

# EU Environmental Principles



Environmental principles inform legal and political frameworks that aim to minimise the ill-effects of human activity on the environment. In the EU (Withdrawal Act) 2018, the UK has committed to incorporating a set of environmental principles into UK legislation. This POSTnote summarises these principles and considers potential opportunities and challenges surrounding their implementation post-Brexit.

## Background

Environmental principles inform legal frameworks that relate to environmental protection or sustainable development.<sup>1</sup> One group of environmental principles has been used in EU policy-making since the 1970s, and a wider set of principles were agreed globally at the 1992 Rio Declaration on Environment and Development.<sup>2,3</sup> They are also nested in a whole array of broader principles (including proportionality and subsidiarity outlined in the Treaty on the Functioning of the European Union (TFEU) articles 3, 5, 9–12). These broader principles apply to the environmental policy realm but are not specifically ‘environmental’.

Article 191(2) of TFEU sets out four main environmental principles that must guide policy within the scope of EU law ([CBP8132](#)).<sup>4</sup> These have been influential in formulating a range of EU directives and regulatory actions, and will constitute the main focus of this note. The principles listed are:

- **The precautionary principle**, which allows regulatory action to be taken even if a risk has not been established with full certainty.<sup>5</sup>
- **The prevention principle**, which aims to prevent environmental damage; such as to protected species or to natural habitats, water and soil; rather than to react to it.<sup>6</sup>

## Overview

- EU environmental law and policy is based on four core environmental principles contained in Article 191(2) of the Treaty on the Functioning of the European Union (TFEU): the precautionary, prevention, rectification at source, and polluter pays principles.
- The principles do not create direct legal rights but have been used by the courts to interpret and apply EU environmental law.
- The precautionary principle is applied to manage risk in cases of scientific uncertainty.
- The polluter pays principle is used to allocate responsibility for pollution costs, although attributing these costs can be complex.
- There is ongoing discussion around future implementation and adoption of the principles in the UK post-Brexit.

- **The rectification at source principle**, which seeks to prevent pollution at its source rather than remedy its effects.<sup>7,6</sup>
- **The polluter pays principle**, which requires polluters to bear the financial cost of their actions.<sup>8</sup>

## European Union (Withdrawal) Act 2018

In Section 16(2) of the EU (Withdrawal) Act 2018 along with the four core principles, a further five principles are outlined.<sup>9</sup> Two of these are contained in Article 11 of TFEU:

- **The integration principle**, which requires environmental protection measures to be integrated into all EU policies and activities, with a particular view to promote sustainable development.<sup>9,6,10</sup>
- **Sustainable development**, which is not defined in TFEU, but widely defined internationally as development that aims to “meet the needs of the present while not compromising the ability of future generations to meet their own needs” ([POSTnote 408](#)).<sup>11,12</sup>

The other three principles are qualitatively different from the four core principles, outlining not general ideas of policymaking, but legal rights for individuals around which there is extensive jurisprudence. These ensure that the UK continues to live up to its Aarhus commitments without the implementation structure of EU law:

- **Public access to environmental information**, which ensures access to written, visual, aural or database

information held by public authorities concerning the environment.<sup>13</sup>

- **Public participation in environmental decision-making**, which relates to the right of public participation in public decision-making relating to environmental matters.
- **Access to justice in relation to environmental matters**, which enables individuals and their associations to exercise rights granted to them under the Aarhus Convention.<sup>14</sup>

The Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community requires the UK to respect the four main principles outlined in TFEU in environmental legislation.<sup>15</sup> This POSTnote provides an overview of these, examining their merits, challenges and options for implementation in the UK post-Brexit.

## The Precautionary Principle

The precautionary principle was defined in the 1992 Rio declaration as “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environment degradation.”<sup>3</sup> The principle has been applied globally to guide policy on issues such as food safety, air quality, acid rain, climate change, North Sea pollution and most frequently to the restriction of chemicals.<sup>16-20</sup> EU applications of the principle include:

- The Environmental Quality Standards Directive 2013/39 EU,<sup>21</sup> which sets environmental quality standards for priority substances on a precautionary basis. For example, persistent organic pollutants, potentially toxic metals (POSTnote 579) such as cadmium,<sup>22</sup> and polycyclic aromatic hydrocarbons<sup>23</sup> are subject to standards set to achieve ‘good’ water quality as required by the Water Framework Directive (WFD).<sup>24</sup>
- Article 6(3) of the Habitats Directive (92/43/EEC), which requires impact assessments to be carried out where a plan or project is likely to have a significant effect on the integrity of a designated habitat site.<sup>25</sup> The UK Government was ruled against by the European Court of Justice for not complying with the Directive when allowing water abstraction in wetland sites designated under the Directive.<sup>25</sup>
- The deliberate release of Genetically Modified Organisms (GMO Directive) 2001/18,<sup>26</sup> including requirements for field testing in the research and development stage assessing how their use might affect ecosystems,<sup>27</sup> which is discussed below.

The precautionary principle has been advocated as a benchmark for regulating risk across different legal cultures.<sup>28</sup> However, translating scientific uncertainty into legal obligations requires a careful and nuanced understanding of both.<sup>29,30</sup> Decision-makers need to have rational and accountable decision-making processes for addressing risks. This involves applying tests of administrative review to understand the legality of decision-making. A report for the European Commission (EC) Directorate General Environment highlighted that actions guided by the precautionary principle should be based on

costs, benefits and best available scientific evidence. However, it also stated that an advantage of the approach is the overt recognition of uncertainties and the negotiated nature of decision-making.<sup>5</sup> The precautionary principle is not intended to eliminate risk, but ensure that the benefits of a decision outweigh the risks. For example, chlorine is often used for its antimicrobial properties to protect human health, but poses a health risk in high concentrations.<sup>31</sup> A precautionary approach is applied when there is a risk of harm, and scientific knowledge is not sufficient to reduce this risk. If harm can be demonstrated, a preventative approach is taken (below and Box 1).<sup>19</sup>

## The Precautionary Principle and GM Crops

In 1998, the EC started a negotiation on new genetically modified (GM) legislation,<sup>32</sup> halting the application process for approving GM Crops. In 2003, the US started a World Trade Organization (WTO) case against the EU on the grounds that the approval of biotech products was so slow that it amounted to a moratorium. In this case, the EU invoked the precautionary principle.<sup>33</sup> It contended in particular that the 2003 Cartagena Protocol on Biosafety – to which the EU, but not the United States, is a party – permits states to adopt a precautionary approach toward products created with new technologies.<sup>34</sup> Although the dispute settlement panel found in favour of the US, it did not state any opinions on the legality of future EU measures or whether the precautionary principles is part of international law binding on all states.<sup>34</sup>

### Box 1: Neonicotinoids and Bees

Neonicotinoids are a class of pesticides which have been associated with declines in bee populations.<sup>35</sup> In December 2013, acting on advice provided by the European Food Safety Authority, the EC triggered an open-ended restriction on three neonicotinoids linked to impacts on bees used for seed treatments, soil applications and foliar sprays (SN06656).<sup>36-38</sup> These measures were based on concerns that they could have harmful, but not lethal, effects on bees (SN06656). However, at the Standing Committee for Food Chain and Animal Health, and a submission to the Appeal Committee, there was no qualified majority support for the European Commission’s proposal to restrict neonicotinoids. As a result, the Commission took the decision on the restrictions itself.

In 2018, an EU-wide restriction on outdoor neonicotinoid use will come into place.<sup>38,39</sup> While the precautionary principle is not always about imposing bans, the prevention principle may require such restrictions. The restrictions on their use followed scientific debate, which concluded that there was a greater risk of harm to bees than had been previously understood.<sup>40,41</sup> A report by the European Food Safety Authority highlighted that bees are exposed to harmful levels of neonicotinoids in treated pollen, nectar and drifting dust.<sup>42</sup> Some studies have outlined the need for landscape-scale experiments in real conditions to be undertaken to determine the effects of neonicotinoids on bees at different spatial and temporal scales.<sup>40, 43, 44</sup> Further studies have highlighted the need for further measures to avoid the use of other, more environmentally harmful chemicals in response to the ban (SN06656). As one of the authors of an academic paper, the Defra Chief Scientific Advisor has suggested monitoring of the use and effects of pesticides are required at the landscape level to inform risk-based pesticide use, which makes the trade-offs between the environmental effects and food production more explicit.<sup>45</sup>

The links between the low levels of GM crops grown in EU countries and the precautionary principle are not straightforward.<sup>46</sup> In the UK, public opinion opposing GM increased alongside challenges surrounding food safety (arising from issues such as the transmission of bovine spongiform encephalitis to humans<sup>47,48</sup> and *Listeria* food poisoning from cheese).<sup>49</sup> This was coupled with additional public concerns that biotechnology companies were exercising too much control over consumers' choices.<sup>50</sup> Perceptions of risk can be shaped by the nature of the risk and the context within which it occurs (POSTnote 564).<sup>51</sup> This will influence regulatory approaches as well as legislative principles. In 2015, the House of Commons Science and Technology Committee recommended that when decisions are made about emerging issues on science and technology, a broad range of social and ethical factors should be taken into consideration. They also recommended a permanent 'Citizens Council' to provide advice on potential social and ethical impacts to the Advisory Committee of Releases to the Environment (whose remit includes Genetically Modified Organisms).<sup>52</sup>

### The Prevention Principle

The prevention principle is intended to prevent, rather than react to, environmental harm from unregulated action.<sup>6</sup> Unlike the precautionary principle, it is applied in law and policy when the risk of harm to the environment is clear.<sup>53</sup> However, the precautionary and prevention principles have been closely linked to one another;<sup>53</sup> for example, in the case of ozone-depleting chemicals.<sup>19</sup> In the 1970s, there was general consensus (but no proof) that chlorofluorocarbons could destroy the ozone layer. Thus, their use was cautioned (precautionary).<sup>19</sup> By the late 1980s, scientific evidence emerged that depletion of the stratospheric ozone layer increased ultraviolet radiation exposure, exacerbating the risk of skin cancers and cataracts in humans and animals. This prompted a preventive approach, requiring the phase-out of chlorofluorocarbons in middle income countries within 10 years and low income countries within 15 years.<sup>54</sup> Until the agreement of the Montreal Protocol in 1987, there was uncertainty as to which principle was being relied upon, but there was scientific consensus on the risk of harm by the time the Protocol came into force in 1989.<sup>19</sup>

The prevention principle was one of 11 objectives and principles listed in the First EU Environmental Action Programme in 1973.<sup>55</sup> In 1983, in the EC's Third Environmental Action Plan it was applied to waste policy (e.g. incineration, landfill and wastewater).<sup>6,56</sup> The Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal (1989) was the most comprehensive global treaty on waste, forming a basis for several applications of the prevention principle in EU law.<sup>57</sup>

### Rectification at Source Principle

The rectification at source principle guides the regulation of pollution from its source rather than in the wider environment.<sup>58</sup> It is not applied as an absolute rule, but as an overriding guide to policy; for instance, encouraging the

development of environmentally friendly technologies and products to reduce pollution at the earliest stage.<sup>59</sup> It has also been used to inform legal interpretation of some EU environmental regulation.<sup>1,60</sup>

### The Polluter Pays Principle

The polluter pays principle (PPP) asserts that those who produce pollution should bear the environmental and social costs of their actions. The PPP was first recognised by an international body in 1972, the Organisation for Economic Co-operation and Development.<sup>61</sup> Prior to this, air and water resources were used as 'sinks' for pollution, with damage to human health and property being paid for by society rather than by the polluter.<sup>61</sup> Disproportionate social and private costs of pollution were being 'externalised' from the polluter to wider society. The PPP aims to overcome these defaults by requiring polluters to internalise the cost of potential pollution in the production process (built-in costs), rather than allowing society to incur costs in the aftermath.<sup>62</sup>

### Designating Costs

The PPP has been utilised as an economic tool for managing different types of environmental pollution through embodiment in legislation including: The Waste Framework Directive,<sup>63</sup> Landfill Directive<sup>64</sup> and Water Framework Directive.<sup>65</sup> However, it is often difficult to define the polluter, the source of pollution,<sup>66</sup> and the associated liability cost over time. Where pollution derives from multiple sources, it should be designated to all polluters.

For example, the Nitrates Directive forms an integral part of the WFD and is one of the key instruments in the protection of waters from agricultural sources. Nitrate pollution may derive from multiple sources in river catchments (Box 2). Stakeholders have also been penalised under the WFD for the failure to meet water quality standards.<sup>67</sup> However, even when the pollution can be attributed to only one stakeholder, the PPP does not necessarily deter pollution by those who can afford to pay the cost.<sup>68</sup>

### The Environmental Principles after Brexit

The European (Withdrawal) Act 2018 outlined a set of 9 environmental principles to provide a basis for future environmental policy action in England.<sup>9</sup> Provisions in section 16 of the Act 2018 require the Government to publish the draft Environmental Principles and Governance

#### Box 2: Designation of Nitrate Vulnerable Zones

In 1997, two farmers challenged the UK Environment Secretary of State on the implementation of the Nitrates Directive across three UK rivers (Waveney, Blackwater and Chelmer).<sup>69,70</sup> They argued that in designated zones where nitrate concentrations had exceeded the Directive limit of 50 mg/l, non-agricultural sources of nitrates were a major contributory factor (such sources include transport, power station and domestic heating<sup>71</sup>). On reference to the European Courts of Justice, the High Court of Justice held that "...as regards the polluter pays principle, the directive does not mean that farmers must take on burdens for the elimination of pollution to which they have not contributed ... viewed in this light, the polluter pays principle reflects the principle of proportionality".<sup>72</sup>

Bill within six months ([CBP8132](#)), which must include a set of environmental principles and a policy statement relating to their application and interpretation. Several groups, including the British Academy have outlined the importance of environmental governance arrangements for the application of the principles in their response to Defra's consultation on the principles, which preceded the Act.<sup>73</sup>

### Challenges and Opportunities

There are a number of challenges and closely related environmental governance issues associated with the implementation of the environmental principles in the UK. These include:

- The proposed independent watchdog that might advise or potentially sanction the UK Government in relation to applying the principles.<sup>74,75</sup> The European Commission enforces EU legal obligations, which may be interpreted or reviewed in accordance with the TFEU environmental principles. The General Council of the Bar of England and Wales (the Bar Council) recently highlighted that the watchdog (as proposed in Defra consultation) would lack equivalent powers to those currently available to the EC and other related legal bodies.<sup>76</sup>
- Developing consistent UK-wide principles and a mechanism for enforcement on all public bodies in relation to applying the principles (see below).<sup>77</sup> At present the principles will only apply to England, and there are concerns that the UK Government could make decisions that do not fit with principles set by the National Assembly of Wales and those in the Scottish Continuity Bill.<sup>78,79</sup> This could result in different emerging sets of standards running in parallel in Wales or Scotland and being applied to devolved matters.
- Some organisations have raised concerns that trade with non-EU countries may be prioritised over strengthened environmental standards,<sup>80</sup> which could hamper adherence to the principles in future.

#### *Application of the Principles by Public Bodies*

The House of Commons Environmental Audit Committee Report on the Government's 25-Year Plan for the Environment highlighted the importance of the principles being applied to all public bodies, including non-departmental public bodies and local authorities, and not just central Government.<sup>77</sup> The view that principles should be applied across all government departments and local government was also outlined by stakeholders in evidence to a National Assembly for Wales Climate Change, Environment and Rural Affairs Committee report.<sup>78</sup> Given concerns over weak legislative language such as the Government 'having regard to' the principles and their application,<sup>77</sup> establishing legislative language requiring all public bodies to comply with the principles would represent a greater commitment to the environment.<sup>77,81</sup>

### Potential Additional Environmental Principles

As well as retaining EU principles in UK law, several organisations have highlighted the options for incorporating

additional environmental principles.<sup>77,76,82</sup> These include the principle of non-regression, which articulates that there should not be any lowering of environmental standards, ambition or protection.<sup>83</sup> An example of its application would be continued commitment to the mitigation of climate change at both a national and international level.<sup>84</sup> This would ensure that environmental standards are not rolled back over time; for instance, when new trade agreements are being negotiated.

Witnesses to the EAC inquiry also referred to a 'high level of environmental protection', outlined in Article 191(2) of the TFEU.<sup>77</sup> The Government has also announced in the 25-Year plan to incorporate 'net gain' into development, meaning that development projects must improve environmental quality or equal any damage caused.<sup>77</sup> Other academics have described developing an 'environmental advancement' principle aimed at pursuing increasingly high environmental standards.<sup>84</sup> Other suggested principles include using the 'best available scientific evidence' to inform policy action and the principle of management at an appropriate physical scale, such as the river catchment.<sup>77,74,85</sup>

Other commentators have highlighted the issue of adopting other non-environmental EU principles, such as the 'innovation principle', which the EU Political Strategy Centre described as a 'counter principle' to the precautionary principle.<sup>86</sup> It is defined as the objective of a "highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment" (Article 3(3) TEU). Its primary aim is to encourage sustainability and employment, while establishing higher productivity and competitiveness, including social and environmental benefits.<sup>86</sup>

### Application and Interpretation of the Principles

Environmental principles have the potential to shape decision-making by the UK government and public bodies. The Government's forthcoming statutory statement of policy on the environmental principles application and interpretation will largely determine how they are implemented. The Environmental Audit Committee recommended this policy statement will require robust scrutiny and consultation to ensure that environmental standards are maintained or improved.<sup>77</sup> In the 25-Year Plan for the Environment, the UK Government stated its ambition to leave the environment in a better state than that it was inherited.<sup>87</sup> However, realising this ambition may depend on the effective implementation of the environmental principles in policy frameworks, the sanctioning regime adopted for not doing so, and regulatory frameworks being afforded scope to incorporate additional principles in future.

## Endnotes

- 1 Scottford E, 2017, *Environmental principles and the evolution of environmental law*, London: Hart
- 2 Mintzer, I, and Leonard, J, 1994, *Negotiating climate change: The inside story of the Rio Convention*, Cambridge University Press
- 3 *Rio Declaration on Environment and Development*, 1992, Report of the United Nations Conference on Environment and Development.
- 4 Treaty on the Functioning of the European Union, Article 191(2).
- 5 Science for Environment Policy, 2017, *The Precautionary Principle: decision making under uncertainty*, Future Brief 18, Produced for the European Commission DG Environment by the Science Communication Unit, UWE, Bristol
- 6 Macrory, R, 2004, *Principles of European Environmental Law*, Groningen, Europa Law Publishing
- 7 Treaty on the Functioning of the European Union, Article 191(2).
- 8 Steinzor R, 2000, *Harvard environmental law review*, 24, 351-464
- 9 European Union (Withdrawal) Act 2018, Section 16(2)
- 10 McIntyre O, 2013, *The principles of integration and interrelationships in international law related to sustainable development: Sobering lessons from EU law*, In: *Confronting Ecological and Economic Collapse: Ecological Integrity for Law, Policy and Human Rights*, eds., Westra, L, Taylor, P, and Michelot, A
- 11 Brundtland Report, 1987, *Our Common Future*
- 12 [United Nations, Sustainable Development Goals Knowledge Platform](#)
- 13 Council Directive 90/313/EEC, *Freedom of access to information on the environment*
- 14 Aarhus Convention on Access to Information, 1998, Public Participation in Decision-Making and Access to Justice in Environmental Matters
- 15 Draft Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, Annex 4, Part 2, p.357
- 16 Fisher, E and Harding, R, 2001, *Journal of Environmental Law*, 13, 317-34
- 17 Vanderzwaag D, 1998, *Journal of Environmental Law and Practise*, 8, 355-75
- 18 O'Riordan T & Jordan A, 1995, *The precautionary principle, science, politics and ethics*, CSERGE Working Paper, PA 95-02
- 19 Haigh, N, 2016, *EU environmental policy: its journey to centre stage*, Routledge
- 20 European Environment Agency, 2001, *Late lessons from early warnings*
- 21 Environmental Quality Standards Directive, 2013/39/EU
- 22 Has-Schön, E, et al, 2015, *Chemosphere*, 135:289-296
- 23 Nicolaus, E, et al, *Marine Pollution Bulletin*, 95:469-469, 2015.
- 24 The Water Framework Directive, 2000/60/EC
- 25 Sundseth, K, and Roth, P, 2014, [Article 6 of the Habitats Directive, Rulings of the European Court of Justice, Ecosystems Ltd \(N2K Group\)](#)
- 26 Directive 2001/18/EC, The deliberate release into the environment of genetically modified organisms.
- 27 Directive 2001/18/EC of the European Parliament and of the Council.
- 28 Fisher E, 2002, *Maastricht Journal of European and Comparative Law*, MJ9, 7-28
- 29 Bozzini E, 2017, *Pesticide policy and politics in the European Union*, Palgrave Macmillan
- 30 Wynne, B, and Meyer, S, 1993, *New Scientist*, 1876:33-35
- 31 [Portuese, A, 2013, European Law Journal, 19 \(5\), 612-635](#)
- 32 Lieberman, S, and Gray, T, *Environmental Politics*, 15 (4), 592-609, 2006.
- 33 Josling, T, 2013, *BIORES*, 9 (3).
- 34 [Peterson, M, 2010, The EU-US Dispute over Regulation of Genetically Modified Organisms, Plants, Feeds, and Foods, International Dimensions of Ethics Education in Science and Engineering](#)
- 35 IPBES, 2017, *Deliverable 3(a): Thematic assessment of pollinators, pollination and food production*
- 36 European Commission, Official Journal of the European Union, L139/12, 2013.
- 37 Guardian, 2018, *Bee harming pesticides banned in Europe*.
- 38 Nature, 2018, *Scientists hail European ban on bee-harming pesticide*
- 39 GOV UK, 2018, *Further restrictions on neonicotinoids banned*
- 40 Woodcock, B, et al, 2017, *Science*, 356 (6345):1393-1395
- 41 Kerr J, 2017, *Science*, 356(6345):1331-1332
- 42 Nature, 2018, *EU expected to vote on pesticide ban after major scientific review*
- 43 Rundlöf, M, 2015, *Nature* 521, 77-80, 2015.
- 44 Henry M, et al, *Proceedings of the Royal Society of London B*, 282, 2015:2110, 2015.
- 45 [Milner, A, and Boyd, I, 2017, Science, 357 \(6357\), 1232-1234](#)
- 46 Lee M, 2018, *GMOs and the precautionary principle* (In Press).
- 47 Scott R, et al, 1999, *Proceedings of the National Academy of Sciences of the United States of America*, 96(26):15137-42
- 48 Gill O, 2013, *BMJ*, 347:5675
- 49 Melo J, et al, 2013, *Food Research International*, 67:75-90
- 50 Monbiot ,G, 2000, *Captive state: the corporate takeover of Britain*, Macmillan
- 51 Hartmann et al, 2018, *Food and chemical toxicology*, 116:100-107
- 52 House of Commons Science and Technology Committee, *Advanced genetic techniques for crop improvement: regulation, risk and precaution: Fifth Report of Session 2014-15*
- 53 [Trouwborst A, 2009, Prevention, precaution, logic and law. The relationship between the precautionary principle and the preventative principle in international law and associated questions, Erasmus Law Review, 2 \(2\)](#)
- 54 Woodcock A, 2012, *Thorax*, 67(12),1028-31
- 55 Haigh N, 2017, *Journal for European Environmental and Planning Law*, 14:155-158
- 56 Hulpke, H, and Müller-Eisen, 1997, *Environmental Science and Pollution Research*, 4(3)146-154
- 57 Basel Convention on the control of transboundary movements of hazardous wastes and their disposal, Directive 93/98/EEC, 1993.
- 58 The Environmental Noise Directive 2002/49/EC, 2000.
- 59 Von Seht, H, and Ott, H, 2000, *EU environmental principles: Implementation in Germany*, Wuppertal Papers
- 60 Case C-2/90 *Commission v. Belgium (Walloon Waste)* [1992] ECR I-4431
- 61 [Munir, M, 2013, History and evolution of the polluter pays principle. How economic idea became a legal principle](#)
- 62 Pearce D & Helm D, *Oxford Review of Economic Policy*, 19(3):438-50, 1990.
- 63 European Commission, Directive 2008/98/EC on waste (Waste Framework Directive)
- 64 European Commission, Directive 1999/31/EC on Landfill (Landfill Directive)
- 65 The Water Framework Directive, 2000/60/EC.
- 66 Annex to Recommendation, 75/436, OJL 194/1, Pt III, 1975.
- 67 Reuters, 2017, *Thames Water hit with record fine for polluting River Thames*
- 68 [Jagers, S, and Duus-Otterström, G, 2007, Intergenerational responsibility, Historical emissions and climate change responsibility, The Quality of Government Working Papers Series](#)
- 69 The Nitrates Directive, 91/676/EEC.
- 70 Case C-293/97, *The Queen v Secretary of State for the Environment and Ministry of Agriculture, Fisheries and Food, ex parte H.A. Standley and Others and D.G.D. Metson and Others*, ECR I-02603, 1999.
- 71 Environmental Audit Committee: UK Progress on Reducing Nitrate Pollution, Eleventh Report of Session 2017–19
- 72 The principle of proportionality requires that acts of the EU institutions be appropriate for attaining the legitimate objectives pursued by the legislation at issue and do not go beyond what is necessary in order to achieve those objectives.
- 73 British Academy, 2018, Consultation response: Environmental principles and governance after the United Kingdom leaves the European Union
- 74 [ClientEarth, 2018, Environmental principles in UK law after Brexit](#)
- 75 Environmental Audit Committee, Oral evidence: Government's environmental principles and governance consultation, HC 1062
- 76 Bar Council, 2018, Bar Council response to the "Environmental principles and governance after the United Kingdom leaves the European Union" Consultation Paper
- 77 Environmental Audit Committee Report, *The Government's 25-Year Plan for the Environment*, Eighth Report of Session 2017–19
- 78 National Assembly for Wales, 2018, Climate Change, Environment and Rural Affairs Committee, *Environmental government arrangements and environmental principles post-Brexit*
- 79 The Scottish Parliament, 2018, UK Withdrawal from the European Union (Legal Continuity) Scotland (Bill)
- 80 Written evidence submitted by Wildlife and Countryside Link to the Environmental Audit Committee Hearing on The Government's 25 Year Plan for the Environment
- 81 Oral evidence given by Maria Lee, Environmental Audit Committee Hearing on The Government's 25 Year Plan for the Environment
- 82 Friends of the Earth, 2018, Environmental principles and governance consultation: a briefing for local groups
- 83 [Green Alliance Blog, 2018, The UK should set its own green lines in the Brexit negotiations](#)
- 84 [Burns C, et al, 2018, UK Environmental Policy Post-Brexit: A Risk Analysis, a report for Friends of the Earth, Brexit and Environment](#)
- 85 Defra, Catchment Based Approach: Improving the quality of our water environment, 2013.
- 86 [European Political Strategy Centre, 2016, Towards an Innovation Principle Endorsed by Better Regulation, Strategic Notes, 14](#)
- 87 HM Government, 2018, A green future: our 25-year plan to improve the environment.