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Article

Accepted Version

Hilson, C. ORCID: <https://orcid.org/0000-0003-4114-6471>
(2018) The impact of Brexit on the environment: exploring the
dynamics of a complex relationship. *Transnational
Environmental Law*, 7 (1). pp. 89-113. ISSN 2047-1033 doi:
<https://doi.org/10.1017/S2047102517000279> Available at
<https://centaur.reading.ac.uk/72360/>

It is advisable to refer to the publisher's version if you intend to cite from the
work. See [Guidance on citing](#).

To link to this article DOI: <http://dx.doi.org/10.1017/S2047102517000279>

Publisher: Cambridge University Press

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The Impact of Brexit on the Environment: Exploring the Dynamics of a Complex Relationship

Chris Hilson *

Abstract

Brexit is likely to have a significant impact on the environment. In the current article I argue against seeing the traffic as all one-way. While there was a temptation for the advocates of staying in the European Union (EU), in the context of referendum campaigning, to portray the United Kingdom (UK) as a laggard pressured into positive environmental performance by the EU as leader, the reality is that the UK has also strengthened the EU's environmental policy in some areas and seen its own weakened in others. Influence in both directions has also varied over time. The article goes on to consider core 'Leave' arguments around sovereignty and 'taking back control', exploring the implications of these in the specific context of environmental governance. In discussing subsidiarity, it concludes that leaving the EU will not remove the need for the pooling of some sovereignty over environmental matters at international level and, in the context of devolution, at UK level.

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Keywords: Brexit, environment, sovereignty, control, subsidiarity, governance

1. INTRODUCTION

There have been a number of excellent, comprehensive studies on the environmental implications of the United Kingdom (UK) leaving the European Union (EU), often referred to as 'Brexit'.¹ Detailed as these existing studies are, they do not always systematically set out the dynamic interaction between the UK and the EU, with influence – both positive and negative – travelling in both directions over time and across different policy areas within environmental policy. Nor do they necessarily unpick the various factors which have a bearing on any assessment of whether leaving the EU is likely to be environmentally deleterious. In the current article I aim to do both of these.

The article consists of two parts. In the first part, I consider the potential impact of Brexit on environmental policy and hence environmental quality. While this part considers the potential practical consequences, the second then considers the normative consequences of Brexit for issues of sovereignty and control – issues which featured strongly in the referendum debates. I argue that subsidiarity is central to the discussion and that repatriating environmental competence will typically fail to produce the desired level of *effective* control over environmental problems. I also highlight, as others have, that environmental sovereignty, once returned from 'Brussels', gives rise to questions about environmental federalism within the UK and the appetite of devolved administrations for a degree of Brussels-replacing central control. Both parts of the article therefore concern the title's

¹ Environmental Audit Committee (EAC), Third Report of Session 2015–16, 'EU and UK Environmental Policy', HC 537; Institute for European Environmental Policy (IEEP), 'Brexit: The Implications for UK Environmental Policy and Regulation' (2016), available at: http://ieep.eu/assets/2016/IEEP_2016_Brexit_-_Implications_for_UK_Environmental_Policy_and_Regulations.pdf; C. Burns et al., 'The EU Referendum and the UK Environment: An Expert Review' (2016), available at: http://ukandeu.ac.uk/wp-content/uploads/2016/04/Expert-Review_EU-referendum-UK-environment.pdf; C. Burns, A. Jordan & V. Gravey, 'The EU Referendum and the UK Environment: the Future Under a 'Hard' and a 'Soft' Brexit'' (2016), available at: <http://ukandeu.ac.uk/wp-content/uploads/2016/08/The-Environment-under-Soft-or-Hard-Brexit.pdf>; HM Government, 'Review of the Balance of Competences between the United Kingdom and the European Union: Environment and Climate Change' (2014), ch. 2; V. Heyvaert and A. Čavoški, 'UK Environmental Law Post-Brexit', in M. Dougan (ed.), *The UK After Brexit* (Intersentia, 2017), pp. 115-133.

‘impact of Brexit on the environment’: the first part covers environmental policy and quality; the second part relates to environmental governance.

In deciding whether Brexit is likely to be good or bad for the environment in policy terms, it is important to note that any such assessment is inevitably value-laden. Although Table 1 below presents a form of ledger of positive and negative aspects of Brexit, the discussion that follows illustrates that there may be room for reasonable disagreement on where a policy is placed.

Different sides may be equally committed to environmental protection, but have competing visions of the best policy means for achieving this.² The EU emissions trading system (ETS) is a good example. To what extent one regards the ETS as a force for good is likely to depend in part on one’s faith in market-based instruments. Moreover, while this article mostly focuses on the potentially environmentally deleterious impact of Brexit on the specific policy areas that constitute the EU’s environmental *acquis*, it is also worth observing that some believe the very nature of the EU as a growth-based trading block as a whole is environmentally harmful and that the UK would therefore be better off out.³

2. MULTI-DIRECTIONAL EFFECTS

² E.g., the UK Environment Secretary, Michael Gove, has stated: ‘While the EU has often been a force for good in raising environmental standards, some of the means haven’t necessarily been the most effective regulatory tools - so getting those right will be critical to Brexit success’ (R. Harrabin, ‘Brexit ‘Will Enhance’ UK Wildlife Laws – Gove’, *BBC News*, 19 June 2017, available at: <http://www.bbc.co.uk/news/science-environment-40331919>).

³ E.g. J. Jones, ‘The EU is an Outsized Behemoth Beyond Reform: The Green Case for Brexit’, *The Guardian*, Comment is Free, 8 June 2016, available at: <https://www.theguardian.com/commentisfree/2016/jun/08/eu-reform-green-brexit>: ‘The most profound weakness of the EU, from the Green point of view, is that it is a super-sized top-down dogmatic project of endless industrial development and growth. It fosters the pointless carting of goods enormous distances, and it smashes local resilience and self-reliance. Often well-intentioned environmental policies are outweighed at every turn by the more fundamental drivers of its bid to turn the whole of Europe into a paradise for (environmentally damaging) agribusiness and industry.’ The Green Party itself was in favour of Remain (being more concerned with the threat of Brexit to the environmental *acquis*): Green Party, ‘Natalie Bennett Unveils Our “Three Yeses” to Europe’, 23 Jan. 2013, available at: <https://www.greenparty.org.uk/news/2013/01/23/natalie-bennett-unveils-our-three-yeses-to-europe>.

Table 1: The impact on environmental policy of UK membership of the EU

	<i>Policy outcome</i>		
	Negative	Positive	
<i>Polity impacted</i>	EU	<p>EU policy diluted by UK membership Air quality Fracking Energy efficiency Soils EU Emissions Trading System (ETS) (early)</p>	<p>EU policy strengthened by UK membership Climate Change (targets, recent EU ETS, and external policy, but <u>not</u> renewables or energy efficiency) Common Agricultural Policy (CAP) Common Fisheries Policy (CFP) Integrated Pollution Prevention and Control (IPPC)/Industrial Emissions Directive (IED) Habitats (early)</p>
	UK	<p>UK diluted by EU CAP CFP Biofuels</p>	<p>UK strengthened by EU Bathing Water Drinking water Air Quality Recent wildlife protection (<u>except</u> farm birds) Waste Renewables Chemicals Genetically Modified Organisms (GMOs) Fracking Environmental Impact Assessment (EIA)</p>

Table 1 is designed to show the interaction between the UK and the EU in environmental policy in a bi-directional and bi-dimensional manner; one which shows that the impacts have not all been one way, and have not been uniformly positive or negative, but rather a mix of both.⁴ In the campaigning and debate leading up to the EU referendum, the Remain side typically emphasized the ways in which the EU had been good for the UK environment and that leaving would therefore be harmful.

⁴ See IEEP, 'Report on the Influence of EU Policies on the Environment' (2013), at p. 1 (stressing a two-way relationship), available at: http://www.ieep.eu/assets/1230/Final_Report_-_Influence_of_EU_Policies_on_the_Environment.pdf.

This side of the argument is captured by the bottom right hand box of Table 1 and the policy areas contained within, such as drinking water, bathing water and waste policy, where EU Directives have undoubtedly led to significant improvements in UK standards. A number of Remainers did however also mention the few EU policy areas in the bottom left hand box which have not necessarily been environmentally beneficial for the UK, including in particular the Common Agricultural Policy (CAP) and the Common Fisheries Policy (CFP).⁵ The CAP, for example, has gone hand in hand with an intensification of agriculture and has been associated with, inter alia, a decline in previously common farmland birds and diffuse nitrate pollution of watercourses from fertilizers.⁶ In that respect, it can be argued that non-environmental EU policy⁷ has had as much, if not more, of an effect on the quality of the UK environment as dedicated environmental policy. An assessment of the effects of Brexit on the environment, therefore, should not be limited to a consideration of environmental law and policy alone.

Understandably in a referendum aimed at persuading UK voters, the effects of UK membership on the EU received less attention. However, in assessing the overall effects of Brexit on the environment, these effects – set out in the top half of Table 1 – also require careful consideration as part of a bi-directional assessment. Some have been positive. For example, the UK has driven the EU on climate change targets⁸ and has encouraged the greening of the CAP.⁹ It was also instrumental in the design of the Integrated Pollution Prevention and Control (IPPC) industrial emissions regime,

⁵ See also, e.g., biofuels, where EU policy has been questioned on environmental grounds both by those on the Leave side (see, e.g., dissenting report by P. Lilley, EAC, n. 1 above) and by the environmental movement (see, e.g., G. Monbiot, 'These Brexiters Will Grind Our Environment Into the Dust', *The Guardian*, 20 July 2016, available at: <https://www.theguardian.com/commentisfree/2016/jul/20/brexiters-make-britain-countryside-like-kansas>).

⁶ Burns et al., n. 1 above, p. 37.

⁷ Although, of course, EU agricultural policy has for some time contained agri-environmental policy within it (albeit of questionable overall ambition).

⁸ IEEP, n. 4 above, pp. 7, 24; Burns et al., n. 1 above, p. 16.

⁹ Burns et al., n. 1 above, p. 38; written evidence of V. Gravey et al. submitted to the HC, EAC inquiry, 'The Future of the Natural Environment after the EU Referendum' (Session 2016–17), para. 13, available at: <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environmental-audit-committee/the-future-of-the-natural-environment-after-the-eu-referendum/written/35891.html>.

which later became the Industrial Emissions Directive.¹⁰ EU external policy on the environment has also been enhanced by UK input, especially in the area of climate change negotiations. Membership of the EU has given the UK more influence than it would otherwise have had – the UK gets the benefits of putting forward its own views but with the added weight of a larger bloc’s platform to support them.¹¹ Other effects, where the UK government has blocked or watered down EU environmental legislation, have been negative. Recent examples include policies on air quality,¹² fracking,¹³ energy efficiency,¹⁴ and soils.¹⁵

3. A DYNAMIC RELATIONSHIP

It is tempting to see the relationship between the EU and UK in static rather than dynamic terms across time. The temptation is thus to regard the UK as forever the laggard and the EU as always the leader. While it is not hard to see why pre-referendum campaigning on the Remain side would take this stance, in reality the UK government’s environmental credentials have fluctuated over time and across environmental policy areas. The EU’s environmental record, too, changes according to the political complexion of the European Commission and Member State governments in the Council of

¹⁰ Directive 2010/75/EU [2010] OJ L 334/17. EAC (n. 1 above, para. 22; cf. N. Haigh, *EU Environmental Policy: Its Journey to Centre Stage* (Routledge, 2016), pp. 197-203, noting resistance to the British idea of a single permitting authority.

¹¹ Burns et al., n. 1 above, p. 11; J. Gummer et al., ‘Within the EU, Britain Can Take the Lead on Tackling Climate Change’, *The Guardian*, 18 Apr. 2016, available at: <https://www.theguardian.com/environment/2016/apr/18/within-the-eu-britain-can-take-the-lead-on-tackling-climate-change>; EAC, n. 1 above, paras 15-8; IEEP, n. 4 above, p. 7; R. Davis, ‘Should Environmentalists Support the UK’s Membership of the EU?’, Energydesk Greenpeace, 17 Mar. 2016, available at: <http://energydesk.greenpeace.org/2016/03/17/comment-brexit-environmentalists-support-uk-eu-membership>.

¹² A. Neslen, ‘EU Dilutes Proposal to Halve Air Pollution Deaths After UK Lobbying’, *The Guardian*, 3 June 2016, available at: <https://www.theguardian.com/environment/2016/jun/03/eu-dilutes-proposal-halve-air-pollution-deaths-uk-lobbying>.

¹³ D. Carrington, ‘UK Defeats European Bid for Fracking Regulations’, *The Guardian*, 14 Jan. 2014, available at: <https://www.theguardian.com/environment/2014/jan/14/uk-defeats-european-bid-fracking-regulations>.

¹⁴ EAC, n. 1 above, para. 23.

¹⁵ DEFRA, ‘Safeguarding our Soils: A Strategy for England’ (2009), p. 3; G. Monbiot, ‘The Farming Lobby Has Wrecked Efforts to Defend Our Soil’, *The Guardian*, 5 June 2014, available at: <https://www.theguardian.com/environment/georgemonbiot/2014/jun/05/the-farming-lobby-has-wrecked-efforts-to-defend-our-soil>.

Ministers. Some of the policy areas listed in Table 1 provide a good illustration of this. For example, the EU ETS could legitimately be placed in either the 'EU policy diluted' or the 'EU policy strengthened' box. Insofar as the UK pushed for this policy in the first place¹⁶ and it has become regarded by many as a somewhat ineffective neoliberal instrument,¹⁷ it might legitimately be put in the negative top left hand box. However, the UK has also been instrumental more recently in trying to strengthen the policy by restricting allowances,¹⁸ which could mean UK influence belongs more in the positive top right hand box. Similarly, while the UK was an early advocate of nature conservation laws and was thus supportive of the Habitats Directive¹⁹ at the time of its inception,²⁰ in recent years the UK Government, arguably, has come to regard the Directive as a burdensome obstruction to development projects.²¹ As regards the EU's changing stance vis-a-vis the environment, the current Juncker-led EU Commission, for example, worried some environmentalists with its Better Regulation-based 'fitness check' of the Birds²² and Habitats Directives.²³

The dynamic nature of the EU-UK environmental relationship requires consideration not only of the past and present but also to the future. In the lead-up to the referendum, the future direction of the UK Government's environmental policy was undoubtedly a cause of concern in some quarters.

Anecdotally, many environmentally conscious voters appeared minded to vote Remain in part

¹⁶ IEEP, n. 4 above, p. 25; Burns et al., n. 1 above, p. 16.

¹⁷ See e.g. G. Winter, 'The Climate Is No Commodity: Taking Stock of the Emissions Trading System' (2010) 22(1) *Journal of Environmental Law*, pp. 1-25.

¹⁸ Burns et al., n. 1 above, p. 18.

¹⁹ Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora [1992] OJ L206/7.

²⁰ Burns et al., n. 1 above, p. 138; T. Hutchings (WWF), oral evidence, House of Lords Select Committee on the European Union, Energy and Environment Sub-Committee, 'Brexit: Environment and Climate Change', 26 Oct. 2016, at p. 22, available at:

<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/eu-energy-and-environment-subcommittee/brexit-environment-and-climate-change/oral/42398.pdf>.

²¹ As opposed to ensuring sustainable development. For details of the government's negative view, see e.g. HM Treasury Autumn Statement 2011, at para. 1.99; A. Neslen, 'Brexit Would Free UK From 'Spirit-crushing' Green Directives, Says Minister', *The Guardian*, 30 May 2016, available at: <https://www.theguardian.com/politics/2016/may/30/brexit-spirit-crushing-green-directives-minister-george-eustice>.

²² Directive 2009/147/EC on the Conservation of Wild Birds [2010] OJ L20/7.

²³ IEEP, n. 1 above, p. 20; European Commission, 'Fitness Check of the Birds and Habitats Directives', available at: http://ec.europa.eu/environment/nature/legislation/fitness_check/index_en.htm; see further V. Gravey, 'Nature Directives 'Fit for Purpose': A Turning Point for EU Policy Dismantling?', *Environmental Europe? blog*, 7 Dec. 2016, available at: <http://environmentaleurope.ideason europe.eu/2016/12/07/naturealertrefit>.

because of a fear that a Conservative government which had previously referred to environmental issues as ‘Green crap’²⁴ would see Brexit as an opportunity to deregulate troublesome environmental ‘red tape’.²⁵ Deregulation – both in general and in relation to the environment specifically – also featured strongly in the Leave campaign.²⁶ Nevertheless, the Government’s balance of competences review on the environment and climate change in the run up to the referendum in general revealed no obvious clamouring for deregulation by environmental and industry stakeholders.²⁷ As for the Government’s own view, the Environmental Audit Committee (EAC) report made clear:

The Government’s renegotiation of the UK’s relationship with the EU did not explicitly include a reference to the environment. Mr Stewart, Minister at DEFRA, told us: ‘We are not intending to renegotiate those directives. [...] The basic structure of the competences, the basic structure of European environmental law in relation to our Department I think is very close to what we think is sensible. It is what we would intend to do in the United Kingdom.’ Lord Bourne, Minister at DECC, said, ‘in this area of energy and climate change, the UK’s interests are very much within a strong EU. [...] this area is not part of the renegotiation. We are very comfortable with the EU stance.’²⁸

Of course, while that was true of the pre-referendum Government, no one knew what a post-Brexit government might look like. Many suspected that it might be led by pro-Brexit politicians on the right of the Conservative party, a number of whom had climate sceptic views and were unsympathetic to the environment more generally. To that extent therefore, any deregulatory fear was potentially well founded. In the end, the fall-out from the referendum produced a new government led by a supposedly ‘quiet Remainer’ Prime Minister, with a leading Leave campaigner

²⁴ J. Garman, ‘Green Crap’? Cameron’s U-turn on the Environment is Just as Shameful as Clegg’s on Tuition Fees’, *The Independent*, 21 Nov. 2013, available at: <http://www.independent.co.uk/voices/comment/green-crap-cameras-u-turn-on-the-environment-is-just-as-shameful-as-cleggs-on-tuition-fees-8954747.html>.

²⁵ See further L. Fisher, ‘Sovereignty, Red Tape...and the Environment’, PSA blog, 17 June 2016, available at: <https://www.psa.ac.uk/insight-plus/blog/sovereignty-red-tape%E2%80%A6and-environment>.

²⁶ On the environment, see e.g. Neslen, n. 21 above.

²⁷ HM Government, n. 1 above.

²⁸ EAC, n. 1 above, at paras 56-7.

as Environment Secretary and with three prominent ‘Brexiters’²⁹ members of the Cabinet tasked with negotiations on Brexit, including those relating to the environment. This Government remained in power after a snap election in June 2017, albeit with a much reduced majority.

It may be too early to predict the Government’s ideological approach post-Brexit. However, in contemplating the impact of Brexit on the environment, political will is in any event only part of the equation. In practice, significant change in UK environmental policy seems unlikely for two reasons. Firstly, the policy literature tells us that path dependence from a relationship built up over many decades means that there will be a significant inclination towards maintaining the status quo.³⁰ Secondly, even if historically embedded ways of doing things were easily undone at the best of times (which path dependence tells us they are not), Brexit represents far from the best of times. The overwhelming work pressure on the UK Government, Parliament and the civil service in dealing with many of the procedural mechanics of Brexit, both centrally and arguably even more so within the devolved administrations of Wales, Scotland, and Northern Ireland, means that there is unlikely to be time to carry out a root and branch overhaul of environmental policy, at least in the short to medium term. This does not mean that *no* changes will occur. Firstly, the Government is on record as stating that roughly one third of EU environment legislation will not be carried across via the European Union (Withdrawal) Bill³¹ (the statute designed to repeal the future legal authority of EU law in the UK while simultaneously carrying over the existing body of EU law onto the UK books).³² This is because there are some policies which, on leaving the EU, cannot easily take immediate legal

²⁹ Those on the Leave side in favour of Brexit have often been styled ‘Brexiters’, with a nod to Dumas’s *The Three Musketeers*.

³⁰ B. Flynn, ‘What a Difference a Vote Makes? Second Guessing British-EU Environmental Policy Interactions After Brexit’, Environmental Europe? blog, 1 Aug. 2016, available at: <http://environmentaleurope.ideason europe.eu/2016/08/01/difference-vote-makes-second-guessing-british-eu-environmental-policy-interactions-brexit/>. On path dependence, see e.g. P. Pierson, ‘Increasing Returns, Path Dependence, and the Study of Politics’ (2000) 94(2) *The American Political Science Review*, pp. 251-267; S. Krasner, ‘Approaches to the State: Alternative Conceptions and Historical Dynamics’ (1984) 16(2) *Comparative Politics*, pp. 223-246.

³¹ Available at: <https://publications.parliament.uk/pa/bills/cbill/2017-2019/0005/18005.pdf>. The Bill was initially referred to as the Great Repeal Bill and then just the Repeal Bill.

³² Oral evidence before the Environmental Audit Committee inquiry, ‘The Future of the Natural Environment after the EU Referendum’, 25 Oct. 2016 (Session 2016–17), Q. 327 (Andrea Leadsom MP).

effect through such a Bill. Obvious examples include legislation that requires some form of EU level authorization process or involvement such as the REACH Regulation on chemicals³³ and the EU ETS.³⁴ Anticipated changes are not driven by a deregulation rationale, but by the need to deal with the practical realities of transposition post-Brexit.³⁵ Secondly, while root and branch overhaul of environmental legal frameworks is unlikely, small-scale tinkering could occur and could still produce a major change in the effect of the law. For example, keeping the structures of the Birds³⁶ and Habitats³⁷ Directives in place but adopting minor changes to the conditions for derogation or to the interpretation of ‘overriding reasons of imperative public interest’ to justify development that harms a European Site (and what constitutes acceptable compensation) could significantly alter the impact of the law.³⁸

For some time in the future after Brexit, then, a combination of path dependence and administrative pressures makes significant structural change to UK environmental policy unlikely, at least in areas which do not face Withdrawal Bill transposition difficulties. In that respect, UK policy in the short to medium term is not unlike the EU’s as far as ability to change is concerned. Although the EU is currently going through what might be characterized as a deregulatory phase in respect of its environmental policy, in practice the rate of change is not great: as the 2016 UK Environmental Audit Committee report observed, given the need to secure agreement among many Member States, it is not easy to change EU environmental policy.³⁹ Thus, notwithstanding the fundamentally dynamic nature of the UK and EU relationship, the rate of change should not be overplayed. The EU

³³ See further HC, EAC, ‘The Future of Chemicals Regulation after the EU Referendum’, Eleventh Report of Session 2016–17, HC 912.

³⁴ The Repeal Bill White Paper provides the e.g. of reg. 6(2)(b) of the Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001, SI 2001/1754, which contains a requirement to obtain an opinion from the European Commission. This will require removal (and possible replacement with a UK body) via secondary legislation (Department for Exiting the European Union, ‘Legislating for the United Kingdom’s Withdrawal from the European Union’, Cm 9446, 2017, at p. 20).

³⁵ House of Lords, European Union Committee, 12th Report of Session 2016–17, ‘Brexit: Environment and Climate Change’, HL Paper 109, at para. 58.

³⁶ N. 22 above.

³⁷ N. 19 above.

³⁸ I am grateful to one of the anonymous referees for this point.

³⁹ EAC, n. 1 above at paras 29-32.

environmental *acquis*, albeit not immobile, is relatively unmovable. The UK capacity to change post-Brexit, in turn, is perhaps more constrained in practice than some might expect.

4. FUTURE RELATIONSHIP MODEL

Article 50 of the Treaty on European Union (TEU) provides for a two-year negotiation period once the UK government has triggered the Brexit process by formally communicating its intention to leave, which it did at the end of March 2017. The aim is for the UK and the EU to come to an agreement within this two-year period, at which point the UK will cease to be an EU Member State. If such an agreement cannot be reached then, under Article 50 TEU, the UK will drop out of the EU at the end of the period, unless the other 27 Member States unanimously agree to an extension beyond two years. While any agreement arising from this process is expected to include the terms of the 'divorce' – how resident EU citizens, EU staff pensions, existing UK budget contributions, assets and so on are to be dealt with – to what extent it will also include the terms of the UK's future relationship with the EU remains less clear. There is a view that it may be impractical to cover both the divorce and future relationship within the two year negotiation period and that the future relationship will therefore be left to a separate, 'mixed agreement'. In addition to European Parliament consent, this would require ratification by all EU Member States in accordance with their own constitutional arrangements (as with, for instance, the recent EU-Canada CETA bilateral trade deal).⁴⁰ The UK government has nevertheless expressed the hope that an Article 50 TEU agreement would cover both issues. This would secure the twin advantages of requiring only qualified majority voting by the Council (and the consent of the European Parliament) for its approval and avoiding a damaging gap period during which, in the absence of a future relationship agreement or a transitional arrangement, the UK's relationship status with the EU could fall back on World Trade

⁴⁰ Comprehensive and Economic Trade Agreement (CETA) Between Canada and the European Union and its Member States, available at <http://ec.europa.eu/trade/policy/in-focus/ceta/ceta-chapter-by-chapter>.

Organization (WTO) rules (and associated tariffs). The European Council, in contrast, has stated that it stands ‘ready to engage in *preliminary and preparatory* discussions’ on the future relationship agreement in the context of negotiations under Article 50 TEU, but only when it ‘decides that sufficient progress has been made in the first phase towards reaching a satisfactory agreement on the arrangements for an orderly withdrawal.’⁴¹

Whatever legal form is finally adopted, the eventual model chosen for the UK’s future relationship with the EU is likely to make a significant difference to whether Brexit turns out to be positive or negative for the environment. Since the referendum, there has been much discussion of the nature of the potentially available models. The adjectives used to describe Brexit have been many and varied including, for example, ‘dirty’ Brexit, ‘clean’ Brexit, and even ‘red white and blue’ Brexit. However, most commentators have settled on the UK’s options lying somewhere on a spectrum between ‘hard’ and ‘soft’ Brexit.⁴² A hard Brexit could take a variety of forms but is essentially one that would take the EU outside the single market and probably also the customs union. A soft Brexit would preserve full single market access and could involve the UK remaining a member of the European Free Trade Area (EFTA) and joining the European Economic Area (EEA) (the so-called Norway model). A slightly less soft variant would involve entering into sector-by-sector bilateral agreements with the EU (the so-called Swiss model).

If the UK were to adopt a Norway model based on EEA membership, then most existing EU environmental policy would remain in place, with the key exceptions being the Habitats⁴³ and Birds⁴⁴

⁴¹ European Council, ‘European Council (Art. 50) guidelines for Brexit negotiations’, 29 Apr. 2017, Press release 220/17, emphasis added, available at: <http://www.consilium.europa.eu/en/press/press-releases/2017/04/29-euco-brex-it-guidelines>.

⁴² It should be noted that this spectrum was rejected by the Prime Minister Theresa May in her speech to the 2016 Conservative Party Conference: ‘there is no such thing as a choice between “soft Brexit” and “hard Brexit”. This line of argument – in which “soft Brexit” amounts to some form of continued EU membership and “hard Brexit” is a conscious decision to reject trade with Europe – is simply a false dichotomy ... it is not going to [sic] a “Norway model”. It’s not going to be a “Switzerland model”. It is going to be an agreement between an independent, sovereign United Kingdom and the European Union.’ Available at: <http://press.conservatives.com/post/151239411635/prime-minister-britain-after-brex-it-a-vision-of>.

⁴³ N. 19 above.

⁴⁴ N. 22 above.

Directives and the Bathing Water Directive.⁴⁵ Under such a model, policy areas with significant environmental implications, notably agriculture and fisheries, would also return to UK control. A Swiss-style soft Brexit would preserve much less of the EU environmental *acquis*. In the Swiss case, there has merely been some attempt at coordination between the EU ETS and the Swiss ETS. Switzerland also enjoys (paid) membership of the European Environment Agency.⁴⁶ In the case of a hard Brexit followed by a Canada/CETA-style free trade agreement, there would not even be this minimal level of direct involvement in EU environmental policy institutions (although CETA does provide for some cooperation on environmental issues⁴⁷). In addition, the Canada-EU Agreement largely preserves the right of each country to choose its own levels of environmental protection,⁴⁸ subject to certain exhortations not to lower standards in a race to the bottom.⁴⁹ Thus, if either a Swiss-style soft Brexit or a hard Brexit transpires, the landscape for UK environmental policy becomes less predictable than with the softer EEA Norway model which preserves much of the status quo.

However, in terms of the impact of the UK's future relationship with the EU on the dynamics at play in Table 1, either a hard or a soft Brexit scenario removes the top left and right-hand boxes from consideration. In neither scenario will the UK retain the ability to block or dilute proposed EU legislation that it does not like. On this basis, Brexit of either kind would (*ceteris paribus*) be positive for the stringency of EU environmental policy (and, with the Norway model, therefore also for UK environmental policy which would be obliged to implement it).⁵⁰ Nor, of course, will the UK be able to positively influence EU environmental policy.

⁴⁵ Directive 2006/7/EC Concerning the Management of Bathing Water Quality [2006] OJ L64/37.

⁴⁶ <https://www.eda.admin.ch/dea/en/home/bilaterale-abkommen/abkommen-umsetzung/abkommenstexte/umwelt.html>.

⁴⁷ Arts 22.3 and 24.12 CETA, n. 40 above.

⁴⁸ Art. 24.3 CETA.

⁴⁹ Art. 24.5 CETA.

⁵⁰ M. Le Page, 'Green Lining? Five Ways Brexit Could be Good for the Environment', *New Scientist*, 29 June 2016.

Now, considering the inverse direction of influence represented in the bottom two boxes of Table 1, it should not be assumed, that EU influence on UK environmental policy will disappear after Brexit, even on a hard Brexit model. The single market of the UK's large trading neighbour is bound to exert a considerable influence over its domestic policy. This is particularly true with regard to environmentally-related product standards⁵¹ (for example on vehicle emissions)⁵² since UK manufacturers will most likely wish to continue to export to the single market.⁵³ There would inevitably be pressure to harmonize relevant UK standards with those of the EU. Hence, even after leaving the EU, the UK could still find itself in a position where its environmental policy is strengthened by the EU. However, for environmental and climate targets and associated process standards, the influence of competition from the single market could also be negative. If the EU adopts weaker standards than the UK, then the latter may find it hard to subject its own industries⁵⁴ to unilateral stringent targets which could harm their competitiveness when compared with the weaker EU rules facing their rivals. In this case, even after leaving the EU, the UK could still find itself in the bottom left box in Table 1, with its environmental policy weakened by the EU. Thus, even after a hard Brexit, the single market's continuing influence on UK environmental policy means that the UK will still be affected both positively and, potentially, negatively. However, regardless of whether a soft or hard Brexit is pursued, the scope for the UK to continue to influence EU environmental policy will be severely curtailed.

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⁵¹ As well as, in some instances, process standards (where the EU exerts extra-territorial control over process standards in relation to products that want access to the single market). See J Scott, 'Extraterritoriality and Territorial Extension in EU Law' (2014) 62(1) *American Journal of Comparative Law*, pp. 87-125.

⁵² Directive 2007/46/EC establishing a Framework for the Approval of Motor Vehicles [2007] OJ L 263/1.

⁵³ IEEP, n. 1 above, p. 7; Heyvaert and Čavoški, n. 1 above, p. 125.

⁵⁴ Including agriculture – see Gravey et al., n. 9 above, para. 13.

As Burns notes,⁵⁵ it is notoriously difficult to state with any degree of certainty that improvements to UK environmental quality were caused by EU membership. Some changes may have happened in time anyway, even without EU influence (due to, for instance, policy convergence), and it is not always possible to disentangle multiple causes of environmental change (for example, separating the impact of EU policy from improvements to environmental quality due to deindustrialization, or other economic changes such as the ‘dash to gas’).

When assessing impact, time has a key bearing on assessing whether leaving the EU is positive or negative for the environment. Before the referendum, much was made of the significant positive impact the EU has had *historically* on UK environmental policy. Take the Bathing Water Directive⁵⁶ as an example. Many rightly point to the impact of this instrument, along with the Urban Waste Water Treatment Directive,⁵⁷ on the quality of UK bathing waters previously severely polluted with untreated sewage effluent. However, in trying to establish whether, on balance, the EU has been positive for UK environmental policy, we cannot easily assess whether the UK would, in time, have taken action itself in these areas in any event. All we can safely conclude is that at the time the UK was not acting and EU policy pressured it into doing so. Environmental impact assessment (EIA) provides a further example, including evidence of some prior UK action in this case. While the EU’s 1985 EIA Directive⁵⁸ undoubtedly pressured the UK to adopt EIA as a procedural mechanism within land use planning decision making, the UK had in fact issued a report considering EIA in 1977.⁵⁹ In doing so, it had likely taken inspiration from the United States’ (US) 1969 National Environmental Policy Act.⁶⁰ However, progress in implementing the report’s recommendations was very slow and was eventually overtaken by the EU Directive’s requirements.⁶¹ Although the UK may eventually

⁵⁵ Burns et al., n. 1 above, pp. 8-9, at 135-6.

⁵⁶ Directive 2006/7/EC [2006] OJ L64/37.

⁵⁷ Directive 91/271/EEC [1991] OJ L135/40.

⁵⁸ Directive 85/337/EEC [1985] OJ L175/40.

⁵⁹ Scottish Natural Heritage (SNH), ‘Environmental Assessment Handbook’, Annex 6, available at <http://www.snh.org.uk/publications/on-line/heritagemanagement/EIA/annex6.shtml>.

⁶⁰ National Environmental Policy Act of 1969 § 102, 42 U.S.C. § 4332.

⁶¹ SNH, n. 59 above.

have acted on EIA on its own accord, it was hostile to the proposed Directive which it managed to water down.⁶² Even then, as Jordan notes, ‘left to its own devices, Britain would almost certainly have adopted a much more informal and voluntary system than the one promoted by the EU’ and with a narrower scope in terms of projects caught by the regime.⁶³

Next, moving away from the historical, there is the separate question of whether the EU remains a necessary *current* pressure for the UK in relation to environmental policy. With bathing water the answer is that it is less called for today⁶⁴ in that over 96% of UK beaches are now of sufficient quality or above.⁶⁵ That said, there is no room for complacency as the UK remains second bottom in the EU in terms of the rates of bathing waters with poor quality.⁶⁶ Air quality is probably the most obvious area of environmental law where EU-based pressure today still plays a significant role. The number of lives lost as a result of NO₂ pollution is one of the highest in the EU,⁶⁷ and EU law has been instrumental in the NGO ClientEarth’s court-based efforts to apply pressure on the UK government to improve air quality.⁶⁸

It is also worth pausing to consider the often mentioned ‘fall-back’ impacts of international law in terms of the causal relation between EU influence and UK impact in Table 1. Areas where UK environmental policy has been strengthened by the EU, identified in the bottom right box of the table, would not automatically be endangered by the UK’s departure from the EU. This is because in a number of areas the UK is subject to obligations under international environmental law which will

⁶² A. Jordan, *The Europeanization of British Environmental Policy: A Departmental Perspective* (Palgrave Macmillan, 2002), at p. 180.

⁶³ *Ibid.*, p. 181. See also p. 186.

⁶⁴ IEEP, n. 4 above, para. 4.3.1.

⁶⁵ European Environment Agency (EEA), ‘European Bathing Water Quality in 2016’, EEA Report No 5/2017. This is compared with only 27% in 1990: DEFRA, Environment Agency and Rory Stewart MP, ‘England’s Bathing Water Results 2015’, 5 Nov. 2015, available at <https://www.gov.uk/government/news/englands-bathing-water-results-2015>.

⁶⁶ EEA, *ibid.*

⁶⁷ EEA, ‘Air Quality in Europe — 2016 Report’, EEA Report No 28/2016, p. 59.

⁶⁸ From a line of cases, see e.g. *ClientEarth (No.2) v. Secretary of State for the Environment, Food and Rural Affairs* [2016] EWHC 2740 (Admin).

provide fall-back protection,⁶⁹ albeit typically not as comprehensive or anywhere nearly as effectively enforceable as EU law. It cannot therefore be said that but for EU membership those areas of environmental policy would be completely jeopardized, because the UK's international obligations will still exert a protective effect, albeit a lesser one.

6. DEVOLUTION

The current section on devolution assumes that the UK will have a common, single future relationship model with the EU, as opposed to one that varies internally with, for example, Scotland remaining an EU member, or perhaps a member of the single market, while the rest of the UK leaves.⁷⁰ To the extent that environmental policy is a devolved matter in the UK, there are currently some differences in policy and performance across the various constituent parts of the UK,⁷¹ but these differences are kept in check to a considerable degree by common EU standards across many areas.⁷²

⁶⁹ The Aarhus Convention provides a good example of this (Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, Aarhus, (Denmark) 25 June 1998, in force 30 Oct. 2001. Available at: <https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf>). Others include the OSPAR Convention (Convention for the Protection of the Marine Environment of the North-East Atlantic, Paris (France) 22 Sept. 1992, in force 25 March 1998. Available at: <https://www.ospar.org/convention/text>) and the Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats, Bern (Switzerland) 19 Sept. 1979, in force 1 June 1982. Available at: <http://www.coe.int/en/web/bern-convention>). These are all mixed agreements, where the UK is a party in its own right as well as the EU. Such agreements (unlike those which lie in the exclusive competence of the EU) are likely to remain binding on the UK post-Brexit without the need for renegotiation, although not everyone takes this view: see <https://www.ukela.org/blog/Brexit-Task-Force/International-environmental-law-after-Brexit>.

⁷⁰ The Scottish Government expressed a desire to remain part of the EEA: Scottish Government, 'Scotland's Place in Europe' (2016), para. 85. However, any form of unique continuing relationship for Scotland seems a remote prospect due to likely hostility from other Member States such as the Spanish, wary of such an arrangement encouraging their own separatist movements.

⁷¹ See e.g. divergent policy on GMOs between Scotland and England (S. Carrell, 'Scotland to Issue Formal Ban on Genetically Modified Crops', *The Guardian*, 9 Aug. 2015, available at: <https://www.theguardian.com/environment/2015/aug/09/scotland-to-issue-formal-ban-on-genetically-modified-crops>; and on waste law and the circular economy (S. Holmes, 'Brexit and Environmental Law' (2016) 28(1) *Environmental Law and Management*, pp. 37-41, at 40-1).

⁷² C. Reid, 'Taking Back Control From Brussels: But Where To?', Oxford University Press blog, 7 Nov. 2016, available at: <http://blog.oup.com/2016/11/brexit-uk-eu-brussels>: 'At a less dramatic level, the removal of the need to comply with EU law will risk greater divergence within the UK in relation to environmental law.' See

Linking this back to the discussion above regarding the effects of Brexit on the UK environment, such effects are also likely to depend on the possible greater divergence between, for example, Scottish and English environmental law that leaving the EU might produce. The scope for such divergence firstly depends on the extent to which repatriated environmental competence is exercised centrally by Westminster or is devolved. There is obviously much greater scope for divergence in the latter scenario. Whether such divergence would be worse for the environment than the pre-Brexit position is hard to predict; it is at least conceivable that all of the devolved governments and England would improve environmental quality. Equally possible -- although they have nearly all promised otherwise⁷³ -- is that we could see one or more of the component parts of the UK loosen their environmental controls from a Brexit baseline, while others (and the EU) maintained or raised theirs. Alternatively, and perhaps as likely, is that although standards might not fall below the Brexit baseline, some parts of the UK would climb beyond these while others would allow them to stagnate.⁷⁴

7. ENFORCEMENT

also Heyvaert and Čavoški, n. 1 above, p. 123. Cf. GMOs, where recent reforms have left much more discretion in the hands of Member States in relation to cultivation of GM crops on their territory (see e.g. M. Dobbs, 'Attaining Subsidiarity-Based Multilevel Governance of Genetically Modified Cultivation?' (2016) 28(2) *Journal of Environmental Law*, pp. 245-73).

⁷³ In their respective White Papers on Brexit, the current Scottish Government has committed to 'maintaining, protecting and enhancing' the environment (n. 70 above, para. 93) and the Welsh Government 'at a minimum, to maintaining current standards in respect of air and water quality, emissions and environmental protection (Welsh Government, 'Securing Wales' Future: Transition from the European Union to a New Relationship With Europe' (2017), p. 29). In its Brexit White Paper, the Conservative UK Government similarly states that it 'is committed to ensuring we become the first generation to leave the environment in a better state than we found it' (HM Government, 'The United Kingdom's Exit From and New Partnership With the European Union (2017) Cm 9417, para. 8.41). However, this should be contrasted with the unwillingness of Government ministers, when appearing before the Environmental Audit Committee and having been asked 7 times, to commit to retaining EU air quality limits following Brexit (: Baroness Jones and Baroness Parminter, 'Green Brexit: Safeguarding Britain's environment', *Politics Home*, 16 Jan. 2017, available at: <https://www.politicshome.com/news/uk/environment/house/82418/green-brexit-safeguarding-britains-environment>).

⁷⁴ I.e., there is a risk that in some areas the Withdrawal Bill's transposition of EU environmental law may produce 'zombie' legislation that sits dustily on the shelf, under-enforced and without being updated in accordance with developing scientific standards (HC, EAC Report 'The Future of the Natural Environment after the EU Referendum', Sixth Report of Session 2016–17, HC 599, para. 39).

It would be a mistake to examine the potential environmental impacts of leaving the EU only with reference to a check-list of policy sectoral winners and losers. As Maria Lee has noted,⁷⁵ one of the major gaps that could be opened up by leaving is an enforcement governance gap. Membership of the EU brings with it procedural reporting obligations⁷⁶ on Member States and exposure to various enforcement mechanisms⁷⁷ to ensure compliance with EU environmental provisions. This broader architecture is an essential component of the effectiveness of environmental governance in the UK. Some existing UK laws, notably the Climate Change Act 2008, do have their own institutional, reporting and enforcement arrangements, which could serve as a source of inspiration when constructing a post-Brexit enforcement system.⁷⁸ However, these arrangements fall short of the political and legal accountability mechanisms that the UK has become used to through EU membership. In the end, leaving gives rise to concern not just about the future quality of environmental legislation, but also about the opportunities for citizens and non-governmental organizations (NGOs) to hold the government to account. Domestic judicial review will of course still be available,⁷⁹ but civil society could lose its ability to hold government to resilient environmental standards. One of the core strengths of EU environmental law is the idea that it represents a credible long-term commitment which cannot be changed at the whim of individual governments just because, for example, they are struggling to meet existing targets.

The extent to which Brexit would produce an enforcement gap depends in large measure on the future relationship model eventually adopted. This is true of both public enforcement by the Commission and private enforcement by individuals in the national courts. With a hard Brexit, all of this would go. Public enforcement under a soft Brexit Norway/EEA model involves a Surveillance

⁷⁵ See oral evidence, 'Brexit: Environment and Climate Change', n. 20 above.

⁷⁶ E.g. Art. 15 Water Framework Directive 2000/60/EC [2000] OJ L 327/1 (duty to report on river basin management plans to the Commission).

⁷⁷ Both public, via Art. 258 of the Treaty on the Functioning of the European Union (TFEU) (infringement proceedings by the Commission) and private (in national courts relying on doctrines such as direct effect).

⁷⁸ Lee, n. 75 above, answers to Q. 9.

⁷⁹ The House of Lords European Union Committee report, n. 35 above, which noted witness concerns that 'existing domestic judicial review procedures may be inadequate and costly' (para. 84). Improved access to justice is thus likely to be a necessity post-Brexit.

Authority with similar supervisory powers to the Commission. However, this arrangement lacks the ability to impose financial penalties on recalcitrant states.⁸⁰ The only recourse consists of a second appearance before the EFTA Court. This same arrangement applied in the EU before the introduction of penalty payments and lump sums, and was considered unsatisfactory. As for private enforcement, in EEA law there is still indirect effect⁸¹ and state liability⁸² but there is no direct effect⁸³ and no principle of supremacy.⁸⁴ These latter two doctrines in particular have been central to the ability of citizens and NGOs to mobilize EU law effectively in their national courts.

8. BREXIT, SOVEREIGNTY AND CONTROL

While the first part of the article considered the potential practical consequences of Brexit for environmental policy and quality, principally in the UK but also more broadly within the EU, the second part examines the normative consequences of Brexit for issues of sovereignty and control. The principle of subsidiarity – which involves consideration of and justification for which geographical level of action is best suited to particular areas of policy – is very much at the heart of these debates.

Arguably the most powerful narrative put forward by the Leave campaign during the referendum campaign was one of ‘taking back control’ and restoring sovereignty to the UK⁸⁵ – both having supposedly been lost to ‘unelected bureaucrats’ in ‘Brussels’. While the key policy area in which many on the Leave side wished to regain control from the EU was undoubtedly immigration, with

⁸⁰ R. Macrory, ‘Brexit Unlikely to Give UK Free Rein Over Green Laws’ (2016) *ENDS Report* 499, pp. 22-3, at 22; Burns et al., n. 1 above, pp. 90, 95.

⁸¹ Case E-4/01 *Karlsson v Iceland* (2002), para. 28.

⁸² *Karlsson* (ibid), paras 29-33.

⁸³ *Karlsson* (ibid), para. 28.

⁸⁴ Case E-1/07 *Criminal Proceedings against A* (2007), paras 40-1.

⁸⁵ E. Fisher & J. Harrison, ‘Beyond the Binary: Brexit, Environmental Law, and an Interconnected World’, OUP Blog, 19 Sept. 2016, available at <http://blog.oup.com/2016/09/binary-brexit-environmental-law/>; S. Weatherill, ‘Why We Need the European Union’, OUP Blog, 20 June 2016, available at <http://blog.oup.com/2016/06/european-union-control/>.

environmental policy much further down the list,⁸⁶ it is nevertheless worth exploring what implications this narrative might have for the latter.

8.1 Transboundary Environmental Problems

It has become something of a truism that the environment is an area where individual state sovereignty on its own is often powerless to achieve desired environmental outcomes. The environment typically does not respect national borders and, hence, states must act together to see results. This is a longstanding element within the academic literature on the environment and subsidiarity: supranational level action on transboundary environmental problems is justified because one state acting alone cannot tackle an environmental problem without other states also cooperating.⁸⁷ Scandinavian acid rain in the 1970s-1980s is often given as an example: it was no use, for example, Sweden acting on its own on acid emissions if the UK's tall power station chimneys were largely responsible for the damage caused. Not surprisingly then, in the end, EU level action was taken to tackle this problem via the Large Combustion Plant (LCP) Directive,⁸⁸ which imposed limits on acid gas emissions from power stations. What this example shows is that, in relation to transboundary problems like air pollution, state sovereignty in isolation gets one nowhere and that supranational EU level coordination is likely to produce a more *effective* pooled sovereignty and control.

8.2 International Law Obligations

If Brexit was about regaining sovereignty, a counter-narrative occasionally heard on the Remain side was that the Leave vision of 'pure', untrammelled sovereignty was a myth, in part because the UK

⁸⁶ Although cf. Neslen, n. 21 above.

⁸⁷ See e.g. C Hilson, *Regulating Pollution* (Hart, 2000), ch. 3; M. Lee, *EU Environmental Law: Challenges, Change and Decision-Making* (Hart, 2005), pp. 9-15.

⁸⁸ Directive 2001/80/EC [2001] OJ L309/1, replacing Directive 88/609/EEC. The Directive has now been superseded by the Industrial Emissions Directive, n. 10 above. There was also international law coordination, considered further below.

would, post-Brexit, remain subject to binding international law obligations.⁸⁹ These involved the UK voluntarily constraining its sovereignty in order to achieve collective action goals, in much the same way as it had done by joining the EU. Reference to these continuing obligations has since become a common feature of the emerging commentary on Brexit and the environment. However, this argument is something of a double-edged sword for environmentalist Remainers. While it rightly picks apart the myth that Brexit will return the UK to a land of ‘year zero’ unrestrained sovereignty,⁹⁰ it at the same time undermines an argument that any action transcending the national level must necessarily emanate from the EU. Indeed, no state can successfully act alone on many environmental issues, and sovereignty must often be constrained in concert with others, but this can be done internationally and not just supranationally. The Birds Directive 2009/147/EC provides a good example. While very much focused on the, again, transboundary issue of *migratory* wild birds which can only be adequately protected by states acting together, the Council of Europe Bern Convention⁹¹ and Bonn Convention (or CMS)⁹² also provide important international law protection for migratory wild birds. The 1979 Convention on Long-Range Transboundary Air Pollution⁹³ – introduced to tackle acid rain across Europe and which preceded the EU LCP Directive discussed above – is another example.⁹⁴ To be sure, there are some additional advantages to supranational level action over the international: EU rules tend to be more tightly framed than their international equivalents, with concrete timetables for expected compliance, and also benefit from more effective

⁸⁹ A point also made by e.g. D. French, ‘Alternate Realities: Brexit and Pokémon’, OUP blog, 10 Oct. 2016, available at <http://blog.oup.com/2016/10/brexit-pokemon-go-law/>; Reid, n. 72 above; and Fisher & Harrison, n. 85 above.

⁹⁰ As Scotford notes: ‘If we are to think again about what standards we want to subscribe to as a nation and how to enforce these, this does not happen in a vacuum of legal development and expertise once we leave the European Union’ (E. Scotford, ‘Air Quality Law in the United Kingdom at a Crossroads’, OUP Blog, 3 Oct. 2016, available at <http://blog.oup.com/2016/10/air-quality-law-environment/#sthash.Hq1ROMWO.QoyeWqC9.dpufhttp://blog.oup.com/2016/10/air-quality-law-environment/>).

⁹¹ N. 69 above.

⁹² Convention on the Conservation of Migratory Species of Wild Animals, Bonn (Germany) 23 June 1979, in force 1 Nov. 1983. Available at: <http://www.cms.int/en/convention-text>.

⁹³ Geneva (Switzerland) 13 Nov. 1979, in force 16 March 1983. Available at: <https://www.unece.org/fileadmin/DAM/env/lrtap/full%20text/1979.CLRTAP.e.pdf>.

⁹⁴ Scotford, n. 90 above. See also Haigh, n. 10 above, at pp. 49-51.

mechanisms for enforcement.⁹⁵ Nevertheless, the point remains, at least in part. In any event, as French has noted, post-Brexit, UK environmental lawyers can be expected to turn their attention much more closely to all relevant international law instruments.⁹⁶ Future research should look, in particular, at the gaps between EU law provisions and their supposedly equivalent international law counterparts.⁹⁷ The UK courts too (aided by creative NGOs and their lawyers), might be expected to play a role in ensuring that international law obligations can be appropriately enforced.⁹⁸

8.3 UK Devolution Arrangements

If EU level supranational coordination on the environment falls away, then what is to fill the gap? Is there then a justification for centralized or coordinated environmental action at a UK level, in line with a principle of subsidiarity similar to that which animated EU-level environmental action itself,⁹⁹ to deal with issues that the devolved parts of the UK cannot satisfactorily address on their own? The question arises because the environment is currently a devolved matter, where competence is effectively shared with the EU. After a hard Brexit, does repatriated EU competence over the environment similarly become devolved to become the *exclusive* competence of Scotland, Wales and Northern Ireland, or should at least some of it be centralized and competence be *shared* with Westminster?¹⁰⁰ This issue is all the more pressing where no equivalent international law fall-back exists to provide a direct replacement for EU law.¹⁰¹

⁹⁵ See also e.g. Haigh, who makes this point when arguing in favour of the LCP Directive, n. 10 above, at pp. 50-1. However, the point is principally true of old governance-style EU directives. New governance measures, such as the proposed EU Renewables Directive (COM(2016) 767 final), offer a less impressively robust scope for enforcement.

⁹⁶ French, above n. 89. See also Reid, n. 72 above, who notes that 'The extent of such treaty obligations can be easily overlooked since in recent decades the measures needed to give effect to them have often been introduced into the UK through EU law'.

⁹⁷ UKELA (The UK Environmental Law Association) is due to produce an international law mapping report later in 2017. See <https://www.ukela.org/brexitactivity>.

⁹⁸ See Macrory, n. 80 above, for suggestions on this.

⁹⁹ See Hilson, and Lee, n. 87 above.

¹⁰⁰ This question is implicit in the title of Colin Reid's blog, n. 72 above: 'Taking back control from Brussels – but where to?'.

¹⁰¹ Even where international law is in place, policing divergence across the various constituent administrations of the UK, so that the UK as a whole does not breach its obligations under that law, may be harder than with reference to EU law. See Reid, n. 72 above.

The difficulty that centralized Westminster control faces is one of wariness by the devolved nations, whose sovereignty over environmental policy and other areas was hard-won through the devolution settlements.¹⁰² While repatriation of EU competence to Westminster would not involve a loss of existing sovereignty, devolved administrations are nevertheless understandably reluctant to replace the old EU master with a new, Westminster one.¹⁰³ This reluctance may be due to the potential for Westminster to ultimately allow less discretion in implementation than the EU system provided, and also for it to be more capriciously deregulatory, again in contrast to the slow pace of change we have come to associate with mature EU environmental law. The various Brexit White Papers provide an interesting insight on the matter. The Scottish and Welsh documents both effectively claim a presumption in favour of full devolution in already devolved areas like environmental policy, with their consent needed for central pooling, in what would need to be a new joint arrangement.¹⁰⁴ The UK and Welsh Government recognize a clear need for some form of arrangement where there is a risk of fragmenting the UK's internal market.¹⁰⁵ This takes us back to subsidiarity and the various justifications for central control over the environment. Preserving an internal UK market from non-tariff barriers to trade forms one key justification for the central harmonization of standards. The definition of waste is an example of a case where the adoption of a common, UK-wide standard would be justified on this ground. Of course, since the UK exports a large amount of domestic waste

¹⁰² See joint statement by First Minister of Scotland Nicola Sturgeon and First Minister of Wales Carwyn Jones in response to the introduction of the European Union (Withdrawal) Bill, 13 July 2017. 'We ... recognise that common frameworks to replace EU laws across the UK may be needed in some areas. But the way to achieve these aims is through negotiation and agreement, not imposition. It must be done in a way which respects the hard-won devolution settlements.' Available at: <https://news.gov.scot/news/eu-withdrawal-bill>.

¹⁰³ See e.g. Steffan Lewis, Plaid Cymru Welsh Assembly Member, Welsh Assembly, The External Affairs and Additional Legislation Committee, 'Leaving the European Union: Implications for Wales—Environment and Marine', 31 Oct. 2016, at paras 151-2, available at <http://www.senedd.assembly.wales/documents/s55521/31%20October%202016.pdf>; M. Dickie, 'Theresa May Takes Hard Line on SNP Demand for Special Brexit Deal', *Financial Times*, 3 Mar. 2017.

¹⁰⁴ Welsh Government, n. 73 above, pp. 26-7; Scottish Government, n 70 above, para. 9(c).

¹⁰⁵ 'We recognise that in some cases, in the absence of EU frameworks which provide an element of consistency across the UK internal market, it will be essential to develop new UK-wide frameworks to ensure the smooth working of the UK market' (Welsh Government, n. 73 above, at p. 26); 'We must also recognise the importance of trade within the UK to all parts of the Union ... So our guiding principle will be to ensure that – as we leave the EU – no new barriers to living and doing business within our own Union are created. We will maintain the necessary common standards and frameworks for our own domestic market' (HM Government, n. 73 above, at para. 3.6). See also the Repeal Bill White Paper, n. 34 above, paras. 4.2-4.3.

to the rest of the EU in the form of refuse-derived fuel, this may well be an area where the UK chooses not to diverge from the EU definition. As the UKELA Waste Working Party observed:

It could, in theory, be possible to have one definition for waste that was traded only nationally within England and Wales while still applying the EU and Basel Convention definitions for waste exports. Would this result in a greater or lesser regulatory burden to industry?¹⁰⁶

In principle, it would also be possible to have different definitions of waste *within* the UK.

Nevertheless, this too is unlikely to prove attractive in terms of legal certainty and ease of trading for businesses operating across the UK's own internal market. Industry would hardly welcome having separate definitions for different jurisdictions within the UK. It would therefore require some form of UK regulatory governance framework to deliver an agreed definition of waste, – whether one that matches the EU definition, or a common UK definition. Questions of waste are partly covered by international law (Basel¹⁰⁷), but its definition of waste – rather unhelpfully for present purposes – links back to national law¹⁰⁸ and applies only to exports. In that sense it cannot directly replace EU law.

While crafting a common UK definition of waste, and potentially also streamlining it with the EU definition, may be considered on the basis of a product-type, trade justification, another typical subsidiarity justification for federal level action on the environment relates to averting unfair competition between states in a race to the bottom on standards. For example, what if, in the absence of the EU Industrial Emissions Directive (IED),¹⁰⁹ England decided to apply lower standards

¹⁰⁶ UKELA, 'Brexit: Implications of the UK Leaving the European Union: Waste Management', *e-law*, March/April 2016, pp. 17-21, at pp. 17, 19, available at <https://www.ukela.org/elaw-newsletter-archive>.

¹⁰⁷ The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Basel (Switzerland), 22 March 1989, in force 5 May 1992. Available at: <http://www.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf>.

¹⁰⁸ Art. 2(1) states ' "Wastes" are substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of *by the provisions of national law.*' That said, art. 2(4) does provide a definition of disposal (any operation specified in Annex IV).

¹⁰⁹ N. 10 above.

than in the devolved administrations, hoping to make itself more attractive to investment through lower pollution control costs? Would this justify a common set of UK BREF¹¹⁰-type standards to avoid this unfair and environmentally harmful competition? Again, there is no obvious single international law replacement for the EU IED. What of possible devolved administration concerns over central control on race to the bottom grounds? One way of meeting these would be to set only *minimum* standards centrally. These would act as a floor, with the devolved administrations and England then free to choose their own standards above this level, but unable to go below it.¹¹¹ Such a floor might usefully be set at the level of existing EU standards. This approach would have much in common with EU law, which similarly typically allows Member States to adopt stricter measures (a point returned to again later).

A third major subsidiarity-based justification for centralized action on the environment applies when transboundary issues are involved, such as cross-border pollution or wildlife migration. In a UK context, the question arises of precisely what form such centralized control should take. For air pollution and migratory species which potentially range over large distances, central standards are likely to be justified. For water pollution, while a common set of standards can be justified at EU level because numerous cross-border watercourses transverse many continental countries, the UK situation involves much smaller numbers. This means that, instead of a centralized UK framework that draws up common regulatory standards across the various jurisdictions within the UK, one could instead seek to coordinate literally only at the borders.

As things stand, cross-border rivers within the UK (such as the Tweed between Scotland and England) are dealt with by legislation which seeks to coordinate the work of the respective environment agencies to achieve the river basin approach required by the EU Water Framework

¹¹⁰ Best available technique reference documents – see further <http://eippcb.jrc.ec.europa.eu/reference/>.

¹¹¹ Suggested by C. Burns in her oral evidence to the Welsh Assembly (n. 103 above), at para. 131 (and see further oral evidence by Burns et al., at paras 137-9, 153, 161-2).

Directive.¹¹² However, this cross-border cooperation currently happens towards the achievement of common water quality standards laid down in the Directive. After Brexit, water quality goals within the UK might start to diverge. Maintaining common standards across the UK might still be justified on race to the bottom, competition grounds, so that industry and farming do not face different ambient quality targets which will inevitably lead to different emissions standards and controls on diffuse pollution, but not on the grounds of controlling cross-border pollution. After all, the various national environment agencies within the UK could simply coordinate, *on cross-border rivers only*, to ensure that stricter standards are not compromised by those of their neighbour.

Rivers that cross from the UK into another EU Member State (such as the Shannon into Ireland) would also be impacted by Brexit. These are currently dealt with under the Water Framework Directive as International River Basin Districts, requiring coordination between the Member States to achieve the Directive's goals.¹¹³ On Brexit, Northern Ireland would no longer be part of an EU Member State and would hence be subject to treatment by Ireland under article 3(5) of the Directive, which states:

Where a river basin district extends beyond the territory of the Community, the Member State or Member States concerned shall endeavour to establish appropriate coordination with the relevant non-Member States, with the aim of achieving the objectives of this Directive throughout the river basin district. Member States shall ensure the application of the rules of this Directive within their territory.

Such coordination could in theory become more difficult given that Northern Ireland would no longer be subject to the requirements of the Directive and might end up with different standards. However, the Irish river example is unlikely to give rise to severe problems because of the United

¹¹² Directive 2000/60/EC (n 65). The Water Environment (Water Framework Directive) (Solway Tweed River Basin District) Regulations 2004, SI 2004/99.

¹¹³ Art. 3(3)-(4).

Nations Watercourses Convention (UNWC),¹¹⁴ to which the UK and Ireland are both signatories.

Article 21(3) UNWC states:

Watercourse states shall, at the request of any of them, consult with a view to arriving at mutually agreeable measures and methods to prevent, reduce and control pollution of an international watercourse, such as: (a) Setting joint water quality objectives and criteria; (b) Establishing techniques and practices to address pollution from point and non-point sources; (c) Establishing lists of substances, the introduction of which into the waters of an international watercourse is to be prohibited, limited, investigated or monitored.

In the Scottish example in contrast, the UNWC would not apply because the Convention only applies between states and not to devolved nations within them. However, some very similar form of cross-border cooperation would be needed.

8.4 New Governance and Multi-level Governance

‘New governance’, a key strand of practice and scholarship within EU law and politics during the previous decade,¹¹⁵ is also worth considering in relation to issues of control and sovereignty. As Fisher and Harrison have suggested, there is a danger in seeing Brexit and environmental sovereignty in strictly binary terms, with control and sovereignty either completely preserved or completely lost.¹¹⁶ While a large part of the original EU environmental *acquis* was very much aimed at uniformity across Member States, with centralization of power at EU level in order to achieve it, this ‘old governance’ approach has since then often been replaced by new governance. The latter

¹¹⁴ Convention on the Law of the Non-navigational Uses of International Watercourses, New York (U.S.A.) 21 May 1997, in force 17 Aug. 2014. Available at: legal.un.org/ilc/texts/instruments/english/conventions/8_3_1997.pdf.

¹¹⁵ See e.g. J. Scott & D. Trubek, ‘Mind the Gap: Law and New Approaches to Governance in the European Union’ (2002) 8(1) *European Law Journal*, pp. 1-18; G. De Búrca & J. Scott (eds.), *Law and New Governance in the EU and the US* (Hart, 2006); C.F. Sabel & J. Zeitlin, ‘Learning from Difference: The New Architecture of Experimentalist Governance in the EU’ (2008) 14(3) *European Law Journal*, pp. 271-327.

¹¹⁶ N. 85 above.

allows greater discretion to be left in the hands of Member States, affording them to greater determination of their own path via a decentralized approach. The new EU approach to genetically modified organisms (GMOs) provides a good example, allowing for a degree of flexibility in Member State choices on the cultivation of GM crops on their territory.¹¹⁷ Renewables provide another example. The original EU Renewables Directive¹¹⁸ imposed binding (albeit differentiated)¹¹⁹ targets on Member States in order to reach the overall EU target.¹²⁰ Even these binding targets allowed ‘Member States a large discretion on the choice of national measures’.¹²¹ Nevertheless, the proposal for a revised Renewable Energy Directive goes one step further in abandoning binding national targets altogether. Instead, it maintains an overall target for the EU but, espousing a bottom-up perspective similar to that reflected in the nationally determined contributions of the Paris Agreement, the overall target is said to be ‘best achieved through a partnership with Member States combining their national actions supported by a framework of measures as outlined in this Proposal’.¹²²

However, it would be mistaken to see the old approach to EU environmental governance as wholly centralizing. After all, Directives, which famously leave Member States a degree of implementing discretion, were a key source of law used at that time.¹²³ Similarly, Article 193 TFEU has long allowed Member States to adopt more stringent measures than in EU legislation in many circumstances.¹²⁴ EU environmental directives are seldom exhaustively harmonizing. Taking back control in this

¹¹⁷ M. Lee, ‘The Ambiguity of Multi-Level Governance and (De)-harmonisation in EU Environmental Law’ (2013) 15 *Cambridge Yearbook of European Legal Studies*, pp. 357-81; Dobbs, n. 72 above.

¹¹⁸ 2009/28/EC [2009] OJ L140/16.

¹¹⁹ See recital 15: ‘The starting point, the renewable energy potential and the energy mix of each Member State vary. It is therefore necessary to translate the Community 20 % target into individual targets for each Member State’.

¹²⁰ See recital 14: ‘The main purpose of mandatory national targets is to provide certainty for investors’.

¹²¹ Proposal for a Directive on the promotion of the use of energy from renewable sources, COM(2016) 767 final, p. 4.

¹²² *Ibid.* Member States will still have binding obligations to produce National Energy and Climate Plans and to report on these (under a separate proposal on the Energy Union Governance).

¹²³ Although, as Dobbs, n. 72 above, p. 248 notes, there is an important difference between implementation power and the power to make policy decisions.

¹²⁴ See D. Langlet & S. Mahmoudi, *EU Environmental Law and Policy* (OUP, 2016), at p. 102.

context therefore means taking back control to adopt weaker standards, because control to have stricter ones was already largely there under Article 193 TFEU.

It would be equally mistaken to claim that new governance is now wholly in the ascendant: in some areas such as the EU ETS, initial decentralization (in setting national allocation plans – NAPS) has since given rise to a more centralized system (with the Commission setting an EU-wide cap on emissions).¹²⁵ However, from a sovereignty and control perspective, the examples of new governance such as GMOs and renewables illustrate that EU environmental policy, especially in some of its more recent incarnations, does not always involve Member States losing all control to a highly centralized EU level. This phenomenon can also be explained through a multi-level governance (MLG) lens.¹²⁶ MLG theory argues that not all power rests with states; rather, it is diffused across multiple levels, potentially from the local to the international. Therefore, to the extent that states retain a degree of sovereign policy decision-making power over particular EU policy areas like GMOs and renewables above, sovereignty and control exist at more than one level.

Nevertheless, while it is important to point to the overlapping issues of new governance and MLG in order to establish that Brexiteers would be mistaken in thinking of EU environmental policy as an area over which the UK had fully lost control (which needed to be regained), these considerations should not be read as wholesale normative support for such approaches. Where the EU acts in a way that is perceived by the environmental movement as anti-environmental – such as on the subject of GMOs – then of course there will be a temptation to support new governance flexibility for Member States, as this would allow them to make their own, more ambitious environmental choices.

However, by and large, EU environmental policy is environmentally progressive. In most cases, new governance flexibility could result in Member States watering down standards, which can hardly be regarded as a good thing environmentally. It remains to be seen, for example, whether the bottom-

¹²⁵ C. Hilson, 'It's All About Climate Change, Stupid! Exploring the Relationship Between Environmental Law and Climate Law' (2013) 25(3) *Journal of Environmental Law*, (pp. 359-370, p. 368. See also industrial emissions: Lee, n. 117 above.

¹²⁶ On MLG see e.g. Dobbs, n. 72 above.

up approach of the proposal for a revised renewables directive will be as effective environmentally as the existing Directive with its binding Member State targets. That Member States are capable of watering down can be seen in relation to the EU ETS, where a number of Member States had come up with very weak NAPs. This led to more recent EU centralization, away from the previous ineffective new governance-style NAPs. This more centralized approach is likely to be environmentally beneficial and to secure greater, collective control over climate change than national control over NAPs provided. Hence, there is often a lot to be said for old governance and EU as opposed to national control may well produce better environmental outcomes.

In recent years, the MLG governance approach has also been particularly prevalent in the context of the perceived 'governance gap' in relation to climate change.¹²⁷ The argument here is that lower governance levels (including cities¹²⁸ and states within federal systems like the US) can to some extent make up for the lack of national and international progress on climate change. While this approach has a descriptive accuracy and also a certain normative appeal, one should again be wary of attaching excessive importance to this perspective in relation to Brexit. While lower governance levels provide a much needed *supplement* to state and international action on climate change, they cannot provide a *replacement* for action at the latter levels. Thus, in the context of Brexit, the EU and climate change, and indeed environmental law more generally, one needs to beware of fallacious reasoning. The governance gap and the lessons from MLG that modern environmental law is not all about control at or by one single authority – the state – should not be misinterpreted as validating the proposition that any Brexit-resulting demise of forceful EU action on climate change or, indeed, any subsequent weakening of UK level action in this area, is therefore unproblematic.

9. CONCLUSION

¹²⁷ L. Vanhala & C. Hilson, 'Climate Change Litigation: Symposium Introduction' (2013) 35(3) *Law & Policy* 141-9, at p. 143.

¹²⁸ Via e.g. the covenant of mayors, on which see further V. Heyvaert, 'What's in a Name? The Covenant of Mayors as Transnational Environmental Regulation' (2013) 22(1) *RECIEL*, pp. 78-90.

In assessing the environmental implications of Brexit, I have argued for a systematic, dynamic analysis of the effect of the UK's membership of the EU on the environment. However, this should not be taken as a claim that leaving may, somehow, not be so bad after all. A benefit of using a table like the one presented in the current article is that the balance of positives to negatives can easily be seen. And a glance at the table confirms that there are far more positives than negatives to the UK's existing relationship. The only way to preserve all of these would be by the UK remaining a full member. Given that this seems inconceivable, the second best solution would be an EEA-style soft Brexit or one where (unlike in the Swiss model) the EU insists on a considerable proportion of the environmental *acquis* being respected as a condition of single market membership.¹²⁹ Although the EEA route also seems improbable, the June 2017 UK election result makes some form of soft Brexit a more likely outcome.¹³⁰ While these two particular soft Brexit options would not preserve the positive, top right box of Table 1, they would at least preserve much of the positive, bottom right qualities. However, even with a hard Brexit, given the single market influence, the bottom right and left boxes would not entirely disappear.

In considering issues of sovereignty and control in the specific context of environmental governance, I stressed the importance of the principle of subsidiarity. *Effective* control over the environment often requires collaboration between states, particularly in the case of transboundary pollution or wildlife migration. While this might involve pooling sovereignty via multilateral or bilateral international agreements rather than via supranational EU level action, the drafting and enforcement advantages of EU law mean that the latter will typically offer the *most* effective control. It also became clear that Brexit, depending on its eventual shape, is likely to give rise to contestation over environmental sovereignty and control *within* a devolved UK. In the absence of common EU federal action on the environment post-Brexit, subsidiarity suggests that there will be a

¹²⁹ D. Boffey, 'MEPs in Bid to Force UK to Meet Environmental Regulations After Brexit', *The Guardian*, 31 Jan. 2017, available at: <https://www.theguardian.com/politics/2017/jan/31/european-parliament-force-uk-meet-environmental-regulations-after-brexit>.

¹³⁰ B. Maddox, 'What Does the Election Result Mean for Brexit?', Institute for Government, 9 June 2017, available at: <https://www.instituteforgovernment.org.uk/blog/what-does-election-result-mean-brexit>.

need for the UK to create a similar centralized system internally in some areas of environmental policy. However, having fought hard for sovereignty over the environment as a devolved matter, the devolved administrations have already begun to express a degree of hostility towards the idea that Westminster might take back control at the centre when the EU environmental *acquis* is repatriated. In the end then, the environment reveals sovereignty to be much more complicated than many Brexiteers may have imagined. The UK will still want many of the functions that the EU served in relation to the environment to be carried out. Taking the EU out of the equation simply means that these subsidiarity-justified functions have to be performed elsewhere: via international law cooperation and via central UK control. Pooling UK sovereignty with other states remains necessary for the former; and pooling at least some sovereignty that would otherwise be devolved seems inevitable for the latter.