



BRIEFING PAPER

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Brexit and air quality

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Summary

Poor air quality is considered by the Government to be “the largest environmental risk to public health in the UK”. As well as human health, air pollution also has implications for the natural environment and for the economy. Due to the transboundary nature of air pollution, action to manage and improve air quality in the UK has been driven by both international agreements and EU legislation, as well as national and devolved legislation.

This paper gives an overview of the current air quality legal framework and sets out the speculation and what is known so far about what could change following Brexit.

Current law and policy

At international level, the Gothenburg Protocol and amendments to it set emissions ceilings levels for various pollutants. Its aim is to control long-range transboundary pollution. It is implemented at EU level through several directives, including the National Emission Ceilings Directives of 2001 and 2016. The 2001 Directive is implemented in the UK through the by the *National Emission Ceilings Regulations 2002*. The 2016 Directive sets emission ceilings which apply from 2020 and has been implemented by the [National Emission Ceilings Regulations 2018](#).

There is also legislation relating to ambient air quality (the air that more immediately surrounds us) at EU level through [Directive 2008/50/EC](#) (the “Air Quality Directive”). Instead of setting a ceiling for pollutants, it sets “limit values” (parameters that must not be exceeded) for concentrations of different pollutants. In the UK responsibility for meeting ambient air quality limit values is devolved to the national administrations in Scotland, Wales and Northern Ireland. The Secretary of State for Environment, Food and Rural Affairs has responsibility for meeting the limit values in England and Defra co-ordinates assessment and air quality plans for the UK as a whole.

The Air Quality Directive is implemented in the UK through:

- [Air Quality Standards Regulations 2010](#) (as amended);
- [Air Quality Standards \(Wales\) Regulations 2010](#) (as amended);
- [Air Quality Standards \(Scotland\) Regulations 2010](#) (as amended); and
- [Air Quality Standards Regulations \(Northern Ireland\) 2010](#) (as amended)

EU infraction proceedings

Enforcement mechanisms for failure to meet air quality limit values are contained in EU law and are not implemented directly in domestic legislation. In February 2014 the EU Commission began [infraction proceedings](#) against the UK for its failure to meet air quality targets for nitrogen dioxide set by The Air Quality Directive in certain parts of the UK. On 17 May 2018 the European Commission referred the UK to the Court of Justice of the EU for “for failure to respect limit values for nitrogen dioxide (NO₂), and for failing to take appropriate measures to keep exceedance periods as short as possible.”

Judicial review and air quality plan compatibility with EU legislation

Separate to the Commission proceedings, but arising from the same EU Air Quality Directive, private judicial reviews have also been brought against the UK Government stemming from the admitted and continuing failure of the United Kingdom, since 2010, to comply (in certain zones), with the limits for nitrogen dioxide levels. These proceedings

have resulted in the Government being required to produce a number of different air quality plans aimed at reducing nitrogen dioxide levels.

Brexit: statements, concerns and uncertainties

Until a final Brexit agreement is reached with the EU, much of what will happen to air quality standards and enforcement following Brexit is the subject of speculation. The Government has been clear that it has no plans to change limit values and targets for air quality following Brexit. The Government's intention is that pursuant to the [European Union \(Withdrawal\) Act 2018](#), law derived from the EU, including air quality legislation, would be converted into domestic law after Exit Day. Depending on the terms agreed of any future trading arrangements, once the UK has left the EU, the UK could then potentially amend air quality standards and review any deadlines for meeting them.

While the [European Union \(Withdrawal\) Act 2018](#) will convert the current framework of air quality targets, the role that EU institutions play in monitoring and enforcing these targets will be lost. There has been considerable debate over the loss of the role of EU institutions in monitoring and enforcing environmental law, including on air quality, following Brexit and over the future of EU environmental principles.

In response to concerns raised, the Government held a consultation on [environmental principles and governance](#) from May-August 2018. It proposed the creation of a new statutory independent environmental watchdog to hold government to account on its environmental obligations; and options for establishing environmental principles in the UK. A [draft Environment \(Principles and Governance\) Bill](#) was published on 19 December 2018. A Library briefing paper, [Environmental principles and governance: the draft Bill](#), provides background and reaction to the Bill. A further part to this Bill is expected to be published in the next Parliamentary session which will include legislative measures to improve air quality, stemming from proposals in the Government's [Clean Air Strategy 2019](#).

One of the areas that the [Government has indicated that it might change post-Brexit](#) is how air quality is monitored and assessed in order to provide requirements that are more targeted and focussed to UK needs.

Some of the [Government's Brexit "no deal" preparation technical notices](#) have implications for air quality policy. These include:

- [Upholding environmental standards if there's no Brexit deal](#);
- [Industrial emissions standards \('best available techniques'\) if there's no Brexit deal](#), 13 September 2018; and
- [Reporting CO₂ emissions for new cars and vans if there's no Brexit deal](#), 13 September 2018

For further information on related issues see Library briefing papers, [Air Pollution: Meeting Nitrogen Dioxide Targets](#) and [Brexit and the environment](#).

1. Sources of air pollution

Air pollution can come from a variety of different pollutants and stem from a variety of different sources.

Some of the principal pollutants that are relevant to this paper include:

- **Sulphur dioxide (SO₂):** An acid gas formed when fuels containing sulphur impurities are burned. The main man-made sources include fossil fuel combustion and incineration of waste.¹
- **Nitrogen oxides:** Compounds formed when nitrogen and oxygen combine. NO_x, which comprises nitric oxide (NO) and nitrogen dioxide (NO₂), is emitted from combustion processes. NO is subsequently oxidised to form NO₂, although some NO₂ is emitted directly. Main sources include power generation, industrial combustion and road transport.²
- **Particulate matter (PM):** Small breathable particles classified according to size. PM is not a single compound. It is made up of a mixture of solid and liquid particles of organic and inorganic chemicals; and includes some naturally occurring ones, such as salt and dust.³ Within this category, PM is split further into PM₁₀ and PM_{2.5}, which reflects the size of the particles. The smaller the particle, the further it can penetrate into the lungs through inhalation.⁴ Sources of PM are classified as either primary, such as particles from engine combustion or break and tyre wear; or secondary, when other chemicals react to form PM in the atmosphere.
- **Ozone (O₃):** A pollutant gas which is not emitted directly from any source in significant quantities, but is produced by reactions between other pollutants (such as NO_x and **Volatile Organic Compounds** (VOCs)), in the presence of sunlight.⁵ Ozone is not reported as part of transboundary pollution obligations as it is not a primary pollutant. Ozone acts as an irritant to the eyes, nose and lungs. It can also affect vegetation, impacting crop yields and ecosystems.⁶
- **Lead and heavy metals,** for example, arsenic, cadmium, mercury and nickel. Anthropogenic emissions of toxic metals originate mainly from fossil fuel combustion, industrial processes and waste incineration.⁷
- **Polycyclic Aromatic Hydrocarbons (PAH).** PAHs are a large group of chemical compounds that are toxic and carcinogenic. This group includes Benzo[a]pyrene (BaP). The main sources of

¹ European Environment Agency, [Air quality in Europe 2017](#), October 2017, p16

² HM Government publication, Defra, [Air Pollution in the UK 2016](#), September 2017, glossary

³ WHO Fact Sheet, [Ambient \(outdoor\) air quality and health](#), September 2016

⁴ Defra, [Air Pollution in the UK 2016](#), September 2017, pvii

⁵ HM Government publication, Defra, [Air Pollution in the UK 2016](#), September 2017, glossary

⁶ Air Quality Expert Group, [Ozone in the United Kingdom](#), 2009

⁷ European Environment Agency, [Air quality in Europe 2017](#), October 2017, p17

BaP are domestic heating (in particular wood and coal burning), waste burning, coke production and steel production.⁸

These pollutants have been chosen for this paper because the regulation of them highlights the interaction between EU and UK legislative and policy regimes, as well as the monitoring, reporting and enforcement mechanisms in relation to them.

As seen from this list, the sources creating these pollutants are wide-ranging and cover a range of natural and anthropogenic sources, including the combustion of fossil fuels for industrial and domestic processes, incineration of waste, emissions from traffic, chemical and photo-chemical reactions. For further information see the Defra publication [What are the causes of Air Pollution](#).

1.1 Reasons for concern

Air pollution is cause of concern for human health, the natural environmental and on the economy.

It is widely acknowledged that air pollution has a significant public health impact.⁹ The World Health Organisation (WHO) has published its own [Air quality guidelines](#), 2005, which offer global guidance on thresholds and limits for key air pollutants that pose health risks.

The WHO has also published a [WHO Global Urban Ambient Air Pollution Database](#) (update 2016). The summary to it states that globally, over 80% of people living in urban areas where levels are monitored are exposed to air quality levels that exceed WHO limits and that people living in low income cities were the most likely to be affected.¹⁰

An April 2017 briefing from the Royal College of Physicians (RCP) on [Brexit: What does it mean for air quality?](#), gave a summary of some of the health implications of poor air quality:

- Outdoor air pollution causes an estimated 40,000 deaths in the UK every year.
- Exposure to outdoor air pollution is estimated to lead to a loss of 15 minutes of life expectancy each day.
- In addition to the health implications, air pollution has a significant impact on business and our health services. In the UK, these costs add up to more than £20 billion every year.
- Exposure to outdoor air pollution is associated with lifelong health implications, including: effects on foetal development (particularly in relation to lung and kidney development), and increases in heart attacks and strokes for those in later life. Air pollution is also linked to asthma, diabetes, dementia, obesity and cancer.¹¹

⁸ European Environment Agency, [Air quality in Europe 2017](#), October 2017, p16

⁹ WHO, [Ambient \(outdoor\) air quality and health](#), September 2016

¹⁰ WHO, [WHO Global Urban Ambient Air Pollution Database](#) (update 2016)

¹¹ Royal College of Physicians, [Brexit: What does it mean for air quality?](#) April 2017

The Government's July 2017 [UK plan for tackling roadside nitrogen dioxide concentrations](#) provides a summary of some of the implications of poor air quality on public health, the natural environment and the economy:

11. Poor air quality is the largest environmental risk to public health in the UK. It is known to have more severe effects on vulnerable groups, for example the elderly, children and people already suffering from pre-existing health conditions such as respiratory and cardiovascular conditions. Studies have suggested that the most deprived areas of Britain bear a disproportionate share of poor air quality.

12. Air pollution also results in damage to the natural environment. NO₂ contributes to acidification and eutrophication of soil and watercourses, which impacts on animal and plant life and biodiversity. It also contributes to local ozone production which has public health impacts and damages agricultural crops, forests and plants.

13. Air pollution has social costs and risks the potential for economic growth. It also impacts upon people of working age which can have economic effects, for instance if they have to take days off work due to air pollution-related health problems. Poor air quality is estimated to have had a total cost of up to £2.7 billion through its impact on productivity in 2012.¹²

For a selection of further views and studies about the impacts of air pollution see:

- [Reports and statements](#) from the Committee on the Medical Effects of Air Pollutants (COMEAP);
- written evidence submitted to the joint select committee inquiry into [Improving Air Quality](#);
- [Chief Medical Officer annual report 2017: health impacts of all pollution – what do we know?](#) 2 March 2018; and
- section 1.3 of the European Environment Agency report, [Air quality in Europe 2017](#), October 2017.

¹² HM Government, [UK plan for tackling roadside nitrogen dioxide concentrations](#), July 2017, p3

2. The integration of EU air quality law

Due to the transboundary nature of air pollution, action to manage and improve air quality in the UK has been driven by both international agreements and EU legislation, as well as domestic legislation.

Box 1: Competence on air quality: an example of ambient air control

EU law

The EU [Directive 2008/50/EC](#), (the Air Quality Directive), sets legally binding standards for ambient air quality (the air that surrounds us). It sets limit values for concentrations of various pollutants and dates by which targets must be achieved. For example, in respect of nitrogen dioxide (NO₂) it sets a maximum annual mean concentration of no more than 40µg (microgram)/m³; and an hourly mean concentration of 200µg/m³ not to be exceeded more than 18 times in a year.

UK and devolved nations legislation

In the UK, responsibility for meeting air quality limit values is devolved to the national administrations in Scotland, Wales and Northern Ireland. The Secretary of State for Environment, Food and Rural Affairs has responsibility for meeting the limit values in England and the Department for Environment, Food and Rural Affairs (Defra) co-ordinates assessment and air quality plans for the UK as a whole. The Air Quality Directive is implemented in the UK through:

- [Air Quality Standards Regulations 2010](#) (as amended);
- [Air Quality Standards \(Wales\) Regulations 2010](#) (as amended);
- [Air Quality Standards \(Scotland\) Regulations 2010](#) (as amended); and
- [Air Quality Standards Regulations \(Northern Ireland\) 2010](#) (as amended)

Each devolved nation has discretion to go above and beyond the EU requirements. For example, Scotland has set a stricter limit value for PM_{2.5} than required by the Air Quality Directive and those limits adopted in the other UK countries.

Monitoring and enforcement

The UK is required to report air quality data on an annual basis to the European Commission under the Air Quality Directive.

EU law is monitored and enforced by the European Commission under Article 258 of the Treaty on the Functioning of the European Union, as the "Guardian of the Treaties". It is overseen by the Court of Justice of the European Union (CJEU), which can levy fines on Member States that are found to be in breach of EU law. This enforcement mechanism does not stem from the Air Quality Directive itself.

The need for an air quality plan

Under article 24 of the Air Quality Directive, where there is a risk that the levels of pollutants will exceed one or more of the thresholds, Member States "shall draw up action plans indicating the measures to be taken in the short term in order to reduce the risk or duration of such an exceedance." Following recognition that a number of UK zones had not met the Directive's limits in respect of nitrogen dioxide, the Government has produced a number of successive plans to tackle roadside nitrogen dioxide levels. See box 3 for further information.

The legislation in the sections below was selected for this paper to highlight the interaction between international agreements, EU and domestic law, as well as interaction with legislation and policy in the devolved nations. Legislation has also been selected where it is likely to be of interest to MPs because of recent and/or forthcoming legislative change at EU level. There are other pieces of legislation which deal with other different air pollutants which are not covered further in this paper.

2.1 International agreement: the Gothenburg Protocol 1999

The United Nations Economic Commission for Europe (UNECE) Convention on Long-Range Transboundary Air Pollution was extended in 1999 by the [Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone](#), with the aim of reducing emissions of transboundary air pollution. It set national emissions ceilings for sulphur, nitrogen oxides, volatile organic compounds (VOCs) and ammonia for 2010. The EU and the UK are both contracting parties to the Protocol.

In 2012, decisions amending the Protocol, known as the “2012 Amendment” set new emissions ceilings for sulphur dioxide, nitrogen oxides, ammonium and VOCs to be achieved by 2020 and beyond.¹³ The emissions reductions targets were also extended to include PM_{2.5}. The acceptance of the 2012 Amendment on behalf of the European Union was published by the Commission in the Official Journal [Council Decision \(EU\) 2017/1757](#) of 17 July 2017.

The protocol is implemented at EU level through several EU directives. These include: *Directive (EU) 2016/2284* on the reduction of national emissions of certain atmospheric pollutants; and *Directive (EU) 2015/2193* on the limitation of emissions of certain pollutants into the air from medium combustion plants.

The enforcement provisions of the Gothenburg Protocol to the Convention on Long Range Transboundary Air Pollution are summarised in a paper by the UK Environmental Law Association (UKLEA) as follows:

Decision 1997/2 of the Executive Body of the Convention adopted a non-compliance procedure applicable to all the Protocols under the Convention. This creates an International Committee formed of eight Parties which periodically reviews compliance with the reporting requirements of the protocols to consider any submissions or referrals made to it concerning a Party's non-compliance with treaty obligations. The Committee is required to report and make recommendations annually to the Executive Body on cases of non-compliance. The decision does not expressly specify the range of measures that can be imposed on a Party in non-compliance.¹⁴

¹³ UNECE, [Parties to UNECE Air Pollution Convention approve new emission reduction commitments for main air pollutants by 2020](#), 4 May 2012

¹⁴ UK Environmental Law Association, [Brexit and Environmental Law: The UK and International Environmental Law after Brexit](#), September 2017, p90

The Defra [Air Pollution in the UK 2017](#), September 2018 report states that the UK meets all current emission ceilings as provided by the Gothenburg Protocol:

The UK continues to meet current international and EU ceilings for emissions of ammonia, non-methane volatile organic compounds and sulphur dioxide.¹⁵

2.2 EU Legislation

National Emissions Ceilings Directives 2001 and 2016

The Gothenburg Protocol is implemented, among other Directives, in the EU through the [2001 National Emission Ceilings Directive](#) (the “NECD 2001”). The NECD 2001 sets national “ceilings” for air pollutants. The ceilings cover four pollutants: nitrogen oxides (NO_x); sulphur dioxide (SO₂); non-methane volatile organic chemicals (NMVOCs); and ammonia, to be met from 2010 and which will continue to apply until 2020.¹⁶

The NECD 2001 was transposed into UK legislation by the *National Emission Ceilings Regulations 2002*. Member States have to report their emission inventories annually to the European Environment Agency (EEA) and the European Commission in order to monitor progress and verify compliance. The Government-funded National Atmospheric Emissions Inventory website reports that the UK is meeting its targets:

Analysis of compliance is undertaken every year and presented in the EEA’s NECD status reports ([latest version 2015](#)). The UK has met its targets for all four pollutants for all years since 2010 inclusive.¹⁷

A revised NECD ([2016/2284/EU](#)) (the “2016 Directive”), was agreed in 2016. It sets new emission reduction commitments for each Member State for the NECD 2001 pollutants and additionally for fine particulates (PM_{2.5}) to be met by 2020 and 2030. The 2016 Directive will replace the NECD 2001 from 1 July 2018.¹⁸ It was transposed in UK legislation by the [National Emission Ceilings Regulations 2018](#) (SI No.129), which came into force on 1 July 2018.

Member states were required by Article 6 of the 2016 Directive to establish, by 1 April 2019 at the latest, a National Air Pollution Control Programme which must be regularly updated, at least every four years. This is a governance mechanism designed to ensure that the reduction commitments for 2020 and 2030 are met.¹⁹

On 1 April 2019 the UK Government, alongside the Scottish Government, Welsh Government and the Northern Ireland Department

¹⁵ Defra, [Air Pollution in the UK 2017](#), September 2018, p12

¹⁶ National Atmospheric Emissions Inventory website, [National Emissions Ceilings Directive \(NECD\)](#) [on 18 March 2019]

¹⁷ National Atmospheric Emissions Inventory website, [National Emissions Ceilings Directive \(NECD\)](#) [on 18 March 2019]

¹⁸ National Atmospheric Emissions Inventory website, [National Emissions Ceilings Directive \(NECD\)](#) [on 18 March 2019]

¹⁹ EU Commission, [Draft Guidance on National Air Pollution Control Programmes](#), 10 March 2017

for Agriculture, Environment and Rural Affairs, published a [National Air Pollution Control Programme](#) (NAPCP).

The NAPCP is a UK wide document and sets out the proposed measures and technical analysis, which demonstrate how the legally binding 2020 and 2030 emission reduction commitments for nitrogen oxides, ammonia, non-methane volatile organic compounds, particulate matter and sulphur dioxide could be met across the UK.

A consultation document published prior to the publication of the final version of the NAPCP indicated that it included measures already set out in the UK Government's [Clean Air Strategy 2019](#), which applies to England, rather than new measures. It argues that other measures from across the UK, "will only increase compliance and emission reductions."²⁰

The Air Quality Directive 2008

Whereas the Gothenburg Protocol and the National Emission Ceilings Directives are concerned with transboundary air pollution and control of pollutants that cross national borders, the EU [Directive 2008/50/EC](#) on ambient air quality and cleaner air for Europe sets legally binding standards for ambient air quality (the more immediate air that surrounds us). Instead of setting a ceiling for pollutants, it sets limit values for concentrations of them.

Limit values are legally binding and must not be exceeded. They are set at the same level for all countries for individual pollutants and comprise a concentration value, an averaging period for the concentration value, a number of exceedances allowed (per year) and a date by which it must be achieved. Some pollutants have more than one limit value, for example relating to short-term average concentrations (such as the hourly mean) and long-term average concentrations (such as the annual mean).²¹

Box 2: Air Quality Directive emission limits and targets for NO_x, PM and Ozone for the protection of human health

- **By January 2005 for PM₁₀:** a maximum annual mean concentration of no more than 40µg/m³ ; and a 24 hour mean concentration of 50µg/m³ not to be exceeded more than 35 times a year.
- **By January 2010 for NO₂:** a maximum annual mean concentration of no more than 40µg/m³; and an hourly mean concentration of 200µg/m³ not to be exceeded more than 18 times in a year.
- **By January 2015 for PM_{2.5}:** a maximum annual mean concentration of 25µg/m³.
- **By January 2020 for PM_{2.5}:** a maximum annual mean concentration of 20µg/m³.
- **By January 2010 for ozone:** a target of a daily 8 hour ozone mean of 120 µg/m³ not to be exceeded more than 25 days year (averaged over 3 years). A long-term objective of a daily 8 hour ozone mean of 120 µg/m³, with no exceedances from January 2020.

µg = microgram

The Directive allows for Member States to apply to the European Commission to postpone the deadline for meeting the limit values for

²⁰ HM Government, [Air Quality: Consultation on draft National Air Pollution Control Programme](#), February 2019, p3

²¹ Defra, [Air Pollution in the UK 2016](#), September 2017

certain pollutants in a particular area. For example, this is by three years for PM₁₀ and up to five years for NO₂. The Commission must approve the extension to the deadline.

Under article 24 of the Directive, where there is a risk that the levels of pollutants will exceed one or more of the alert thresholds specified in the Directive, Member States “shall draw up action plans indicating the measures to be taken in the short term in order to reduce the risk or duration of such an exceedance.”²² The UK has produced a number of these plans. See box 3 in this paper below for further information.

UK implementation

The Air Quality Directive is implemented in the UK through:

- [Air Quality Standards Regulations 2010](#) (as amended);
- [Air Quality Standards \(Wales\) Regulations 2010](#) (as amended);
- [Air Quality Standards Regulations \(Northern Ireland\) 2010](#) (as amended); and
- [Air Quality Standards \(Scotland\) Regulations 2010](#) (as amended). Scotland has set stricter levels for PM₁₀ and PM_{2.5} than the EU requirements. In April 2016, the Scottish Government became the first country in Europe to adopt the World Health Organisations recommended guideline value for PM_{2.5} of 10µg/m³ as an annual mean threshold.

Further information about compliance and enforcement of the EU Air Quality Directive is provided below in section 3 of this paper.

Fourth Daughter Directive (arsenic, cadmium, mercury, nickel and PAHs)

[Directive 2004/107/EC](#) of 15 December 2004, (referred to as “the Fourth Daughter Directive”), covers the four elements cadmium, arsenic, nickel and mercury, together with polycyclic aromatic hydrocarbons (PAH). As well as setting limit values for these elements (apart from mercury), the Directive sets monitoring and reporting requirements for member states.²³

It is implemented in the UK through the same regulations as made in relation to the Air Quality Directive ([Directive 2008/50/EC](#)), as set out above.

In relation to compliance with requirements of this Directive, the Defra Air Pollution in the UK 2017 report stated:

All zones met target values for arsenic, cadmium and nickel but some zones exceeded the target value for benzo[a]pyrene.²⁴

Medium Combustion Plant Directive

The [Medium Combustion Plant Directive](#) (MCPD) entered into force on 18 December 2015 and had to be transposed by Member States by 19

²² Article 24, [Directive 2008/50/EC on ambient air quality and cleaner air for Europe](#)

²³ Defra, [Air Pollution in the UK 2016](#), September 2017

²⁴ Defra, [Air Pollution in the UK 2017v](#), September 2018, p50

December 2017.²⁵ It regulates pollutant emissions from the combustion of fuels in plants with a rated thermal input equal to or greater than 1 megawatt (MWth) and less than 50 MWth.²⁶ Medium combustion plants those that are generally used to generate heat for large buildings (offices, hotels, hospitals, prisons) and industrial processes, as well as for power generation.²⁷ The MCPD was based on an EU Commission proposal, which was part of the [Clean Air Policy Package](#) adopted on 18 December 2013.

The Department for Environment, Food and Rural Affairs and Welsh Government published a consultation, [Improving air quality: reducing emissions from Medium Combustion Plants and Generators](#), in November 2016 seeking views on draft plans to implement the MCPD and emission controls on generators in order to improve air quality. This consultation applied to England and Wales only. The consultation document made clear that until negotiations to exit the European Union have been completed the Government will continue to negotiate, implement and apply EU legislation.²⁸ The idea behind the MCPD is summarised the Government's consultation as follows:

The Medium Combustion Plant Directive (MCPD) will help to reduce air pollution by bringing in emission controls for combustion plants in the 1-50MWth range. The MCPD was supported by the UK as it will deliver a cost-effective improvement to air quality. The Directive requires all plant in scope to be registered or permitted and sets limits on the levels of pollutants that these plants can emit according to their type, size, age, fuel type and annual operating hours. It also requires operators to test emissions from their plants to demonstrate compliance with emission limits.²⁹

The [Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018](#) now brings these changes into force. The explanatory memorandum to this SI sets out the long implementation period to meet the requirements of the directive:

In accordance with the Directive operators of new Medium Combustion Plants will require a permit to operate plants from 20 December 2018, at which point those plants will have to comply with the emission limit values for certain pollutants (which depends on the fuel used). Operators will also need to keep a record of operations to demonstrate compliance with their permit conditions for at least 6 years. A long implementation period is provided for existing Medium Combustion Plants, in order to provide operators with sufficient time to adapt technically to the requirements. This means operators of existing medium

²⁵ Directive (EU) 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

²⁶ European Commission website, [The Medium Combustion Plant \(MCP\) Directive](#) [downloaded on 5 December 2017]

²⁷ Defra and Welsh Government, [Consultation on reducing emissions from Medium Combustion Plants and Generators to improve air quality](#), November 2016, p1

²⁸ Department for Environment, Food and Rural Affairs and Welsh Government, [Improving air quality: reducing emissions from Medium Combustion Plants and Generators](#), November 2016

²⁹ Department for Environment, Food and Rural Affairs and Welsh Government, [Improving air quality: reducing emissions from Medium Combustion Plants and Generators](#), November 2016, p1

combustion plants only come within the permitting regime from 2024 or 2029, depending upon the plant's rated thermal input.³⁰

In December 2016 the Scottish Government published its consultation, [Consultation on Implementation of the Medium Combustion Plant Directive in Scotland](#). The [Pollution Prevention and Control \(Designation of Medium Combustion Plant Directive\) \(Scotland\) Order 2017](#) is now in force.

The Northern Ireland [Consultation on the transposition of the Medium Combustion Plant Directive \(1-50 megawatts\) including the regulation of thermal electricity generators](#), was published on 21 June 2017. The *Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013* were amended to transpose the requirements of the Medium Combustion Plant Directive, from March 2018.³¹

Industrial Emissions Directive

The regulation of emissions from industrial installations and mobile plant is regulated primarily by the [Industrial Emissions Directive](#) 2010 (Directive 2010/75/EU) (the IED).

The IED aims to protect human health and the environment through the use of "Best Available Techniques" (BAT). BAT means the available techniques which are the best for preventing or minimising emissions and impacts on the environment. "Techniques" includes both the technology used and the way the installation is designed, built, maintained, operated and decommissioned. The European Commission produces [best available technique reference documents](#) which contain the BAT for installations. Around 50,000 installations undertaking the industrial activities listed in Annex I of the IED are required to operate in accordance with a permit (granted by the authorities in the Member States).³²

The Industrial Emissions Directive 2010 is implemented through the Environmental Permitting (EP) regime in England and Wales, the Pollution Prevention and Control (PPC) regime in Scotland and in Northern Ireland through the Pollution Prevention and Control Regulations (Northern Ireland) 2013.

2.3 UK duties

National coordination and devolution

In the UK, responsibility for meeting air quality limit values is devolved to the national administrations in Scotland, Wales and Northern Ireland. The Secretary of State for Environment, Food and Rural Affairs has responsibility for meeting the limit values in England and the

³⁰ HM Government, [Explanatory memorandum to the Environmental Permitting \(England and Wales\) \(Amendment\) Regulations 2018](#), p3

³¹ Amendment made by the [Pollution Prevention and Control \(Industrial Emissions\) \(Amendment\) Regulations \(Northern Ireland\) 2018](#)

³² European Commission website, [The Industrial Emissions Directive](#) [downloaded on 6 March 2018]

Department for Environment, Food and Rural Affairs (Defra) co-ordinates assessment and air quality plans for the UK as a whole.³³

At a national level, the UK Government and the devolved administrations (except Northern Ireland) are required under the Environment Act 1995 to produce a national air quality strategy. The requirement for Northern Ireland stems from the Environment (Northern Ireland) Order 2002. The purpose is to have a document with common aims covering all parts of the UK. This was last reviewed and published in 2007, as the [UK Air Quality Strategy for England, Scotland, Wales and Northern Ireland](#).

While this strategy considers the European and wider international context in which the UK's domestic policies are set, the document is not a requirement stemming from EU legislation. The three main pollutants of focus in it are nitrogen dioxide (NO₂), ozone (O₃) and particle matter (PM).

Again, while not an EU requirement, each Government within the UK can choose to publish its own air quality strategy. These documents often set the policy in the context of the EU standards. These strategies are highlighted below.

England

On 14 January 2019 UK Government published a [Clean Air Strategy 2019](#) for England. It sets out the Government's plans for dealing with all sources of air pollution. In particular, it proposes new legislation aimed at reducing emissions from domestic burning:

- We will legislate to prohibit sale of the most polluting fuels
- We will ensure that only the cleanest stoves are available for sale by 2022
- We will make changes to existing smoke control legislation to make it easier to enforce
- We will give new powers to local authorities to take action in areas of high pollution.³⁴

Scotland

In November 2015, the Scottish Government published [Cleaner Air for Scotland – The Road to a Healthier Future](#). Its purpose is set out as follows:

The purpose of Cleaner Air for Scotland – The Road to a Healthier Future (CAFS) is to provide a national framework which sets out how the Scottish Government and its partner organisations propose to achieve further reductions in air pollution and fulfil our legal responsibilities as soon as possible. CAFS outlines the contribution that better air quality can make to sustainable development whilst improving health and the natural environment and reducing health inequalities for the citizens of Scotland.³⁵

³³ Defra website, [UK and EU Air Quality Policy Context](#) [downloaded on 6 March 2018]

³⁴ HM Government, [Clean Air Strategy 2019](#), January 2019, p63

³⁵ Scottish Government, [Cleaner Air for Scotland – The Road to a Healthier Future](#), November 2015, executive summary

Since publication, [annual progress reports](#) have been published. In November 2018 the Scottish Government announced a comprehensive independently led review of CAFS will be undertaken, to be completed by autumn 2019.³⁶

Wales

The Welsh Government has established a clean air programme for Wales and has committed to publish a Clean Air Plan for Wales later in 2019. The aim of this will be to identify key pollutants, their effects on public health and the natural environment in Wales and what actions needs to be taken to improve air quality.³⁷

Northern Ireland

A section from the UK Government's National Air Pollution Control Programme, summarises the planned Air Quality Strategy for Northern Ireland:

The Northern Ireland Executive's draft Programme for Government includes a supporting indicator on air quality, based on monitored levels of roadside nitrogen dioxide across Northern Ireland. One of the key measures in the Delivery Plan for this indicator is the preparation of an Air Quality Strategy for Northern Ireland. The Strategy examines the evidence base for air pollution on a sectoral basis (e.g. transport, household emissions, industry and agriculture) and puts forward policy proposals for consideration in tackling the sources of pollution in these sectors. The Strategy also includes a comprehensive review of current air quality policy and legislation in Northern Ireland. It is planned to launch the Strategy for public consultation in 2019.³⁸

Local authority obligations throughout the UK

The local air quality management regime in each of the four UK countries requires every district and unitary authority to regularly review and assess air quality in their areas.

The aim of the reviews is to identify whether national objectives have been, or will be, achieved at relevant locations, by an applicable date. Under [Part IV of the Environment Act 1995](#),³⁹ if [national objectives](#) are not met, or at risk of not being met, the local authority concerned must declare an [air quality management area](#) (AQMA) and prepare an air quality action plan. The air quality action plan should describe the pollution reduction measures which will be put in place and related timings. These plans contribute to the achievement of air quality limit values at local level.

This system is known as the local air quality management (LAQM) system. It does not place an absolute obligation on local authorities to achieve the Government's National Air Quality Strategy, but they are required to act "*in pursuit of the achievement*" of the standards. This is because air quality is generally seen as a transboundary issue and it is

³⁶ Scottish Government, [Tackling Air Pollution](#), 6 November 2018

³⁷ Welsh Government, [New plan to tackle roadside air pollution in Wales](#), 29 November 2018

³⁸ HM Government, [National Air Pollution Control Programme](#), 1 April 2019, p13

³⁹ The requirement for Northern Ireland stems from the Environment (Northern Ireland) Order 2002

recognised that it is not always possible to control emissions originating from other areas.

Further information about the LAQM regimes in each of the UK countries is available as follows:

- Defra, [Local Air Quality Management Policy Guidance](#) (PG16), April 2016 (applies to England, excluding London)
- Scottish Government, [Local Air Quality Management policy guidance](#), March 2016
- Welsh Government, [Local Air Quality Management](#) (LAQM), June 2017
- Northern Ireland Department of Agriculture, Environment and Rural Affairs website, [Local Air Quality Management](#) [downloaded on 28 February 2018]

Under Part IV of the Environment Act 1995 supervision of the LAQM system in Greater London has been devolved to the Mayor of London, who has powers to intervene and give directions to London boroughs. For further information see the [London Local Air Quality Management Policy Guidance 2016](#).

For the purposes of air quality monitoring and assessment of compliance with the above Directives, the UK is divided into 43 air quality zones; many zones incorporate more than one local authority area.

3. EU Air Quality Directive: compliance and enforcement

The UK is required to report air quality data on an annual basis to the European Commission under the Directive on ambient air quality and cleaner air for Europe (2008/50/EC), the “Air Quality Directive”.

The Air Quality Directive contained certain flexibility with regard to the deadline for returning air pollution to safe levels. For example, although the original deadline for meeting the NO₂ limit values was 1 January 2010, extensions have been agreed by the Commission with some Member States who had notified it of a credible and workable plan for meeting the air quality standards within five years of the original deadline, i.e. to January 2015.⁴⁰ Notifications by Member States and Commission decisions on notification are available EU Commission webpage, [Air Quality - Time extensions](#).

The United Kingdom submitted a notification to the Commission in September 2011 of a postponement (under Article 22(1) of the Air Quality Directive) of the 2010 deadline for attaining the annual limit value and hourly limit value for NO₂ in a number of air quality zones. The Commission accepted the notification for some, but not all of the zones. This was on the grounds that the United Kingdom had not demonstrated that compliance with the limit value could be achieved by 1 January 2015 or earlier. For further information see “[Commission decision](#) of 25 June 2012 (C(2012) 4155 final).⁴¹

3.1 Compliance with Air Quality Directive limits

An annual report summarises the UK’s submission on ambient air quality to the European Commission on behalf of Defra and the Devolved Administrations of Scotland, Wales and Northern Ireland. The latest report, [Air Pollution in the UK 2017](#), published in September 2018 summarises the reported data as follows:

- The UK met the limit value for hourly mean nitrogen dioxide (NO₂) in all but two zones.
- Six zones were compliant with the limit value for annual mean NO₂. The remaining 37 zones exceeded this limit value. In 36 of these zones the exceedance of the limit value decreased compared to 2016. Modelling done for the 2017 UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations indicated that improvements in zone compliance would begin to be seen only in 2019 once the time necessary to put measures in place was factored in.

⁴⁰ European Commission, Press release Brussels, [Environment: Commission takes action against UK for persistent air pollution problems](#), 20 February 2014

⁴¹ [Commission decision](#) of 25 June 2012 (C(2012) 4155 final) on the notification by the United Kingdom of Great Britain and Northern Ireland of a postponement of the deadline for attaining the limit values for NO₂ in 24 air quality zones.

- All non-agglomeration zones complied with the critical level for annual mean NOX concentration, set for protection of vegetation.
- Three zones exceeded the target value for benzo[a]pyrene.
- All zones met the target values for arsenic, cadmium and nickel.
- All zones met both the target values for ozone; the target value based on the maximum daily eight-hour mean, and the target value based on the AOT40 statistic.
- Nine zones were compliant with the long-term objective for ozone, set for the protection of human health. This is based on the maximum daily eight-hour mean. The other 34 zones exceeded this long-term objective.
- All zones met the long-term objective for ozone, set for the protection of vegetation. This is based on the AOT40 statistic.
- All zones met the limit value for daily mean concentration of PM10 particulate matter, without the need for subtraction of the contribution from natural sources.
- All zones met the limit value for annual mean concentration of PM10 particulate matter, without the need for subtraction of the contribution from natural sources.
- All zones met both limit values for annual mean concentration of PM2.5 particulate matter: the Stage 1 limit value, which came into force on 1st January 2015, and the indicative Stage 2 limit value which must be met by 2020.
- The running year Average Exposure Indicator (AEI) for 2017 was within the 2020 exposure reduction target.
- All zones met the EU limit values for sulphur dioxide, carbon monoxide, lead and benzene.⁴²

A page on the Defra website, [Air Quality Plan for nitrogen dioxide \(NO₂\) in UK \(2017\): Zone Plans](#), lists the 37 zones that have been identified as having air quality exceedances of NO₂:

- [Zone 1: Greater London Urban Area Zone Plan](#)
- [Zone 2: West Midlands Urban Area Zone Plan](#)
- [Zone 3: Greater Manchester Urban Area Zone Plan](#)
- [Zone 4: West Yorkshire Urban Area Zone Plan](#)
- [Zone 5: Tyneside Zone Plan](#)
- [Zone 6: Liverpool Urban Area Zone Plan](#)
- [Zone 7: Sheffield Urban Area Zone Plan](#)
- [Zone 8: Nottingham Urban Area Zone Plan](#)
- [Zone 9: Bristol Urban Area Zone Plan](#)
- [Zone 11: Leicester Urban Area Zone Plan](#)

⁴² Defra, [Air Pollution in the UK 2017](#), September 2018, piii - iv

- [Zone 12: Portsmouth Urban Area Zone Plan](#)
- [Zone 13: Teesside Urban Area Zone Plan](#)
- [Zone 14: The Potteries Zone Plan](#)
- [Zone 15: Bournemouth Urban Area Zone Plan](#)
- [Zone 16: Reading/Wokingham Urban Area Zone Plan](#)
- [Zone 17: Coventry/Bedworth Zone Plan](#)
- [Zone 18: Kingston upon Hull Zone Plan](#)
- [Zone 19: Southampton Urban Area Zone Plan](#)
- [Zone 20: Birkenhead Urban Area Zone Plan](#)
- [Zone 21: Southend Urban Area Zone Plan](#)
- [Zone 24: Glasgow Urban Area Zone Plan](#)
- [Zone 25: Edinburgh Urban Area Zone Plan](#)
- [Zone 26: Cardiff Urban Area Zone Plan](#)
- [Zone 27: Swansea Urban Area Zone Plan](#)
- [Zone 28: Belfast Metropolitan Urban Area Zone Plan](#)
- [Zone 29: Eastern Zone Plan](#)
- [Zone 30: South West Zone Plan](#)
- [Zone 31: South East Zone Plan](#)
- [Zone 32: East Midlands Zone Plan](#)
- [Zone 33: North West & Merseyside Zone Plan](#)
- [Zone 34: Yorkshire & Humberside Zone Plan](#)
- [Zone 35: West Midlands Zone Plan](#)
- [Zone 36: North East Zone Plan](#)
- [Zone 37: Central Scotland Zone Plan](#)
- [Zone 38: North East Scotland Zone Plan](#)
- [Zone 41: South Wales Zone Plan](#)
- [Zone 42: North Wales Zone Plan](#)⁴³

Previous compliance

Reports on the UK's air quality from previous years, dating back to 2003, are available from the Defra [Air Pollution in the UK report](#) website and the UK Air Quality websites at:

- <http://uk-air.defra.gov.uk/>;
- www.scottishairquality.co.uk;
- www.welshairquality.co.uk; and
- www.airqualityni.co.uk.

In May 2013 the UK Supreme Court declared that EU Air Quality Directive limits on nitrogen dioxide had been regularly exceeded in 16

⁴³ Defra website, [Air Quality Plan for nitrogen dioxide \(NO₂\) in UK \(2017\): Zone Plans](#) [downloaded on 14 February 2018]

zones across the UK.⁴⁴ The areas affected were: Greater London, the West Midlands, Greater Manchester, West Yorkshire, Teesside, the Potteries, Hull, Southampton, Glasgow, the East, the South East, the East Midlands, Merseyside, Yorkshire & Humberside, the West Midlands, and the North East.

The Court also noted that air quality improvement plans had estimated that in London compliance with the Directive's standards would only be achieved by 2025 and by 2020 for the other 15 zones.⁴⁵ The original deadline in the Directive was for compliance by 2010.

3.2 EU infraction proceedings against the UK

EU law is monitored and enforced by the European Commission under Article 258 of the Treaty on the Functioning of the European Union, as the "Guardian of the Treaties". It is overseen by the Court of Justice of the European Union (CJEU), which can levy fines on Member States that are found to be in breach of EU law.

The Commission stated in 2013 that it would like to "to achieve full compliance with existing air quality standards by 2020 at the latest".⁴⁶ In February 2014 the EU Commission began [infraction proceedings](#) against the UK for its failure to meet Air Quality Directive targets for NO₂ in 16 of its air quality zones (listed in the previous section of this paper).⁴⁷

This action was followed in February 2017 by [final warnings](#) to Germany, France, Spain, Italy and the United Kingdom for failing to address repeated breaches of NO₂ limits.⁴⁸

On 30 January 2018 an Air Quality Ministerial Summit was convened by Commissioner Vella, as a final effort to find solutions to address the serious problem of air pollution in these countries. The Commission concluded the Member States in question, "did not present credible, effective and timely measures to reduce pollution, within the agreed limits and as soon as possible, as required under EU law."⁴⁹ The Commission therefore decided to proceed with legal action.

On 17 May 2018 the EU Commission referred the UK (along with France, Germany, Hungary, Italy and Romania) to the Court of Justice of the EU for "for failure to respect limit values for nitrogen dioxide (NO₂), and for failing to take appropriate measures to keep exceedance periods

⁴⁴ R (on the application of ClientEarth) (Appellant) v The Secretary of State for the Environment, Food and Rural Affairs (Respondent), [\[2013\] UKSC 25](#)

⁴⁵ European Commission, Press release Brussels, [Environment: Commission takes action against UK for persistent air pollution problems](#), 20 February 2014

⁴⁶ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, A Clean Air Programme for Europe /*, [COM/2013/0918 final */](#)

⁴⁷ European Commission, Press release, [Environment: Commission takes action against UK for persistent air pollution problems](#), Brussels, 20 February 2014

⁴⁸ European Commission - Press release, [Commission warns Germany, France, Spain, Italy and the United Kingdom of continued air pollution breaches](#), Brussels, 15 February 2017

⁴⁹ European Commission press release, "[Air quality: Commission takes action to protect citizens from air pollution](#)" 17 May 2018

as short as possible.”⁵⁰ Further information is available from the EU Commission press release, “[Air quality: Commission takes action to protect citizens from air pollution](#)” 17 May 2018.

A guide to [Infringement Procedure](#) on the European Commission website sets out the stages of infringement procedure. The next steps are as follows:

3. If the EU country still doesn't comply, the Commission may decide to refer the matter to the Court of Justice. Most cases are settled before being referred to the Court.
4. If an EU county fails to communicate measures that implement the provisions of a directive in time, the Commission may ask the Court to impose penalties.
5. If the Court finds that a country has breached EU law, the national authorities must take action to comply with the Court judgment.⁵¹

⁵⁰ European Commission press release, “[Air quality: Commission takes action to protect citizens from air pollution](#)” 17 May 2018

⁵¹ European Commission website, [Infringement procedure](#) [downloaded on 14 February 2018]

4. Judicial review and air quality plan compatibility with EU legislation

Separate to European Commission infraction proceedings, EU legislation on air quality has also provided the legal framework for the Government's actions to be challenged by private organisations in the UK courts by judicial review.

Box 3: Government plans on NO₂ air quality

The judicial review proceedings outlined below refer to a number of different Government plans to reduce nitrogen dioxide (NO₂). The plans were formulated following recognition that a number of zones in the UK had not met EU limits on NO₂ (as set out in section 3 above). The air quality plans were initially submitted to the European Commission with a view to postponement of the 2010 compliance date for meeting the NO₂ limits to 2015. The plans are as follows:

- [Air Quality Plans for the achievement of EU air quality limit values for nitrogen dioxide \(NO₂\) in the UK](#): UK Overview Document, **September 2011**. This was subsequently replaced by:
- [Improving air quality in the UK, Tackling nitrogen dioxide in our towns and cities: UK overview document](#), **December 2015**. This in turn was replaced by:
- [UK plan for tackling roadside nitrogen dioxide concentrations: Detailed plan](#), **July 2017**. This is the Government's current approach to setting out how the UK will be reducing roadside nitrogen dioxide concentrations.

Following judicial review proceedings in relation to the July 2017 Plan, the High Court ruled, on 21 February 2018, that a supplement to the 2017 Plan should be produced by the Government by 5 October 2018. This has now been published: [Supplement to the UK plan for tackling roadside nitrogen dioxide concentrations](#), 5 October 2018.

4.1 Judicial review 2015

Proceedings brought by the environmental advocacy charity, ClientEarth, arose out of the admitted and continuing failure of the United Kingdom since 2010 to secure compliance in certain zones with the limits for nitrogen dioxide levels set by European Union law, under the Air Quality Directive (2008/50/EC).⁵² Article 13 of this Directive sets limit values "for the protection of human health". In respect of NO₂, certain limits "may not be exceeded" from the relevant date, i.e. 1 January 2010.

ClientEarth argued that the UK was required to apply for postponement in respect of *all* zones where compliance with the air quality limits could not be met by the original deadline. The Secretary of State had not applied to postpone the deadline for some of the UK's non-compliant zones, but instead in 2011 had produced the 2011 [Air Quality Plans for the achievement of EU air quality limit values for nitrogen dioxide \(NO₂\) in the UK](#): UK Overview Document, which predicted that compliance may be achieved by 2015 in 24 zones, 15 zones were expected to

⁵² R (on the application of ClientEarth) (Appellant) v The Secretary of State for the Environment, Food and Rural Affairs (Respondent), [\[2013\] UKSC 25](#)

achieve compliance between 2015 and 2020 and that compliance in the London zone was expected to be achieved before 2025.⁵³

The Supreme Court referred several questions to the Court of Justice of the European Union (CJEU) concerning interpretation of the Air Quality Directive. Having received a response to its questions from the CJEU, in its ruling on 29 April 2015 the Supreme Court unanimously ordered that the government must submit new air quality plans to the European Commission no later than 31 December 2015.⁵⁴ A press summary of the judgement set out:

The Secretary of State's argument that there was no basis for an order quashing the 2011 plans, nor a mandatory order to replace them, was rejected. The critical breach is of article 13, not of articles 22 or 23. The CJEU judgment leaves no doubt as to the seriousness of the breach, which has been continuing for more than five years, nor as to the responsibility on the national court to secure compliance. Further, during those five years the prospects of early compliance have become worse (2014 projections predicting non-compliance in some zones after 2030). The Secretary of State accepted that a new plan has to be prepared. The new government should be left in no doubt as to the need for immediate action, which is achieved by an order that new plans must be delivered to the Commission not later than 31 December 2015. [19, 28-29, 33].⁵⁵

Following the court order, Defra consulted on new [Draft plans to improve air quality in the UK](#) in September 2015. The final version, [Improving air quality in the UK, Tackling nitrogen dioxide in our towns and cities: UK overview document](#), was published on 17 December 2015.⁵⁶ These updated and replaced the previous 2011 air quality plan.

In order to comply with NO₂ limits, the 2015 plan included a new commitment to legislate for Clean Air Zones (often referred to as Low Emission Zones or LEZs) for Birmingham, Leeds, Nottingham, Derby and Southampton to be introduced by 2020. The aim of these was to discourage older and more polluting buses, taxis, coaches and lorries, by charging them to access key parts of these cities. The proposal explicitly excluded cars.⁵⁷

4.2 Further Judicial Review 2016 and 2017

Following the publication of the 2015 air quality plan ClientEarth asked the high court for a judicial review of the plan. This was on the basis that the Government had breached its legal duty to produce new air

⁵³ HM Government, [Air Quality Plans for the achievement of EU air quality limit values for nitrogen dioxide \(NO₂\) in the UK: UK Overview Document](#), September 2011, p7

⁵⁴ Supreme Court, [R \(on the application of ClientEarth\) \(Appellant\) v Secretary of State for the Environment, Food and Rural Affairs \(Respondent\)](#), 29 April 2015

⁵⁵ [Press summary](#), R (on the application of ClientEarth) (Appellant) v Secretary of State for the Environment, Food and Rural Affairs (Respondent) [2015] UKSC 28, 29 April 2015, On appeal from [2012] EWCA Civ 897

⁵⁶ Defra, [Air quality in the UK: plan to reduce nitrogen dioxide emissions \(2015\)](#), December 2015

⁵⁷ Defra, [The Government announces plans to improve air quality in cities](#), 17 December 2015

quality plans to bring air pollution down to legal levels in the “shortest possible time”.⁵⁸

The Court [ruled](#) on 2 November 2016 and quashed the 2015 Air Quality Plan.⁵⁹ The judgement focused on the Directive’s requirement to keep exceedances “as short as possible”. The judgement rejected the argument that there could be regard to cost in setting a target date for compliance. In addition, it concluded that setting a compliance date for 2020, rather than determining when compliance could be achieved and working towards that, was incorrect. The judgement also concluded that relying on older emissions models, which were known to significantly underestimate real driving emissions, to model future emissions was incorrect:

It seems to me plain that by the time the plan was introduced the assumptions underlying the Secretary of State’s assessment of the extent of likely future noncompliance had already been shown to be markedly optimistic. In my judgement, the AQP did not identify measures which would ensure that the exceedance period would be kept as short as possible; instead it identified measures which, if very optimistic forecasts happened to be proved right and emerging data happened to be wrong, might achieve compliance. To adopt a plan based on such assumptions was to breach both the Directive and the Regulations.⁶⁰

The Court determined that the Government's 2015 Air Quality Plan for the reduction of NO₂ emissions had failed to comply with EU and domestic law.⁶¹ The Court held that a draft modified Air Quality Plan should be produced by April 2017. The final plan should be published and sent to the European Commission by 31 July 2017.⁶²

Following the announcement of the June 2017 general election, the Government applied to the court to postpone the publication of the consultation. This application failed and the Government was ordered to consult on a third version by May 2017 and keep to the July 2017 publication date.⁶³

The Government’s then published its [Draft UK Air Quality Plan for tackling nitrogen dioxide](#) and associated [consultation document](#) in May 2017. The Government was criticised for a lack of detail in the plan and for delegating action to local authorities.⁶⁴ ClientEarth again took the Government to court over concerns about the draft plan. The court

⁵⁸ “Judge decides UK government will face renewed legal action over air quality” [ClientEarth](#), 28 April 2016

⁵⁹ ClientEarth v Secretary of State of Environment, Food and Rural Affairs, [2016] [EWHC](#) 2740 (Admin)

⁶⁰ High Court Ruling, [ClientEarth -v- Secretary of State for the Environment, Food and Rural Affairs](#) [EWHC 2740 \(Admin\) Case No: CO/1508/20162](#) 2 November 2016

⁶¹ R (on the application of CLIENTEARTH) v SECRETARY OF STATE FOR ENVIRONMENT FOOD & RURAL AFFAIRS (2016) [2016] [EWHC](#) 3613 (Admin)

⁶² R (on the application of CLIENTEARTH) v SECRETARY OF STATE FOR ENVIRONMENT FOOD & RURAL AFFAIRS (2016) [2016] [EWHC](#) 3613 (Admin)

⁶³ R on the application of ClientEarth v Secretary of State for Environment Food and Rural Affairs [2017] [EWHC](#) B12 (Admin)

⁶⁴ Business Green, [Draft Air Quality Plan: Green economy reacts](#), 5 May 2017

ruled that the plan was not unlawful as it was in draft form and was not the final version.⁶⁵

4.3 The 2017 Air Quality Plan and the 2018 court ruling

The Government kept to the High Court's deadline and published its latest [UK plan for tackling roadside NO₂ concentrations](#) on 26 July 2017. This focused exclusively on emissions from transport. Table 1 of this Plan lists those local authorities with roads with concentrations of NO₂ forecast above legal limits. The Plan makes clear that the Greater London Authority, Birmingham, Nottingham, Derby, Leeds and Southampton councils are expected to deliver Clean Air Zones by the end of 2019.

The Plan directs that 23 local authorities listed in Table 1, that it has projected as having NO₂ limit exceedances projecting beyond the next 3-4 years, to develop plans to achieve statutory NO₂ limit values within the shortest possible time. The Government has offered support, guidance and funding to these areas.⁶⁶

A further 45 local authorities listed in table 1 of the Plan were not required to take specific action to improve air quality. Of these 45 local authorities, 12 were expected to achieve compliance in 2018, a further 10 are expected to achieve compliance in 2019, a further 13 are expected to achieve compliance in 2020, and the remaining 10 are expected to achieve compliance in 2021.

Following the publication of the Government's 2017 Plan, ClientEarth announced that it would again take legal action against the UK Government "over its persistent failure to deal with illegal air pollution across the country".⁶⁷ Its grounds for judicial review were set out in a press release as follows:

- 1.The latest plan backtracks on previous commitments to order 5 cities to introduce clean air zones by 2020;
- 2.The plan does not require any action in 45 local authorities in England, despite them having illegal levels of air pollution.
- 3.The plan does not require any action by Wales to bring down air pollution as quickly as possible.⁶⁸

The High Court delivered its [judgement](#) on 21 February 2018.⁶⁹ Mr Justice Garnham told the Court that the approach in the Government's current 2017 Plan to tackling pollution in 45 local authority areas was "not sufficient",⁷⁰ and that in relation to these areas it, "does not

⁶⁵ The Guardian, [Latest legal challenge to Tory air pollution plans fails](#), 5 July 2017

⁶⁶ HM Government, [UK plan for tackling roadside nitrogen dioxide concentrations. Detailed plan](#), July 2017, para 96

⁶⁷ ClientEarth, [ClientEarth launches new air pollution legal action](#), 7 November 2017

⁶⁸ ClientEarth, [ClientEarth launches new air pollution legal action](#), 7 November 2017

⁶⁹ [ClientEarth No.3, R \(on the application of\) v Secretary of State for Environment, Food and Rural Affairs & Ors](#) [2018] EWHC 315 (Admin) (21 February 2018)

⁷⁰ [ClientEarth No.3, R \(on the application of\) v Secretary of State for Environment, Food and Rural Affairs & Ors](#) [2018] EWHC 315 (Admin) (21 Feb 2018), para 75

contain measures sufficient to ensure substantive compliance with the 2008 Directive and the English Regulations.”⁷¹ The judge did, however, reject ClientEarth's case in relation to the Government's plans for Birmingham, Leeds, Nottingham, Derby and Southampton. He said the Government's approach to those cities was "sensible, rational and lawful".⁷²

The court ordered the Secretary of State to produce compliant Supplement to the 2017 plan for the 45 areas in England by 5 October 2018.⁷³

A [written statement from the Government](#) on the outcome of the judicial review was published on 22 February 2018 giving reaction to it. In reaction to those local authority areas identified in the judgement as requiring further action, the Government stated:

In relation to local authority areas which are expected to achieve compliance between 2018 and 2021, Ministers have already offered significant support, and as recognised in the judgment have “urged and encouraged” them to come up with proposals to improve air quality. However, the Court found that the Government should have legally required the local authorities to take such steps, but acknowledged that further action will not be required in 12 areas where compliance will be achieved this year.

We had previously considered that it was sufficient to take a pragmatic, less formal approach to such areas. However, in view of the Court’s judgment, we are prepared to take a more formal line with the other 33 local authorities.⁷⁴

In March 2018 the government [directed](#) these 33 English local authorities with shorter-term NO₂ problems to undertake studies to establish whether there are measures they can take to reduce NO₂ air pollution in their areas in the shortest possible time. These authorities had to submit their findings to the government by 31 July 2018.⁷⁵ With a view to publishing a final supplement by 5 October 2018, the Government published a consultation in May 2018: [Air quality: reducing nitrogen dioxide air pollution in 33 local authorities \(England\)](#) seeking views on the proposed measures. The Supplement has now been published (see section 4.4 below).

The Welsh government, which was also named as a defendant in the case, agreed at a High Court hearing in January 2018 to work on a new air quality plan for Wales.⁷⁶ The Government’s written statement set out that:

⁷¹ [ClientEarth No.3, R \(on the application of\) v Secretary of State for Environment, Food and Rural Affairs & Ors](#) [2018] EWHC 315 (Admin) (21 Feb 2018), para 104

⁷² [ClientEarth No.3, R \(on the application of\) v Secretary of State for Environment, Food and Rural Affairs & Ors](#) [2018] EWHC 315 (Admin) (21 Feb 2018), para 101

⁷³ “Government air quality plan ruled unlawful” [AirQualityNews.com](#), 21 February 2018

⁷⁴ Outcome of the judicial review of the UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations: [Written statement - HCWS477](#), 22 February 2018

⁷⁵ Ministerial Direction, [Environment Act 1995 \(Feasibility Study for Nitrogen Dioxide Compliance\) Air Quality Direction 2018](#)

⁷⁶ “Welsh Government's air pollution pledge at court case” [BBC News](#), 25 January 2018

The Welsh Ministers indicated that they recognise that the Welsh element of the Air Quality Plan does not satisfy legal requirements. They have undertaken to publish a supplemental plan, following consultation, by 31 July 2018.⁷⁷

An *Interim Welsh Government supplemental plan (WGSP) to the UK plan for tackling roadside nitrogen dioxide concentrations 2017*, was published in July 2018.⁷⁸ This was followed by the final version of the supplemental plan published on 29 November 2018.⁷⁹ A press release to accompany the supplemental plan summarised its key actions:

Temporary 50 mph speed limits were introduced in June at the five sections of the Motorway and Trunk Road Network which exceed legal limits. The plan proposes to make these speed limits permanent, along with the introduction of variable diversion routes in Newport. The speed limits and diversion will be subject to review periodically.

The Welsh Government has placed a Direction on Cardiff and Caerphilly Councils to undertake an assessment by 30 June 2019 to identify the best option to achieve statutory NO₂ limit values within the shortest possible time. The Welsh Government has also allocated £20 million towards supporting the two local authorities to achieve compliance.⁸⁰

4.4 The October 2018 supplement

As set out above, the Government was required to publish a supplement to the latest [UK plan for tackling roadside NO₂ concentrations](#) by 5 October 2018. The [Supplement to the UK plan for tackling roadside nitrogen dioxide concentrations](#) was duly published. The Supplement sets out measures that the Government has directed⁸¹ that specified local authorities must deliver to help achieve compliance with NO₂ limits on certain roads. For example, these include:

- Retrofit of approximately 400 buses in total with technology to reduce harmful emissions in Dudley, Wolverhampton, Sandwell, Reading, Newcastle-under-Lyme and Portsmouth.
- Traffic management measures such as signal optimisation in Dudley, Sandwell, Wolverhampton and South Gloucestershire.
- Other measures such as behavioural change campaigns in Solihull and Leicester.⁸²

The Supplement also explains that some roads have now been identified as being compliant with NO₂ limits when previously they were not due

⁷⁷ Outcome of the judicial review of the UK Plan for Tackling Roadside Nitrogen Dioxide Concentrations: [Written statement - HCWS477](#), 22 February 2018

⁷⁸ Welsh Government, [Interim Welsh Government supplemental plan to the UK plan for tackling roadside nitrogen dioxide concentrations 2017](#), July 2018

⁷⁹ Welsh Government, [New plan to tackle roadside air pollution in Wales](#), 29 November 2018

⁸⁰ Welsh Government, [New plan to tackle roadside air pollution in Wales](#), 29 November 2018

⁸¹ The Direction was made by the [Environment Act 1995 \(Implementation of Measures for Nitrogen Dioxide Compliance\) Air Quality Direction 2018](#), 4 October 2018 which specifies the local authorities and the measures they need to take.

⁸² HM Government, [Supplement to the UK plan for tackling roadside nitrogen dioxide concentrations](#), 5 October 2018, p1

to new, more local, data being used in the modelling of roadside NO₂ limits. It also set out a further eight local authority areas where this further data has identified eight new areas which have persistent, long term exceedances:

3. Some local studies, using more detailed local data, have set out that 26 road links identified in the national modelling as exceeding legal limits, are in fact already compliant. Conversely, some studies have identified roads with more persistent, long-term exceedances beyond 2021 and government has directed the local authorities responsible for these links to develop and implement plans to bring forward compliance. These are Bolsover, Bradford, Portsmouth, Broxbourne, Newcastle-under-Lyme, Stoke-on-Trent, Leicester and Liverpool.⁸³

These eight local authorities have now been directed⁸⁴ by the Government to carry out more detailed studies to develop a plan to identify the most suitable measures to address the exceedances in the shortest possible time. The deadlines for this work are set out in the supplement as follows:

130. The government has directed these local authorities to produce a final plan by 31 October 2019 at the latest and sooner where possible. This is a shorter timescale than was given to the 28 local authorities the government are already working with, since work has already started through this initial feasibility study. This is a challenging deadline, in particular as this process involves more detailed air quality and transport modelling which some local authorities will not yet have available. It is vital that action is taken in the shortest time possible to improve air quality in these areas above the legal limits. In order to inject urgency into this process, the government has included a deadline for initial plans by end January 2019, setting out a short list of options.⁸⁵

ClientEarth, the charity who initiated the judicial reviews of the Government's earlier plans, responded to the publication of the Supplement expressing concern that requiring more plans to be produced would lead to more delays in actually addressing air quality issues and that further local authorities could have "hidden" air quality problems.⁸⁶

⁸³ HM Government, [Supplement to the UK plan for tackling roadside nitrogen dioxide concentrations](#), 5 October 2018, para 3

⁸⁴ The Direction was made by the [Environment Act 1995 \(Feasibility Study for Nitrogen Dioxide Compliance\) \(No. 2\) Air Quality Direction 2018](#), 4 October 2018

⁸⁵ HM Government, [Supplement to the UK plan for tackling roadside nitrogen dioxide concentrations](#), 5 October 2018, para 130

⁸⁶ Client Earth, [New pollution plan reveals toxic air in England worse than feared](#), 5 October 2018

5. Air quality and Brexit issues

Until a final Brexit agreement is reached with the EU, much of what will happen to air quality standards and enforcement following Brexit is the subject of speculation. The Government has been clear that it has no plans to change limit values and targets for air quality following Brexit. In relation to air quality, the Government has said that the “European Union (Withdrawal) Bill [now Act] is designed to ensure that, as far as possible, the same rules and laws will apply on the day after we leave as on the day before.”⁸⁷ In the Clean Air Strategy 2019 the Government stated “Our vision is for a green Brexit in which environmental standards are not only maintained, but also enhanced.”⁸⁸

Concerns, however, have been raised in Parliament and from certain academics, legal professionals and environment campaign groups that standards could be changed, that they may not align with future EU changes, and that the future enforcement of such standards is unclear. The section below sets out some of the concerns and uncertainties in relation to air quality and Brexit, alongside the Government’s responses and reaction to them, where available.

Further information about these concerns, Government responses to them and how they relate to a wider environmental context is also set out in the Library briefing paper, [Brexit and the environment](#).

5.1 European Union (Withdrawal) Act 2018

The [European Union \(Withdrawal\) Act 2018](#) was designed to provide legal continuity by copying over the entire body of EU law onto the UK’s post-exit statute book. In broad terms, this means that all existing EU air quality law will be converted into domestic law from exit day. All EU environmental laws, principles and relevant enforcement mechanisms will continue to apply to the UK up until exit day. Related statutory instruments have amended the domestic legislation that implements EU air quality legislation to ensure it continues to be operable after the withdrawal of the UK from the EU – see in particular the [Air Quality \(Amendment of Domestic Regulations\) \(EU Exit\) Regulations 2019](#) and the [Air Quality \(Miscellaneous Amendment and Revocation of Retained Direct EU Legislation\) \(EU Exit\) Regulations 2018](#).

Amendments relating to air quality were tabled for the Commons’ Committee stage of the then EU (Withdrawal) Bill. See for example, amendment numbers 334 and 345 tabled by Leader of the Opposition, Jeremy Corbyn.⁸⁹ Amendment 334 aimed to ensure in legislation that the UK maintained existing air quality standards and protections following the UK’s exit from the EU. It was discussed at Committee Stage on 12 December 2017. The Government rejected it on the basis that it would prepare a “starting gun” for litigation:

⁸⁷ [Pollution Control: Written question – 120393](#), answered 4 January 2018

⁸⁸ HM Government, [Clean Air Strategy 2019](#), January 2019, p79

⁸⁹ [Notices of Amendments](#) given up to and including Monday 4 December 2017

While we support the intention behind amendments 97, 98, 96, 138, 333, 334 and new clauses 62 and 63, they give no definition of what an environmental protection is or precisely how one might know that such protections were being weakened or narrowed. We believe that the hon. Members would be preparing the starting gun for a vast quantity of litigation so we cannot accept the amendments to clause 7, 8 or 9 or the new clauses.⁹⁰

5.2 Changes to air quality targets and limits

The [European Union \(Withdrawal\) Act 2018](#), (the “Withdrawal Act”), and related statutory instruments aim to continue EU air quality regulation into UK law after exit day. Once the UK has left the EU, however, the UK Government could then potentially amend air quality standards and review any deadlines for meeting them. This would be subject to the limitations of the Withdrawal Act, the UK’s international obligations and any terms agreed as part of a future relationship and/or trading arrangements.

Following the referendum result in June 2016 some environment and health organisations expressed concern early on that policies on air pollution could be weakened following the UK exit from the EU. ClientEarth challenged the Government to affirm its commitment to environmental laws, including on air pollution.⁹¹ The Chair of the Environmental Audit Committee, Mary Creagh, expressed the view that EU membership had been key for air quality, and had allowed campaigners to hold the Government to account.⁹² She also said there were “question marks about what will happen to air pollution standards in the brave new Brexit world.”⁹³

The Government has sought to allay concerns about changes to air quality standards following Brexit by stating that there are no plans to change air quality limit values and targets:

Asked by: Justin Madders. Air Pollution: EU Law

To ask the Secretary of State for Environment, Food and Rural Affairs, whether the Government plans to retain the air quality targets contained in the 2008 Ambient Air Quality Directive after the UK has left the EU.

Answered by: Dr Thérèse Coffey 08 March 2017

The Ambient Air Quality Directive (including its limit values and target values) was transposed into law in England through the Air Quality Standards Regulations 2010. There are no plans to change the limit values and target values in the Regulations.⁹⁴

The Government’s [25 Year Environment Plan](#), published in January 2018 stated:

The UK’s determination to improve air quality is reinforced by our commitment to meeting ambitious, legally-binding targets to cut emissions of five pollutants – ammonia, nitrogen oxides, non-

⁹⁰ HC Deb 12 December 2017 [c287](#)

⁹¹ ClientEarth, [Brexit “challenge” to politicians over UK environmental laws](#), 24 June 2016

⁹² [HC Deb 12 July 2016, c193](#)

⁹³ [HC Deb 12 July 2016, c193](#)

⁹⁴ [HC Written Question 66372 Air Pollution: EU Law](#), 8 March 2017

methane volatile organic compounds, fine particulate matter and sulphur dioxide – by 2020 initially, and by 2030 for a deeper cut. Our commitment to meeting these legally binding targets is not affected by the UK's departure from the EU.⁹⁵

The UK Government published a Clean Air Strategy 2019 in January 2019, to show how the Government intends to tackle all sources of air pollution and focused on action in England. It stated:

We have set out our vision for a Green Brexit in which environmental standards are not only maintained but enhanced, and Chapter 9 of this strategy sets this in the context of our leadership role nationally and internationally.⁹⁶

The Clean Air Strategy also set out the Government's ambition to introduce a more stringent "goal" for PM_{2.5} levels that those set by the EU:

The UK's current objectives on PM_{2.5} stem from EU legislation. We already meet the EU limit value of 25 µg/m³ and are on track to meet a second stage limit of 20 µg/m³ by 2020. In this we are ahead of several European countries who still have exceedances of these limits. (...)

The WHO guidelines recommend an ultimate goal for concentrations of PM_{2.5} of 10 µg/m³. This is less than half the current EU limit and the WHO recognises that this represents a significant challenge. 92% of the global population currently live in areas that exceed this goal. The WHO therefore recommend a step-by-step approach to achieve progressive reductions. Reflecting this, we will set a bold new goal to progressively cut public exposure to particulate matter pollution, as suggested by the WHO. By implementing the policies in this Strategy, we will reduce PM_{2.5} concentrations everywhere, so that the number of people living in locations above the WHO guideline level of 10 µg/m³ is reduced by 50% by 2025, compared to our 2016 baseline. Areas above the 10 µg/m guideline limit in 2025 will have lower concentrations than today, and we will set out our plans to reduce PM_{2.5} concentrations even further in due course.⁹⁷

In the Government's May 2019 [25 Year Environment Plan Progress Report](#), it set out how further research would inform a new PM_{2.5} target:

Recognising the importance of reducing exposure to PM_{2.5} to improve public health, we will publish evidence this year to examine what action would be needed to meet the World Health Organization (WHO) annual mean guideline limit of 10 µg/m³. We will also use this to inform a new, ambitious long-term target for PM_{2.5}.⁹⁸

A December 2017 report by the Environmental Industries Commission, an environmental business membership organisation, on [Improving Air Quality after Brexit](#) suggested that a change to air quality limit values post Brexit could be desirable on the basis that they could be more

⁹⁵ HM Government, [A Green Future: Our 25 Year Plan to Improve the Environment](#), February 2018, p97

⁹⁶ HM Government, [Clean Air Strategy 2019v](#), January 2019, p32

⁹⁷ HM Government, [Clean Air Strategy 2019v](#), January 2019, p30 and 32

⁹⁸ HM Government, [25 Year Environment Plan Progress Report: January 2018 to March 2019](#), 16 May 2019, p23

refined for the UK's specific circumstances, rather than aligned with a more generic EU approach:

These are concentration values for pollutants in ambient air, applying to locations where the public is routinely exposed and averaged over a given time period. While they have been a useful tool to help drive air quality improvements, they also imply that concentrations above the limit value are harmful and those below are not. Health evidence has demonstrated that this is not the case for pollutants such as fine particulate matter or ozone, and may not be so for other pollutants.

However, Limit Values are an accepted concept in Europe and are written into, for example, land use planning processes and tend to be strongly supported by both Member States and NGOs. Moreover, the UK's geographic position in Europe, with weather systems dominated by Atlantic south westerly winds, means that annual average concentrations for particulate matter (PM10 and PM2.5) tend to be lower than more central European states. Compliance with the limit values for PM10 is universal across the UK and thus measures to reduce PM, probably the most harmful of the standard suite of air pollutants, are de-prioritised despite evidence that health impacts continue below the Limit Value concentrations.

Brexit could offer the opportunity to seek examples of policy making in countries and regions outside the EU and to draw on examples more suited to the UK context.⁹⁹

Air quality standards as part of an agreement on future trade

Future standards on air quality may be linked to any future trading agreement agreed with the EU and/or other countries. This is because access to markets often requires certain environmental standards to be adopted or maintained.

In a report on [Brexit: environment and climate change](#) the House of Lords European Union Committee noted equivalence between UK and EU standards may still be required under trade arrangements such as Free Trade Agreement (FTA):

...In other words, equivalence between UK and EU environmental standards would almost certainly be required, as part of any comprehensive FTA, in order to remove non-tariff barriers to trade, thereby ensuring UK access to the Single Market. The UK might therefore need not only to preserve many current standards, but to reflect some new standards as and when they were agreed by the EU, so as to continue to trade into the Single Market.

89. The UK would not necessarily be required to give direct effect to EU law in order to meet EU standards and regulations, "if it could demonstrate that its domestic law had an equivalent effect." For instance, in our report *Brexit: the options for trade*, we cited the example of the EU ETS, where, instead of participating in the scheme, the UK could potentially adopt a carbon tax approach in which the price of carbon was similar and could be considered equivalent. As Prof Lee commented, countries could "decide, mutually, to recognise our different

⁹⁹ Environmental Industries Commission, [Improving Air Quality after Brexit](#), 14 December 2017, p18

safety standards". Prof Macrory agreed: "Depending on the terms of the agreement, there may be various forms of reciprocal recognition of authorisations", which would have "implications for trading".¹⁰⁰

In the agreed *Political Declaration setting out the framework for the future relationship between the European Union and the United Kingdom*, 25 November 2018, ambition is set out for a "level playing field" to ensure open and fair competition, including in environmental standards:

XIV. LEVEL PLAYING FIELD FOR OPEN AND FAIR COMPETITION

79. The future relationship must ensure open and fair competition. Provisions to ensure this should cover state aid, competition, social and employment standards, environmental standards, climate change, and relevant tax matters, building on the level playing field arrangements provided for in the Withdrawal Agreement and commensurate with the overall economic relationship. The Parties should consider the precise nature of commitments in relevant areas, having regard to the scope and depth of the future relationship. These commitments should combine appropriate and relevant Union and international standards, adequate mechanisms to ensure effective implementation domestically, enforcement and dispute settlement as part of the future relationship.¹⁰¹

For further information about environmental provision, in general, in the Withdrawal Agreement and the Political Declaration, see Library briefing papers:

- [The UK's EU Withdrawal Agreement](#), 14 March 2019; and
- [The Political Declaration on the Framework for Future EU-UK Relations](#), 30 November 2018.

Future divergence

Potentially linked with a future trade agreement is the issue of divergence from any future changes to EU air quality standards.

Commentators suggest that the EU standards will not remain static for long and it is not yet clear whether the UK has any plans to follow any changes to EU standards following Brexit.¹⁰² As set out above, the UK may wish to consider divergence to make the regulations more relevant to the UK environment and it may not want to follow any new EU standards over which it has had no say.

5.3 Enforcement and compliance

As set out above in section 3.3, the UK is currently subject to EU infraction proceedings on air quality. In May 2018 the European

¹⁰⁰ House of Lords European Union Committee, [Brexit: environment and climate change](#), 12th Report of Session 2016-17 - published 14 February 2017 - HL Paper 109, para 87-88

¹⁰¹ [Political Declaration setting out the framework for the future relationship between the European Union and the United Kingdom](#), as endorsed by leaders at a special meeting of the European Council on 25 November 2018, para 79

¹⁰² Environmental Industries Commission, [Improving Air Quality after Brexit](#), 14 December 2017, p12

Commission referred the UK to the Court of Justice of the EU for “for failure to respect limit values for nitrogen dioxide (NO₂), and for failing to take appropriate measures to keep exceedance periods as short as possible.”¹⁰³ An article from the specialist publication ENDSReport speculated, in August 2018, that the UK may have left the EU before a fine would be given in this case:

Brexit means that the fate of the European Commission’s legal action is uncertain. If the matter came before the EU’s Court of Justice (CJEU) today, it would find the UK in breach of the Ambient Air Quality Directive for certain. The government admitted to it years ago.

But it can take more than two years for a hearing, and as long again for the court to hand down a fine, if the European Commission chooses to refer the case back. So any further development is unlikely before the anticipated implementation period ends.¹⁰⁴

In the March 2017 White Paper on legislating for withdrawal from the EU, the Government confirmed that the Court of Justice of the European Union (CJEU) would cease to have direct jurisdiction over the UK after EU withdrawal, but said “any question as to the meaning of EU-derived law” would still be determined in domestic courts by reference to the CJEU’s case law as it exists on the day of Brexit.¹⁰⁵ Following exit from the EU therefore the threat of fines for non-compliance from European Institutions would to be removed.

Environmental principles and governance: the draft Bill

On 12 November 2017, the [Government announced](#) plans to consult on a new, independent statutory body that would hold Government to account for upholding environmental standards in England; and on the scope and content of a new national policy statement to ensure environmental principles underpinned policy making.¹⁰⁶ The consultation on [Environmental principles and governance after EU Exit](#), ran from May-August 2018. It proposed the creation of a new statutory independent environmental watchdog to hold government to account on its environmental obligations and options for establishing environmental principles in the UK.

Following the consultation process a [Draft Environment \(Principles and Governance\) Bill 2018](#) was published on 19 December 2018. The draft Bill as it stands is broadly split into three key areas covering: environmental principles; establishing a new environmental governance body named the Office for Environmental Protection (OEP); and introducing a new legal requirement for the Government to publish Environmental Improvement Plans which it will monitor and report on

¹⁰³ European Commission press release, “[Air quality: Commission takes action to protect citizens from air pollution](#)” 17 May 2018

¹⁰⁴ “Explainer: What Brexit means for... air quality” [ENDS Report](#), 30 August 2018

¹⁰⁵ [Legislating for the United Kingdom’s withdrawal from the European Union](#), Department for Exiting the EU, March 2017, p15

¹⁰⁶ HM Government, [New environmental protections to deliver a Green Brexit](#), 12 November 2017

annually. The first of these plans would be the existing 25-year environment plan which was published in January 2018.

The majority of the Bill's provision apply to England only. The Scottish Government¹⁰⁷ and Welsh Government¹⁰⁸ are both considering separate principles and governance arrangements. The Permanent Secretary of Northern Ireland's Department of Agriculture, Environment and Rural Affairs (DAERA) has subsequently written to the House of Commons Environmental Audit Committee to state that officials have concluded that "it is in the public interest to ask for the Bill's extension to NI."¹⁰⁹

The draft Bill has been subject to recent pre-legislative scrutiny inquiries and reports by both the [Environmental Audit Committee](#) (EAC) and the [Environment, Food and Rural Affairs Committee](#) (Efra). Both committees were critical of the draft clauses. Government responses to these reports have not yet been published. The Efra Committee expressed concern that the draft Bill's provisions were "not equivalent to the current environmental protections provided by membership of the EU."¹¹⁰ Similarly, the EAC said:

Enforcement by the OEP is limited to administrative compliance and not the failure to attain environmental standards and targets. This is at odds with the Government's claim that the Bill places environmental accountability at the heart of Government and is not equivalent to the procedure of the European Commission.¹¹¹

The draft clauses will form part of a wider Environment Bill, which has not yet been published. The Government has set out broadly the "wider ambition of the Bill" in "four other key areas: air, wildlife, water and waste", which are likely to be included in the full Bill. The wider Environment Bill is expected to be introduced in the following Parliamentary session.¹¹²

For further information on the draft Bill see Library briefing paper, [Environmental principles and governance: the draft Bill](#), 30 January 2019.

5.4 Monitoring and reporting requirements

The EU Air Quality Directive makes provisions for adapting standardised procedures to streamline the data provision, assessment and reporting of air quality. For reporting purposes, the UK is divided into 43 air quality zones.¹¹³ A zone is deemed to be non-compliant if the UK's

¹⁰⁷ Scottish Government, [Consultation on Environmental Principles and Governance in Scotland](#), 16 February 2019

¹⁰⁸ Welsh Government consultation document, [Environmental Principles and Governance in Wales Post European Union Exit](#), 18 March 2019

¹⁰⁹ [Letter](#) from Dr Denis McMahon, permanent secretary of Northern Ireland's Department of Agriculture, Environment and Rural Affairs (DAERA) to Chair of the Environmental Audit Committee, 27 February 2019

¹¹⁰ Environment, Food and Rural Affairs Committee, [Pre-legislative scrutiny of the Draft Environment \(Principles and Governance\) Bill](#), 30 April 2019, p3

¹¹¹ Environmental Audit Committee, [Scrutiny of the Draft Environment \(Principles and Governance\) Bill](#), 25 April 2019, p4

¹¹² Defra press release, [New environment protections set out in flagship bill](#), 19 December 2018

¹¹³ See para 23 preamble to [Directive 2008/50/EC](#) of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

official monitoring and modelling shows that concentrations of pollutants in the air at one or more locations within the zone exceed certain limits.

In oral evidence to the Joint Select Committee inquiry into Improving Air Quality, Dr Thérèse Coffey MP, Parliamentary Under-Secretary of State, Department for Environment, Food and Rural Affairs, indicated that air quality monitoring and reporting requirements could be changed after the UK leaves the EU:

Dr Coffey: There are parts of the directive that are, in themselves, quite interesting and challenging, and there are definitely things we can do in the future to make some of this more targeted and focused in our assessment and management of measures to improve air quality. At the moment, we have population blocks of more than 200,000 with a certain population density, and that is what we report, in terms of compliance zones. We have 43 zones around the country. That fits in with our European reporting requirements. Potentially, once we leave the European Union and look at this again, we might be able to do something that is a lot more focused and targeted.¹¹⁴

In December 2017 The Environmental Industries Commission expressed concern that the removal of reporting obligations would “reduce transparency and the capacity to track UK progress from outside Government”, although it went on to concede that “the current reporting frameworks tend to be highly technical and not necessarily accessible to non-experts.”¹¹⁵

Draft clause 7 of the draft *Environment (Principles and Governance) Bill* would put a duty on the Secretary of State to ensure that appropriate monitoring data is obtained to assess whether the natural environment is improving in accordance with the current Environmental Improvement Plan (EIP). The EIP is proposed to be the Government’s January 2018 publication, [A Green Future: Our 25 Year Plan to Improve the Environment](#).

Alongside the Bill documents, the Government published a [consultation on the 25 year environment plan: measuring progress](#) on 19 December 2018, seeking views on the indicators and measures that should be used to show environment change and how the government will measure progress against the 10 goals of the plan. The consultation included a draft indicator framework and closed on 25 January 2019.¹¹⁶ The headline indicator on changes in air quality includes two system indicators: one that tracks the change in concentration of fine particulates in the air (PM_{2.5}) that can have adverse health impacts; the other tracks the area exposed to damaging levels of ammonia (NH₃).¹¹⁷

¹¹⁴ Oral evidence: [Improving Air Quality](#), HC 433, 30 November 2017, Q169

¹¹⁵ Environmental Industries Commission on [Improving Air Quality after Brexit](#), 14 December 2017, p12

¹¹⁶ Gov.uk, [Consultation on the 25 year environment plan: measuring progress](#), 19 December 2018

¹¹⁷ Defra, [Measuring environmental change – draft indicators framework for the 25 Year Environment Plan Draft for discussion](#), December 2018, p3

While not discussing the air quality indicator explicitly, the EAC expressed concern about the overall approach to monitoring in its pre-legislative scrutiny of the draft Bill:

We welcome the Government putting the requirement to prepare annual reports on the implementation of Environmental Improvement Plans in the Bill. Yet we are concerned that the approach to monitoring and data collection could hinder this process. While Defra's draft indicator framework is promising, we are concerned that a proportion of the indicators will not be ready until 2020 at the earliest and that the Natural Capital Committee considers that there are errors in the Government's approach. We recommend Defra urgently completes its indicator framework and takes on board the advice from the Natural Capital Committee to establish a robust baseline from which to measure progress.¹¹⁸

National Air Pollution Control Programme (NAPCP)

As set out in section 2.2 of this paper, the revised 2016 [National Emission Ceilings Directive](#) (2016/2284) (NECD) requires EU Member States to establish, by 1 April 2019 at the latest, an initial National Air Pollution Control Programme (NAPCP) which must be regularly updated at least every four years.

On 1 April 2019 the UK Government alongside the Scottish Government, Welsh Government and the Northern Ireland Department for Agriculture, Environment and Rural Affairs, published its [UK National Air Pollution Control Programme](#). The Government has not made any statement as to whether it will continue with updates to this document following Brexit.

5.5 Devolved nations

In the UK, responsibility for meeting EU air quality limit values is devolved to the national administrations in Scotland, Wales and Northern Ireland. The Secretary of State for Environment, Food and Rural Affairs has responsibility for meeting the limit values in England and the Department for Environment, Food and Rural Affairs (Defra) co-ordinates assessment and air quality plans for the UK as a whole.¹¹⁹

In [oral evidence](#) to the Environmental Audit Committee on 1 November 2017 the Secretary of State for Environment, Food and Rural Affairs, Michael Gove, set out his view of a future framework for the devolved Administrations (DAs) in relation to the environment in general:

I foresee Britain leaving the European Union as providing even more opportunities for the DAs to do more in this area. Also, I have to be honest, there are things that both the Scottish and Welsh Administrations have done that have been admirable and in advance of what we have done in England, so they have set the standard in the UK.
(...)

However, it is important we have a UK framework that properly allows the DAs to do what they consider to be appropriate in their

¹¹⁸ Environmental Audit Committee, [Scrutiny of the Draft Environment \(Principles and Governance\) Bill](#), 25 April 2019, para 50

¹¹⁹ Defra website, [UK and EU Air Quality Policy Context](#) [downloaded on 5 December 2017]

own space but at the same time preserves UK-wide rules. We are very keen to get down to the nitty gritty of discussion on what should be in those frameworks with the DAs.¹²⁰

Michael Gove said there was potential for a discussion about whether air quality should maintain common UK-wide rules:

The potential is there for us to have a very fruitful and creative discussion about what should be done at the devolved level and what, for example, common rules on air quality, let us say, should be maintained at a UK level.¹²¹

He went on set out his view of future regulatory divergence between the UK and the devolved Administrations on air quality:

Q33 John McNally: How do you envisage this regulatory divergence between the UK and the devolved Administrations be managed?

Michael Gove: I do not believe we should have regulatory divergence on things like air quality or water quality.¹²²

For further information about the views of the devolved administrations in relation to Brexit and the environment in general, see Library briefing paper [Brexit and the environment](#).

5.6 International agreements

The Government has indicated support for the current level of protections and regulation from its international environmental agreements. For example, in the February 2018 [25 Year Environment Plan](#), the Government stated:

We remain fully committed to implementing within the UK those international agreements to which this country is a party and will continue to lead their application globally, working in partnership across the UK and internationally.¹²³

The House of Lords European Union Committee on [Brexit: environment and climate change](#) from February 2017 noted views that following Brexit, international law would become the “backstop” for environmental standards.¹²⁴

The EU, in areas where it has exclusive competence has entered into agreements on behalf of its Member States (under Article 3 of the [Treaty on the Functioning of the European Union](#)). Where it does not have exclusive competence the agreement is a mixed agreement shared between the European Union and its Member States (under Article 4). The UKLEA report [Brexit and Environmental Law: The UK and International Environmental Law after Brexit](#), has highlighted the Convention on Long-Range Transboundary Air Pollution 1979 (which

¹²⁰ Rt Hon Michael Gove MP, oral evidence to the Environmental Audit Committee on the [Government’s Environmental Policy](#), HC 544, 1 November 2017, Q28

¹²¹ Rt Hon Michael Gove MP, oral evidence to the Environmental Audit Committee on the [Government’s Environmental Policy](#), HC 544, 1 November 2017, Q32

¹²² Rt Hon Michael Gove MP, oral evidence to the Environmental Audit Committee on the [Government’s Environmental Policy](#), HC 544, 1 November 2017, Q33

¹²³ HM Government, [A Green Future: Our 25 Year Plan to Improve the Environment](#), February 2018, p129

¹²⁴ The House of Lords European Union Committee, [Brexit: environment and climate change](#), 14 February 2017, HL Paper 109, para 52

was extended by the Gothenburg Protocol) as being a mixed agreement (for further information about this Protocol see section 2.1 of this paper).¹²⁵

One area of uncertainty that has been highlighted in relation to Brexit is around mixed agreements where both the EU and UK have competence (and both are signatories) and the ratification document does not define the division of competences.¹²⁶ For example, writing in the ENDS Report, Richard Macrory, professor of environmental law at University College London, suggested that a further agreement may be required before the UK can take on all responsibilities under a treaty:

A smoother way forwards may be for the UK to agree to shoulder all the responsibilities under the treaty in question, perhaps under a protocol. Some have argued that this will require all parties to assent to the agreement – both third countries and the other EU member states.¹²⁷

For further information and views on whether such agreements will remain in force from Brexit day, see House of Commons Library Briefing Paper, [Legislating for Brexit: EU external agreements](#) (CBP 7850), 5 January 2017.

In response to a PQ on this issue in September 2017 Dr Thérèse Coffey, Parliamentary Under-Secretary for Defra stated that the Government would:

... continue to be bound by international Multilateral Environmental Agreements (MEAs) to which it is party. We are committed to upholding our international obligations under these agreements and will continue to play an active role internationally following our departure from the EU. We will give due consideration to the ratification of MEAs in the future to which the UK is not currently party in its own right, (recognising that some risks have no relevance to the UK.)¹²⁸

See the Library briefing paper on [Brexit: energy and climate change](#) for further information about the potential impact of Brexit on the Paris Agreement on climate change and the EU Emissions Trading System.

5.7 No deal technical notices

As part of its preparations for a “no deal” EU exit scenario, the government has published series of technical notices, designed to “allow businesses and citizens to understand what they would need to do in a ‘no deal’ scenario, so they can make informed plans and preparations.”¹²⁹

¹²⁵ UK Environmental Law Association, [Brexit and Environmental Law: The UK and International Environmental Law after Brexit](#), September 2017, p90

¹²⁶ ENDS Report, [Brexit unlikely to give UK free rein over green laws](#), [subscription needed], vol.499, 17 August 2016

¹²⁷ ENDS Report, [Brexit unlikely to give UK free rein over green laws](#), [subscription needed], vol.499, 17 August 2016

¹²⁸ PQ [9691](#) [on Environment: Treaties] 18 September 2017

¹²⁹ Gov.uk, [UK government's preparations for a 'no deal' scenario](#), 24 August 2018

A “no deal” scenario is described by the Government as “a scenario in which the UK leaves the EU without agreement.”¹³⁰

Environmental standards

On 13 September 2018 the Government published a technical notice on [Upholding environmental standards if there's no Brexit deal](#), updated 19 December 2018.¹³¹

The technical notice also sets out the Government’s ambition to introduce an “Environment Bill” which will “apply to England and reserved matters and will incorporate a range of issues, including clean air.”

It also reiterates the Government’s plans to establish a new, independent statutory body to hold government to account on environmental standards in relation to England and reserved matters, alongside a statutory statement of environmental principles to guide future government policy making.¹³²

Two further technical notices have also been issued which also have implications for air quality. These are:

- [Industrial emissions standards \(“best available techniques”\) if there’s no Brexit deal](#), 13 September 2018, updated 19 December 2018.
- [Reporting CO2 emissions for new cars and vans if there’s no Brexit deal](#), 13 September 2018.

Industrial emissions standards (best available techniques)

The EU Industrial Emissions Directive (IED)¹³³ aims to protect human health and the environment through the use of “Best Available Techniques” (BAT) in regulated installations. The European Commission produces [best available technique reference documents](#) (BREF) which contain the BAT for installations. They also contain BAT Conclusions that contain emission limits associated with BAT, which must not be exceeded unless agreed by the relevant competent authority.

The Government’s technical notice on [Industrial emissions standards \(“best available techniques”\) if there’s no Brexit deal](#), 13 September 2018 (updated 19 December 2019) sets out how the Government would seek to ensure that, in a no deal scenario, existing BAT Conclusions would continue to have effect in UK law after an EU exit, to provide powers to adopt future BAT Conclusions in the UK and ensure the devolved administrations maintain powers to determine BAT through their regulatory regimes:

The European Commission holds a power to establish BAT Conclusions for the purpose of environmental permitting for

¹³⁰ Gov.uk, [UK government's preparations for a 'no deal' scenario](#), 24 August 2018

¹³¹ HM Government, [Upholding environmental standards if there's no Brexit deal](#), 13 September 2018

¹³² HM Government, [Upholding environmental standards if there's no Brexit deal](#), 13 September 2018

¹³³ Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)

activities within the scope of the IED, which are based on BREFs developed through the EU-level Sevilla process. In a 'no-deal' scenario, the UK would no longer be part of the Sevilla process.

The UK government would make secondary legislation to ensure the existing BAT Conclusions continue to have effect in UK law after we leave the EU, to provide powers to adopt future BAT Conclusions in the UK and ensure the devolved administrations maintain powers to determine BAT through their regulatory regimes.

The UK government will put in place a process for determining future UK BAT Conclusions for industrial emissions. This would be developed with the devolved administrations and competent authorities across the UK. The UK government's Clean Air Strategy consultation for England also seeks views from interested parties on what the UK BAT regime might look like in the future.

Feedback we receive via this consultation will influence options which will be consulted on, through which industry and interested parties will have a further opportunity to help shape how BAT is determined once the UK leaves the EU.

It is the government's aim to ensure that the future UK BAT regime continues to endorse the collaborative approach of the current system and industry will be a part of that approach.

The UK BAT system would also consider the impacts of the EU approach.¹³⁴

Reporting CO₂ emissions for new cars and vans

Another Government technical notice on [Reporting CO₂ emissions for new cars and vans if there's no Brexit deal](#), 13 September 2018 sets out that in a no deal scenario the Department for Transport (DfT) would take over the functions that the European Commission previously exercised regarding the application and enforcement of CO₂ standards for UK-registered cars and vans. Emissions of CO₂ from new passenger cars and light commercial vehicles registered in Europe each year (registrations) are governed by Regulation (EC) 443/2009 and Regulation (EU) 510/2011 respectively. In a no deal scenario these regulations would be "brought into UK legislation," with deficiencies corrected to account for UK circumstances.¹³⁵

¹³⁴ HM Government, [Industrial emissions standards \('best available techniques'\) if there's no Brexit deal](#), 13 September 2018

¹³⁵ Government technical notice on [Reporting CO₂ emissions for new cars and vans if there's no Brexit deal](#), 13 September 2018

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