



BREXIT: CHALLENGES AND OPPORTUNITIES

THE IMPLICATIONS OF BREXIT ON SCOTLAND'S NATURAL ASSETS

Recommendations

- The key principles and instruments of European Union (EU) environmental regulation and practice merit consideration for inclusion in UK and Scottish legislation at the appropriate time in the light of the agreements on Brexit with the EU and on common frameworks within the UK.
- Arrangements for ensuring enforcement of environmental principles, policies and regulations are needed. There are a number of models which the Royal Society of Edinburgh (RSE) recommends be considered by the UK and Scottish Governments. On balance, our preference is for a strong, well-resourced and independent environmental scrutiny and enforcement body to be established for Scotland. Its powers could include the collection and analysis of data and publication of its findings, mediating solutions and seeking resolution on non-compliance, and ensuring through involvement of the courts that non-compliance is effectively dealt with.
- To implement these two recommendations, the RSE invites the Scottish Government and Scottish Parliament to consider a new Scottish Environment Act, incorporating the Scottish Government's proposals in the light of its consultation on *Developing an Environment Strategy for Scotland*¹.
- Advantage should be taken of the opportunity provided by Brexit to develop a new approach for supporting the production of food which fully incorporates environmental stewardship alongside food security and other key policy objectives, and for a renewed push to tackle local ambient air quality.
- Scotland should seek, in the first instance through the UK Government, continuing engagement in and access to EU research and innovation programmes. Scotland should also seek to remain engaged in the European Environment Agency and the European Topic Centres.

¹ Developing an Environment Strategy for Scotland: discussion paper, Scottish Government, June 2018
<https://www.gov.scot/publications/developing-environment-strategy-scotland-discussion-paper/>

Summary

- *There is a substantial acquis of EU legal instruments designed to protect and improve environmental quality. Their implementation has been accompanied by a considerable improvement in the quality of the natural environment, particularly protecting species and habitats, improving water and air quality and reducing waste.*
- *These improvements have also brought benefits to people's lives and to businesses through the improvement of environmental quality and through providing more equitable access to environmental resources under licensing schemes.*
- *Key EU treaties and charters have established significant environmental management principles, such as precaution, polluter pays and no regression. These should not be lost.*
- *The effect of the Common Agricultural Policy on the environment has been mixed reflecting its predominant focus on food production.*
- *Implementation of measures has been limited on some issues – most notably in relation to local air quality and formerly on species and habitat protection.*
- *Withdrawal from the EU poses challenges to the maintenance and improvement of the quality of Scotland's environment, unless current EU arrangements are adopted in UK and Scots law and in practices on the ground.*
- *Brexit provides an opportunity to take a more integrated approach to the implementation of environmental law and policy, rather than the previous, somewhat fragmentary approach.*
- *Enforcement procedures and practices within the EU, including the role of the Court of Justice of the European Union (CJEU), are perceived to have had a deterrent effect on a reluctance to implement some environmental regulations in the UK. There is a good case for ensuring that measures of equivalent effectiveness are created in the UK and Scotland. A variety of options are explored including establishing an independent environmental enforcement body.*

- *Scottish input to, and use of, environmental knowledge and data, collected for EU purposes, has been substantial. Means to retain these valuable connections should be explored.*

Introduction

- 1 Following the result of the referendum on the United Kingdom's membership of the EU on 23 June 2016, the Royal Society of Edinburgh (RSE) established a European Strategy Group. The group oversees the provision of EU-related strategic advice in the following five areas: Migration, Diversity, Rights & Social Protection; Constitutional Law and Government; Economy & Public Finance; Research, Innovation and Tertiary Education; and the Environment.²
- 2 The quantity of EU environmental regulation is very substantial. A total of 27 Directives are in force. All of these have been enacted into UK and devolved administration statutes and form the basis for most regulation on air and water quality, habitat and species protection, waste management, flooding, and environmental assessment³. They are focussed on both the use and protection of natural resources both for their own sake – the nature-based approach – and the benefits arising to people and their social, health and economic wellbeing.
- 3 The literature distributed to every household in the UK by the UK Government prior to the Referendum on EU membership did not mention the environment and the role of EU environmental measures. In addition, much of the public and political debate has ignored the important role of environmental regulations and the benefits which they have brought.
- 4 At the same time, an opinion survey across Europe in 2017 revealed that 94% of respondents considered that protecting the environment was important and, in rank order, that there is a continuing need for research, heavier fines for wrong-doing, better enforcement, tougher legislation, more information, and financial incentives⁴. Many businesses in Scotland depend on the environment and estimates have shown the monetary value of Scotland's ecosystem services to be very considerable⁵.

² RSE Advice Papers on Brexit Challenges and Opportunities
<https://www.rse.org.uk/rse-publishes-advice-brexit-challenges-opportunities/>

³ EU Environmental Legislation and UK Implementation, Chartered Institute of Ecology and Environmental Management, December 2015
https://www.cieem.net/data/files/Resource_Library/Policy/Policy_work/CIEEM_EU_Directive_Summaries.pdf

⁴ Eurobarometer Survey, Attitudes of European Citizens Towards the Environment, November 2017 http://ec.europa.eu/environment/eurobarometers_en.htm

⁵ Evan Williams, John R. Firn, Vanessa Kind, Mark Roberts and Derek McGlashan, The value of Scotland's ecosystem services and natural capital, Environmental Policy and Governance, March/April 2003 <https://onlinelibrary.wiley.com/doi/abs/10.1002/eet.314>

- 5 This Advice Paper, focuses specifically on the implications of Brexit for the terrestrial environment – air, land and freshwater. It refers to other regulations and policies, for example relating to agriculture, where it is considered that they can affect the environment, in a positive or negative manner, and which are relevant for the future in maintaining the quality of Scotland's environment and the benefits to society.

Effect of EU Directives and Regulations

- 6 The impact of the Directives and Regulations on the environment in Scotland can be best illustrated by the following statistics (Interventions from the EU have had either a direct effect or have stimulated action by the UK Government and/or devolved administrations and it is not always possible to decipher which has had the most formative impact).

- a) **Nature.** Special Areas of Conservation have been designated under the Habitats and Species Directive for the protection of nature, leading to 241 sites covering 2.47M hectares (ha) and candidate sites covering almost 3M ha⁶. In addition, Special Protection Areas have been designated under the Birds Directive with 153 sites established covering 1.23M ha and 15 proposed marine sites⁷. There is some overlap between the two sets of sites in some locations.
- b) **Water.** In 1992, 6.8% of rivers were classified as slightly polluted, polluted, or severely polluted. After the implementation of the Framework Water Directive, this fell to 3.5% in 2015⁸. Under the Bathing Waters Directive quality improved from 17% failure against standards in 2000 to full compliance in 2013⁹.
- c) **Air.** There has been a great reduction in pollution from industrial emissions – for example an 87% drop in sulphur dioxide between 1996 and 2015¹⁰ and a 70% drop in nitrogen oxides since 2002¹¹. As a result, the area of sensitive habitats

exceeding critical deposition loads for acidification has fallen from 68% to 31% between 1996 and 2012. This has largely been driven by the EU National Emission Ceilings Directive which implemented the Gothenburg Protocol. However, local air quality remains poor. There are 38 defined air quality management areas in Scotland and proposals for low emission zones in Scotland's major cities. Despite a Scottish Government commitment to comply with all European air quality standards by 2020, this seems impossible now to achieve¹² as only one city-centre low-emission zone is currently in the planning stages. The UK has recently been referred to the European Court of Justice for repeated failure to address local air pollution.

d) **Waste.** In 2011, 12Mt of waste was generated in Scotland, 2.4% recovered and 48% recycled. By 2015, 11.6Mt of waste was generated, 5.6% recovered and 56% recycled. For all wastes, the amount being recycled has increased by almost 25% between 2011 and 2016. For household waste specifically, the amount being landfilled has declined by 60% between 2005 and 2016¹³. Much of this improvement has been driven by the UK landfill tax introduced to help meet the targets of the EU Landfill Directive.

- 7 While no EU Directive on soils was agreed, there is a thematic soil study. Arguably, the European debates encouraged the development of *A Scottish soil strategy and state of soils*¹⁴.
- 8 Through Euratom, which gives a significant role to the European Commission and is subject to the jurisdiction of the CJEU, there has been a secure system of regulation of nuclear materials for over 60 years. The UK Nuclear Safeguards Act has recently been passed which is intended to create a legal framework for a nuclear safeguards regime to operate in the UK after the UK leaves Euratom. However, it remains unclear how the associated governance and enforcement will be delivered under the new provisions.

6 Special Areas of Conservation, Scottish Natural Heritage <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/international-designations/natura-sites/special-areas-conservation-sacs>

7 Special Protection Areas, Scottish Natural Heritage <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/protected-areas/international-designations/natura-sites/special-protection-areas-spas>

8 Key Scottish Environment Statistics 2016, Scottish Government <http://www.gov.scot/Publications/2016/10/7565/0>

9 Key Scottish Environment Statistics 2016, Scottish Government <http://www.gov.scot/Publications/2016/10/7565/334167>

10 Key Scottish Environment Statistics 2016, Scottish Government <https://beta.gov.scot/publications/key-scottish-environment-statistics-2016-9781786525505/pages/6/>

11 Pollutant Search Results Summary, SEPA <http://apps.sepa.org.uk/SPRIPA/Search/ByPollutant/Summary.aspx?Media=air&Pollutant=122>

12 Cleaner Air for Scotland: The Road to a Healthier Future, Scottish Government, November 2015 <http://www.gov.scot/Resource/0048/00488493.pdf>

13 Digest of Waste and Resource Statistics, Department for Environment, Food, & Rural Affairs, May 2018 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/710124/Digest_of_Waste_and_Resource_Statistics_2018.pdf

14 Scotland's Soils <http://soils.environment.gov.scot/>

Overall assessment

- 9 The statistics quoted above point to substantial improvements in environmental quality and environmental protection as a direct or indirect result of the implementation of EU Directives and Regulations. It is arguable that the UK has led on many of these given the influential position of certain UK elected pro-environment MEPs on European Parliament Committees and the effective lobbying of major environmental non-governmental organisations (NGOs) in Brussels. This is supported by evidence presented to the House of Commons Environmental Audit Committee's review of *EU and UK Environmental Policy*¹⁵.
- 10 Framework Directives have proved to be particularly important in setting down strategic, spatial approaches within which more specific Directives and Regulations can apply. For example, the Water Framework Directive has provided a comprehensive frame of reference for all regulations relating to the improvement of freshwater quality. In Scotland, it has stimulated the development of River Basin Management Plans. The Waste Framework Directive took a similar conceptual approach to defining the waste hierarchy and the expectation of producer responsibility.
- 11 A fundamental improvement in environmental practice has been the articulation of overarching principles relating to the environment set out in EU legislation. Article 37 of the Charter of Fundamental Rights of the EU on environmental protection states that *"A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development"*¹⁶. Of key significance is the general and specific principles set out in Article 191 of the Treaty on the Functioning of the EU (otherwise known as the Lisbon Treaty).
- 12 Article 191(1) states that *"Union policy on the environment shall contribute to pursuit of the following objectives: preserving, protecting and improving the quality of the environment, protecting human health, prudent and rational utilisation of natural resources, promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change"*. Article 191(2) states that *"policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay."* These provisions are generally stated as the precautionary principle; the principle of prevention; the polluter pays principle; the principle that as a priority environmental damage should be rectified at source; and the integration principle. The RSE has stated these in full because it is considered that they are important post Brexit – a point which is returned to later.
- 13 One of the important facets of environmental regulation in the EU has been the combination of sound science, robust evidence, overt risk analysis, stakeholder engagement, cyclical prioritisation, strong underpinning legal powers, and scrutiny by the European Commission and other regulatory agencies, as well as possible referral for breaches of the Directives' requirements to the CJEU. The administration of the system has not been perfect by any means, and implementation of the procedures has not always been proportionate. Nevertheless, we consider that this integrated approach provides a sound basis for operation once the UK leaves the EU.
- 14 EU Directives and Regulations have a force in the environmental field much greater than much of domestic statute and regulation. They are capable of enforcement through well established procedures. Monitoring of Member State performance is undertaken by DG Environment, assisted by data gathering and analysis by the European Environment Agency and other bodies such as the European Topic Centres, and ultimately referral to the CJEU. Under a non-binding European Recommendation, the standard of environmental inspections by Member State authorities is audited by the Network for the Implementation and Enforcement of Environmental Law (IMPEL), which is made up of all the environmental authorities within the Member States.

¹⁵ EU and UK Environmental Policy, House of Commons Environmental Audit Committee, April 2016 <https://publications.parliament.uk/pa/cm201516/cmselect/cmenvaud/537/537.pdf>

¹⁶ Charter of Fundamental Rights of the European Union <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012P/TXT>

- 15** Sanctions, such as threat of withdrawal of access to EU Structural Funds, have been applied in the UK (for example, in relation to proposals for development in Cardiff Bay which were considered to have a damaging effect on the species and habitats protected under the Natura 2000 system). Between 2003 and 2016, 46% of CJEU judgements involving the UK related to the environment. Of these 29 cases, 21 were found in the European Commission's favour, 4 in the UK's favour and 4 with mixed outcomes¹⁷. There is a mechanism by which third parties, for example NGOs or even individuals, can raise concerns with the Commission about infringements by Member States¹⁸. Overall, this system appears, from the experience of those who have worked within government and its agencies, to have had a salutary effect on Member States' governments in supporting compliance and improving the quality and extent of implementation.
- 16** The requirements of the Directives and Regulations have, however, tended to be implemented in a piecemeal manner, resulting in a lack of integration between the different requirements. For example, the Water Framework Directive is inherently risk-based and there can be challenges in reconciling its requirements against those of the nature protection legislation which accepts no risk to protection of some habitats and species, especially those given priority status. There is also still too much implementation on the ground in isolation from wider landscapes, leaving protected areas vulnerable to cross-boundary effects from water sources in areas not formally protected. Additionally, there will be the accumulating effects of climate change on the ecological status of freshwaters. Ideally, any reformulation of the transposing legislation should address the issues that are highlighted here in order to provide for a coherent and integrated approach.
- 17** At times, there appears to have been a reluctance by both the UK and Scottish Governments to fully implement EU provisions. This is especially the case for ambient air quality where the UK Government has been referred to the CJEU, along with some other Member States. In the early period following the establishment of the Species and Habitats Directive, there appeared to be a marked reluctance by both the UK Government and the pre-devolution Scottish administration towards the need for a comprehensive approach to species and habitats protection¹⁹. This changed in response to a more rigorous approach demanded by the European Commission, following the intervention of international environmental NGOs and the European Topic Centre for Nature Conservation.
- 18** There is considerable first-hand evidence that supranational enforcement procedures and the threat of legal proceedings have, in some instances, ensured the effective implementation of environmental measures by the UK Government and devolved administrations, often against their willingness. This has been the case in the implementation of the Natura 2000 scheme for habitats and species protection. This safeguard is at risk in the future unless appropriate governance structures and effective enforcement procedures are established.
- 19** There has been a marked imbalance in resources available for implementing EU environmental measures compared with other aspects of EU policy. For example, very considerable funds have been available to those parts of Scotland, and other parts of the UK, which have qualified under regional development measures. More important have been the EU funds available for agriculture in Scotland, for example these totalled €732m in 2017²⁰, although some of this is for environmental measures. This imbalance in resource availability may have had an influence on the speed of implementation of environmental measures.

¹⁷ Who's Afraid of the ECJ?, Chartering the UK's relationship with the European Court, Institute for Government, December 2017 https://www.instituteforgovernment.org.uk/sites/default/files/publications/IfG_Brexit_ECJ_v10FINAL%20web.pdf

¹⁸ Complaint Form for breach of EU law https://ec.europa.eu/assets/sg/report-a-breach/complaints_en/index.html

¹⁹ Roger Crofts, The European Natura 2000 Protected Area Approach: A Practitioner's Perspective, PARKS 2014 Vol 20.1 http://parksjournal.com/wp-content/uploads/2014/04/PARKS-20.1-Crofts-10.2305IUCN.CH_.2014.PARKS-20-1.RC_.en_.pdf

²⁰ Agriculture in the UK 2017, DEFRA, May 2018 <https://www.gov.uk/government/statistics/agriculture-in-the-united-kingdom-2017>

Other regulations and policies affecting the environment

- 20** The RSE consider that the non-environmental EU policy having the most profound effect on the terrestrial environment has been the Common Agricultural Policy (CAP). Over 40 years, the CAP has influenced land use choices, especially the type and intensity of use of agricultural land which impact on the environment in many ways, including on greenhouse gas emissions, water quality and biodiversity. This conclusion is set in the context that Scotland's agricultural land is distinctive in that 86% is classified as Less Favoured Areas (LFA), with a relatively small proportion of high quality farmland, many valuable semi-natural habitats, more forest cover than the rest of the UK and a significant proportion of land used for sporting purposes.
- 21** The implementation of the CAP after the 2003 reforms gave Scotland significant flexibility in the balance of funding between direct support payments and the Rural Development Programme (which includes an aim of sustaining a farming sector that is environmentally sound). Brexit provides an opportunity to develop a more tailored set of policies that better reflect the Scottish situation, with the potential to be more advantageous to the environment by reflecting the importance of stewardship of natural systems and processes, while continuing to ensure a productive and profitable agricultural sector. However, the nature of the UK internal market post-Brexit, including the scope for policy divergence in the devolved nations, coupled with other cross-cutting issues, including future trade policy, will influence farm and forest profitability and possibly standards and, consequently, drive environmental change.

Recommended arrangements for the future

- 22** From this overall assessment, it is considered that the wide range of environmental Directives and Regulations, underpinned by high-level Environmental Principles and backed by strong, independent enforcement procedures, have provided a package which has been of significance in maintaining and, in part, improving the quality of Scotland's terrestrial environment. The RSE

considers that it would be very remiss of the UK and Scottish Governments if these benefits were not maintained after Brexit. Every opportunity should be taken to update the panoply of regulation and principles in the light of knowledge of their operation over the past 40 years of UK membership of the EU, so that Scotland has a continually improving terrestrial environment. New environmentally sensitive arrangements for the support of food production are needed. It is recommended that the UK retains links with European research and advisory bodies.

- 23** It follows from the above arguments that the primary concerns for the future are twofold: to ensure that the overarching principles of environmental regulation and the Directives and Regulations have statutory force under new UK and Scottish statutes, and that mechanisms for enforcement, independent of the government, are put in place. These are dealt with in turn. Concluding, that rather than relying entirely on policy statements which can be readily changed, a new comprehensive statute at both UK and Scottish levels would be the preferred means of encompassing all of the recommendations in this paper.
- 24** The UK Government's commitments are strong in the generality, but weak on the details. The White Paper on Brexit stated the following on the environment:
- "The UK and its constituent parts have long-standing commitments to protecting the environment. The Government has been clear that the UK will maintain high environmental standards once it has left the EU and has published a 25 Year Environment Plan for England to set out the scale of its future ambitions. Scotland, Wales and Northern Ireland have made clear that they have equally high ambitions. The UK has also fulfilled the commitment to consult on a new, independent, statutory body to hold the government to account on environmental protections. The UK is party to numerous Multilateral Environmental Agreements, and the UK is committed to upholding its international obligations under these agreements after it leaves the EU"*²¹.

²¹ The Future Relationship Between the UK and the EU, HM Government, July 2018
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/725288/The_future_relationship_between_the_United_Kingdom_and_the_European_Union.pdf

The environment is not one of the 5 main principles stated in the White Paper (economy, community, union, democracy and the UK's place in the world). Hence the need, as is argued below, for firmer commitments by the UK Government and in Scotland.

(1) Transposing fundamental environmental principles and regulation into UK and Scottish law and practice

25 The fundamental environmental principles, established under the Charter of Fundamental Rights and in Articles 191(1) and 191(2) of the Treaty on the Functioning of the EU, quoted above, should be enacted in both UK and Scots law (without necessarily retaining the Charter of Fundamental Rights in general as part of UK law). This would provide a higher level for environmental protection than was the case under national law before the UK joined the EU.

26 Perhaps the most critical principle that should be part of UK and Scottish legislation post Brexit is that of *no regression*. There are continuing issues about maintaining environmental quality²². Evidence gathered by the European Environment Agency points to the inability to achieve the environmental quality targets set for 2020²³. Therefore, adopting a principle specifically stating that there should be no diminution of environmental quality arising from decisions by government would seem to be reasonable. This is a minimum requirement. Ideally, a more positive provision of *net improvement* to environmental assets and their functioning could be established. This is the essence of the Nature Improvement Areas in England²⁴. In Scotland, this approach could be placed within the framework of a higher-level goal of environmental protection, which serves to protect against misapplications of more specific principles and is in tune with the Scottish Government's stance in its consultation paper on *Developing an Environment Strategy for Scotland*, published in June 2018²⁵.

27 Departure from the EU provides an opportunity for the UK and Scotland to consider broadening

and modernising the basic principles in the light of new knowledge and practice. Two examples illustrate this point. First, there may well be advantages to broadening the polluter-pays principle to become the *user-of-ecosystem-services pays principle*. This would apply to commercial users of environmental goods and services. It would also, potentially, open up mechanisms to remedy the well-recognised market failures concerning wider environmental exploitation through what are widely termed *Payments for Environmental Services* schemes. Second, some of the Directives, specifically the Habitats and Species Directive and the Water Framework Directive, are based on a static, protectionist approach to environmental quality. However, this approach is not appropriate for the future given the effects of climate change on ecological quality and species and habitat distribution already being observed²⁶.

28 The key principles and provisions in Article 191(1) and (2) of the Lisbon Treaty do not form part of the European Union (Withdrawal) Act 2018²⁷ which was approved by the UK Parliament. The commitment by the UK Government to include these principles in a new Environmental Principles and Governance Bill is welcome²⁸. As is the Prime Minister's commitment in a speech on 2 March 2018 that "*as we leave the EU we will uphold environmental standards and go further to protect our shared natural heritage. And I fully expect that our standards will remain at least as high as the EU's*"²⁹. The RSE also welcomes the positive statements in the Scottish Government's environment strategy consultation, specifically the commitments to "maintaining or exceeding EU environmental standards" and "ensuring future trading arrangements do not compromise standards"³⁰. There is, however, a need for consistency in the principles to be included in proposed legislation and coordination on the differing timescales for policy commitment and legislative proposals. It is also important that these high standards for the environment are safeguarded in the face of the trade-offs needed to realise new trading arrangements.

²² State of Nature 2016: Scotland https://scottishwildlifetrust.org.uk/docs/002_466__stateofnature2016_scotland_1sept_1473756177.pdf

²³ Environmental Indicator Report, European Environment Agency, 2017 <https://www.eea.europa.eu/publications/environmental-indicator-report-2017>

²⁴ Nature Improvement Areas: improved ecological networks, Natural England <https://www.gov.uk/government/publications/nature-improvement-areas-improved-ecological-networks>

²⁵ Developing an Environment Strategy for Scotland: discussion paper, Scottish Government, June 2018 <https://www.gov.scot/publications/developing-environment-strategy-scotland-discussion-paper/>

²⁶ RSE Conference Report, Spotlight on Scotland's Biodiversity, October 2017 <https://www.rse.org.uk/wp-content/uploads/2016/12/RSE-Biodiversity-Conference-Report.pdf>

²⁷ European Union (Withdrawal) Act 2018 <http://www.legislation.gov.uk/ukpga/2018/16/contents/enacted>

²⁸ Environmental Principles and Governance Bill consultation, Defra, May 2018 <https://www.gov.uk/government/news/new-environment-law-to-deliver-a-green-brex>

²⁹ PM Mansion House Speech, 2 March 2018 <https://politick.co.uk/pm-mansion-house-speech-2-march-2018/>

³⁰ Developing an Environment Strategy for Scotland: discussion paper, Scottish Government, June 2018 <https://www.gov.scot/publications/developing-environment-strategy-scotland-discussion-paper/>

- 29** The RSE considers that protocols (often termed ‘proofing tests’) are required in the future to enable assessments of the effects of any measures, positive and negative, on the environment, society and the economy. We suggest consideration be given to using the Circular Economy and the Triple Bottom Line accounting framework (which comprises social, environmental and financial dimensions). At the same time, proofing tests could help to identify opportunities for innovation, as in the recycling of plastics.
- 30** In determining the precise approach to new legislation, consideration should be given to approaches taken in the past and those which are likely to prove the most effective to maintain environmental standards in the future. Three separate and distinct bodies of legislation regulate our immediate environment – these relate to health & safety, wildlife, and pollution control. For historical reasons, they have adopted quite different underlying concepts of delivery in the UK. Health & Safety legislation is founded on the principle of laying responsibility firmly on business managers, staff and staff representative groups to ensure appropriate policies and procedures, within certain guidelines, are in place and observed. Wildlife legislation is largely delivered through agreed land management contracts with support funding. In contrast, pollution control regulation is predominantly delivered through a technocratic approach of setting numerically based discharge licences, for which a fee is also charged. These historical differences have remained in place throughout the UK’s membership of the EU. Departure from the EU may offer an opportunity to review these distinct foundations and move towards a more consolidated approach. The great advantage of the health and safety approach is that, within Scotland, 2.6 million employees are exposed to basic training in health and safety; this undoubtedly transfers into personal and home life providing a multiplier effect. In a more democratic and empowered world, there is some attraction in shifting wider environmental responsibilities towards a more individual level.
- 31** Some progress is being made in considering these broader measures. For example, the RSE welcomes Section 16 of the European Union (Withdrawal) Act 2018 which places a statutory duty on the Secretary of State to develop, review and maintain a comprehensive set of environmental principles; and the Scottish Government’s commitment to the four key principles of environment: polluter pays, preventative action, tackling pollution at source and precautionary principle, stated in the recent discussion paper on *Developing an Environment Strategy for Scotland*³¹.
- 32** The RSE welcomes the principles and the provisions in the UK Withdrawal from the European Union (Legal Continuity) (Scotland) Bill approved in March 2018 by the Scottish Parliament, specifically regarding the transposition of the general principles of EU law and the Charter of Fundamental Rights in section 5 and the provisions in sections 11-13 relating to dealing with deficiencies in the UK law post Brexit³². It is recognised that there is a legal challenge to the validity of the Scottish Parliament’s powers to pass such a Bill. The RSE is concerned that Ministers only need to have regard to the guiding principles on the environment, and only in so far as they are relevant to the provisions being made in the regulations. Our preference is for the duties to be strengthened and that they should be applicable to all public authorities. The Bill does not include the principle of integration from Article 11 of the Lisbon Treaty. Although the Scottish Government’s commitment to sustainable development goes some way to implementing the principle in practice, the RSE would ask for reconsideration of whether this can be included in legislation once the common frameworks have been agreed.
- 33** There are welcome commitments by both the UK and Scottish Governments to maintaining the quality of the terrestrial environment through policies post Brexit. But, concerns remain that firm proposals for the necessary legislation remain too vague at present. A key issue to be resolved relates to the arrangements that will be made in the UK and Scotland post-Brexit for the enforcement and interpretation of EU-derived environmental principles, policies and regulations. The development and agreement of common frameworks among the UK Government and devolved administrations will be an important part of this process.

³¹ Developing an Environment Strategy for Scotland: discussion paper, Scottish Government, June 2018 <https://www.gov.scot/publications/developing-environment-strategy-scotland-discussion-paper/>

³² UK Withdrawal from the European Union (Legal Continuity) (Scotland) Bill <http://www.parliament.scot/parliamentarybusiness/Bills/107725.aspx>

(2) Implementing effective enforcement procedures

34 Many possibilities for enforcement procedures have been discussed in recent months varying from using existing legal processes and procedures and existing government bodies, to variations on practice elsewhere, to entirely new arrangements which seek to mimic those within the EU (see, for example, the work of the UK Environmental Law Association³³). As a starting point, the RSE considers it essential that enforcement procedures, independent of the UK Government and the devolved administrations, are established to maintain the effectiveness of implementation of EU Directives and Regulations. The RSE supports the following statement made by the Environmental Policy Forum: *“Transferring the letter of the law through the Bill is only part of the equation. We will equally require means to ensure all the UK governments and their regulatory agencies are held to account for their implementation of the detail of the law, as leaving the EU will bring an end to the investigative role of the European Commission and the direct jurisdiction of the Court of Justice of the European Union”*³⁴.

35 The stated policy of both the UK and Scottish Governments that there should be no dilution in the implementation and enforcement of environmental regulations is an important commitment that should be maintained.

36 In the absence of a supranational enforcement mechanism after leaving the EU, the only current alternative within the UK would be to seek a judicial review. However, this is very expensive and very narrow in focus. It comprises a court proceeding which is concerned only with the lawfulness of a decision or action or failure to act, by a public body exercising a public function. The remedies available to the court are discretionary, very rarely provide damages, and are limited usually to a requirement for the public body to review its decision.

37 At the UK level, it is considered that the UK Supreme Court should be the ultimate arbiter of whether public bodies have acted lawfully as it is independent of government and of political interference. The UK Supreme Court and, before a case gets there on appeal, the Court of Session,

as the supreme civil court in Scotland, have only the limited competence provided by judicial review over environmental decisions by public authorities (i.e. the courts can prevent breaches of natural justice caused by a procedural impropriety or an irrational decision, etc). For the courts to be able to go further and review the *merits* of a decision by a public authority affecting the environment would represent a significant shift in power and responsibility. A feature of EU law, which will become domestic law but is unfamiliar here, is the imposition of obligations on government actually to achieve specific outcomes (e.g. bathing water quality). At present, there is no established practice for who can enforce these, when and leading to what remedy. All of these issues need to be clarified.

38 The courts cannot operate in isolation and there should be consideration of the establishment of an independent body for Scotland (and similarly for the rest of the UK) to help bring environmental cases to the courts. There are a number of options. At the devolved level, there are concerns about the use of an existing body, such as the Scottish Environment Protection Agency which, as a Non-Departmental Public Body, is a creature of the government of the day and operates within a framework of governance and accountability set by Scottish Ministers. One solution worthy of serious consideration is a truly independent arm's length system.

39 A number of organisations have argued the case for an Environmental Commission. For example, Client Earth argue for a body independent of government able to scrutinise government action in response to complaints and to review government performance as it sees fit³⁵. Environmental Courts, developed under the Aarhus Convention, are another model. The EU law on procedural environmental rights, which implements the Aarhus Convention, includes access to environmental information, right of public participation in both environmental impact assessments and permitting procedures, and public participation in strategic environmental assessments of policies. Interestingly, the UK has had the highest number of referrals to the Aarhus Convention Compliance Committee³⁶.

³³ <https://www.ukela.org/brexit>

³⁴ Environmental Policy Forum <https://ifm.org.uk/wp-content/uploads/2017/10/2017-09-05-EPF-EU-Withdrawal-briefing.pdf>

³⁵ A New Nature and Environment Commission, Client Earth, May 2018
<https://www.documents.clientearth.org/library/download-info/a-new-nature-and-environment-commission/>

³⁶ See:

<https://www.uncece.org/environmental-policy/conventions/public-participation/aarhus-convention/tfvg/envpcc/implementation-of-decisions-of-the-meeting-of-the-parties-on-compliance-by-individual-parties/sixth-meeting-of-the-parties-2017/united-kingdom-decision-v18k.html>

- 40** The RSE notes the recent UK Government consultation on a new enforcement body³⁷ and the advice of a Scottish Government established roundtable³⁸ and consider there is a serious case for any new body to be independent from government and to have clear enforcement powers, as opposed to the predominantly advisory and supervisory roles exercised on behalf of government that are proposed. The Scottish report, commissioned by the Cabinet Secretary for the Environment, Climate Change and Land Reform specifically excluded consideration of a body independent of government. It would be important to ensure that any new body is able to speak freely and is not subject to inappropriate interference or influence by the Scottish or UK Governments, while also ensuring that the methods of appointing the body and holding it to account are appropriate in our parliamentary democracy.
- 41** These various models should be seriously considered in the post Brexit context. The overriding criteria should be to ensure that environmental quality regulation and practice are subject to scrutiny that is independent of government, that recommendations for improvements in practice and statute can be made, and that unsolved cases can be referred to the courts. Specifically, a new environmental enforcement body should also have the responsibility to develop protocols for the key environmental principles outlined earlier, to provide training in their application and to call to account all parts of the public sector to deliver the requirements of the regulations. This is a role similar to that played by the Accounts Commission and Audit Scotland.

(3) Comprehensive Environment Acts

- 42** The question arises whether there should just be transposition of the EU statutes directly into UK and devolved administration law and practice, or whether there should be a new Environment Act. The latter would have a wider compass setting out the vision, policies, laws

and practices for the future as the context for transposing the environmental legislation of the EU. There is pressure for this to occur for England following the publication of the UK Government's Environment Plan for the next 25 years.³⁹

- 43** A good case can be made for a new Environment Act because of the aforementioned lack of integration, the many and diverse issues affecting environmental quality and the existence of many Scottish laws and policies. This Act could incorporate statutory procedures and policies already adopted by the Scottish Government. These include the requirements to meet targets on the reduction of greenhouse gases and the development of a Land Use Strategy under the Climate Change (Scotland) Act 2009, the commitment to implementation of the UN Sustainable Development Goals 2015-2030 in Scotland, the adoption in practice of the concept of 'natural capital', and the framework for the delivery of public services through the National Performance Framework cascade. Therefore, there is equal justification for a comprehensive Environment Act for Scotland.
- 44** The RSE considers Scotland's future environment strategy, policy and legislation should be more closely aligned to the global environmental and social justice agendas. One model is the Well-Being of Future Generations (Wales) Act 2015;⁴⁰ an approach along these lines merits consideration for Scotland. The 17 UN Sustainable Development Goals for 2015-2030 provide a global framework targeted specifically at "ending poverty, protecting the planet and ensuring prosperity to all"⁴¹. The RSE supports the adoption of these goals by the Scottish Government as the basic frame of reference for its policies and action.⁴²

³⁷ Environmental Principles and Governance after EU Exit, Defra, May 2018 <https://consult.defra.gov.uk/eu/environmental-principles-and-governance/>

³⁸ Environmental Governance in Scotland after Brexit, Scottish Government, June 2018 <http://www.gov.scot/Publications/2018/06/2221>

³⁹ A Green Future: Our 25 Year Plan to Improve the Environment, HM Government, January 2018 <https://www.gov.uk/government/publications/25-year-environment-plan>

⁴⁰ Well-Being of Future Generations (Wales) Act 2015 <http://www.legislation.gov.uk/anaw/2015/2/contents/enacted>

⁴¹ UN Sustainable Development Goals <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

⁴² The Global Goals for Sustainable Development in Scotland <https://globalgoals.scot/scotlands-goals/>

⁴⁵ Associated international conventions and treaty commitments under the UN post Rio package will, hopefully, be maintained to ensure that Scottish action in relation to reduction in biodiversity loss, protection of existing biodiversity and of genetic diversity, and in relation to climate change mitigation and adaptation will continue under these international umbrellas. However, implementation is largely a matter for the signatory governments and enforcement measures are weak. Hence, as part of the proposals for a new environmental enforcement agency, independent enforcement scrutiny of those international treaties and conventions, to which Scotland is party as a constituent part of the UK, should be included.

⁴⁶ The commitments in the recent Scottish Government discussion paper, *Developing an Environment Strategy for Scotland*⁴³, to recognise Scotland's international environmental responsibilities and obligations are welcomed.

(4) Support for food production post Brexit

⁴⁷ Brexit provides an opportunity for Scotland and/or the UK in due course to modify the EU system for supporting food production. If any changes are made they should be done in an environmentally sensitive and sustainable manner. Where appropriate, common UK frameworks should be sought. The Scottish and UK Governments, in the development of their environmental strategies and their approaches to supporting the food production sector, should develop a more integrated approach, as recommended earlier in this paper. This is also supported by the Scottish Government's Agricultural Champions.⁴⁴ There is already the basis for such integration from recent experience. The framework is provided by the Land Use Strategy duty in the Climate Change (Scotland) Act 2009 and has been developed through the successful regional land use strategy pilots.⁴⁵

There is scope, therefore, to extend these throughout Scotland to recognise the varying opportunities for environmentally sensitive food production. Allied to this regional approach, should be the implementation of the Land Rights and Responsibilities Statement Principles approved by the Scottish Parliament through the Land Reform (Scotland) Act 2016.⁴⁶

(5) Retaining links to European research-based information, knowledge and advice

⁴⁸ Scotland is well placed, with government agencies and research institutes in the environmental field and expertise in the Higher Education Institutes, to continue to make available objective, scientific evidence on environmental trends and their causes. However, the potential loss of UK-EU researcher mobility and collaboration, coupled with considerable doubt as to whether the UK will be able to access EU funded programmes (including the new Framework Programme, *Horizon Europe*), are very significant issues that need to be addressed. It is considered, that, as a matter of priority, the UK Government seeks to secure the UK's continued direct participation in EU research programmes⁴⁷. Scotland and the UK should also continue to have membership of a number of European institutions in the environmental field after Brexit including the European Environment Agency and Topic Centres.

⁴⁹ The European Environment Agency is an agency of the European Union charged with providing sound and independent information in order to help make informed decisions about improving the environment, integrating environmental considerations into economic policies, and moving towards sustainability. All EU members are part of the European Environment Agency, but other states may also join through agreement with the EU.

⁴³ Developing an Environment Strategy for Scotland: discussion paper, Scottish Government, June 2018 <https://www.gov.scot/publications/developing-environment-strategy-scotland-discussion-paper/>

⁴⁴ A future strategy for Scottish agriculture: final report, Scottish Government's Agricultural Champions, May 2018 <https://www.gov.scot/publications/future-strategy-scottish-agriculture-final-report-scottish-governments-agriculture-champions/>

⁴⁵ Evaluation of the Regional Land Use Framework Pilots, January 2016 <http://www.gov.scot/Publications/2016/01/9321/0>

⁴⁶ Scottish land rights and responsibilities statement, Scottish Government, September 2017 <http://www.gov.scot/Publications/2017/09/7869>

⁴⁷ Note, this topic is covered in more detail by other RSE advice papers

Currently there are 33 full members (28 EU Member States, plus 5 others) and 6 cooperating countries who have applied for full membership. The European Environment Information and Observation Network (EIONET) is a partnership network of the European Environment Agency and its members and cooperating countries. It is the vehicle that brings together environmental information from every country, facilitating the delivery of timely, nationally validated, high-quality data. There appears to be no formal inhibition to a non-EU Member State joining the European Environment Agency and the UK and the devolved administrations, therefore, should seriously consider becoming full members of the European Environment Agency after Brexit.

- 50 The European Commission draws on advice from six topic centres, comprising networks of highly regarded research institutes around Europe. The topics are: air pollution and climate change mitigation; climate change impacts and adaptation; biological diversity; waste and materials in the green economy; inland, coastal and marine waters; and urban, land and soil systems. The UK is involved in these as contributors of science and research. After departing the EU, there will be no comparable source of customised scientific and technical advice to UK and devolved governments when considering future environmental strategies, plans, policies and legislation or when seeking evidence on the efficacy of existing policies. The RSE considers that the UK and the devolved administrations should develop an association with these topic centres to allow exchange of information on scientific knowledge and best practice.

Additional Information

This Advice Paper has been signed off by the RSE's EU Strategy Group and the RSE General Secretary.

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