels		
Reference	Target/Objective – deadline + info	SOER Sector
European Council, 2006 Review of the EU Sustainable Development Strategy	Increase biofuels to 8% of all petrol and diesel for transport purposes placed on the market (2015)	Energy
2 TARGETS/OBJECTIVES IN LEGISLATIVE PROPOSALS (PRESENTED BUT NOT YET ADOPTED BY 31st DECEMBER 2018)		
2a GHG emissions from transport		
Reference	Target/objective + deadline and info	
Commission Communication COM(2017)676 Proposed Regulation setting emission performance standards for new passenger cars and for new light commercial vehicles and amending Regulation (EC) No 715/2007 ¹⁶	New EU fleet-wide targets (2025): a) for the average emissions of the new passenger car fleet, an EU fleet-wide target equal to a 15% reduction of the average of the specific emissions targets in 2021 determined in accordance with Annex I; b) for the average emissions of the new light commercial vehicles fleet, an EU fleet- wide target equal to a 15% reduction of the average of the specific emissions targets in 2021 determined in accordance with Annex I.	
Commission Communication COM(2017)676 Proposed Regulation setting emission	New EU fleet-wide targets (2030): ¹⁷	

¹⁴ National contributions to the overall Union target shall be set by Member States. For the calculation of gross final consumption of energy from renewable energy sources, special rules apply to biofuels, bioliquids and biomass fuels produced from food and feed crops. Moreover, the Directive sets sustainability and GHG emission criteria that biofuels and solid/gaseous biomass fuels used in transport, power, heating and cooling must comply with, in order to be counted towards the overall RES target.

¹⁵ For the calculation of Member States share of renewable energy within the final consumption of energy in the transport, special rules apply to biofuels, bioliquids and biomass fuels produced from food and feed crops. Renewable electricity will count four times its energy content towards the 14% target when used in road vehicles and 1.5 times when used in rail transport. Fuels used in aviation and maritime sectors may (but are not required to) contribute to the 14% target. The contribution of non-food renewable fuels supplied to these sectors will count 1.2 times their energy content. Moreover, the Directive sets sustainability and GHG emission criteria that biofuels and solid/gaseous biomass fuels used in transport, power, heating and cooling must comply with, in order to be counted towards the transport RES target.

¹⁶ Moreover, it has to be underlined that, according to the proposed regulation, from 2021 the EU fleet-wide targets shall be measured on the new emissions test procedure called Worldwide Harmonised Light Vehicle Test Procedure (WLTP) in accordance with Regulation (EU) 2017/1151. In the 2020-2024 period, the already established EU fleet wide targets for 2020 of 95g/km for passenger cars and 147g/km for light commercial vehicles will apply.

¹⁷ In the compromise agreement of December 2018 (Proposal for a Regulation of the European Parliament and of the Council setting emission performance standards for new passenger cars and for new light commercial vehicles as part of the Union's integrated approach to reduce CO2 emissions from light-duty vehicles and amending Regulation (EC) No 715/2007 (recast) - Final compromise text approved by Coreper, 17 January 2019), this target has been amended as follows: 'From 1 January 2030 the following targets shall apply: (a) for the average emissions of the new passenger car fleet, an EU fleet-wide target equal to a 37,5 % reduction of the average of the specific emissions targets in 2021 determined in accordance with point 6.1.2 of Part A of Annex I;

performance standards for new passenger cars and for new light commercial vehicles and amending Regulation (EC) No 715/2007	a) for the average emissions of the new passenger car fleet, an EU fleet-wide target equal to a 30% reduction compared to the average of the specific emissions targets in 2021 determined in accordance with Annex I; b) for the average emissions of the new light commercial vehicles fleet, an EU fleet-wide target equal to a 30% reduction of the average of the specific emissions targets in 2021 determined in accordance with Annex I.
2b Energy	
Reference	Target/objective + deadline and info
COM(2017)653, Proposed revised Directive 2009/33/EU on the promotion of clean and energy - efficient road transport vehicles	National shares of light-duty and heavy-duty vehicles to which minimum procurement targets (including energy consumption, emissions of CO ₂ and of certain pollutants) for contracting entities/authorities shall apply (2025) INT ◻
COM(2017)653, Proposed revised Directive 2009/33/EU on the promotion of clean and energy - efficient road transport vehicles	National shares of light-duty and heavy-duty vehicles to which minimum procurement targets (including energy consumption, emissions of CO ₂ and of certain pollutants) for contracting entities/authorities shall apply (2030) FIN ◻
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE	
3a GHG emissions and ODS in general	
Reference	Target/objective + deadline and info
Directive 2006/40/EC relating to emissions from air conditioning systems in motor vehicles	MS shall no longer grant EC type-approval or national type-approval for a type of vehicle fitted with an air conditioning system designed to contain fluorinated greenhouse gases with a GWP higher than 150 (2011) INT
Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading	Beginning on 1 January 2013, the total quantity of allowances to be allocated to aircraft operators shall be equivalent to 95% of the historical aviation emissions multiplied by the number of years in the period (2013)
Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading	Stationary installations: the Community-wide quantity of allowances issued each year starting in 2013 shall decrease in a linear manner (factor of 1.74%) beginning from the mid-point of the period from 2008 to 2012 (2013)
3b GHG emissions from transport	
Reference	Target/objective + deadline and info
Directive 98/70/EC relating to the quality of petrol and diesel fuels	Member States shall ensure that gas oils intended for use by non-road mobile machinery (including inland waterway vessels), agricultural and forestry tractors and recreational craft may be placed on the market within their territory only if the sulphur content of those gas oils does not exceed 10 mg/kg (2008) ¹⁸
3c Energy	

(b) for the average emissions of the new light commercial vehicles fleet, an EU fleet-wide target equal to a 31 % reduction of the average of the specific emissions targets in 2021 determined in accordance with point 6.1.2 of Part B of Annex I' (Art. 1.5). Art. 1 also establishes that 'from 1 January 2025, a zero- and low-emission vehicles' benchmark equal to a 15% share of the respective fleets of newly registered passenger cars and light commercial vehicles shall apply in accordance with points 6.3 of Parts A and B of Annex I, respectively' and 'from 1 January 2030, a zero- and low-emission vehicles' benchmark equal to a 35% share of the fleet of newly registered passenger cars, and a zero- and low-emission vehicles' benchmark equal to a 30% share of the fleet of newly registered light commercial vehicles shall apply in accordance with points 6.3 of Parts A and B of Annex I, respectively' (Art. 1.6-7).

¹⁸ The same Article on diesel fuel (Art. 4.2) also states the following: 'However, in order to accommodate minor contamination in the supply chain, Member States may, from 1 January 2011, permit gas oil intended for use by non-road mobile machinery (including inland waterway vessels), agricultural and forestry tractors and recreational craft to contain up to 20 mg/kg of sulphur at the point of final distribution to end users. Member States may also permit the continued placing on the market until 31 December 2011 of gas oil containing up to 1 000 mg/kg sulphur for rail vehicles and agricultural and forestry tractors, provided that they can ensure that the proper functioning of emissions control systems will not be compromised'.

Reference	Target/objective + deadline and info
Directive 2009/28/EC, Renewable Energy Directive	Member States shall require the use of minimum levels of energy from renewable sources in new buildings and in existing buildings that are subject to major renovation (2014 end)
4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS	
The environmental theme 'Climate change' is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:	
<ul style="list-style-type: none"> ✓ Policy documents: Commission Communication COM(2005)627, Support of electricity from renewable sources; Commission Communication COM(2005)628, Encouraging the use of biomass as an alternative source of energy; Commission Communication COM(2006)34, EU Strategy for Biofuels; Commission Communication COM(2006)545, Action Plan for Energy Efficiency; Commission Communication COM(2006)628, Biomass Action Plan; Commission Communication COM(2006)848, Renewable Energy Roadmap; Commission Communication COM(2007)19, Review of the Community Strategy to reduce CO₂ emissions from passenger cars and light-commercial vehicles; Commission Communication COM(2008)389, Single European Sky II: towards more sustainable and better performing aviation; Commission Communication COM(2008)435, Strategy for the internalization of external transport costs; Commission Communication COM(2008)645, Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss; Commission Communication COM(2008)768, Offshore wind energy; Commission Communication COM(2008)772, Energy Efficiency: delivery the 20% target; Commission Communication COM(2009)279, A sustainable future for transport: Towards an integrated, technology-led and user friendly system; Commission Communication COM(2009)519 Investing in the Development of Low Carbon Technologies (SET-Plan); Commission Communication COM(2011)571 Roadmap to a Resource Efficient Europe; Commission Communication COM(2011)885, Energy Roadmap 2050; Commission Communication COM(2013)17, Clean power for transport: a European alternative fuels strategy; Commission Communication COM(2013)180, Future of Carbon Capture and Storage in Europe; Commission Communication COM(2013)216, An EU Strategy on adaptation to climate change;¹⁹ Commission Communication COM(2013)479, Integrating maritime transport emissions in the EU's greenhouse gas reduction policies; Commission Communication COM(2014)8, Blue Energy; Commission Communication COM(2014)15, A policy framework for climate and energy in the period from 2020 to 2030; Commission Communication COM(2014)285, Strategy for reducing Heavy-Duty Vehicles' fuel consumption and CO₂ emissions; Commission Communication COM(2016)500, Accelerating Europe's transition to a low-carbon economy; Commission Communication COM(2016)763, Accelerating Clean Energy Innovation; Commission Communication COM(2017)675, Delivering on low-emission mobility - A European Union that protects the planet, empowers its consumers and defends its industry and workers; and Council (Environment), Conclusions on an EU strategy on adaptation to climate change, 18 June 2013. ✓ Environmental legislation in force: Directive 92/42/EEC on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuel; Directive 2009/31/EC on the geological storage of carbon dioxide; Directive 2009/33/EC clean and energy efficiency transport vehicles; Directive 2009/33/EC clean and energy efficiency transport vehicles; Regulation No 106/2008 on a Community energy-efficiency labelling programme for office equipment; Regulation (EU) 2017/1369 setting a framework for energy labeling and repealing Directive 2010/30/EU 	
It is also worth noting that many multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to 'Climate change', although they fall outside the scope of this research work. The most important agreements include, for instance, the Vienna Convention on the Protection of the Ozone Layer (A: 22.03.1985; E.F.: 22.09.1988; ratified by the EU); the UN Framework Convention on Climate Change (A: 09.05.1992; E.F.: 21.03.1994; ratified by the EU); Energy Charter Treaty (A: 17.12.1994, E.F.: 16.04.1998; ratified by the EU).	
Also the UN Sustainable Development Goals (SDGs) address climate change, particularly SDG 13: 'Take urgent action to combat climate change and its impacts'; SDG 7: 'Ensure access to affordable, reliable, sustainable and modern energy for all' and SDG 11: 'Make cities inclusive, safe, resilient, and sustainable'.	

¹⁹ According to the Strategy, all Member States are to develop, implement and review their adaptation policies in the light of guidelines prepared by the European Commission, addressing issues such as cross-border aspects and coherence with national disaster risk management plans.

AIR POLLUTION

Most of the targets and objectives listed under ‘Climate Change’ and ‘Industrial pollution’ are also relevant to ‘Air pollution’.

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
1a Air pollution in general		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2008/50/EC on ambient air quality and cleaner air for Europe	PM _{2,5} limit value (stage 1) and exposure concentration obligation (2015) INT	
COM(2005)446, Thematic Strategy on Air Pollution	47% reduction in loss of life expectancy as a result of exposure to particulate matter (2020)	
COM(2005)446, Thematic Strategy on Air Pollution	10% reduction in acute mortalities from exposure to ozone (2020)	
COM(2005)446, Thematic Strategy on Air Pollution	Reduction in excess acid deposition of 74% and 39% in forest areas and surface freshwater areas respectively (2020)	
COM(2005)446, Thematic Strategy on Air Pollution	43% reduction in areas or ecosystems exposed to eutrophication (2020)	
COM(2005)446, Thematic Strategy on Air Pollution	Emissions reductions: -82% of SO ₂ , -60% of NO _x , -51% of VOCs, -27% of NH ₃ , -59% of primary PM _{2,5} compared to the year 2000 (2020)	
Directive 2008/50/EC on ambient air quality and cleaner air for Europe	PM _{2,5} national exposure reduction target (2020) △	
Decision 1386/2013/EU (7 th EAP)	Reduce air pollution and its impact on ecosystems and biodiversity with the long-term aim of not exceeding critical loads and levels (2020)	
Decision 1386/2013/EU (7 th EAP)	Improve outdoor and indoor air quality (making reference to WHO recommended levels/guidelines; 2020)	
Directive 2008/50/EC on ambient air quality and cleaner air for Europe	PM _{2,5} limit value (stage 2) (2020) FIN	
Directive (EU) 2016/2284, Revised National Emission Ceilings Directive.	Reduction targets are imposed for SO ₂ , NO _x , non-methane volatile organic compounds, NH ₃ and PM _{2,5} , to be reached between 2020 and 2029 INT △ ²⁰	
COM(2013)918, A Clean Air Programme for Europe	Reduce health impacts (premature mortality due to particulate matter and ozone) of 52% relative to 2005 (2030)	
COM(2013)918, A Clean Air Programme for Europe	Reduce ecosystem area exceeding eutrophication limits by 35% relative to 2005 (2030)	
Directive (EU) 2016/2284, Revised National Emission Ceilings Directive.	Reduction targets are imposed for SO ₂ , NO _x , non-methane volatile organic compounds,	

²⁰ Reduction is calculated for each Member State as a percentage with 2005 emissions as its basis. Thus, percentages may vary greatly amongst countries, substances and timelines. Directive (EU) 2016/2284 prescribes a linear reduction trajectory comprising 2020 and 2030 levels, so that 2025 will be the milestone to assess the progress of such a reduction. Member States not complying with this linear reduction will have to explain the reasons for such a deviation and the measures to achieve the reduction trajectory. On the other hand, Member States may follow a non-linear reduction trajectory until 2025 if economic or technical efficiency reasons are justified and provided that they converge to the linear trajectory as from 2025 and the achievement of the reduction objectives is not affected.

	NH3 and PM _{2,5} , to be reached from 2030 onwards FIN \triangle ²¹	
1b Air pollution from transport		
Reference	Target/objective + deadline and info	SOER Sector
Regulation (EC) 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information	Euro 6 standard for registration and sale of new types of passenger cars and light duty vehicles (2015) FIN	Transport
Directive 2016/802/EU relating to a reduction in the sulphur content of certain liquid fuels	Marine fuels not to be used in the areas of MS territorial seas, exclusive economic zones and pollution control zones falling within SO _x Emission Control Areas ²² if the sulphur content of those fuels by mass exceeds 0.1% (2015 beginning) FIN	Transport
Regulation (EU) No 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 4 standard for new types of vehicles (2016-2017, depending on L-category) – Emission limit values INT	Transport
Regulation (EU) No 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 4 standard for existing types of vehicles (2017-2018, depending on L-category) – Emission limit values FIN	Transport
Directive 2009/126/EC on Stage II petrol vapour recovery during refueling of motor vehicles at service stations	Service stations with a throughput > 3000 m ³ must install Stage II PVR technology (2018)	
Commission Implementing Decision 2014/132/EU setting the Union-wide performance targets for the air traffic management network and alert thresholds for the second reference period 2015-19	Average horizontal en route flight efficiency of at least 2,6% in 2019 for the actual trajectory ²³	Transport
Commission Implementing Decision 2014/132/EU setting the Union-wide performance targets for the air traffic management network and alert thresholds for the second reference period 2015-19	Average horizontal en route flight efficiency of at least 4,1% in 2019 for the last filed flight plan trajectory ²⁴	Transport
Decision 1386/2013/EU (7th EAP)	Innovative approaches for urban public transport and mobility (2020)	Transport
Regulation (EU) 2016/1628, Requirements for gaseous and particulate pollutant emission limits for internal combustion engines for non-road mobile machinery	Exhaust emission limit values (referred to as Stage V) applied to EU-type approval of engines for non road mobile machinery, depending on engine category/sub-category (2018-2020)	Transport
Regulation (EU) No 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 5 standard for new types of vehicles (2020) – Emission limit values INT	Transport
Directive 2016/802/EU relating to a reduction in the sulphur content of certain liquid fuels	Marine fuels not to be used in the areas of MS territorial seas, exclusive economic zones and pollution control zones (outside SO _x Emission Control Areas) if the sulphur content of those	Transport

²¹ See previous footnote.

²² [Sulphur oxide emission control areas](#) (SO_x-ECAS) in the EU are found in the Baltic and North Seas and the English Channel.

²³ As defined in point 2.1(a) of section 1 of Annex I to Implementing Regulation (EU) 390/2013 (the indicator is the comparison between the length of the en route part of the actual trajectory derived from surveillance data and the achieved distance, summed over all IFR -instrument flight rules- flights within or traversing the local airspace).

²⁴ As defined in point 2.1(b) of section 1 of Annex I to Implementing Regulation (EU) 390/2013 (the difference between the length of the en route part of the last filed flight plan trajectory and the corresponding portion of the great circle distance, summed over all IFR -instrument flight rules- flights within or traversing the European airspace).

	fuels by mass exceeds 0.5% (2020 beginning). FIN	
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS shall ensure that an appropriate number of recharging points accessible to the public are put in place by 2020, to ensure that electric vehicles can circulate at least in urban/suburban agglomerations and other densely populated areas (2020)	Transport
Regulation (EU) 2016/1628 — requirements for gaseous and particulate pollutant emission limits for internal combustion engines for non-road mobile machinery	Exhaust emission limit values (referred to as Stage V) applied to the placing on the market of engines for non-road mobile machinery, depending on engine category/sub-category (2019-2021)	Transport
Regulation (EU) No 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 5 standard for existing types of vehicles (2021) – Emission limit values FIN	Transport
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS shall ensure that install shore-side electricity supply for inland waterway vessels and seagoing ships in maritime and inland ports as a priority in ports of the TEN-T Core Network, and in other ports (2025)	Transport
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS which decide to include hydrogen refuelling points accessible to the public in their national policy frameworks shall ensure that, by 2025, an appropriate number of such points are available, to ensure the circulation of hydrogen-powered motor vehicles, including fuel cell vehicles, within networks determined by those Member States (2025)	Transport
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS shall ensure that an appropriate number of refuelling points for liquefied natural gas (LNG) are put in place at maritime ports, to enable LNG inland waterway vessels or seagoing ships to circulate throughout the TEN-T Core Network by 2025 (2025)	Transport
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS shall ensure that an appropriate number of refuelling points for LNG are put in place at inland ports, to enable LNG inland waterway vessels or seagoing ships to circulate throughout the TEN-T Core Network by 2030 (2030)	Transport
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE		
3a Air pollution		
Reference	Target/objective + deadline and info	
Directive 2008/50/EC on ambient air quality and cleaner air for Europe	Maximum VOC content limit values for vehicles refinishing products (2007)	
Directive 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products	Second set of VOCs limit values for paints and varnishes (2010) FIN	
Directive 2008/50/EC on ambient air quality and cleaner air for Europe	PM _{2,5} and ozone target values (2010)	
Directive 2008/50/EC on ambient air quality and cleaner air for Europe	Nitrogen dioxide and benzene limit values (2010)	
Directive 2004/107/EC relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air	Target values for concentrations of As, Cd, Ni, benzo(a)pyrene in air (2012)	
3b Air pollution from transport		

Reference	Target/objective + deadline and info
Directive 98/70/EC relating to the quality of petrol and diesel fuels	MS shall prohibit the marketing of leaded petrol within their territory (2000)
Regulation (EC) 595/2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI)	Euro VI standard for approval of new types of heavy vehicles (2012)
Regulation (EC) 595/2009 on type-approval of motor vehicles and engines with respect to emissions from heavy duty vehicles (Euro VI)	Euro VI standard for registration and sale of all new heavy vehicles (2013)
Directive 98/70/EC relating to the quality of petrol and diesel fuels	The presence of the metallic additive methylcyclopentadienyl manganese tricarbonyl in fuel shall be limited to 2 mg of manganese per litre (2014) FIN
Directive 2016/802/EU relating to a reduction in the sulphur content of certain liquid fuels	Marine fuels not to be used in the areas of MS territorial seas, exclusive economic zones and pollution control zones (outside SO _x Emission Control Areas) if the sulphur content of those fuels by mass exceeds 3.5% (2014) INT
Directive 2016/802/EU relating to a reduction in the sulphur content of certain liquid fuels	Marine fuels not to be used in the areas of MS territorial seas, exclusive economic zones and pollution control zones falling within SO _x Emission Control Areas ²⁵ if the sulphur content of those fuels by mass exceeds 1% (2014) INT

4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS

The environmental theme 'Air pollution' is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:

- ✓ Policy documents: Commission Communication COM(2008)435, Strategy for the internalization of external transport costs and Commission Communication COM(2017)652, Towards the broadest use of alternative fuels - an Action Plan on Alternative Fuels Infrastructure under Article 10(6) of Directive 2014/94/EU, including the assessment of national policy frameworks under Article 10(2) of Directive 2014/94/EU
- ✓ Environmental legislation in force: **Directive 94/63/EC on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations and Directive 2009/33/EC clean and energy efficiency transport vehicles.**

It is also worth noting that some multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to 'Air pollution', although they fall outside the scope of this research work. The most important agreements include, for instance, the Convention on Long-Range Transboundary Air Pollution (LRTAP; A: 13.11.1979; E.F.: 16.03.1983; ratified by the EU).

Also the UN Sustainable Development Goals (SDGs) address air pollution, particularly SDG 7: 'Ensure access to affordable, reliable, sustainable and modern energy for all'; SDG 11: Make cities inclusive, safe, resilient, and sustainable' and SDG 13: 'Take urgent action to combat climate change and its impacts'.

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

NOISE

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
Reference	Target/objective + deadline and info	SOER Sector
COM(2008)432 Communication from the Commission to the European Parliament and the Council – Rail noise abatement measures addressing the existing fleet (rail)	Completing the retrofitting exercise (i.e retrofitting freight wagons with low-noise brakes; 2015)	Transport
Regulation (EC) No 661/2009 concerning type-approval requirements for the general safety of	MS shall prohibit the registration, sale and entry into service of both new vehicles (categories M, N, and O) and new tyres	Transport

²⁵ Sulphur oxide emission control areas (SO_x-ECAS) in the EU are found in the Baltic and North Seas and the English Channel.

motor vehicles, their trailers and systems, components and separate technical units	intended for such vehicles which do not comply with rolling noise limit values (2016)	
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems, and amending Directive 2007/46/EC and repealing Directive 70/157/EEC	Noise-limit values (phase 1) for new vehicles types (2016 beginning) INT	Transport
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 4 standard for new types of vehicles (2016-2017, depending on L-category) – Sound level limits INT	Transport
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 4 standard for existing types of vehicles (2017-2018, depending on L-category) – Sound level limits FIN	Transport
Decision 1386/2013 (7 th EAP)	Noise pollution has significantly decreased (2020)	
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 5 standard for new types of vehicles (2020) – Sound level limits	Transport
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems,	Noise-limit values (phase 2) for new vehicles types (2020) INT	Transport
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 5 standard for existing types of vehicles (2021) – Sound level limits	Transport
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems	Noise-limit values (phase 2) for first registration of vehicles (2022) INT	Transport
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems	Noise-limit values (phase 3) for new vehicles types (2024) FIN	Transport
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems	Noise-limit values (phase 3;) for first registration of vehicles (2026) FIN	Transport
2 TARGETS/OBJECTIVES IN LEGISLATIVE PROPOSALS (PRESENTED BUT NOT YET ADOPTED BY 31st DECEMBER 2018)		
Reference	Target/objective + deadline and info	
ERA (European Union Agency for Railways) Recommendation to the EC to amend to the Commission Regulation (EU) No 1304/2014 concerning the technical specification for interoperability (TSI) relating to the subsystem rolling stock – noise (006REC1072)	TSI Noise shall be applied to existing freight wagons by 2024 (which will likely require operators to retrofit most existing wagons with composite brakes).	
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE		
Reference	Target/objective + deadline and info	
Directive 2000/14/EC on the approximation of the laws of the Member States relating to the noise emission in the environment by equipment for use outdoors	Permissible sound power levels shall not be exceeded by equipment for use outdoors (Stage II) (2006) FIN	
4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS		
The environmental theme ‘Noise’ is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:		
<ul style="list-style-type: none"> ✓ Policy documents: European Commission, Commission Staff Working Document on rail freight noise reduction, 22 December 2015. ✓ Environmental legislation in force: Directive 2002/49/EC relating to the assessment and management of environmental noise; Commission implementing Regulation (EU) 2015/429 setting out the modalities to be 		

followed for the application of the charging for the cost of noise effects;²⁶ **Regulation (EU) 598/2014 on rules and procedures with regard to the introduction of noise-related operating restrictions at Union airports.**²⁷

It is also worth noting that many multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to 'Noise', although they fall outside the scope of this research work. These agreements usually do not only address noise, but noise is included in their scope. For instance, we can mention the Chicago Convention on International Civil Aviation (A: 07.12.1944, E.F.: 04.04.1947), the Vienna Convention on Road Traffic (A: 08.11.1968, E.F.: 21.05.1977); the Alpine Convention (A: 07.11.1991; E.F.: 06.03.1995; ratified by the EU) and the Convention on the Protection of the Black Sea Against Pollution (A: 21.04.1992, E.F.: 15.01.1994).

Also the UN Sustainable Development Goals (SDGs) address noise, particularly SDG 11: 'Make cities inclusive, safe, resilient, and sustainable'

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

WASTE AND RESOURCES

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
1a General		
Reference	Target/objective + deadline and info	SOER Sector
COM(2011) 571, Roadmap to a Resource Efficient Europe	Waste is managed as a resource (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Achieve an absolute and per capita decline of waste generated (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Ensure high quality recycling (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Limit energy recovery to non-recyclable materials (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Virtually eliminate landfilling (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Eradicate illegal shipments of waste (2020)	
Decision 1386/2013/EU (7 th EAP)	Landfilling is limited to non-recyclable and non-recoverable waste (2020)	
1b Reuse, recycling and recovery targets		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2000/53/EC, ELV Directive	Targets for end-of-life vehicles (by average weight per vehicle per year): - reuse and recovery: 95% - reuse and recycling: 85% (2015) FIN	Industry
Directive 2012/19/EU, WEEE Directive	WEEE, with reference to Annex I categories: - cat. 1 or 10: 85% recovery and 80% recycling - cat. 3 or 4: 80% recovery and 70% recycling - cat. 2, 5, 6, 7, 8 or 9: 75% recovery and 55% recycling Gas discharge lamps: 80% recycling	Industry

²⁶ The Regulation sets out the modalities to be followed by the infrastructure manager for the application of the charging for the cost of noise effects caused by the freight rolling stock. The scheme should start not later than 11 December 2016 and apply until 2021.

²⁷ The Regulation establishes rules and procedures with regard to the introduction of noise-related operating restrictions applying to large airports with more than 50,000 civil aircraft movements per year.

	(2015) INT	
Directive 2012/19/EU, WEEE Directive	WEEE, with reference to Annex III categories: - cat. 1 or 4: 85% recovery and 80% reuse and recycling - cat. 2: 80% recovery and 70% reuse and recycling - cat. 5 or 6: 75% recovery and 55% reuse and recycling - cat. 3: 80% recycling (2018) FIN	Industry
Directive 2008/98/EC, Waste Framework Directive	Recycling and reuse of 70% by weight of non-hazardous construction and demolition waste (2020)	
Directive 2008/98/EC, Waste Framework Directive	Recycling and reuse of 50% by weight of paper, plastic, glass and metal from households (2020)	
<i>Directive 2008/98/EC, Waste Framework Directive, as amended by Directive 2018/851/EU</i>	<i>Increase the reuse and recycling of municipal waste to a minimum of 55% (2025) INT</i>	
<i>Packaging Waste Directive 94/62/EC as amended by Directive 2018/852/EU</i>	<i>Increase the recycling rate of packaging waste to 65% (2025) INT</i>	
<i>Packaging Waste Directive 94/62/EC as amended by Directive 2018/852/EU</i>	<i>Achieve minimum targets by weight for recycling regarding specific materials contained in packaging waste: (i) 50 % of plastic; (ii) 25% of wood; (iii) 70% of ferrous metal; (iv) 50% of aluminium; (v) 70% of glass; (vi) 75% of paper and cardboard (2025) INT</i>	
COM(2018)28, EU Strategy for plastics in a circular economy	All plastics packaging is either reusable or can be recycled in a cost-effective manner and more than half of plastics waste generated in Europe is recycled (2030)	
COM(2018)28, EU Strategy for plastics in a circular economy	Sorting and recycling capacity of plastics has increased fourfold since 2015, leading to the creation of 200,000 new jobs, spread all across Europe (2030)	
<i>Directive 2008/98/EC, Waste Framework Directive, as amended by Directive 2018/851/EU</i>	<i>Increase the reuse and recycling of municipal waste to a minimum of 60% (2030) INT</i>	
<i>Packaging Waste Directive 94/62/EC as amended by Directive 2018/852/EU</i>	<i>Increase the recycling rate of packaging waste to 70% (2030) FIN</i>	
<i>Packaging Waste Directive 94/62/EC as amended by Directive 2018/852/EU</i>	<i>Achieve minimum targets by weight for recycling regarding specific materials contained in packaging waste: (i) 55 % of plastic; (ii) 30% of wood; (iii) 80% of ferrous metal; (iv) 60% of aluminium; (v) 75% of glass; (vi) 85% of paper and cardboard (2030) FIN</i>	
<i>Directive 2008/98/EC, Waste Framework Directive, as amended by Directive 2018/851/EU</i>	<i>Increase the reuse and recycling of municipal waste to a minimum of 65% (2035) FIN</i>	
1c Collection and disposal		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2008/98/EC, Waste Framework Directive	Separate collection for glass, plastic, metal, paper (2015)	
Directive 2006/66/EC on waste batteries and accumulators	Collection target for batteries: 45% (2016) FIN	
Directive 1999/31/EC on landfills	Disposal of biodegradable municipal waste: reduction to 35% of total 1995 biodegradable municipal waste (2016) FIN	
Directive 2012/19/EU, WEEE Directive	Collection target for WEEE: 45% of the average weight of EEE placed on the market in the	

	three preceding years in the Member State concerned (2016) INT	
Directive 2012/19/EU, WEEE Directive	Collection target for WEEE: – 65% of the average weight of EEE placed on the market in the Member State in the three preceding years or – 85% of WEEE generated in the Member State. (2019) FIN	
Directive 2008/98/EC, Waste Framework Directive, as amended by Directive 2018/851/EU	Bio-waste shall be either separated and recycled at source, or is collected separately and is not mixed with other types of waste (2023 – end)	
Landfill Directive 1999/31/EC, as amended by Directive 2018/850/EU	Member States shall endeavour to ensure that as of 2030 , all waste suitable for recycling or other recovery, in particular in municipal waste, shall not be accepted in a landfill, with the exception of waste for which landfilling delivers the best environmental outcome.	
Landfill Directive 1999/31/EC, as amended by Directive 2018/850/EU	Ensure that the amount of municipal waste landfilled is reduced to 10% of the total amount of municipal waste generated (2035)	
1d Products and product making		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in EEE	No heavy metals (Pb, Hg, Cd, hexavalent Cr, PBB and PBDE) in vitro medical devices (2016)	Industry
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in EEE	No heavy metals (Pb, Hg, Cd, hexavalent Cr, PBB and PBDE) in industrial monitoring and control instruments (2017)	Industry
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in EEE	No heavy metals (Pb, Hg, Cd, hexavalent Cr, PBB and PBDE) in all electrical and electronic equipment not covered by the previous Directive 2002/95/EC (2019)	Industry
Directive 94/62/EC on packaging and packaging waste (as amended by Directive 2015/720/EU)	Reduction in the consumption of lightweight plastic carrier bags (2018 – 2025) ²⁸	
1e SCP and resource efficiency		
Reference	Target/objective + deadline and info	SOER Sector
COM(2011)571, Roadmap to a Resource Efficient Europe	Disposal of edible food waste should be halved (2020)	
2 TARGETS/OBJECTIVES IN LEGISLATIVE PROPOSALS (PRESENTED BUT NOT YET ADOPTED BY 31st DECEMBER 2018)		
Reference	Target/objective + deadline and info	
Proposal for a Directive on the reduction of the impact of certain plastic products on the environment, COM(2018)340 ²⁹	Member States shall take the necessary measures to collect separately, by 2025 , an amount of waste single-use plastic products listed in Part F of the Annex equal to 90% of such	

²⁸ The measures taken by Member States shall include either or both of the following:

- the adoption of measures ensuring that the annual consumption level does not exceed 90 lightweight plastic carrier bags per person by 31 December 2019 and 40 lightweight plastic carrier bags per person by 31 December 2025, or equivalent targets set in weight. Very lightweight plastic carrier bags may be excluded from national consumption objectives;
- the adoption of instruments ensuring that, by 31 December 2018, lightweight plastic carrier bags are not provided free of charge at the point of sale of goods or products, unless equally effective instruments are implemented. Very lightweight plastic carrier bags may be excluded from these measures.

²⁹ Based on the final compromise text adopted by the European Parliament and the Council in January 2019, the following targets/objectives have been established: 1) Member States shall achieve a measurable quantitative reduction in the consumption of Annex A single use plastic products (e.g. cups for beverage) by 2026, compared to 2022; 2) with regard to single use plastic products listed in Annex C (i.e. beverage containers with a capacity up to three liters): a) from 2025, PET bottles shall contain at least 25% recycled plastic, calculated as an average for all PET bottles placed on the market on the territory of that

	single-use plastic products placed on the market in a given year by weight.
Proposal for a Directive on the reduction of the impact of certain plastic products on the environment, COM(2018)340 ³⁰	Member States shall take the necessary measures to achieve a significant reduction in the consumption of the single-use plastic products listed in Part A of the Annex on their territory by ... [six years after the end-date for transposition of this Directive].
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE	
Reference	Target/objective + deadline and info
Directive 2000/53/EC, ELV Directive	MS shall ensure that materials and components of vehicles put on the market after 1 July 2003 do not contain lead, mercury, cadmium or hexavalent chromium other than in specified cases (2003)
Directive 94/62/EC on packaging and packaging waste	At least 60% by weight of packaging waste to be recovered or incinerated at waste incineration plants with energy recovery (2008)
Directive 94/62/EC on packaging and packaging waste	Between 55% and 80% by weight of packaging waste to be recycled (2008)
Directive 94/62/EC on packaging and packaging waste	Recycling targets for materials contained in packaging waste must be attained: <ul style="list-style-type: none"> - 60% for glass, paper and board; - 50% for metals; - 22.5% for plastics and; - 15% for wood (2008)
Directive 2006/66/EC on waste batteries and accumulators	Producers provide for the treatment and recycling of waste batteries and accumulators, based on BAT (2009)
Directive 96/59/EC on PCB & PCT	Decontamination or disposal of equipment with PCB volumes > 5 dm ³ (2010)
Directive 2006/66/EC on waste batteries and accumulators	Recycling targets for batteries by average weight: 65% of lead acid batteries, 75% of nickel cadmium batteries, 50% of other batteries (2011)
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in EEE	No heavy metals (Pb, Hg, Cd, hexavalent Cr, PBB and PBDE) in monitoring and control devices and medical devices (2014)
4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS	
The environmental theme 'Waste and resources' is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:	
<ul style="list-style-type: none"> ✓ Policy documents: Commission Communication COM(2005)666, Thematic Strategy on the prevention and recycling of waste; Commission Communication COM(2005)670, Thematic Strategy on the sustainable use of natural resources; Commission Communication COM(2008)767, An EU strategy for better ship dismantling; and Commission Communication COM(2017)334, The role of waste to energy in the circular economy. ✓ Environmental legislation in force: Sewage Sludge Directive 86/278/EEC; Directive 96/59/EC on the disposal of PCBs and PCTs; Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues; Directive 2006/21/EC on the management of waste from the extractive industries; Regulation (EC) No 1013/2006 on shipments of waste. 	
It is also worth noting that some multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to 'Waste and resources', although they fall outside the scope of this research work. These include, for instance, the Basel Convention on	

Member State; b) from 2030, beverage bottles shall contain at least 30% recycled plastic, calculated as an average for all beverage bottles placed on the market on the territory of that Member State; 3) the following separate collection targets for recycling shall be achieved with regard to single use plastic products listed in Annex C (i.e. mainly beverage bottles with a capacity of up to three liters, including their caps and lids, but the exclusion of plastic and beverage bottles that have caps and lids made from plastic): a) 77% by weight by 2025; b) 90% by weight by 2029.

³⁰ See previous footnote.

the Control of Transboundary Movements of Hazardous Wastes and their Disposal (A: 22.03.1989; E.F.: 05.05.1992; ratified by the EU).
Also the UN Sustainable Development Goals (SDGs) address waste and resources, particularly SDG 12: 'Ensure sustainable production and consumption patterns'.

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

CHEMICAL POLLUTION

Some targets/objectives listed under other environmental themes (especially 'Marine environment' and 'Freshwater') are directly related to chemicals.

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
Reference	Target/objective + deadline and info	SOER Sector
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: HBCDD, DEHP, BBP, DBP, DIBP, diarsenic trioxide, diarsenicpentaoxide, lead chromate, lead sulfochromate yellow, lead chromate molbydatesulphate red, TCEP and 2,4-DNT (2015)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning DBT compounds (final deadline; 2015)	Industry
Directive 2009/128/EC establishing a framework for Community action to achieve the sustainable use of pesticides	MS shall restrict sales of pesticides authorised for professional use to persons holding the required certificate (2015)	Industry
Regulation (EU) 528/2012 concerning the making available on the market and use of biocidal products ³¹	Phase out of several active substances contained in selected biocidal product types (2015)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: trichloroethylene (2016) .	Industry
<i>Regulation (EU) 528/2012 concerning the making available on the market and use of biocidal products³²</i>	<i>Phase out of several active substances contained in selected biocidal product types (2016)</i>	
Regulation (EC) No 648/2004 on detergents	Consumer automatic dishwasher detergents shall not be placed on the market if the total content of phosphorus is equal to or greater than 0.3 grams in the standard dosage (2017, beginning)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: chromium trioxide, acids generated from chromium trioxide, sodium dichromate/chromate, potassium dichromate/chromate, ammonium dichromate, formaldehyde, arsenic acid, Bis(2-methoxyethyl) ether, 1,2 dichloroethane (EDC), 2,2-dichloro 4,4'-Methylenedianilide (MOCA) (2017) .	Industry
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning phenylmercury (2017)	Industry

³¹ See e.g. [Commission implementing Decision 2014/227/EU of 24 April 2014](#) on the non-approval of certain biocidal active substances pursuant to Regulation (EU) No 528/2012 of the European Parliament and of the Council

³² See e.g. [Commission implementing Decision \(EU\) 2015/1736 of 28 September 2015](#) not approving triflumuron as an active substance for use in biocidal products for product-type 18.

<i>Regulation (EU) 528/2012 concerning the making available on the market and use of biocidal products³³</i>	<i>Phase out of several active substances contained in selected biocidal product types (2017)</i>	
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions: inorganic ammonium salts shall not be placed on the market, or used, in cellulose insulation mixtures or cellulose insulation articles and methanol shall not be placed on the market in in windscreen washing or defrosting fluids above a certain concentration (2018)	Industry
Regulation (EU) 2017/852 on mercury	Dental amalgam shall not be used for dental treatment of deciduous teeth, of children under 15 years and of pregnant or breastfeeding women (2018)	
<i>Regulation (EU) 528/2012 concerning the making available on the market and use of biocidal products³⁴</i>	<i>Phase out of several active substances contained in selected biocidal product types (2018)</i>	
Regulation (EU) 2017/852 on mercury	Dental amalgam shall only be used in pre-dosed encapsulated form. The use of mercury in bulk form by dental practitioners shall be prohibited (beginning of 2019)	
Regulation (EU) 2017/852 on mercury	Operators of dental facilities in which dental amalgam is used or dental amalgam fillings or teeth containing such fillings are removed, shall ensure that their facilities are equipped with amalgam separators for the retention and collection of amalgam particles, including those contained in used water (beginning of 2019)	
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: dichromium tris (chromate), strontium chromate, potassium hydroxyoctaoxodizincatedichromate, pentazinc chromate octahydroxide; bis(pentabromophenyl)ether (decabromodiphenyl ether; decaBDE) (2019)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning bisether (2019)	Industry
<i>Regulation (EU) 528/2012 concerning the making available on the market and use of biocidal products³⁵</i>	<i>Phase out of several active substances contained in selected biocidal product types (2019)</i>	

³³ See e.g. [Commission implementing Decision \(EU\) 2016/1950 of 4 November 2016](#) on the non-approval of certain biocidal active substances pursuant to Regulation (EU) No 528/2012 of the European Parliament and of the Council; [Commission implementing Decision \(EU\) 2016/110 of 27 January 2016](#) not approving triclosan as an active substance for use in biocidal products for product-type 1; [Commission implementing Decision \(EU\) 2016/109 of 27 January 2016](#) not to approve PHMB (1600; 1.8) as an active substance for use in biocidal products for product-types 1, 6 and 9; [Commission implementing Decision \(EU\) 2016/108 of 27 January 2016](#) not approving 2-Butanone, peroxide as an active substance for use in biocidal products for product-types 1 and 2 [Commission implementing Decision \(EU\) 2016/107 of 27 January 2016](#) not approving cybutryne as an active substance for use in biocidal products for product-type 21.

³⁴ See e.g. [Commission implementing Decision \(EU\) 2017/1282 of 14 July 2017](#) not approving 2-méthyl-1,2-benzisothiazol-3(2H)-one as an existing active substance for use in biocidal products for product-type 13, [Commission implementing Decision \(EU\) 2017/802 of 10 May 2017](#) not approving PHMB (1600; 1.8) as an existing active substance for use in biocidal products for product-type 5.

³⁵ See e.g. [Commission implementing Decision \(EU\) 2018/1622 of 29 October 2018](#) on the non-approval of certain biocidal active substances pursuant to Regulation (EU) No 528/2012 of the European Parliament and of the Council; [Commission implementing Decision \(EU\) 2018/1251 of 18 September 2018](#) not approving empenethrin as an [existing active substance](#) for use in biocidal products for product-type 18; [Commission implementing Decision \(EU\) 2018/622 of 20 April 2018](#) not approving chlorophene as

European Council, 2006 Review of the EU Sustainable Development Strategy	Ensure that chemicals are produced and used without threats to humans and the environment (2020)	Industry
Decision 1386/2013/EU (7 th EAP)	Risks associated with the use of hazardous substances, including chemicals in products, are minimized (2020)	
Decision 1386/2013/EU (7 th EAP)	Sustainable use of plant protection products, without any harmful effect on human health (2020)	
Decision 1386/2013/EU (7 th EAP)	Safety concerns related to nanomaterials are effectively addressed (2020)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: 1-bromopropane; diisopentyl phthalate ; 1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich ; 1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters ; 1,2-benzenedicarboxylic acid, dipentyl ester, branched and linear ; bis(2-methoxyethyl) phthalate ; dipentyl phthalate ; N-pentyl-isopentylphthalate ; anthracene oil ; Pitch, coal tar, high-temp. (2020)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning bisphenol A, PFOA, D4 and D5, NMP + restrictions concerning the placing on the market of clothes, textiles and footwear containing 33 CMR chemicals (2020)	Industry
<i>Regulation (EC) 1907/2006 and amendments, REACH</i>	<i>REACH restrictions DEHP, DBP, BBP and DBP (2020)</i>	
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated ; 4-nonylphenol, branched and linear, ethoxylated (2021)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions: nonylphenol ethoxylates shall not be placed on the market in textile articles which can reasonably be expected to be washed in water during their normal lifecycle (2021)	Industry
Regulation (EU) 2017/852 on mercury	All amalgam separators in use provide a retention level of at least 95% of amalgam particles (2021)	
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning PFOA (2022)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning PFOA (2023)	Industry
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning PFOA (2032)	Industry
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE		
Reference	Target/objective + deadline and info	

an existing active substance for use in biocidal products for product-type 3; [Commission implementing Decision \(EU\) 2018/619 of 20 April 2018](#) not approving PHMB (1415; 4.7) as an existing active substance for use in biocidal products for product-type 1, 5 and 6. See also Commission Implementing Regulation (EU) 2018/783 of 29 May 2018 amending Implementing Regulation (EU) No 540/2011 as regards the conditions of approval of the active substance imidacloprid; Commission Implementing Regulation (EU) 2018/784 of 29 May 2018 amending Implementing Regulation (EU) No 540/2011 as regards the conditions of approval of the active substance clothianidin; and Commission Implementing Regulation (EU) 2018/785 of 29 May 2018 amending Implementing Regulation (EU) No 540/2011 as regards the conditions of approval of the active substance thiamethoxam.

Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning organostanning compounds, PHAs, DEGME, DEGBE, MDI, cyclohexane, ammonium nitrate, dichloromethane (2010)
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning organostanning compounds, PHAs, dichloromethane (2011)
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning DBT compounds, DOT compounds, dichloromethane (final deadline), acrylamide (2012)
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning mercury (2012)
Regulation (EC) 648/2004 on detergents	Consumer laundry detergents shall not be placed on the market if the total content of phosphorus is equal to or greater than 0.5 grams in the standard dosage (2013)
Directive 98/8/EC (no longer in force) and Regulation 528/2012/EU concerning the making available on the market and use of biocidal products	Phase out of several active substances contained in selected biocidal product types (2006-2014)
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: 5-tert-butyl-2,4,6-trinitro- m-xylene, 4,4'- Diaminodiphenylmethane (2014)
Directive 2009/128/EC establishing a framework for Community action to achieve the sustainable use of pesticides	General principles of integrated pest management are implemented by all professional users (2014)

4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS

The environmental theme 'Chemical pollution' is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:

- ✓ Policy documents: Commission Communication COM(99)706, Community Strategy for Endocrine Disruptors; Commission Communication COM(2001)593, Community Strategy for Dioxins, Furans and Polychlorinated Biphenyls; Commission Communication **COM(2005)20, Community strategy concerning mercury;** Commission Communication **COM(2006)372, A thematic strategy on the sustainable use of pesticides;** Commission Communication **COM(2012)252, The combination effects of chemicals - Chemical mixtures;** Commission Communication COM(2010)723, Review of the Community Strategy concerning mercury.
- ✓ Environmental legislation in force: **Regulation (EC) No 2003/2003 relating to fertilizers; Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No 1907/2006; Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117; and Regulation (Commission Delegated Regulation) (EU) No 1062/2014 on the work programme for the systematic examination of all existing active substances contained in biocidal products referred to in Regulation (EU) No 528/2012 of the European Parliament and of the Council.**

It is also worth noting that many multilateral (or international) environmental agreements to which the EU and/or most of its Member States are parties, as well as the related protocols, are relevant to 'Chemical pollution', although they fall outside the scope of this research work. The most important agreements include, for instance, the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (A: 10.09.1998; EF: 24.02.2004; ratified by the EU) and the Stockholm Convention on Persistent Organic Pollutants (A: 22.05.2001; EF: 17.05.2004; ratified by the EU).

Also the UN Sustainable Development Goals (SDGs) address chemical pollution, particularly SDG 12: 'Ensure sustainable production and consumption patterns' (environmentally sound management of chemicals).

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

INDUSTRIAL POLLUTION

Most of the targets and objectives listed under 'Industrial pollution' are also relevant to 'Air Pollution' and 'Freshwater'.

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD

1a Air pollution		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2010/75/EU, Industrial Emissions Directive	Extension of IED requirements to new activities/installations not covered by the scope of the IPCC Directive ³⁶ (2015)	Industry
Directive 2010/75/EU, Industrial Emissions Directive	New emissions limit value for selected VOCs and halogenated VOCs (2015)	Industry
Directive 2010/75/EU, Industrial Emissions Directive	New emission limit values for existing large combustion plants (2016)	Energy
Directive 2010/75/EU, Industrial Emissions ³⁷ Directive; Commission implementing Decisions (EU) 2012/134 and (EU) 2012/135	Permit conditions shall comply with BAT conclusions for the following activities: manufacture of glass and production of iron and steel (2016)	Industry
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decisions (EU) 2013/163, (EU) 2013/732 and (EU) 2013/184.	Permit conditions shall comply with BAT conclusions for the following activities: production of cement, lime and magnesium oxide, production of chloralkali, and tanning of hide and skin (2017)	Industry
Directive (EU) 2015/2193 on limiting emissions of certain pollutants into the air from medium combustion plants	Limit values for SO ₂ , NO _x and dust applied by fuel category to new medium combustion plants (2018) INT	Energy
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decision (EU) 2015/2119	Permit conditions shall comply with BAT conclusions for the following activities: wood-based panel production (2019)	Industry
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decisions (EU) 2016/902 and (EU) 2016/1032	Permit conditions shall comply with BAT conclusions for the following activities: common wastewater and waste gas treatment/ management system in the chemical sector and non ferrous metal industry (2020)	Industry
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decisions (EU) 2017/132, (EU) 2017/1442 and (EU) 2017/2117	Permit conditions shall comply with BAT conclusions for the following activities: intensive rearing of poultry and pigs, large combustion plants and production of large-volume organic chemicals (2021)	Industry
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decisions (EU) 2018/1147	Permit conditions shall comply with BAT conclusions for the following activities: waste treatment (2022)	
Directive (EU) 2015/2193 on limiting emissions of certain pollutants into the air from medium combustion plants	Limit values for SO ₂ , NO _x and dust applied by fuel category to existing medium combustion plants (2025-2030) FIN	Energy
1b Air and water pollution		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2010/75/EU Industrial Emissions Directive; Commission implementing Decisions (EU) 2014/687 and (EU) 2014/738	Permit conditions shall comply with BAT conclusions for the following activities:	Industry

³⁶ IED requirements applied to new installations, combustion plants, etc. from 7 January 2013 (i.e. by the date of transposition of the Directive).

³⁷ It is important to underline that, according to the IED Directive (Art. 14.3 and Art. 15.3), the permit conditions including emission limit values must be based on the Best Available Techniques (BAT). In order to define BAT, the Commission organises an exchange of information with experts from Member States, industry and environmental organisations. This process results in [BAT Reference Documents](#) (BREFs); the BAT conclusions contained, that are the reference for setting permit conditions, are adopted by the Commission as Implementing Decisions. According to Art. 21, within 4 years of publication of decisions on BAT conclusions relating to the main activity of an installation, the competent authority shall ensure that: (a) all the permit conditions for the installation concerned are reconsidered and, if necessary, updated to ensure compliance with the Directive; (b) the installation complies with those permit conditions.

	production of pulp, paper and board and refining of mineral oil and gas (2018)	
1c Water pollution		
Reference	Target/objective + deadline and info	SOER Sector
Directive 2010/75/EU, Industrial Emissions Directive	Extension of IED requirements to new activities (2015)	Industry
3 TARGETS AND OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY LEGISLATION IN FORCE		
Reference	Target/objective + deadline and info	
Directive 2010/75/EU, Industrial Emissions Directive	Application of IED requirements to existing installations already covered by the IPPC Directive (beginning 2014)	
4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS		
<p>The environmental theme 'Industrial pollution' is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective. Most of these legislation/policy documents are listed under other environmental themes, such as climate change, air pollution, chemicals, and waste and resources.</p> <p>It is also worth noting that some multilateral (or international) environmental agreements to which the EU and/or its Member States are parties, as well as the related protocols, are relevant to 'Industrial pollution', although they fall outside the scope of this research work. These include, for instance, the Convention on Transboundary Effects of Industrial Accidents (A: 17.03.1992; E.F.: 09.04.2000; ratified by the EU) and most of the conventions listed, e.g., under 'Climate Change', 'Air Pollution', and 'Chemical Pollution'.</p> <p>Also the UN Sustainable Development Goals (SDGs) address industrial pollution, particularly SDG 9: 'Build resilient infrastructure, promote sustainable industrialization and foster innovation' and SDG 12: 'Ensure sustainable production and consumption patterns'.</p>		

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

CROSS-CUTTING ENVIRONMENTAL AREA

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD		
1a Natural resources		
Reference	Target/objective + deadline and info	SOER Sector
European Council, 2006 Review of the EU Sustainable Development Strategy	Improve management and avoid overexploitation of renewable natural resources (2015)	
1b SCP and resource efficiency		
Reference	Target/objective + deadline and info	SOER Sector
COM(2011) 571, Roadmap to a Resource Efficient Europe	Phase out environmentally harmful subsidies and substantially increase the share of environmental taxes (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Food chain resource inputs should be cut by 20% (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Price signals and environmental information should be in place to incentivize citizens and public authorities to choose the most resource efficient products and services (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Market and policy incentives that reward business investments in efficiency are in place (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe and Decision 1386/2013/EU (7 th EAP)	Resource efficiency targets and indicators guide public and private decision-makers, so that resource efficiency is improved (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Economic growth and wellbeing is decoupled from resource inputs (2020)	

Decision 1386/2013/EU (7 th EAP)	Significantly reduce the overall environmental impact of all major sectors of EU economy (2020)	
Decision 1386/2013/EU (7 th EAP)	Reduced overall environmental impact of production and consumption in the food, housing and mobility sectors (2020)	
COM(2011) 571, Roadmap to a Resource Efficient Europe	Economy grows respecting resource constraints (2050)	
<p>4 MAIN LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED AND INTERNATIONAL AGREEMENTS</p> <p>The cross-cutting environmental area is regulated and addressed by several pieces of environmental legislation and policy documents not setting any target/objective, including the following:</p> <ul style="list-style-type: none"> ✓ Policy documents: Commission Communication COM(2007)140, Green Paper on market-based instruments for environment and related policy purposes; Commission Communication COM(2007)551, Towards a new culture for urban mobility, Green Paper; Commission Communication COM(2007)621, Agenda for a sustainable and competitive European tourism; Commission Communication COM(2008)397, Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan; Commission Communication COM(2008)400, Public procurement for a better environment; Commission Communication COM(2012)60, Innovating for Sustainable Growth: A bioeconomy for Europe; Commission Communication COM(2013)913, Resource efficient urban mobility; Commission Communication COM(2016)773, Ecodesign Working Plan 2016-2019. ✓ Environmental legislation in force: Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage; Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment; Directive 2014/24/EU on public procurement and repealing Directive 2004/18/EC; Directive 2014/25/EU on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC; Regulation (EC) No 1221/2009 “EMAS III”; and Regulation (EC) No 66/2010 on the EU Ecolabel. <p>It is also worth noting that many multilateral (or international) environmental agreements to which the EU and/or its Member States are parties, as well as the related protocols, are relevant to the cross-cutting environmental area, although they fall outside the scope of this research work. The most important agreements include, for instance, the Espoo Convention on Environmental Impact Assessment in a Transboundary Context (A: 25.02.1991, E.F.: 10.09.1997; ratified by the EU) and the Aarhus Convention on Access to Environmental Information, Public Participation in Environmental Decision-Making and Access to Justice (A: 25.06.1998, E.F.: 30.10.2001; ratified by the EU).</p>		

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

‘A’: adopted; ‘E.F.’: entered into force.

Annex II – SOER Economic Sectors – Cut-off date: 31st March 2018

ENERGY

Most of the targets and objectives listed under ‘Energy’ are also relevant to other economic sectors such as ‘Transport’, ‘Industry’ and ‘Agriculture’

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD (SET BY ENVIRONMENTAL AND NON ENVIRONMENTAL POLICY DOCUMENTS AND LEGISLATION IN FORCE)		
1a Energy efficiency		
Reference	Target/Objective – deadline + info	SOER ET
Directive 2010/31/EU on the energy performance of buildings	All new buildings occupied and owned by public authorities are ‘nearly zero-energy’ buildings (2019)	Climate change
Directive 2012/27/EU, Energy Efficiency Directive; COM(2011)109, Energy efficiency action plan; European Council 8/9 March 2007: ‘20-20-20’ targets; COM(2010) 2020, Europe 2020 strategy	Reduce consumption of primary energy by 20% compared to energy consumption projections for 2020 (2020) \triangle ³⁸	Climate change
Decision 1386/2013/EU (7 th EAP)	Innovative approaches for sustainable buildings and energy efficiency (2020)	Climate change
Directive 2012/27/EU, Energy Efficiency Directive	Cumulative end-use energy savings target for energy distributors/energy sales companies (2020)	Climate change
Directive 2010/31/EU on the energy performance of buildings	All new buildings are ‘nearly zero-energy’ buildings (2021)	Climate change
COM(2014)15, Policy framework for climate and energy 2020-2030	Increase energy savings of 25% (2030)	Climate change
COM(2014)520, Energy Efficiency Communication (see also COM(2016)860, Clean energy for all Europeans)	Increase energy savings of 30% (2030)	Climate change
Council Conclusion, October 2014; COM(2014)15 Policy framework for climate and energy 2020-2030	27% increase in efficiency compared to projections of future energy consumption (2030)	Climate change
1b Renewable Energy		
Reference	Target/Objective – deadline + info	SOER ET
European Council, 2006 Review of the EU Sustainable Development Strategy	Increase renewable energy to 15% of total energy consumption (2015)	Climate change
Directive 2009/28/EC, Renewable Energy Directive	Increase the share of energy from renewable sources to at least 10% of the final consumption of energy in transport (2020)	Climate change
Directive 2009/28/EC, Renewable Energy Directive	Increase renewable energy to at least 20% of final energy consumption (2020) \triangle	Climate change
Council Conclusion, October 2014	Increase renewable energy to 27% of EU energy consumption (EU-28) (2030)	Climate change
1c Biofuels		
Reference	Target/Objective – deadline + info	SOER ET
European Council, 2006 Review of the EU Sustainable Development Strategy	Increase biofuels to 8% of all petrol and diesel for transport purposes placed on the market (2015)	Climate change
1d Combustion plants		

³⁸ Each Member State shall set an indicative national energy efficiency target, based on either primary or final energy consumption, primary or final energy savings or energy intensity.

Reference	Target/Objective – deadline + info	SOER ET
Directive 2010/75/EU, Industrial Emissions Directive	New emission limit value for existing large combustion plants (2016)	Industrial pollution
Directive (EU) 2015/2193 on limiting emissions of certain pollutants into the air from medium combustion plants	Limit values for SO ₂ , NO _x and dust applied by fuel category to new medium combustion plants (2018) INT	Industrial pollution
Directive (EU) 2015/2193 on limiting emissions of certain pollutants into the air from medium combustion plants	Limit values for SO ₂ , NO _x and dust applied by fuel category to existing medium combustion plants (2025-2030) FIN	Industrial pollution
4 MAIN NON-ENVIRONMENTAL LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING TARGETS OR OBJECTIVES, THAT HAVE BEEN ANALYSED		
The economic sector 'Energy' is regulated and addressed by several pieces of non-environmental legislation and policy documents not setting any environmental target/objective, including the following:		
<ul style="list-style-type: none"> ✓ Policy documents: Commission Communication COM(2008)781, EU energy security and solidarity action plan; Commission Communication COM(2010)639, A strategy for competitive, sustainable, secure energy; Commission Communication COM(2013)253, Energy technologies and innovation; Commission Communication COM(2014)330, European energy security strategy !; Commission Communication COM(2015)80, Energy Union Framework Strategy; Commission Communication COM(2015)82, Achieving the 10% electricity interconnection target: making Europe's electricity grid fit for 2020; Commission Communication COM(2015)340, The EU's new energy market design; Commission Communication COM(2016)51, EU Strategy for Heating and Cooling; ✓ Non-environmental legislation in force: Directive 2003/96/EC on restructuring the Community framework for the taxation of energy products and electricity; Regulation (EU) 2016/426 on appliances burning gaseous fuels and repealing Directive 2009/142/EC. 		

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

TRANSPORT

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD (SET BY ENVIRONMENTAL AND NON ENVIRONMENTAL POLICY DOCUMENTS AND LEGISLATION IN FORCE)		
1a General		
Reference	Target/Objective – deadline + info	SOER ET
Decision 1386/2013/EU (7 th EAP)	Innovative approaches for urban public transport and mobility (2020)	Air Pollution
1b GHG emissions		
Reference	Target/Objective – deadline + info	SOER ET
Regulation (EC) 443/2009 setting emission performance standards for new passenger cars	Limit fleet average CO ₂ emissions from new cars to 130 g/km (2012– 2015) ³⁹ INT	Climate change
Regulation (EU) 510/2011, Emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO₂ emissions from light-duty vehicles	Average specific emissions from light commercial vehicles running on alternative fuels, composed of 85% bioethanol must be reduced by 5% by 31 December 2015	Climate change
Directive 2006/40/EC relating to emissions from air conditioning systems in motor vehicles	Phase out mobile air conditioning systems designed to use F-gases with global warming potential >150 for new vehicles (2017) FIN	Climate change
Directive 2006/40/EC relating to emissions from air conditioning systems in motor vehicles	Air-conditioning systems designed to contain fluorinated greenhouse gases with a global warming potential higher than 150 shall not be retrofitted to any vehicles (2017) FIN	Climate change

³⁹ For every year in that period, the percentage of a manufacturer's cars that must comply with the limit increases. From 2015, 100% of cars must comply (compared to 75% in 2013 and 80% in 2014).

Directive 2006/40/EC relating to emissions from air conditioning systems in motor vehicles	Air conditioning systems in all vehicles shall not be filled with fluorinated greenhouse gases with a global warming potential higher than 150 (2017) FIN	Climate change
Regulation (EU) 510/2011, Emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO² emissions from light-duty vehicles	Limit fleet average CO ₂ emissions from new light commercial vehicles to 175 g/km (2014– 2017) INT	Climate change
COM(2010)186 final, European strategy on clean and energy efficient vehicles	Limit fleet average CO ₂ emissions from new cars to 95 g/km (2020)	Climate change
Regulation (EU) 510/2011, Emission performance standards for new light commercial vehicles as part of the Union's integrated approach to reduce CO₂ emissions from light-duty vehicles	Limit fleet average CO ₂ emissions from new light commercial vehicles to 147 g/km (2020) FIN	Climate change
Regulation (EC) 443/2009 setting emission performance standards for new passenger cars	Limit average emissions for the new car fleet to 95 g CO ₂ /km (end 2020) FIN	Climate change
Directive 98/70/EC relating to the quality of petrol and diesel fuels	Reduce life cycle GHG emissions per unit of energy from fuel and energy supplied by at least 6% compared to a fuel baseline standard (2020)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Reduce CO ₂ emissions from the transport sector by 20% compared to 2008 levels (2030)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Reduce conventionally fuelled cars in cities by 50% (2030)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Major urban centers achieve essentially CO ₂ -free city logistics (2030)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Shift 30% of road freight over 300 km to rail/waterborne transport (2030)	Climate change
COM(2016)501, A European Strategy for Low-Emission Mobility	Zero- and low-emission vehicles will need to be deployed and gain significant market share by 2030 .	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Reduce CO ₂ emissions from the transport sector by 60% compared to 1990 levels (2050)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Completely phase out conventionally fuelled cars in cities (2050)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Shift 50% of road freight over 300 km to rail/waterborne transport (2050)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Shift the majority of long- and medium-distance passenger road transport to rail (2050)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Airlines increase their use of low carbon fuels by 40% (2050)	Climate change
COM(2011)144 final, Roadmap to a single European transport area	Reduce carbon emissions from shipping by 40% compared to 2005 levels (2050)	Climate change
1c Air pollution		
Reference	Target/Objective – deadline + info	SOER ET
Regulation (EC) 715/2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 5 and Euro 6) and on access to vehicle repair and maintenance information	Euro 6 standard for registration and sale of new types of passenger cars and light duty vehicles (2015) FIN	Air pollution
Directive 2016/802/EU relating to a reduction in the sulphur content of certain liquid fuels	Marine fuels not to be used in the areas of MS territorial seas, exclusive economic zones and pollution control zones falling within SO _x	Air pollution

	Emission Control Areas ⁴⁰ if the sulphur content of those fuels by mass exceeds 0.1% (2015 beginning) FIN	
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 4 standard for new types of vehicles (2016-2017, depending on L-category) – Emission limit values INT	Air pollution
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 4 standard for existing types of vehicles (2017-2018, depending on L-category) – Emission limit values FIN	Air pollution
Commission Implementing Decision 2014/132/EU setting the Union-wide performance targets for the air traffic management network and alert thresholds for the second reference period 2015-19	Average horizontal en route flight efficiency of at least 2.6% in 2019 for the actual trajectory ⁴¹	Air pollution
Commission Implementing Decision 2014/132/EU setting the Union-wide performance targets for the air traffic management network and alert thresholds for the second reference period 2015-19	Average horizontal en route flight efficiency of at least 4.1% in 2019 for the last filed flight plan trajectory (2019) ⁴²	Air pollution
Regulation (EU) 2016/1628, Requirements for gaseous and particulate pollutant emission limits for internal combustion engines for non-road mobile machinery	Exhaust emission limit values (referred to as Stage V) applied to EU-type approval of engines for non road mobile machinery, depending on engine category/sub-category (2018-2020)	Noise
Regulation (EU) No 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 5 standard for new types of vehicles (2020) – Emission limit values INT	Air pollution
Directive 2016/802/EU relating to a reduction in the sulphur content of certain liquid fuels	Marine fuels not to be used in the areas of MS territorial seas, exclusive economic zones and pollution control zones (outside SO _x Emission Control Areas) if the sulphur content of those fuels by mass exceeds 0.5% (2020 beginning). FIN	Air pollution
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS shall ensure that an appropriate number of recharging points accessible to the public are put in place by 2020, to ensure that electric vehicles can circulate at least in urban/suburban agglomerations and other densely populated areas (2020)	Air pollution
Regulation (EU) 2016/1628, Requirements for gaseous and particulate pollutant emission limits for internal combustion engines for non-road mobile machinery	Exhaust emission limit values (referred to as Stage V) applied to the placing on the market of engines for non road mobile machinery, depending on engine category/sub-category (2019-2021)	Air pollution
Regulation (EU) No 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 5 standard for existing types of vehicles (2021) – Emission limit values FIN	Air pollution
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS shall ensure that install shore-side electricity supply for inland waterway vessels	Air pollution

⁴⁰ [Sulphur oxide emission control areas](#) (SO_x-ECAS) in the EU are found in the Baltic and North Seas and the English Channel.

⁴¹ As defined in point 2.1(a) of section 1 of Annex I to Implementing Regulation (EU) No 390/2013 (the indicator is the comparison between the length of the en route part of the actual trajectory derived from surveillance data and the achieved distance, summed over all IFR -instrument flight rules- flights within or traversing the local airspace).

⁴² As defined in point 2.1(b) of section 1 of Annex I to Implementing Regulation (EU) No 390/2013 (the difference between the length of the en route part of the last filed flight plan trajectory and the corresponding portion of the great circle distance, summed over all IFR -instrument flight rules- flights within or traversing the European airspace).

	and seagoing ships in maritime and inland ports as a priority in ports of the TEN-T Core Network, and in other ports (2025)	
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS which decide to include hydrogen points accessible to the public in their national policy frameworks shall ensure that, by 2025, an appropriate number of such points are available, to ensure the circulation of hydrogen-powered motor vehicles, including fuel cell vehicles, within networks determined by MS (2025)	Air pollution
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS shall ensure that an appropriate number of refuelling points for liquefied natural gas (LNG) are put in place at maritime ports, to enable LNG inland waterway vessels or seagoing ships to circulate throughout the TEN-T Core Network by 2025 (2025)	Air pollution
Directive 2014/94/EU, Deployment of alternative fuels infrastructure	MS shall ensure that an appropriate number of refuelling points for LNG are put in place at inland ports, to enable LNG inland waterway vessels or seagoing ships to circulate throughout the TEN-T Core Network by 2030 (2030)	Air pollution
1d Noise		
Reference	Target/Objective – deadline + info	SOER ET
COM(2008)432, Communication from the Commission to the European Parliament and the Council – Rail noise abatement measures addressing the existing fleet (rail)	Completing the retrofitting exercise (i.e retrofitting freight wagons with low-noise brakes; 2015)	Noise
Regulation (EC) 661/2009 concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units	MS shall prohibit the registration, sale and entry into service of both new vehicles (categories M, N, and O) and new tyres intended for such vehicles which do not comply with rolling noise limit values (2016)	Noise
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems	Noise-limit values (phase 1) for new vehicles types (2016 beginning) INT	Noise
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 4 standard for new types of vehicles (2016-2017, depending on L-category) – Sound level limits INT	Noise
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 4 standard for existing types of vehicles (2017-2018, depending on L-category) – Sound level limits FIN	Noise
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 5 standard for new types of vehicles (2020) – Sound level limits	Noise
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems	Noise-limit values (phase 2) for new vehicles types (2020) INT	Noise
Regulation (EU) 168/2013 on the approval and market surveillance of two- or three-wheel vehicles and quadricycles	Euro 5 standard for existing types of vehicles (2021) – Emission limit values	Noise
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems	Noise-limit values (phase 2) for first registration (2022) INT	Noise
Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems	Noise-limit values (phase 3) for new vehicles types (2024) FIN	Noise

Regulation (EU) 540/2014 on the sound level of motor vehicles and of replacement silencing systems	Noise-limit values for cars (phase 3;) for first registration (2026) FIN	Noise
4 MAIN NON ENVIRONMENTAL LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE THAT HAVE BEEN ANALYSED		
The economic sector 'Transport' is regulated and addressed by several pieces of non-environmental legislation and policy documents not setting any environmental target/objective, including the following:		
<ul style="list-style-type: none"> ✓ Policy documents: Commission Communication COM(2006)819, An action plan for airport capacity, efficiency and safety in Europe; Commission Communication COM(2007)22, A competitive automotive regulatory framework for the 21st Century; Commission Communication COM(2007)575, An integrated maritime policy for the European Union; Commission Communication COM(2009)8, Maritime transport strategy; Commission Communication COM(2012)494, Communication on Blue Growth, Opportunities for marine and maritime sustainable growth; Commission Communication COM(2013)623, Towards quality inland waterway transport NAIADES II; Commission Communication COM(2015) 598, An aviation strategy for Europe; Commission Communication COM (2017)283, An agenda for a socially fair transition towards clean, competitive and connected mobility for all. ✓ Non-environmental legislation in force: Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructures; Directive 2006/87/EC laying down technical requirements for inland waterway vessels and repealing Council Directive 82/714/EEC; Directive 2008/57/EC on the interoperability of the rail system within the Community (Recast); Directive 2014/89/EU establishing a framework for maritime spatial planning; Regulation (EC) No 549/2004 laying down the framework for the creation of the Single European Sky (Framework Regulation). 		

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.
'A': adopted; 'E.F.': entered into force.

INDUSTRY

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD (SET BY ENVIRONMENTAL AND NON ENVIRONMENTAL POLICY DOCUMENTS AND LEGISLATION IN FORCE)		
1a Industrial pollution - Air pollution		
Reference	Target/Objective – deadline + info	SOER ET
Directive 2010/75/EU, Industrial Emissions Directive	Extension of IED requirements to new activities/installations not covered by the scope of the IPPC Directive ⁴³ (2015)	Industrial pollution
Directive 2010/75/EU, Industrial Emissions Directive	New emission limit value for selected VOCs and halogenated VOCs (2015)	Industrial pollution
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decisions (EU) 2012/134 and (EU) 2012/135	Permit conditions shall comply with BAT conclusions for the following activities: manufacture of glass and production of iron and steel (2016)	Industrial pollution
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decisions (EU) 2013/163, (EU) 2013/732 and (EU) 2013/184.	Permit conditions shall comply with BAT conclusions for the following activities: production of cement, lime and magnesium oxide, production of chloralkali, and tanning of hide and skin (2017)	Industrial pollution
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decision (EU) 2015/2119	Permit conditions shall comply with BAT conclusions for the following activities: wood-based panel production (2019)	Industrial pollution
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing decisions (EU) 2016/902 and (EU) 2016/1032	Permit conditions shall comply with BAT conclusions for the following activities: common wastewater and waste gas treatment/ management system in the	Industrial pollution

⁴³ IED requirements applied to new installations, combustion plants, etc. from 7 January 2013 (i.e. by the date of transposition of the Directive).

	chemical sector and non ferrous metal industry (2020)	
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decisions (EU) 2017/132, (EU) 2017/1442 and (EU) 2017/2117	Permit conditions shall comply with BAT conclusions for the following activities: intensive rearing of poultry and pigs, large combustion plants and production of large-volume organic chemicals (2021)	Industrial pollution
1b Industrial pollution - Air and water pollution		
Reference	Target/objective + deadline and info	SOER ET
Directive 2010/75/EU, Industrial Emissions Directive; Commission implementing Decisions (EU) 2014/687 and (EU) 2014/738	Permit conditions shall comply with BAT conclusions for the following activities: production of pulp, paper and board and refining of mineral oil and gas (2018)	Industrial pollution
1c Industrial pollution - Water pollution		
Reference	Target/objective + deadline and info	SOER ET
Directive 2010/75/EU, Industrial Emissions Directive	Extension of IED requirements to new activities (2015)	Industrial pollution
1d Chemical pollution		
Reference	Target/Objective – deadline + info	SOER ET
Regulation (EC) 1907/2006 and amendments, REACH	‘Sunset date’ for the following SVHCs: HBCDD, DEHP, BBP, DBP, DIBP, diarsenic trioxide, diarsenic pentoxide, lead chromate, lead sulphochromate yellow, lead chromate molybdatesulphate red, TCEP and 2,4-DNT (2015)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning DBT compounds (final deadline; 2015)	Chemical pollution
Directive 2009/128/EC establishing a framework for Community action to achieve the sustainable use of pesticides	MS shall restrict sales of pesticides authorised for professional use to persons holding the required certificate (2015)	Chemical pollution
Commission Regulation (EC) 1881/2006 setting maximum levels for certain contaminants in foodstuffs	Infant formulae and processed cereal-based foods/ baby foods for infants and young children listed in the Annex shall not exceed the maximum level of cadmium set out in the Annex by 2015	SEC
Commission Regulation (EC) 1881/2006 setting maximum levels for certain contaminants in foodstuffs	Cocoa beans and derived products listed in the Annex shall not exceed the maximum level of polycyclic aromatic hydrocarbons set out in the Annex by 2015	SEC
Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food	Only the substances included in the Union list of authorized substances set out in Annex I may be intentionally used in the manufacture of plastic layers in plastic materials and article. This provision as regards the use of additives, others than plasticisers, shall apply for plastic layers or plastic coatings in caps and closures as from 31 December 2015 .	SEC
Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food	Only the substances included in the Union list of authorized substances set out in Annex I may be intentionally used in the manufacture of plastic layers in plastic materials and article. This provision as regards the use of additives used in glass fibre sizing for glass fibre reinforced plastics, shall apply from 31 December 2015 .	SEC

Regulation (EU) 528/2012 concerning the making available on the market and use of biocidal products	Phase out of several active substances contained in selected biocidal product types (2015)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: trichloroethylene (2016)	Chemical pollution
Regulation (EC) No 648/2004 on detergents	Consumer automatic dishwasher detergents shall not be placed on the market if the total content of phosphorus is equal to or greater than 0.3 grams in the standard dosage (2017, beginning)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: chromium trioxide, acids generated from chromium trioxide, sodium dichromate/chromate, potassium dichromate/chromate, ammonium dichromate, formaldehyde, arsenic acid, Bis(2-methoxyethyl) ether, 1,2 dichloroethane (EDC), 2,2-dichloro 4,4'-Methylenedianilide (MOCA) (2017)	Chemical pollution
Regulation (EC) 1907/2006 and amendments REACH	REACH restrictions concerning phenylmercury (2017)	Chemical pollution
Regulation (EC) No 1223/2009 on cosmetic products	Restrictions to the use of certain chemicals ⁴⁴ in specified cosmetic products (2017)	SEC
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions: inorganic ammonium salts shall not be placed on the market, or used, in cellulose insulation mixtures or cellulose insulation articles (2018)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: dichromium tris (chromate), strontium chromate, potassium hydroxyoctaoxodizincatedichromate, pentazinc chromate octahydroxide; bis(pentabromophenyl)ether (decabromodiphenyl ether; decaBDE) (2019)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning bisether (2019)	Chemical pollution
Commission Regulation (EC) No 1881/2006 setting maximum levels for certain contaminants in foodstuffs	Cocoa and chocolate products listed in the Annex shall not exceed the maximum level of cadmium set out in the Annex by 2019	SEC
European Council, 2006 Review of the EU Sustainable Development Strategy; Decision 1386/2013/EU (7 th EAP)	Ensure that chemicals (and plant protection products) are produced and used without threats to humans and the environment (2020)	Chemical pollution
Decision 1386/2013/EU (7 th EAP)	Safety concerns related to nanomaterials are effectively addressed (2020)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: 1-bromopropane; diisopentyl phthalate ; 1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich ; 1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters ; 1,2-benzenedicarboxylic acid, dipentyl ester .	Chemical pollution

⁴⁴ Ethanol 2,2; 1-Methyl-2,6-bis-benzene; Di[2-[4-[(E)-2-[4-[bis(2-hydroxyethyl)aminophenyl]vinyl]pyridin-1-ium]butanoyl]aminoethyl]di-sulfanyl dichloride; Di[2-[4-[(E)-2-[2,4,5-trimethoxyphenyl]vinyl]pyridin-1-ium]butanoyl]aminoethyl]disulfanyl dichloride; 1H-Pyrazole-4,5- diamine, 1-hexyl-, sulfate (2:1); 4-Hydroxy-2,5,6-triaminopyrimidine sulfate; 2-[(3-Aminopyrazolo[1,5-a]pyridin-2-yl)oxy]ethanol hydrochloride; Phenol, 3-amino-2- dimethyl; 2-Naphthalenaminium, 8-[(4- amino-3-nitrophenyl)azo]-7-hydroxy- N,N,N-trimethyl-, chloride; 3-Amino-7- (dimethylamino)-2-methoxyphenoxazin- 5-ium chloride.

	branched and linear; bis(2-methoxyethyl) phthalate; dipentyl phthalate; N-pentyl-isopentylphthalate; anthracene oil; Pitch, coal tar, high-temp. (2020)	
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning bisphenol A, PFOA, D4 and D5 (2020)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	'Sunset date' for the following SVHCs: 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated; 4-nonylphenol, branched and linear, ethoxylated (2021) .	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions: nonylphenol ethoxylates (NPE) shall not be placed on the market in textile articles which can reasonably be expected to be washed in water during their normal lifecycle (2021)	Chemical pollution
Regulation (EC) 1907/2006 and amendments REACH	REACH restrictions concerning PFOA (2022)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning PFOA (2023)	Chemical pollution
Regulation (EC) 1907/2006 and amendments, REACH	REACH restrictions concerning PFOA (2032)	Chemical pollution
1e Ecodesign requirements		
Reference	Target/Objective – deadline + info	SOER ET
Commission Regulation (EU) 327/2011 implementing Directive 2009/125/EC - Ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW	Energy efficiency – 2015 (beginning)	SEC
Commission Regulation (EU) 547/2012 implementing Directive 2009/125/EC - Ecodesign requirements for water pumps	Energy efficiency – 2015 (beginning)	SEC
Commission Regulation (EC) 1275/2008 implementing Directive 2005/32/EC - Ecodesign requirements for standby and off mode, and networked standby, electric power consumption of electrical and electronic household and office equipment	Various requirements concerning power consumption- 2015	SEC
Commission Regulation (EC) 640/2009 implementing Directive 2005/32/EC - Ecodesign requirements for electric motors	Energy efficiency - 2015	SEC
Commission Regulation (EC) 641/2009 implementing Directive 2005/32/EC - Ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products	Energy efficiency - 2015	SEC
Commission Regulation (EC) 642/2009 implementing Directive 2005/32/EC - Ecodesign requirements for televisions	Power consumption – 2015 (beginning)	SEC
Commission Regulation (EC) 643/2009 implementing Directive 2005/32/EC - Ecodesign requirements for household refrigerating appliances.	Energy efficiency - 2015	SEC
Commission Regulation (EU) 813/2013 implementing Directive 2009/125/EC - Ecodesign requirements for space heaters and combination heaters	Various requirements concerning energy efficiency and noise - 2015	SEC

Commission Regulation (EU) No 814/2013 implementing Directive 2009/125/EC - Ecodesign requirements for water heaters and hot water storage tanks	Various requirements mainly concerning energy efficiency and noise - 2015	SEC
Commission Regulation (EU) 66/2014 implementing Directive 2009/125/EC - Ecodesign requirements for domestic ovens, hobs and range hoods	Various requirements concerning energy efficiency - 2015	SEC
Commission Regulation (EU) 548/2014 on implementing Directive 2009/125/EC with regard to small, medium and large power transformers	Various requirements concerning energy efficiency - 2015	SEC
Commission Regulation (EU) 1253/2014 implementing Directive 2009/125/EC - Ecodesign requirements for ventilation units	Various requirements concerning energy efficiency and noise- 2016 (beginning)	SEC
Commission Regulation (EU) 1194/2012 implementing Directive 2009/125/EC - Ecodesign requirements for directional lamps, light emitting diode lamps and related equipment	Energy efficiency and functionality requirements- 2016	SEC
Commission Regulation (EU) 617/2013 implementing Directive 2009/125/EC - Ecodesign requirements for computers and computer servers	Requirements related to energy consumption - 2016	SEC
Commission Regulation (EU) 66/2014 implementing Directive 2009/125/EC - Ecodesign requirements for domestic ovens, hobs and range hoods	Various requirements concerning energy efficiency - 2016	SEC
Commission Regulation (EU) 2015/1095 implementing Directive 2009/125/EC - Ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers	Energy efficiency -2016	SEC
Commission Regulation (EU) 1016/2010 implementing Directive 2009/125/EC with regard to ecodesign requirements for household dishwashers	Energy efficiency – 2016 (end)	SEC
Commission Regulation (EC) 1275/2008 implementing Directive 2005/32/EC - Ecodesign requirements for standby and off mode, and networked standby, electric power consumption of electrical and electronic household and office equipment	Various requirements concerning power consumption- 2017	SEC
Commission Regulation (EC) 245/2009 implementing Directive 2005/32/EC - Ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps	Lamp efficacy and lamp performance (stage 3) – 2017 FIN	SEC
Commission Regulation (EC) 640/2009 implementing Directive 2005/32/EC - Ecodesign requirements for electric motors	Energy efficiency - 2017	SEC
Commission Regulation (EC) 642/2009 implementing Directive 2005/32/EC - Ecodesign requirements for televisions	Power consumption – 2017 (beginning)	SEC
Commission Regulation (EU) 666/2013 implementing Directive 2009/125/EC - Ecodesign requirements for vacuum cleaners	Various requirements concerning energy efficiency, dust pick up, noise, hose durability, operational motor lifetime, etc.- 2017	SEC

Commission Regulation (EU) 813/2013 implementing Directive 2009/125/EC - Ecodesign requirements for space heaters and combination heaters	Various requirements concerning energy efficiency - 2017	SEC
Commission Regulation (EU) 814/2013 implementing Directive 2009/125/EC - Ecodesign requirements for water heaters and hot water storage tanks	Various requirements mainly concerning energy efficiency - 2017	SEC
Commission Regulation (EU) 66/2014 implementing Directive 2009/125/EC - Ecodesign requirements for domestic ovens, hobs and range hoods	Various requirements concerning energy efficiency - 2017	SEC
Commission Regulation (EU) 1253/2014 implementing Directive 2009/125/EC - Ecodesign requirements for ventilation units	Various requirements concerning energy efficiency and noise- 2018 (beginning)	SEC
Commission Regulation (EU) 2015/1188 implementing Directive 2009/125/EC - Ecodesign requirements for local space heaters	Energy efficiency and emissions of nitrogen oxides – 2018 (beginning)	SEC
Commission Regulation (EC) 244/2009 implementing Directive 2005/32/EC - Ecodesign requirements for non-directional household lamps	Lamp efficacy (stage 6) 2018 FIN	SEC
Commission Regulation (EU) 813/2013 implementing Directive 2009/125/EC - Ecodesign requirements for space heaters and combination heaters	Various requirements concerning emissions of nitrogen oxides - 2018	SEC
Commission Regulation (EU) 814/2013 implementing Directive 2009/125/EC - Ecodesign requirements for water heaters and hot water storage tanks	Various requirements concerning energy efficiency and the emission of nitrogen oxides - 2018	SEC
Commission Regulation (EU) 2015/1095 implementing Directive 2009/125/EC - Ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers	Energy efficiency and energy performance - 2018	SEC
Commission Regulation (EU) 2016/2281 implementing Directive 2009/125/EC - Ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units	Energy efficiency, energy performance, emission of nitrogen oxides - 2018	SEC
Commission Regulation (EC) 642/2009 implementing Directive 2005/32/EC - Ecodesign requirements for televisions	Power consumption – 2019 (beginning)	SEC
Commission Regulation (EU) 2015/1095 implementing Directive 2009/125/EC - Ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers	Energy efficiency - 2020 (beginning)	SEC
Commission Regulation (EC) 1275/2008 implementing Directive 2005/32/EC - Ecodesign requirements for standby and off mode, and networked standby, electric power consumption of electrical and electronic household and office equipment	Various requirements concerning power consumption- 2019	SEC
Commission Regulation (EU) 66/2014 implementing Directive 2009/125/EC - Ecodesign requirements for domestic ovens, hobs and range hoods	Various requirements concerning energy efficiency - 2019	SEC

Commission Regulation (EU) 2015/1189 implementing Directive 2009/125/EC - Ecodesign requirements for solid fuel boilers	Energy efficiency and emissions of pollutants ⁴⁵ - 2020	SEC
Commission Regulation (EU) 2016/2281 implementing Directive 2009/125/EC - Ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units	Energy efficiency, energy performance, emission of nitrogen oxides – 2021 (beginning)	SEC
Commission Regulation (EU) 548/2014 on implementing Directive 2009/125/EC with regard to small, medium and large power transformers	Various requirements concerning energy efficiency - 2021	SEC
Commission Regulation (EU) 2015/1185 implementing Directive 2009/125/EC - Ecodesign requirements for solid fuel local space heaters	Energy efficiency and emissions of pollutants ⁴⁶ - 2022 (beginning)	SEC
1f GHG emissions and ODS in general		
Reference	Target/Objective – deadline + info	SOER ET
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of fluorinated greenhouse gases shall be prohibited (2015)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of domestic refrigerators and freezers that contain HFCs with GWP of ≥ 150 shall be prohibited (2015)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of fire protection equipment containing HFC-23 shall be prohibited (2016)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 93% (2016) INT	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	Refrigeration, air conditioning and heat pump equipment charged with HFCs shall not be placed on the market unless accounted for within the quota system (2017)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of technical aerosols that contain HFCs with GWP ≥ 150 shall be prohibited (2018)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The use of sulphur hexafluoride in magnesium die-casting and in the recycling of magnesium die-casting alloys in installations using a quantity of sulphur hexafluoride below 850 kg per year is prohibited (2018)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 63% (2018) INT	Climate change
Regulation (EC) 1005/2009 on substances that deplete the ozone layer	Stop producing HCFCs (2019)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	Ban on the placing on the market of specific equipments containing HFCs (⁴⁷) (2020)	Climate change

⁴⁵ Particulate matters, organic gaseous compounds, carbon monoxide, nitrogen oxides.

⁴⁶ Particulate matters, organic gaseous compounds, carbon monoxide, nitrogen oxides.

⁴⁷ The placing on the market of the following shall be prohibited:

- refrigerators and freezers for commercial use containing HFCs with GWP $\geq 2\,500$;
- stationary refrigeration equipment containing HFCs with GWP $\geq 2\,500$;
- movable room air-conditioning equipment containing HFCs with GWP ≥ 150 ;

Regulation (EU) 517/2014 on fluorinated greenhouse gases	The use of fluorinated greenhouse gases, with a GWP \geq 2 500 to service or maintain refrigeration equipment with a charge size \geq 40 tonnes of CO ₂ equivalent shall be prohibited (2020)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 45% (2021) INT	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of a) refrigerators/freezers for commercial use containing HFCs with GWP \geq 150 and b) multipack centralised refrigeration systems for commercial use with a rated capacity \geq 40 kW containing fluorinated greenhouse gases with GWP \geq 150 shall be prohibited (2022)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of foams containing HFCs with GWP \geq 150 shall be prohibited (2023)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 31% (2024) INT	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The placing on the market of single split air-conditioning systems containing less than 3 kg of fluorinated greenhouse gases that contain fluorinated greenhouse gases with GWP \geq 750 shall be prohibited (2025)	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 24% (2027) INT	Climate change
Regulation (EU) 517/2014 on fluorinated greenhouse gases	The percentage to calculate the maximum quantity of HFCs to be placed on the market and corresponding quotas shall be 21% (2030) FIN	Climate change
1g Waste – Reuse, recycling and recovery targets		
Reference	Target/Objective – deadline + info	SOER ET
Directive 2000/53/EC, ELV Directive	Targets for end-of-life vehicles (by average weight per vehicle per year): - reuse and recovery: 95% - reuse and recycling: 85% (2015) FIN	Waste and resources
Directive 2012/19/EU, WEEE Directive	WEEE, with reference to Annex I categories: - cat. 1 or 10 (2015) INT: 85% recovery and 80% recycling - cat. 3 or 4: 80% recovery and 70% recycling - cat. 2, 5, 6, 7, 8 or 9: 75% recovery and 55% recycling Gas discharge lamps: 80% recycling	Waste and resources
Directive 2012/19/EU, WEEE Directive	WEEE, with reference to Annex III categories: - cat. 1 or 4: 85% recovery and 80% reuse and recycling	Waste and resources

- foams containing HFCs with GWP \geq 150 – extruded polystyrene.

	<ul style="list-style-type: none"> - cat. 2: 80% recovery and 70% reuse and recycling - cat. 5 or 6: 75% recovery and 55% reuse and recycling - cat. 3: 80% re cycling <p>(2018) FIN</p>	
1h Waste – Products and product making		
Reference	Target/Objective – deadline + info	SOER ET
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in EEE	No heavy metals (Pb, Hg, Cd, hexavalent Cr, PBB and PBDE) in vitro medical devices (2016)	Waste and resources
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in EEE	No heavy metals (Pb, Hg, Cd, hexavalent Cr, PBB and PBDE) in industrial control appliances (2017)	Waste and resources
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in EEE	No heavy metals (Pb, Hg, Cd, hexavalent Cr, PBB and PBDE) in all EEE (2019)	Waste and resources
3 TARGETS/OBJECTIVES WITH A DEADLINE BEFORE 2015 SET BY NON ENVIRONMENTAL LEGISLATION IN FORCE		
Reference	Target/objective + deadline and info	
Commission Regulation (EC) 244/2009 implementing Directive 2005/32/EC - Ecodesign requirements for non-directional household lamps	Lamp efficacy (stage 1) 2009 INT	
Commission Regulation (EC) 1275/2008 implementing Directive 2005/32/EC - Ecodesign requirements for standby and off mode, and networked standby, electric power consumption of electrical and electronic household and office equipment	Various requirements concerning power consumption- 2010	
Commission Regulation (EC) 107/2009 implementing Directive 2005/32/EC - Ecodesign requirements for simple set-top boxes	Power consumption– 2010	
Commission Regulation (EC) 244/2009 implementing Directive 2005/32/EC - Ecodesign requirements for non-directional household lamps	Lamp efficacy (stage 2) 2010 INT	
Commission Regulation (EC) 245/2009 implementing Directive 2005/32/EC - Ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps	Lamp efficacy and lamp performance (stage 1) – 2010 INT	
Commission Regulation (EC) 278/2009 implementing Directive 2005/32/EC - Ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies	Power consumption– 2010	
Commission Regulation (EC) 642/2009 implementing Directive 2005/32/EC - Ecodesign requirements for televisions	Power consumption, home-mode and peak luminance ratio – 2010	
Commission Regulation (EC) 643/2009 implementing Directive 2005/32/EC - Ecodesign requirements for household refrigerating appliances.	Energy efficiency - 2010	
Commission Regulation (EC) 244/2009 implementing Directive 2005/32/EC - Ecodesign requirements for non-directional household lamps	Lamp efficacy (stage 3) 2011 INT	

Commission Regulation (EC) 278/2009 implementing Directive 2005/32/EC - Ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies	Power consumption– 2011
Commission Regulation (EC) 640/2009 implementing Directive 2005/32/EC - Ecodesign requirements for electric motors	Energy efficiency - 2011
Commission Regulation (EC) 642/2009 implementing Directive 2005/32/EC - Ecodesign requirements for televisions	Power consumption– 2011
Commission Regulation (EC) 643/2009 implementing Directive 2005/32/EC - Ecodesign requirements for household refrigerating appliances.	Energy efficiency - 2011
Commission Regulation (EC) 107/2009 implementing Directive 2005/32/EC - Ecodesign requirements for simple set-top boxes	Power consumption– 2012
Commission Regulation (EC) 244/2009 implementing Directive 2005/32/EC - Ecodesign requirements for non-directional household lamps	Lamp efficacy (stage 4) 2012 INT
Commission Regulation (EC) 245/2009 implementing Directive 2005/32/EC - Ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps	Lamp efficacy and lamp performance (stage 2) – 2012 INT
Commission Regulation (EC) 642/2009 implementing Directive 2005/32/EC - Ecodesign requirements for televisions	Power consumption– 2012
Commission Regulation (EC) 643/2009 implementing Directive 2005/32/EC - Ecodesign requirements for household refrigerating appliances.	Energy efficiency - 2012
Commission Regulation (EU) 1015/2010 implementing Directive 2009/125/EC - ecodesign requirements for household washing machines	Energy efficiency – 2012
Commission Regulation (EU) 1016/2010 implementing Directive 2009/125/EC with regard to ecodesign requirements for household dishwashers	Energy efficiency - 2012
Commission Regulation (EU) 327/2011 implementing Directive 2009/125/EC - Ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW	Energy efficiency; Ventilator fans – 2013 (beginning)
Commission Regulation (EU) 547/2012 implementing Directive 2009/125/EC - Ecodesign requirements for water pumps	Energy efficiency – 2013 (beginning)
Commission Regulation (EC) 1275/2008 implementing Directive 2005/32/EC - Ecodesign requirements for standby and off mode, and networked standby, electric power consumption of electrical and electronic household and office equipment	Various requirements concerning power consumption- 2013

Commission Regulation (EC) 244/2009 implementing Directive 2005/32/EC - Ecodesign requirements for non-directional household lamps	Lamp efficacy (stage 5) 2013 INT
Commission Regulation (EC) 641/2009 implementing Directive 2005/32/EC - Ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products	Energy efficiency - 2013
Commission Regulation (EC) 643/2009 implementing Directive 2005/32/EC - Ecodesign requirements for household refrigerating appliances.	Energy efficiency - 2013
Commission Regulation (EU) 1016/2010 implementing Directive 2009/125/EC with regard to ecodesign requirements for household dishwashers	Energy efficiency - 2013
Commission Regulation (EU) 1194/2012 implementing Directive 2009/125/EC - Ecodesign requirements for directional lamps, light emitting diode lamps and related equipment	Energy efficiency and functionality requirements- 2013
Commission Regulation (EU) 1015/2010 implementing Directive 2009/125/EC - Ecodesign requirements for household washing machines	Energy efficiency – 2013 (end)
Commission Regulation (EC) 1881/2006 setting maximum levels for certain contaminants in foodstuffs.	Cocoa beans and derived products listed in the Annex shall not exceed the maximum level of polycyclic aromatic hydrocarbons set out in the Annex by 2012-2014.
Commission Regulation (EU) 206/2012 implementing Directive 2009/125/EC - Ecodesign requirements for air conditioners and comfort fans	Energy efficiency – 2014 (beginning)
Commission Regulation (EC) 643/2009 implementing Directive 2005/32/EC - Ecodesign requirements for household refrigerating appliances.	Energy efficiency - 2014
Commission Regulation (EU) 932/2012 implementing Directive 2009/125/EC - Ecodesign requirements for household tumble driers	Energy efficiency - 2014
Commission Regulation (EU) 1194/2012 implementing Directive 2009/125/EC - Ecodesign requirements for directional lamps, light emitting diode lamps and related equipment	Energy efficiency and functionality requirements- 2014
Commission Regulation (EU) 666/2013 implementing Directive 2009/125/EC - Ecodesign requirements for vacuum cleaners	Various requirements concerning energy efficiency, dust pick up, noise, hose durability, operational motor lifetime, etc.- 2014
Commission Regulation (EU) 617/2013 implementing Directive 2009/125/EC - Ecodesign requirements for computers and computer servers	Requirements related to energy consumption - 2014

4 MAIN NON ENVIRONMENTAL LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED

The economic sector 'Industry' is regulated and addressed by several pieces of non-environmental legislation and policy documents not setting any environmental target/objective, including the following:

- ✓ Policy documents: Commission Communication COM(2006)136, [Making Europe a pole of excellence on corporate social responsibility](#); Commission Communication COM(2008)2741, **The raw materials initiative : meeting our critical needs for growth and jobs**; Commission Communication COM(2010)352, **Europe, the world's No 1 tourist destination – a new political framework for tourism in Europe**; Commission Communication COM(2011)25, Tackling the challenges in commodity markets and on raw materials; Commission Communication COM(2012)433, Strategy for the sustainable competitiveness of the construction sector and its enterprises; Commission Communication COM(2012)582, A Stronger European Industry for Growth and Economic Recovery Industrial Policy Communication; Commission Communication COM(2013)407, **Action Plan for a competitive and sustainable steel industry in Europe**; Commission Communication COM(2016)705, Space Strategy for Europe; Commission Communication COM(2017)479, **Investing in a smart, innovative and sustainable Industry A renewed EU Industrial Policy Strategy**.
- ✓ Non-environmental legislation in force: Directive [2001/95/EC](#) on general product safety;⁴⁸ **Directive 2009/48/EC on the safety of toys**; [Regulation \(EEC\) No 315/93, EU procedures for contaminants in food](#); [Regulation \(EC\) No 1935/2004, Materials and articles intended to come into contact with food](#); [Regulation \(EC\) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EC](#); Construction Products Regulation 305/2011/EU.

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

AGRICULTURE

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD (SET BY ENVIRONMENTAL AND NON ENVIRONMENTAL POLICY DOCUMENTS AND LEGISLATION IN FORCE)

1a Biodiversity and nature

Reference	Target/Objective – deadline + info	SOER ET
Directive 2001/18/EC on the deliberate release into the environment of genetically modified organisms	MS in which GMOs are cultivated take appropriate measures in border areas of their territory to avoid possible cross-border contamination into neighbouring MS in which the cultivation of those GMOs is prohibited (2017)	Biodiversity and nature
COM(2011)244, EU Biodiversity Strategy	Target 3a: Maximise areas under agriculture across grasslands, arable land and permanent crops, covered by biodiversity-related measures under CAP, to bring a measurable improvement in the conservation status of species/habitats depending or affected by agriculture (2020)	Biodiversity and nature (split into agriculture + forestry)

1b Freshwater

Reference	Target/Objective – deadline + info	SOER ET
Decision 1386/2013/EU (7 th EAP)	Manage the nutrient cycle in a more sustainable and resource-efficient way (2020)	Freshwater

4 MAIN NON ENVIRONMENTAL LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED

The economic sector 'Agriculture' is regulated and addressed by several pieces of non-environmental legislation and policy documents not setting any environmental target/objective, including the following:

⁴⁸ In 2013, the European Commission adopted a proposal for new rules improving the safety of consumer products and market surveillance for all non-food products. The package also contains a proposal for a Regulation on consumer product safety ([COM/2013/78](#)) which should repeal Directive 2001/95/EC.

- ✓ Policy documents: Commission Communication COM(2014)179 **Action Plan for the future of organic production in the European Union.**
- ✓ Non-environmental legislation in force: **Regulation (Council Regulation) (EC) No 870/2004 establishing a Community programme on the conservation, characterisation, collection and utilisation of genetic resources in agriculture and repealing Regulation (EC) No 1467/94; Regulation (Council Regulation) (EC) No 834/2007 – organic production and labelling of organic products;**⁴⁹ Regulation (EU) No 1303/2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006; Regulation (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005;⁵⁰ Regulation (EU) No 1306/2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations (EEC) No 352/78, (EC) No 165/94, (EC) No 2799/98, (EC) No 814/2000, (EC) No 1290/2005 and (EC) No 485/2008;⁵¹ Regulation (EU) No 1307/2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy and repealing Council Regulation (EC) No 637/2008 and Council Regulation (EC) No 73/2009;⁵² Regulation (EU) 2016/2031 of the European Parliament of the Council of 26 October 2016 on protective measures against pests of plants, amending Regulations (EU) No 228/2013, (EU) No 652/2014 and (EU) No 1143/2014 of the European Parliament and of the Council and repealing Council Directives 69/464/EEC, 74/647/EEC, 93/85/EEC, 98/57/EC, 2000/29/EC, 2006/91/EC and 2007/33/EC (in force since 2019).

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

‘A’: adopted; ‘E.F.’: entered into force.

FORESTRY

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD (SET BY ENVIRONMENTAL AND NON ENVIRONMENTAL POLICY DOCUMENTS AND LEGISLATION IN FORCE)		
Reference	Target/Objective – deadline + info	SOER ET
COM(2011)244, EU Biodiversity Strategy	Target 3b: Forests Management Plans are in place for all forest that are publicly owned and for forests above a certain size, to bring a measurable improvement in the conservation status of forests ecosystems and species (2020)	Biodiversity and nature (split into agriculture + forestry)
COM(2008)645, Communication on deforestation	Halt global forest cover loss (2030)	Biodiversity and nature
4 MAIN NON ENVIRONMENTAL LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED		
The economic sector ‘Forestry’ is regulated and addressed by several pieces of non-environmental legislation and policy documents not setting any environmental target/objective, including the following:		
✓ Policy documents: Commission Communication COM(2006)302, EU Forest Action Plan.		

⁴⁹ The Regulation sets out the principles, aims and overarching rules of organic production, which are directly relevant to environmental protection. It is currently being revised (COM(2014)180).

⁵⁰ The Regulation sets out how the European Agricultural Fund for Rural Development (EAFRD) aims to develop the agricultural sector over the 2014-2020 period to be more geographically and environmentally balanced and climate-friendly.

⁵¹ The Regulation updates the rules for [cross-compliance](#). Seven standards for good agricultural and environmental conditions of land and 13 statutory management requirements have been shaped, under the first pillar of the CAP, as a condition of benefiting from direct payments.

⁵² The Regulation introduces, under the first pillar of the CAP, new green direct payments to which Member States shall allocate 30% of their direct payment. Farmers receive the green direct payment if they can show that they comply with three obligatory practices which are good for the environment and for climate (concerning crop diversification, maintenance of permanent grassland and ecological focus areas).

- ✓ Non-environmental legislation in force: Regulation -Council Regulation (EC) No [2173/2005](#) Forest law enforcement, governance and trade (FLEGT); Regulation (EU) No 995/2010 laying down the obligations of operators who place timber and timber products on the market.

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets.

'A': adopted; 'E.F.': entered into force.

FISHERY & AQUACULTURE

1 TARGETS AND OBJECTIVES RELEVANT TO THE 2015-2050 PERIOD (SET BY ENVIRONMENTAL AND NON ENVIRONMENTAL POLICY DOCUMENTS AND LEGISLATION IN FORCE)		
Reference	Target/Objective – deadline + info	SOER ET
COM(2006)360, Implementing sustainability in EU fisheries through maximum sustainable yield; Directive 2008/56/EC, Marine Strategy Framework Directive; COM(2011)571, Roadmap to a resource efficient Europe; COM(2011)244, EU biodiversity strategy to 2020	Fishing within MSY (2015)	Marine environment
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Landing obligation for specified commercial fisheries (2015)	Marine environment
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Landing obligation for specified commercial fisheries (2016)	Marine environment
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Landing obligation for specified commercial fisheries (2017)	Marine environment
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Landing obligation for specified commercial fisheries (2019)	Marine environment
COM(2011)244, EU Biodiversity Strategy	Target 4: Better management of EU fish stocks (2020)	Biodiversity and nature
Regulation (EU) 1380/2013 on the Common Fisheries Policy	Fishing within maximum sustainable yield exploitation rate for all stocks (2015-2020).	Marine environment
4 MAIN NON ENVIRONMENTAL LEGISLATION IN FORCE AND POLICY DOCUMENTS, NOT SETTING ANY TARGET/OBJECTIVE, THAT HAVE BEEN ANALYSED		
The economic sector 'Fishery and aquaculture' is regulated and addressed by several pieces of non-environmental legislation and policy documents not setting any environmental target/objective, including the following:		
<ul style="list-style-type: none"> ✓ Policy documents: Commission Communication COM(2007)73, Rights-based management tools in fisheries; Commission Communication COM(2012)494, Communication on blue growth, opportunities for marine and maritime sustainable growth;; ✓ Non-environmental legislation in force: Directive 2014/89/EU establishing a framework for maritime spatial planning; Regulation (Council Regulation) (EC) No 1342/2008 establishing a long-term plan for cod stocks and the fisheries exploiting those stocks and repealing Regulation (EC) No 423/2004; Regulation (Council Regulation) (EC) No 1224/2009 establishing a Community control system for ensuring compliance with the rules of the common fisheries policy; Regulation (EU) 2016/2336 establishing specific conditions for fishing for deep-sea stocks in the north-east Atlantic and provisions for fishing in international waters of the north-east Atlantic and repealing Council Regulation (EC) No 2347/2002. 		

Note: targets/objectives are listed in chronological order of the deadlines for implementation. When provided with the same deadline for implementation, objectives are listed first, followed by targets. 'A': adopted; 'E.F.': entered into force.

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