



Library Note

Leaving the European Union: Environment and Climate Change

On 20 October 2016, the House of Lords will debate the future of environmental and climate change policy in the light of the EU referendum.

The EU's authority to legislate for environmental protection has been enshrined in EU treaties since the Single European Act 1987. The Treaty of Lisbon 2009 amended the objectives of the EU's policy on the environment to state that environmental requirements must be integrated into all EU policies and added an express reference to combating climate change. The powers of the EU to legislate in respect of the environment and climate change are set out in the Treaty on the Functioning of the European Union. The [EU's 7th Environment Action Plan](#) sets out EU environmental and climate change policy plans up to 2020. It identifies three key objectives: protect, conserve and enhance the EU's natural capital; turn the EU into a resource-efficient, green and competitive low-carbon economy; and safeguard EU citizens from environment-related pressures and risks to health and wellbeing.

The EU has legislated on a range of environmental issues, including air and water quality, species and habitats protection, and waste management. A number of these directives have been transposed into UK law. In regards to climate change, the [EU's 2020 energy and climate change package](#), adopted in 2007, created a "binding set of legislation" to ensure the EU met its climate and energy targets for 2020. It is currently drafting legislative proposals to implement its [2030 climate and energy framework](#). In light of the EU referendum result, the UK Government has stated that while it remains a member of the EU "all rights and obligations of EU membership" would remain in force.

In December 2015, a conference of the parties of the United Nations Framework Convention on Climate Change took place in Paris, and an agreement on a successor to the Kyoto Protocol was reached. The central objective of the [Paris Agreement](#) was to keep a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C. The EU ratified the Agreement in October 2016, and the UK Prime Minister, Theresa May, has stated that the Government intends to complete the domestic procedures needed to ratify the Agreement by the end of the year.

This House of Lords Library briefing provides an overview of a selection of European legislation which relates to the environment and climate change, and outlines how it has been implemented in the UK. The briefing also briefly discusses the EU's international commitments to reducing greenhouse gas emissions. This briefing does not provide an analysis of the potential impacts of the UK leaving the EU. However, it does include a selection of recent statements made by the Government on these issues.

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I. Development of EU Competence in Environmental and Climate Change Law

The EU's authority to legislate for environmental protection has been enshrined in EU treaties since the Single European Act 1987,¹ which specifically added the environment as an EU competence.² The Treaty of Amsterdam 1999 further established the principle that environmental protection requirements must be integrated into the EU's other policies. The Treaty of Lisbon 2009 amended the objectives of the EU's policy on the environment to state that environmental requirements must be integrated into all EU policies "with a view to promoting sustainable development", and added an express reference to combating climate change. The environment and climate change are areas of competence that are shared between the EU and the member states, and therefore either party may take action.

The powers of the EU to legislate in respect of the environment and climate change are set out in the Treaty on the Functioning of the European Union (TFEU).³ The TFEU states that EU environment policy should contribute to the pursuit of the objectives of preserving, protecting and improving the quality of the environment; protecting human health; prudent and rational utilisation of natural resources; and promoting measures at international level to deal with regional or worldwide environmental problems.⁴ According to article 191(2) of the TFEU, EU policy on the environment must aim at a "high level of protection".⁵ It should be based on the precautionary principle as well as the principle that preventative action should be taken where necessary.⁶ Furthermore, environmental damage should be rectified at source and the polluter should pay. Article 193 stipulates that environmental legislation adopted by the EU would not prevent any member state from maintaining or introducing more stringent protective measures.⁷ Such measures must be compatible with the Treaties, and the Commission should be notified.

2. EU Environmental and Climate Change Policy

The [EU's 7th Environment Action Plan](#) (EAP) sets out EU environmental and climate change programme up to 2020. It also sets out the EU's vision for the longer term:

In 2050, we live well within the planet's ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued

¹ In the United Kingdom, the European Communities (Amendment) Act 1986 amended the European Communities Act 1972 so as to include in the definition of "the Treaties" and "the Community Treaties" certain provisions of the Single European Act signed at Luxembourg February 1986, and extend certain provisions relating to the European Court to any court attached thereto; and to amend references to the Assembly of the European Communities and approve the Single European Act.

² HM Government, [Review of the Balance of Competences between the United Kingdom and the European Union](#), February 2014, p 17; and House of Commons Environmental Audit Committee, [EU and the UK Environmental Policy](#), 19 April 2016, HC 537 of session 2015–16, p 6.

³ HM Government, [Review of the Balance of Competences between the United Kingdom and the European Union](#), February 2014, p 18.

⁴ Treaty on the Functioning of the European Union, article 191.

⁵ *ibid*, article 191(2); and HM Government, [Review of the Balance of Competences between the United Kingdom and the European Union](#), February 2014, p 18.

⁶ The precautionary principle may be invoked when a potentially dangerous effect is identified by a scientific and objective evaluation, but there is insufficient evidence for the risk to be quantified with certainty (HM Government, [Review of the Balance of Competences between the United Kingdom and the European Union](#), February 2014, p 18).

⁷ Treaty on the Functioning of the European Union, article 193.

and restored in ways that enhance our society's resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society.⁸

The 7th EAP came into force in January 2014, and identified three key objectives:⁹

- To protect, conserve and enhance the Union's natural capital.
- To turn the Union into a resource-efficient, green and competitive low-carbon economy.
- To safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing.

It lists four "enablers" in order to help the EU deliver these goals:¹⁰

- Better implementation of legislation.
- Better information by improving the knowledge base.
- More and wiser investment for environment and climate policy.
- Full integration of environmental requirements and considerations into other policies

To complete the programme, the EAP identifies two additional "horizontal priority" objectives:¹¹

- To make the Union's cities more sustainable.
- To help the Union address international environmental and climate challenges more effectively.

3. Environment and EU Law

The EU has legislated on a range of environmental issues including air quality, water quality, species protection and habitats protection, and waste management. The following sections will focus on these areas of EU environmental law. The European Commission's Directorate-General for the Environment provides further information about the EU's environmental policy, and its suite of legislation on the issue.¹²

3.1 Air Quality

The EU's air quality objective is to achieve "levels of air quality that do not give rise to significant negative impacts on, and risks to, human health and the environment".¹³ A number of EU directives relevant to air quality were transposed into UK law through the Air Quality Standard Regulations 2010, including the Ambient Air Quality Directive 2008 (2008/50/EC) and the Fourth Air Quality Daughter Directive 2004 (2004/107/EC). These two Directives set legally binding limits for concentrations in outdoor air of major air pollutants that impact public

⁸ European Commission, '[Environment Action Programme to 2020](#)', accessed 7 October 2016.

⁹ *ibid.*

¹⁰ *ibid.*

¹¹ *ibid.*

¹² European Commission, '[Environment](#)', accessed 10 October 2016.

¹³ European Environment Agency, '[Air Pollution](#)', 18 February 2015.

health, such as particulate matter and nitrogen dioxide (NO₂).¹⁴ They also require member states to draw up plans and programmes to guarantee compliance with legally binding limits by 2010. However, the 2008 Directive allows member states to submit an application to postpone the attainment date for the NO₂ limit values from 2010 up to 2015, subject to a submission to the Commission of air quality plans setting out how the limits will be met by the extended deadline.¹⁵ In 2013, the requirement for further reductions in emissions by 2030 was set out in the revised EU [Thematic Strategy on Air Pollution \(A Clear Air Programme for Europe\)](#).

Under the Government's existing plans, 16 out of 43 areas in the UK will not meet air quality directive legal limits for NO₂ for 2010 until 2020.¹⁶ In London, the limits are not expected to be met until 2025. In May 2013, the UK Supreme Court declared that the Government was in breach of article 13 of the 2008 Directive, which imposes an absolute obligation on member states to ensure that the limits and margins of tolerance for NO₂ are not exceeded in any zone or agglomeration after the deadline.¹⁷ The Supreme Court further ruled in April 2015 that the Government had to submit new air quality plans to the European Commission no later than 31 December 2015. In response to the Court's 2015 ruling, Department for Environment, Food and Rural Affairs (Defra) stated that work had been underway on revising the plans since February 2014, in order to meet EU targets in NO₂ "as soon as possible".¹⁸ It explained that it had been the Government's position to submit these plans before the end of 2015, and stressed that meeting NO₂ limits was "a common challenge across Europe with 17 member states exceeding limits".

The Government published a [new air quality plan](#) in December 2015, and have submitted it to the European Commission for its assessment.¹⁹ The air quality plan sets out the Government's intention to implement a new programme of clean air zones in five cities: Birmingham, Leeds, Southampton, Nottingham and Derby.²⁰ The plan states that these zones will reduce the pollution in city centres and encourage the replacement of old, polluting vehicles with modern, cleaner vehicles. Commenting on the Government's plan to establish clean air zones in the five cities, the House of Commons Environment, Food and Rural Affairs Committee stated that the programme "will impose a 'one size fits all' model", and recommended that Defra "give local authorities greater flexibility in order that they can tailor measures to best meet their local circumstances".²¹ However, in response, the Government stated that the measures will be

¹⁴ Department for Environment, Food and Rural Affairs, [Air Quality Plans for the Achievement of EU Air Quality Limit Values for Nitrogen Dioxide \(NO₂\) in the UK: Draft UK Overview Document](#), June 2011, p 2; Department for Environment, Food and Rural Affairs, '[UK and EU Air Quality Policy Context](#)', 14 February 2011; and Parliamentary Office of Science and Technology, [Ambient Air Quality](#), February 2014, p 3.

¹⁵ Department for Environment, Food and Rural Affairs, [Air Quality Plans for the Achievement of EU Air Quality Limit Values for Nitrogen Dioxide \(NO₂\) in the UK: Draft UK Overview Document](#), June 2011, p 4.

¹⁶ Department for Environment, Food and Rural Affairs, '[Request for Information: Air Pollution Infraction Fines](#)', May 2014; and Parliamentary Office of Science and Technology, [Air Ambient Air Quality](#), February 2014, p 3.

¹⁷ Supreme Court, '[Press Summary: R \(on the application of ClientEarth\) \(Appellant\) v Secretary of State for the Environment, Food and Rural Affairs \(Respondent\) \[2015\] UKSC 28 On appeal from \[2012\] EWCA Civ 897](#)', 29 April 2015.

¹⁸ BBC News, '[Court Orders UK to Cut NO₂ Air Pollution](#)', 29 April 2015.

¹⁹ Department for Environment, Food and Rural Affairs, '[Air Quality Plan for Nitrogen Dioxide \(NO₂\) in UK \(2015\)](#)', 17 December 2015.

²⁰ Department for Environment, Food and Rural Affairs, [Improving Air Quality in the UK: Tackling Nitrogen Dioxide in our Towns and Cities: UK Overview Document](#), December 2015, p i.

²¹ House of Commons Environment, Food and Rural Affairs Committee, [Air Quality](#), 27 April 2016, HC 479 of session 2015–16, p 13.

tailored according to local circumstances, based on the outcome of detailed local assessments and feasibility studies led by local authorities and funded by central government.²²

A further legal case was launched in April 2016 by the organisation ClientEarth, an organisation of environmental lawyers. The case is ongoing and seeks to challenge the Government to change its plans in order to reduce air pollution more quickly.²³ The case has received support from the London Mayor, Sadiq Khan, who has submitted legal documents stating that he was “concerned that compliance is achieved in as short a period as is possible in order to protect the health of those living and working in London”.²⁴

3.2 Nature Directives

At EU level, nature and biodiversity are protected by several laws, including the Habitats Directive and the Wild Birds Directive, which are collectively known as the ‘nature directives’.²⁵ The European Commission states that the two Directives form the “cornerstone” of Europe’s nature conservation policy.²⁶ The UK is subject to the requirements of the nature directives.

- The Habitats Directive (92/43/EEC) concerns the conservation of natural habitats and of wild fauna and flora.²⁷ It aims to promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. Articles 6, 12, 16 and 17 require member states to report on: the conservation status of habitats and species; compensation measures taken for projects having a negative impact on [Natura 2000](#) sites; and on derogations applied to the strict protection measures.
- The Birds Directive (2009/147/EC) is the codified version of the 1979 Directive 79/409/EEC, which is the oldest piece of EU legislation on the environment.²⁸ The Directive provides a legal framework for the conservation of wild birds naturally occurring in the EU, and for the protection of their habitat. All member states have to submit reports on the status and trend in bird populations (article 12), as well as on derogations (article 9) they may apply to the Directive’s obligations.

The nature directives established the EU-wide Natura 2000 ecological network of designated protected areas relating to specified habitats and birds, known as [Special Areas of Conservation](#) (SACs) and [Special Protection Areas](#) (SPAs) respectively.²⁹ These areas are safeguarded against “potentially damaging developments”.³⁰

²² House of Commons Environment, Food and Rural Affairs Committee, [Air Quality: Government Response](#), 13 September 2016, HC 665 of session 2016–17, p 7.

²³ Damian Carrington, [‘UK Government Faces Second Court Battle Over Air Pollution Plans’](#), *Guardian*, 28 April 2016.

²⁴ Damian Carrington, [‘Sadiq Khan Joins Air Pollution Court Case Against UK Government’](#), *Guardian*, 26 May 2016.

²⁵ European Commission, [‘Nature and Biodiversity Law’](#), accessed 7 October 2016; and House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 75. The European Commission provides further information on all [EU nature and biodiversity laws](#).

²⁶ European Commission, [‘Habitats Directive’](#), accessed 6 October 2016.

²⁷ *ibid.*

²⁸ European Commission, [‘Birds Directive’](#), accessed 6 October 2016.

²⁹ European Commission, [‘Habitats Directive’](#), accessed 6 October 2016; and House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 76.

³⁰ European Commission, [‘Habitats Directive’](#), accessed 6 October 2016.

In the UK, the Nature Directives have been transposed into UK law by a range of regulations since 1994.³¹ The Joint Nature Committee (JNCC) is the public body that advises the UK Government and devolved administrations on UK-wide and international nature conservation, oversees the directives' implementation and reports to the European Commission on the UK's compliance.³² In addition, the UK's legislative framework provides for a range of other international and national nature conservation designation areas, which have not been established under European directives. For example, the UK system of [Sites of Special Scientific Interests](#) (SSSIs), which provide statutory protection for sites "of special interest by reason of any of its flora, fauna, or geological or physiographical features".³³

In the UK, SACs and SPAs correspond to domestic SSSIs.³⁴ The nature directives require these sites to be "suitably" managed and protected by member states. For instance, certain assessments would have to be carried out if a proposed plan or project was to have a significant impact on such a site. Mitigation measures would need to be put in place where necessary before the projects could proceed. If such measures were not possible, the project could only proceed if there were [Imperative Reasons of Overriding Public Interest](#) (IROPI), for instance reasons relating to public health and safety, and then compensatory measures would be required, such as the creation of an alternative habitat.

In 2012, the European Commission launched the [Regulatory Fitness and Performance Programme](#) (REFIT), a rolling project to keep the entire stock of EU legislation under review.³⁵ As part of the REFIT, the Commission are currently evaluating the Birds and Habitats Directives to ensure that they are fit for purpose on the basis of the following criteria: relevance, effectiveness, efficiency, and coherence, as well as the legislation's EU added value.³⁶ Phase one of the review began in January 2015, and the Commission is scheduled to publish its report on the results of the fitness check in the last quarter of 2016.

The initial evaluation report, drawing on member state input and evidence from wider stakeholders, was published in January 2016. The report stated that there was a general consensus that the principles, aims and overall approach of both Directives remained valid and appropriate, while implementation could be improved.³⁷ It also found that the legal framework established through the nature directives fitted "neatly" within the broader framework of other EU environmental legislation and policies. It suggested that the evidence demonstrated that the benefits of the Directives "greatly outweigh their costs", and that their operation therefore "represents an efficient use of resources".³⁸ However, the report also highlighted that implementation was "complex and challenging".³⁹ It found that businesses and environmental

³¹ House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 77. The briefing provides further details about how the Directives have been transposed into law in the various parts of the UK.

³² Joint Nature Committee, '[Who We Are](#)', accessed 6 October 2016; and House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 76.

³³ Joint Nature Committee, '[Protected Areas Designations Directory](#)', accessed 6 October 2016; Joint Nature Committee, '[Guidelines for Selection of Biological SSSIs](#)', accessed 6 October 2016; and House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 76. The JNC provides further information on protected areas in the UK and Overseas Territories designated under international Conventions and European Directives.

³⁴ House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 76.

³⁵ European Commission, [Commission Communication on EU Regulatory Fitness \(2012\)](#), December 2012, pp 3–4; and European Commission, '[Fitness Check of the Birds and Habitats Directives](#)', accessed 7 October 2016.

³⁶ European Commission, [Fitness Check Mandate for Nature Legislation](#), February 2014, p 6.

³⁷ European Commission, [Evaluation Study to Support the Fitness Check of the Birds and Habitats Directives: Draft Final Report](#), 4 January 2016, p 512.

³⁸ *ibid*, p 513.

³⁹ *ibid*, p 512.

groups differed in their views about whether the associated administrative burdens were unnecessary, but shared the view that the burdens were often caused by “inefficient implementation at national, regional and local level”.⁴⁰

3.3 Water Quality

A number of EU directives concerning water quality have been transposed into UK law. They include the following:

European Water Framework Directive

The European Water Framework Directive (2000/60/EC) (WFD) provides a common framework for water management and protection in Europe.⁴¹ It established a system for the protection and improvement of all aspects of the water environment, including rivers, lakes, estuaries, coastal waters and groundwater.⁴² The WFD requires all member states to achieve ‘good’ qualitative and quantitative status of all water bodies (surface water and groundwater) by 2015. However, the 2015 time limit can be extended in certain circumstances. On 16 March 2016, in response to a written parliamentary question on the issue, the then Parliamentary Under Secretary at the Department for Environment, Food and Rural Affairs, Rory Stewart, confirmed that in England, 19 percent of water bodies were currently recorded as good status or better, 22 percent were predicted to achieve good status or better by 2021, and 75 percent of all water bodies had an objective of good or better status.⁴³ He reiterated that the WFD provided exemptions, which he explained allowed the deadline to be extended to 2021 or 2027 and, in some cases, “a less stringent objective to be set, for reasons of disproportionate cost or technical feasibility”.

Urban Waste Treatment Directive

The Urban Waste Treatment Directive (91/271/EEC) (UWWTD) aims to protect the environment from the adverse effects of urban waste water discharges and discharges from certain industrial sectors. It concerns the collection, treatment and discharge of domestic waste water, mixture of waste water and waste water from certain industrial sectors.⁴⁴ In March 2015, the European Commission referred the UK to the Court of Justice of the European Union (CJEU) over failures to ensure that urban waste water was adequately treated in 17 agglomerations.⁴⁵ The date of the Court’s judgment is still pending.⁴⁶ In 2012, the UK had been found in breach of the UWWTD by the CJEU as a result of frequent and large spillages of waste water in London.⁴⁷ However, the Court noted the UK’s proposal for a Thames Tideway

⁴⁰ European Commission, [Evaluation Study to Support the Fitness Check of the Birds and Habitats Directives: Draft Final Report](#), 4 January 2016, p 226.

⁴¹ A briefing on the Water Framework Directive can be found in the House of Commons Library paper, [Water Framework Directive: Achieving Good Status of Water Bodies](#) (27 November 2015).

⁴² House of Commons Library, [Water Framework Directive: Achieving Good Status of Water Bodies](#), 27 November 2015, p 9.

⁴³ House of Commons, [Written Question: Water: EU Law](#), 16 March 2016, 31014.

⁴⁴ European Commission, [Urban Waste Water Directive Overview](#), accessed 7 October 2016.

⁴⁵ European Commission press release, [Commission Refers the UK to Court Over Poor Waste Water Collection and Treatment](#), 26 March 2015.

⁴⁶ European Commission, [Eighth Report on the Implementation Status and the Programmes for Implementation \(as required by Article 17\) of Council Directive 91/271/EEC Concerning Urban Waste Water Treatment](#), 4 March 2016.

⁴⁷ Department for Environment, Food and Rural Affairs, [Creating a River Thames Fit for our Future: An Updated Strategic and Economic Case for the Thames Tideway Tunnel](#), October 2016, p 4.

Tunnel as a potential solution to the problem.⁴⁸ The Government granted Thames Water development consent in 2014, and the target date for completion is 2023.⁴⁹ The Tunnel is intended to operate as a large sewer under the River Thames, which aims to tackle the problem of water overflows.

Bathing Water Directive

The EU has legislated to safeguard public health and clean bathing waters since the 1970s.⁵⁰ The revised Bathing Water Directive (2006/7/EC) requires the UK to monitor and assess beaches and inland sites used by large numbers of bathers for certain parameters of bacteria. In 2015, the UK reported that 4.9 percent (31) of bathing water sites were in poor quality and 0.5 percent (3) were not possible to classify.⁵¹ All other sites (599) were either of sufficient, good or excellent quality.

3.4 Waste

Most regulation of waste management in the UK is regulated by EU law.⁵² EU waste policy and legislation on waste management is based on the “[waste hierarchy](#)”; which sets the following priority order for shaping waste policy and managing waste at the operational level: prevention, (preparing for) reuse, recycling, recovery and, as the least preferred option, disposal (which includes landfilling and incineration without energy recovery).⁵³

The Waste Framework Directive (2008/98/EC) sets out the basic concepts and definitions related to waste management and the waste hierarchy.⁵⁴ The Directive also introduced the “polluter pays principle” and the “extended producer responsibility”.⁵⁵ It incorporates provisions on hazardous waste and waste oils, and includes recycling and recovery targets to be achieved by 2020; 50 percent preparing for re-use and recycling of certain waste materials from households and other origins similar to households, and 70 percent preparing for re-use, recycling and other recovery of construction and demolition waste. The Directive stipulates that member states must adopt waste management plans and waste prevention programmes. The Directive required that member states established, by 12 December 2013, national waste prevention programmes, which should be evaluated at least every sixth year and be revised as appropriate. In December 2013, Defra published its waste prevention programme for England, [Prevention is Better than Cure: The Role of Waste Prevention in Moving to a More Resource Efficient Economy](#).⁵⁶ Defra stated that the aim of the programme was to “improve the environment and

⁴⁸ Department for Environment, Food and Rural Affairs, [Creating a River Thames Fit for our Future: An Updated Strategic and Economic Case for the Thames Tideway Tunnel](#), October 2016, p 4.

⁴⁹ *ibid*, p 14.

⁵⁰ House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 80.

⁵¹ European Environment Agency, [European Bathing Water Quality in 2015](#), May 2016, p 26.

⁵² House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 82.

⁵³ European Commission, ‘[Waste](#)’, accessed 7 October 2016.

⁵⁴ European Commission, ‘[Directive 2008/98/EC on Waste \(Waste Framework Directive\)](#)’, accessed 7 October 2016.

⁵⁵ According to the Organisation for Economic and Co-operation and Development’s definition, extended producer responsibility (EPR) is “an environmental policy approach in which a producer’s responsibility for a product is extended to the post-consumer stage of a product’s life cycle”; European Commission, [Development of Guidance on Extended Producer Responsibility \(EPR\)](#), 2014, p 10.

⁵⁶ Department for Environment, Food and Rural Affairs, [Prevention is Better than Cure: The Role of Waste Prevention in Moving to a More Resource Efficient Economy](#), December 2013.

protect human health by supporting a resource efficient economy, reducing the quantity and impact of waste produced whilst promoting sustainable economic growth”.⁵⁷

In September 2014, the House of Commons Environmental Audit Committee published its report, [An Environmental Scorecard](#), which found that in England, household recycling rates had “plateaued in recent years”, and that the rates at the time of publication were at 43 percent.⁵⁸ It noted that the National Audit Office had identified a risk that the UK may not meet the 50 percent target.⁵⁹ Wales had achieved a recycling rate of 56.2 percent in 2014/15 after the introduction of mandatory food waste collection.⁶⁰ However, it found that there was a wide variation in rates between local authorities in England, Scotland and Northern Ireland. In response to a written parliamentary question, in March 2016, Rory Stewart stated that the UK recycling rate had increased from 11 percent at the turn of the century, to the current level of 44.9 percent.⁶¹

There are a number of pieces of EU legislation which supplement the Waste Framework Directive, including directives on packaging and packaging waste, landfill, end of life vehicles, waste batteries and waste electrical and electronic equipment.⁶²

3.5 EU and UK Environment Policy: Recent Statements

Following the EU referendum result, the Government has stated that it “recognises that there will be a significant opportunity to substantively rethink” the UK’s approach to how it “conducts environmental policy both domestically and internationally”.⁶³ It has suggested that exiting the EU would allow the UK to “develop innovative British solutions [...] consistent with our own domestic priorities and international commitments”. However, it has stressed that while the UK remains a member of the European Union, “all rights and obligations of EU membership” would remain in force.

In response to a written parliamentary question on whether the Government would discuss the EU nature directives as part of the negotiations on the UK leaving the EU, Parliamentary Under Secretary at the Department for Environment, Food and Rural Affairs, Thérèse Coffey stated that:

Whilst we are still a part of the EU, the EU framework for our environment remains in place. Defra will continue to ensure the right policies are in place for a cleaner, healthier environment for everyone. The Government is considering the impacts of the decision to leave the EU, including future arrangements for existing legislation. We have a manifesto commitment to produce a 25 year plan for the environment. We all now have an opportunity to consider our long-term vision for the environment following the referendum vote.⁶⁴

⁵⁷ Department for Environment, Food and Rural Affairs, [Prevention is Better than Cure: The Role of Waste Prevention in Moving to a More Resource Efficient Economy](#), December 2013, p 5.

⁵⁸ House of Commons Environmental Audit Committee, [An Environmental Scorecard](#), 16 September 2016, HC 215 of session 2014–15, p 43.

⁵⁹ *ibid*, pp 43–4.

⁶⁰ Parliamentary Office of Science and Technology, [Trends in the Environment](#), January 2016, p 2.

⁶¹ House of Commons, [Written Question: Waste Disposal](#), 8 March 2016, 29645.

⁶² House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 82.

⁶³ House of Commons Environmental Audit Committee, [EU and UK Environmental Policy: Government’s Response to the Committee’s Third Report of Session 2015–16](#), 7 September 2016, HC 644 of session 2016–17, p 1.

⁶⁴ House of Commons, [Written Question: Nature Conservation: EU Law](#), 5 September 2016, 43316.

In April 2016, the House of Commons Environmental Audit Committee published its report, [EU and UK Environmental Policy](#), which concluded that:

[There are] significant unanswered questions about what relationship a UK outside the EU would have with it and with the rest of the world, just as there are unanswered questions as to how our relationship with the EU might develop.⁶⁵

However, it suggested that the UK would still need to “meet international environmental commitments made in the UN and elsewhere, many of which are reflected in EU law”.⁶⁶ In July 2016, the Committee launched an inquiry into the future of the natural environment in light of the EU referendum.⁶⁷

The House of Commons Library briefing, [Brexit: Impact Across Policy Areas](#), provides a discussion of the potential impact the UK’s exit from the EU might have in relation to the UK’s environmental policy.⁶⁸

4. EU and Climate Change

4.1 EU Climate Change Legislation

The [EU’s 2020 energy and climate change package](#) is a “binding set of legislation” to ensure the EU meets its climate and energy targets for 2020.⁶⁹ The targets were set by EU leaders in 2007, and enacted in legislation in 2009.

The package set three key targets to meet by 2020:

- 20 percent cut in greenhouse gas emissions (GHG) from 1990 levels.
- 20 percent of EU energy from renewables.
- 20 percent improvement in energy efficiency from 2007 levels.⁷⁰

The EU also set out a commitment in its [low-carbon roadmap](#) to reduce greenhouse emissions by 80–95 percent by 2050.⁷¹

The EU has introduced a number of schemes to meet the targets set out in the 2020 package. The following sections outline several of these measures:

EU Emissions Trading System

The EU Emissions Trading System (ETS) works by capping overall emissions from high-emitting industry sectors and power stations, with a yearly decrease in the level of the cap.⁷² Within this cap, companies can buy and sell EU Emission Allowances (EUAs) as needed. This cap-and-trade

⁶⁵ House of Commons Environmental Audit Committee, [EU and UK Environmental Policy](#), 19 April 2016, HC 537 of session 2015–16, p 27.

⁶⁶ *ibid.*

⁶⁷ House of Commons Environmental Audit Committee, [‘Future of the Natural Environment after the EU Referendum Inquiry Launched’](#), 21 July 2016.

⁶⁸ House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, pp 76–90.

⁶⁹ European Commission, [‘2020 Climate and Energy Package’](#), accessed 10 October 2016.

⁷⁰ *ibid.*; and Committee on Climate Change, [‘Climate Change Legislation in the EU’](#), accessed 10 October 2016.

⁷¹ *ibid.*

⁷² The European Commission provides details of the [main EU ETS legislation](#).

approach “gives companies the flexibility they need to cut their emissions in the most cost-effective way”.⁷³ The ETS covers around 45 percent of the EU’s GHG emissions.⁷⁴ In 2020, the target is for the emissions from these sectors to be 21 percent lower than in 2005 levels. In the UK, revenue from EUAs are retained by the Treasury.⁷⁵ Receipts from ETS auctions were £0.6 billion in 2014/15. This was expected to fall to £0.5 billion in 2015/16 and 2016/17, and to £0.4 billion in the following years up to 2020/21.⁷⁶

National Emission Reduction Targets

Under the Effort-Sharing Decision 2009 (406/2009/EC) (ESD), EU member states agreed binding annual targets until 2020 for cutting GHG emissions compared to 2005.⁷⁷ The ESD concerns emissions from most sectors not included in the EU ETS, such as transport (except aviation and international maritime shipping), buildings, small industry, agriculture and waste.⁷⁸ In 2013, these sectors accounted for more than 55 percent of GHG in the EU. However, emissions from land use, land-use change and forestry (LULUCF) are not included in the ESD.

By 2020, the national targets aim for a reduction of around 10 percent in total GHG emissions compared with 2005 levels.⁷⁹ GDP per capita has been used as the main criterion for setting the national targets in order to distribute efforts and costs in “a fair and equitable manner”. The “richest” member states have to reduce their emissions by up to 20 percent, while the “least wealthy” ones may increase them by up to 20 percent above 2005 levels, in order to allow for faster economic growth.⁸⁰

The UK has an annual GHG emissions cap set under the EU ESD.⁸¹ The UK’s target is to reduce emissions by 16 percent from 2005 levels, to be achieved through a declining target for emissions for each year from 2013 until 2020. Germany and France’s national target is to reduce emission levels by 14 percent.⁸² However, Bulgaria may increase emissions above 2005 levels by 20 percent, and Romania by 19 percent.

UK GHG emissions for 2014 under the ESD are provisionally estimated to be 325.3 million tonnes carbon dioxide equivalent (MtCO₂e). This is 28.9 MtCO₂e below the UK’s 2014 cap of 354.2 MtCO₂e.⁸³

⁷³ Committee on Climate Change, ‘[Climate Change Legislation in the EU](#)’, accessed 10 October 2016.

⁷⁴ European Commission, ‘[2020 Climate and Energy Package](#)’, accessed 10 October 2016.

⁷⁵ House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 80.

⁷⁶ HM Treasury, [Budget 2016](#), March 2016, HC 901 of session 2015–16, Table B5.

⁷⁷ European Commission, ‘[2020 Climate and Energy Package](#)’, accessed 10 October 2016.

⁷⁸ *ibid*; and European Parliamentary Research Service, [Effort Sharing Regulation, 2021–2030: Limiting Member States’ Carbon Emissions](#), September 2016, pp 3–4.

⁷⁹ *ibid*, p 4.

⁸⁰ European Commission, ‘[2020 Climate and Energy Package](#)’, accessed 10 October 2016; and European Parliamentary Research Service, [Effort Sharing Regulation, 2021–2030: Limiting Member States’ Carbon Emissions](#), September 2016, p 4.

⁸¹ Department of Energy and Climate Change, [UK Progress Towards GHG Emissions Reduction Targets](#), 19 March 2015, p 8.

⁸² Official Journal of the European Union, [Decision No 406/2009/EC of the European Parliament and of the Council](#), 23 April 2009.

⁸³ Department of Energy and Climate Change, [2014 UK Greenhouse Gas Emissions: Final Figures](#), 2 February 2016, p 9. ESD emissions estimates for 2013 and 2014 are provisional pending the completion of the 2016 EU review and compliance process.

Renewable Energy Directive 2009

The Renewables Energy Directive (2009/28/EC) (RED) was put in place to help the EU meet its renewables target.⁸⁴ It requires the EU to fulfil at least 20 percent of its total energy needs with renewables by 2020.⁸⁵ This is to be achieved through the attainment of individual national targets. Renewables include biomass, wind power, solar power, hydropower, and geothermal energy. In addition, the Directive states that at least 10 percent of final energy consumption in the transport sector must come from renewables by 2020.⁸⁶

The UK's target is that by 2020, 15 percent of its energy needs will be met by renewables. In 2008, renewables constituted 2.25 percent of energy sources in the UK.⁸⁷ In 2015, renewable energy use in the UK increased to 8.3 percent, compared to 7.1 percent in 2014.⁸⁸

4.2 EU 2030 Climate and Energy Framework

In October 2014, the [2030 climate and energy framework](#) was adopted by the European Council.⁸⁹ The European Commission states that the framework “builds on the 2020 package”. It set the following three key targets for the year 2030:⁹⁰

- At least 40 percent cuts in GHG emissions from 1990 levels.
- At least 27 percent share for renewable energy.
- At least 27 percent improvement in energy efficiency.

The Commission made its initial legislative proposals to implement the 2030 climate and energy framework at the end of February 2015.⁹¹ The proposals, set out in the [energy union package](#), “aim to provide a coherent approach to climate change, energy security and competitiveness, and contribute to achieving some of the goals agreed under the 2030 framework”. The energy union package is now being discussed in the Council of the European Union and European Council.

4.3 EU and the Paris Agreement

Background

In 1992, at the United Nations Conference in Rio de Janeiro, the [United Nations Framework Convention on Climate Change](#) (UNFCCC) was signed. It came into force in 1994, and there are currently 197 parties to the convention, including the EU.⁹² It “sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change”.⁹³ In 1997, an

⁸⁴ Committee on Climate Change, ‘[Climate Change Legislation in the EU](#)’, accessed 10 October 2016.

⁸⁵ European Commission, ‘[Renewable Energy Directive](#)’, accessed 12 October 2016.

⁸⁶ Committee on Climate Change, ‘[Climate Change Legislation in the EU](#)’, accessed 10 October 2016.

⁸⁷ House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, p 93.

⁸⁸ Department of Energy and Climate Change, [Renewable Energy in 2015](#), June 2016, Table 3.

⁸⁹ European Commission, ‘[2030 Climate and Energy Framework](#)’, accessed 10 October 2016.

⁹⁰ *ibid.*

⁹¹ European Council and Council of the European Union, ‘[The 2030 Climate and Energy Framework](#)’, accessed 10 October 2016.

⁹² United Nations Framework Convention on Climate Change, ‘[Status of Ratification of the Convention](#)’, accessed 10 October 2016.

⁹³ United Nations Framework Convention on Climate Change, ‘[The United Nations Framework Convention on Climate Change](#)’, accessed 10 October 2016.

additional protocol to the UNFCCC was adopted in Kyoto, Japan. It set binding targets for 37 industrialised countries and the European Union for reducing GHG emissions.⁹⁴ The targets amounted to an average 5 percent reduction in emissions compared to 1990 levels over the five-year period from 2008 to 2012.

In December 2015, a conference of the parties of the UNFCCC took place in Paris, and an agreement on a successor to the [Kyoto Protocol](#) was reached.⁹⁵ Prior to the conference, countries published Intended National Designated Contributions (INDCs) for reducing global GHG emissions. The aim was that the aggregated contributions would add up to a 2°C limit on increases in global temperatures.⁹⁶ UNFCCC analysis, published in November 2015, indicated that the pledges as made would not, if implemented, achieve that aim.⁹⁷

Nevertheless, it was agreed at the conference that the [Paris Agreement's](#) central aim would be to “strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5°C”.⁹⁸ The agreement set an aim for emissions to “peak as soon as possible”. It stipulated that five-yearly reviews of INDCs would take place together with rules on reporting and transparency. On 5 October 2016, the threshold for entry into force of the Paris Agreement was achieved.⁹⁹ The Agreement will enter into force on 4 November 2016. As of 10 October 2016, 75 parties out of the 197 parties to the Convention, including the EU, had ratified the Agreement.

EU Ratification

The principles of the EU wide INDC were agreed by the European Council in October 2014. This set the overall target, but did not allocate targets to individual countries.¹⁰⁰ The INDC was formally approved at an EU Environment Council meeting on 6 March 2015. The UK negotiated as part of the EU block, and internally set targets that—together with those of other member states—aimed to meet the EU’s overall target. The agreement on the 2030 framework, specifically the EU domestic GHG reduction target, formed the basis of the EU’s INDC contribution to the new global climate change agreement.¹⁰¹

In March 2016, the European Commission made a commitment in its assessment of the Paris Agreement, [The Road from Paris](#), that by March 2017 it would have the remaining key legislative proposals set out, including the sharing of effort by each member state.¹⁰² The Commission’s stated aim was to:

Implement the agreed 2030 regulatory framework domestically in a fair and cost efficient manner, providing maximum flexibility for member states and striking the right

⁹⁴ United Nations Framework Convention on Climate Change, ‘[Kyoto Protocol](#)’, accessed 10 October 2016.

⁹⁵ United Nations Framework Convention on Climate Change, ‘[Paris Agreement](#)’, accessed 10 October 2016.

⁹⁶ House of Lords Library, [Global Action on Climate Change](#), 26 October 2015, p 2.

⁹⁷ United Nations Framework Convention on Climate Change, [Synthesis Report on the Aggregate Effect of Intended Nationally Determined Contributions \(INDCs\)](#), 1 November 2015, p 4.

⁹⁸ United Nations Framework Convention on Climate Change, ‘[Paris Agreement](#)’, accessed 10 October 2016.

⁹⁹ *ibid.* The Paris Agreement was to come into force 30 days after it was ratified by 55 countries covering 55 percent of global emissions (UN Framework Convention on Climate Change, ‘[Paris Agreement: Status of Ratification](#)’, accessed 10 October 2016).

¹⁰⁰ European Council, [European Council \(23 and 24 October 2014\): Conclusions](#), 24 October 2014.

¹⁰¹ European Council and Council of the European Union, ‘[The 2030 Climate and Energy Framework](#)’, accessed 10 October 2016.

¹⁰² European Commission, [The Road from Paris: Assessing the Implications of the Paris Agreement](#), 2 March 2016.

balance between national and EU level action. As the next step, the Commission is working on the preparation of proposals for an Effort-Sharing Decision and on land use, land use change and forestry.¹⁰³

The Commission published a [draft council decision for ratifying the Agreement](#) in June 2016.¹⁰⁴ On 30 September 2016, EU ministers at a meeting of the Environment Council agreed ratification, subject to approval by the EU Parliament.¹⁰⁵ Following the Environment Council's decision, the draft document was approved by the EU Parliament with 618 votes for, 38 against and 31 abstentions on 4 October 2016.¹⁰⁶ Once Parliament had consented, the Council formally adopted the Decision. The EU deposited its instrument of ratification with a number of EU countries including Germany and France on 5 October 2016.

UK Ratification of the Paris Agreement and the Fifth Carbon Budget

On 7 June 2016, the then Secretary of State for Energy and Climate Change, Amber Rudd, stated that the UK would ratify the Paris Agreement together with the EU and other member states as soon as possible.¹⁰⁷ On 20 September 2016, the Prime Minister, Theresa May, stated that:

The UK will start its domestic procedures to enable ratification of the Paris Agreement and complete these by the end of the year.¹⁰⁸

In addition to its international commitments under the Paris Agreement, the UK has domestic targets for reducing GHG under the Climate Change Act 2008. The Act established a long-term legally-binding framework to reduce GHG emissions, committing the UK to reducing emissions by at least 80 percent below 1990 baselines by 2050, with an interim target to reduce GHG emissions by at least 34 percent compared to the 1990 baseline by 2020.¹⁰⁹ The Climate Change Act requires the Government to set five-yearly carbon budgets for GHG emissions. Additionally, the Act established the Committee on Climate Change (CCC), and the Government is required to consider its advice.

In January 2016, in response to the Paris Agreement, the CCC wrote to Amber Rudd, about the implications for the fifth carbon budget, which the Government was required to legislate for by 30 June 2016. The CCC concluded that:

The proposed fifth carbon budget would support an increase in EU ambition, consistent with the need for all parties to increase ambition to deliver the goals of the Paris Agreement.¹¹⁰

¹⁰³ European Commission, [The Road from Paris: Assessing the Implications of the Paris Agreement](#), 2 March 2016. The House of Commons Library briefing, [Paris Agreement Ratified](#) (5 October 2016), provides further information about how the EU intends to meet its targets.

¹⁰⁴ European Commission press release, [Climate Action: EU Prepares the Way for a Quick Ratification of Paris Agreement](#), 10 June 2016.

¹⁰⁵ European Commission, [Ministers Approve EU Ratification of Paris Agreement](#), 30 September 2016.

¹⁰⁶ European Parliament, [Results of Votes](#), 4 October 2016.

¹⁰⁷ House of Commons, [Written Question: Climate Change: EU Action](#), 7 June 2016, 38382.

¹⁰⁸ Rowena Mason and Adam Vaughan, [Theresa May: UK to Ratify Paris Climate Change Deal this Year](#), *Guardian*, 20 September 2016.

¹⁰⁹ Department of Energy and Climate Change, [UK Progress Towards GHG Emissions Reduction Targets](#), 19 March 2015, p 6.

¹¹⁰ Committee on Climate Change, [Implications of the Paris Agreement on the Fifth Carbon Budget](#), 28 January 2016.

The CCC's proposals for the fifth carbon budget were published in November 2015.¹¹¹ The Committee proposed that the budget should be set at 1,765 MtCO₂e for 2028–32, which would equate to a 57 percent reduction in emissions compared to 1990 levels. The Government accepted the CCC's advice and on 30 June 2016 the Government laid the draft Carbon Budget Order 2016 before the House of Commons, setting the budget at 1,725 MtCO₂e for the period 2028–30.¹¹² The order was approved by Parliament in July 2016.

The CCC is scheduled to publish further analysis of the implications of the Paris Agreement for UK climate targets and strategy in October 2016.¹¹³

4.4 EU and UK Climate Change Policy: Recent Statements

Following the result of the EU referendum on 30 June 2016, the Government has stated that it “remains committed to meeting its commitments under its existing domestic climate framework, the Climate Change Act”.¹¹⁴

The Government has also reiterated its commitment to the targets set by the EU and the Paris Agreement. For example, in a response to a parliamentary question, published on 5 September 2016, asking whether the UK would continue to take part in negotiations towards the 2030 EU climate framework, Nick Hurd, Minister of State at the Department for Business, Energy and Industrial Strategy, stated that:

The UK's commitment to tackling global climate change remains firm. We are committed to the UK Climate Change Act and the Paris Agreement, and have accepted the recommendation of the Committee on Climate Change on the fifth carbon budget.

Until we leave the EU, the UK remains a member state, with all of the rights and obligations this entails. We will therefore continue to participate in EU negotiations, including those on the EU's climate framework up to 2030. It is not appropriate at this point to speculate about arrangements for after the UK ceases to be a member state.¹¹⁵

The CCC has stated that in light of the referendum result, UK policies would have to be “developed to meet the UK commitments”.¹¹⁶ However, it stated that it was “too early to say” what the impact of the vote would be, or how the “UK policy should seek to evolve”. It stated that it would publish an analysis of the issue in autumn 2016.

¹¹¹ Committee on Climate Change, [The Fifth Carbon Budget: The Next Step Towards a Low-carbon Economy](#), November 2015, p 11.

¹¹² In accepting the CCC's advice, the Government rejected formal inclusion of emissions from international shipping within the fifth carbon budget. The Committee said that if international shipping emissions were excluded then an emission limit of 1,725 MtCO₂e would be appropriate over the period 2028–2032 (Committee on Climate Change, [CCC Welcomes Government Backing for Fifth Carbon Budget and Continued Ambition to Meet 2050 Target](#), 30 June 2016).

¹¹³ Committee on Climate Change, [CCC Welcomes News that UK Government will take Steps to Ratify Paris Agreement](#), 21 September 2016.

¹¹⁴ House of Commons, [Written Question: Climate Change](#), 5 September 2016, 43621.

¹¹⁵ House of Commons, [Written Question: Climate Change](#), 5 September 2016, 43540.

¹¹⁶ Committee on Climate Change, [Meeting Carbon Budgets: 2016 Progress Report to Parliament—Executive Summary](#), June 2016, p 9.

In July 2016, the House of Commons Energy and Climate Change Committee launched an inquiry examining the implications for UK energy policy of leaving the EU.¹¹⁷

The House of Commons Library briefing, [Brexit: Impact Across Policy Areas](#), provides an analysis of the potential impact the UK's exit from the EU might have in relation to climate change policy and the UK's ability to meet its international and domestic targets.¹¹⁸

¹¹⁷ House of Commons Energy and Climate Change Committee, '[Leaving the EU: Implications for UK Energy Policy Inquiry Launched](#)', 7 July 2016.

¹¹⁸ House of Commons Library, [Brexit: Impact Across Policy Areas](#), 26 August 2016, pp 91–6.

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