Joseph McMullen

Bournemouth University, United Kingdom JMcMullen@bournemouth.ac.uk ORCID: 0000-0002-2893-2905

https://doi.org/10.26881/gsp.2021.3.06

Tilak Ginige

Bournemouth University, United Kingdom tginige@bournemouth.ac.uk
ORCID: 0000-0002-0650-8468

Clearing the Air. An Analysis of Atmospheric Protections and Pollutant Regulation in the United Kingdom Before, During, and After the EU

I. Introduction

An estimated 40,000 people die each year in the United Kingdom from illnesses relating to air pollution. The support of the European Union has been fundamental in achieving environmental goals whilst attempting to minimise human health risk. Therefore, there is a plausible element of concern when considering the impact of the UK's departure from the EU on the UK's ability to safeguard human and environmental health. In attempting to predict the impacts of the departure from the EU, it is necessary to understand the origins of modern air pollution legislation and the potential for the UK to revert to pre-EU environmental standards.

The UK's departure from the EU is generating considerable technical difficulties, particularly pertaining to the disentanglement of EU law from the law of the United Kingdom. The current collaborative EU environmental law and UK domestic environmental law is a multifaceted amalgamation of four decades of law-making from both the EU² and UK legislative bodies resulting in an intricate regulatory framework.³ As several major environmental regulatory laws and practices are of EU origin, ⁴ EU legisla-

¹ Fiona Harvey, "Air pollution: UK government loses third court case as plans ruled 'unlawful'" (*The Guardian*, 21 February 2018), https://www.theguardian.com/environment/2018/feb/21/high-court-rules-uk-air-pollution-plans-unlawful [accessed: 2020.03.05].

² The Ordinary Legislative Procedure of the European Union as set out in Article 294 Consolidated Version of the Treaty on the Functioning of the European Union [2012] OJ C326/1. Also see Article 289 OJ C202/172 [2016] for the specification of the two EU legislative procedures, the Ordinary Legislative Procedure and Special Legislative Procedure.

⁵ Benjamin Martill and Uta Staiger, *Brexit and Beyond: Rethinking the Futures of Europe* (UCL Press, 2018) 157. Martill and Staiger note that 'designing a revised legal regime... after Brexit is a task of immense complexity, given the intricacy of existing EU law'.

⁴ For example, Environmental Impact Assessments as regulated by Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92 EU on the Assessment of the Effects of Certain Public and Private Projects on the Environment [2014] OJ L124/1, the definition of 'waste' and standards of air and water quality. Colin T Reid, "Brexit: Challenges for Environmental Law" (2016) 27 Scots Law Times, pp. 143–147.

tion is, in many cases, inextricable from domestic law. This inextricability presents the alarmingly feasible prospects of "legal gaps", undermined legal certainty, and subsequently ineffective or even non-existent law.

In the wake of the UK's departure from the EU, the post-Brexit future of EU-originated legislation produces a degree of uncertainty, particularly related to the protections afforded by such legislation. The European Union (Withdrawal) Act 2018 seeks to address and reduce the potential uncertainties raised by the UK's departure from the EU. By virtue of the Withdrawal Agreement, EU law applied within and in relation to the UK until 31 December 2020, at which time EU Treaties and the general principles of EU law ceased to apply. Where they are not modified or revoked by the European Union (Withdrawal) Act 2018, EU Regulations will continue to apply in domestic law. Further, directly applicable EU legislation in force immediately before 31 January 2020 is safeguarded in domestic law.

However, the practical transposition of pre-existing EU-originated law into domestic law is an intrinsically complex undertaking. EU law and its domestic derivatives were written in the context of the reciprocal obligations between the EU entities and the UK. Enshrined in broad terms within Article 4(3) of the Treaty on the European Union, the obligation of legal cooperation requires that the EU and its Member States mutually assist each other in fulfilling the obligations arising from Treaties or resulting from acts of the institutions of the EU. The legislation that is retained in domestic law but makes reference to arrangements between the EU and the UK – or an EU entity and the UK – requires amendment, restructuring, or alteration to be effectively transposed into independent law. However, the Department for Environment, Food and Rural Affairs estimate that up to one-third of EU environmental laws will not be practi-

⁵ Laura van der Meer, "United Kingdom Legislating to Avoid a Legal Gap after Brexit but Warns UK Persons to Confirm the Details" (*Lexology*, 19 February 2020), https://www.lexology.com/library/detail.aspx?g=3cd2168d-2df8-48c7-b56f-fc08cbcc333e [accessed: 2020.02.14] and Charlotte Burns and Neil Carter, "Brexit and UK Environmental Policy and Politics" (2018) XXIII *Revue Français de Civilisation Britannique*, p. 3.

⁶ '[G]reater scope for rapid change outwith the EU brings both the advantages and disadvantages of flexibility, with the potential to respond more quickly to changing circumstances but also a lack of certainty as to the future... The UK will now be able to make a choice over whether or not to maintain the law inherited from the EU. "See Colin T Reid, 'Brexit and the Future of UK Environmental Law" [2016] 34 Journal of Energy and Natural Resources Law, p. 407.

⁷ Eloise Scotford and Megan Bowman, "Brexit and Environmental Law: Challenges and Opportunities" [2016] 27 King's Law Journal 3.

^{8 (}n 6) Reid states that 'the only certain consequence of that vote is uncertainty'.

As amended by the European Union (Withdrawal Agreement) Act 2020.

See the European Union (Withdrawal) Act 2018 (Exit Day) (Amendment) (No. 3) Regulations 2019.

Section 2 of the European Union (Withdrawal) Act 2018.

Richard Eccles, "The European Union (Withdrawal) Act 2018 as amended by the European Union (Withdrawal Agreement) Act 2020" Bird & Bird (London, January 2020) https://www.twobirds.com/en/news/articles/2018/uk/european-union-withdrawal-act-2018 [accessed: 2020.03.04].

¹³ [2008] C115/13

¹⁴ Environmental Audit Committee, *The Future of Chemicals Regulation after the EU Referendum* (HC 2016–2017, 912).

cally transposable,¹⁵ predominantly due to the reliance on EU entity involvement in functionally effectuating such law. This will produce inevitable legal deficiencies which must be addressed.¹⁶ If they are not addressed and appropriately amended, these legal deficiencies will reduce the extent of protection afforded to the UK environment by remaining legislation, and new gap-filling legislation will be required to mitigate the loss of environmental protections.¹⁷

The reciprocal relationship produced by the mutuality of obligations between the UK and the EU was fundamental in establishing a substantial period of environmental legal development.¹⁸ During its membership of the EU, the UK legislature achieved higher standards of environmental protection in line with EU-originated goals, predominantly by utilising EU entities and frameworks. 19 In return, the UK's membership in the EU incorporated legislative, developmental, and financial contributions to EU objectives and frameworks. 20 In light of this intrinsic reciprocity as a foundation for UK environmental legislation developments, a number of issues are arising as regards the future of UK environmental conservation legislation independent from the EU and the residual legislative protections afforded to UK air quality under post-Brexit domestic law. In order to determine whether protections are likely to increase, decrease, or remain mostly unchanged, it is necessary to analyse both the body of environmental law which developed during the UK's membership of the EU and the precursory body of environmental law prior to the UK's accession to the EU²¹ in January 1973.²² An analysis of these historical environmental law developments before and during the UK's membership of the EU will provide a contextualised narrative against which the expected future of environmental law can be derived.

¹⁵ Environmental Audit Committee, *The Future of the Natural Environment after the EU Referendum*, (HC 2016, 599) (Right Hon. Andrea Leadsom MP).

¹⁶ (n 12)

^{1/ (}n 5)

^{18 (}n 6)

¹⁹ Such as the ambient air pollution concentration control framework produced by the amalgamation of the fourth daughter Directive 2004/107/EC of the Air Quality Framework Directive 96/62/EC and the single Ambient Air Quality Directive 2008/50/EC.

²⁰ Chris Hilson, "The Impact of Brexit on the Environment: Exploring the Dynamics of a Complex Relationship" (2018) 7 *Transnational Environmental Law* 1 95 and *Climate Action*, "Countries to increase financial contributions to the IPCC to cover for US's halt of funding" (*Climate Action*, 12 September 2017), http://www.climateaction.org/news/countries-to-increase-financial-contributions-to-the-ipcc-to-cover-for-uss [accessed: 2020.03.04].

At the time known as the European Economic Community (EEC); The EEC, European Coal and Steel Community, and the European Atomic Energy Community would be subsumed by the European Community by the Treaty of Maastricht on European Union [1992] OJ C325/5. The European Community would, in turn, be renamed the TFEU.

Treaty Concerning the Accession of the Kingdom of Denmark, Ireland, the Kingdom of Norway and the United Kingdom of Great Britain and Northern Ireland to the European Economic Community and the European Atomic Energy Community [1972] OJ L73/5. Following a referendum after the treaty was agreed, Norway elected not to join the EU.

II. Pre-EU Legislation

The United Kingdom boasts a substantial history of measures taken in an attempt to combat air pollution. As the nation industrialised throughout the eighteenth and nineteenth centuries, effective regulation necessitated innovative law and unprecedented scientific developments to combat increasingly harmful emissions. The law, evolving alongside rapid industrial and scientific advancements, sought to balance public health and proprietary rights against a burgeoning industrial economy. However, such a balance proved, at times, impossible to strike. State preferences of economic growth over public health came at a cost of injury and death; preferences of a booming industry came at a cost of environmental and atmospheric health – particularly in industrial hubs such as London, Manchester, St. Helens, and Widnes. As London, Manchester, St. Helens, and Widnes.

The Alkali Inspectorate was established in 1864 to address and remedy severe air pollution issues arising from industrial manufactories.²⁵ In its attempts to protect industry, environment, and public health in coexistence, the Inspectorate utilised novel statutory powers to effectively regulate alkali works whilst improving scientific emission-reducing practices and reducing environmental damage.²⁶ While this period illustrates a ground-breaking interrelationship between law, economy, and environment, the Inspectorate's successes were short-lived. Economic interests hindered legal developments;²⁷ by the time the Inspectorate had been sufficiently empowered and funded to facilitate the development of emission-reducing practices, the Alkali industry was in decline. However, the progress of the Alkali Inspectorate was indicative of the United Kingdom's ability to utilise statutory, judicial, and governmental powers to address environmental issues.

Before the twentieth century, the UK had made consistent progress toward reducing the environmental damage from industrial manufactories as much as possible. However, by the turn of the twentieth century, the United Kingdom had defaulted on

²³ See Jim Morrison, "Air Pollution Goes Back Way Further Than You Think" (*Smithsonian*, 11 January 2016), https://www.smithsonianmag.com/science-nature/air-pollution-goes-back-way-further-you-think-180957716/ [accessed: 2020.03.17] and Christine Corton, *London Fog: The Biography* (2015, Cambridge University Press), p. 33.

²⁴ Hole v Barlow (1858) 4 C.B. (N.S) 334, 140 ER 1113 (C.P. 1114), Walter v Selfe (1851) 64 ER 849, Bamford v Turnley (1860) 3 B & S 62, 122 ER 25, St Helen's Smelting Co. v Tipping [1865] UKHL J81 and Joel F Brenner, "Nuisance Law and the Industrial Revolution" (1974) 3 The Journal of Legal Studies 2 414.

Fred Aftalion, A History of the International Chemical Industry (1991, 2nd edition, Chemical Heritage Press), pp. 11–12, 89–90, and Roy M MacLeod, "The Alkali Acts Administration, 1863–84: The Emergence of the Civil Scientist" (1965) Victorian Studies 2, p. 88.

Peter Reed "Robert Angus Smith and the All It is a few to the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the All It is a few to the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the All It is a few to the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the All It is a few to the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the Civil Scientist" (1965) Press Reed "Robert Angus Smith and the Civil Scientist" (1965) Press Reed "Robert Angus Smith and The Civil Scientist" (1965) Press Reed "Robert Angus Smith and The Civil Scientist" (1965) Press Reed "Robert Angus Smith and The Civil Scientist" (1965) Press Reed "Robert Angus Smith and The Civil Scientist" (1965) Press Reed "Robert Angus Smith" (1965) Press Reed "Robert Angus Smith and The Civil Scientist" (1965) Press Reed "Robert Angus Smith" (1965) Press Reed Robert Angus Smith (1965) Press Reed Robert Angus Reed Robert Angus

Peter Reed, "Robert Angus Smith and the Alkali Inspectorate" [in:] *The Chemical Industry in Europe, 1850–1914: Industrial Growth, Pollution, and Professionalization,* eds E. Homburg, A.S. Travis, and H.G. Schröter, 1998, Springer Science+Business Media, pp. 149–163.

²¹ Report of the Royal Commission on Noxious Vapours, Parliamentary Papers, 1878 (C. 2159) xliv 26–27, Robert Angus Smith, "What Amendments Are Required in the Legislation Necessary to Prevent the Evils Arising from Noxious Vapours and Smoke?" (1877) Transactions of the National Association for the Promotion of Social Science, and Smoke Abatement Committee, Smoke Abatement: Its methods and results (1883).

its environmental protections, and as the alkali industry faded to obsoletion so too did the nation's most valuable environmental legislative framework. As a devastating noxious fog killed thousands in London, 1952, public outcry once again necessitated legislative intervention for protection. The resultant Clean Air Acts²⁸ marked a new era of environmental legislation to effectively reduce black smoke emissions. Nevertheless, other environmental concerns were unabated, remaining mostly unchanged until the United Kingdom's accession to the European Community in 1972. Although other environmental bodies have long since absorbed the Alkali Inspectorate role and function, the legal developments during the pre-EU period are notable as indicators of the UK's ability to address environmental issues outside the ambit of a supranational body. Although the UK's historic reactive approach had yielded substantial reductions in some harmful atmospheric pollutants, a purely reactive approach is not without its flaws. First, reactive regulations tend to be restricted, focusing on very few specific pollutants or sources.²⁹ For example, whilst the Clean Air Acts reduced atmospheric sulfur dioxide concentrations, harmful nitrogen oxide (NO₂) levels were not addressed or reduced. NO_x contributed to lethal smog episodes in the 1990s, during which NO_x levels peaked at more than double the safe level recommended by the World Health Organisation.³⁰ Second, reactive regulation does not necessarily anticipate or prevent future harm – it tends, simply, to address and attempt to remedy existing harm. ³¹ This has historically resulted in pollutant displacement; regulatory measures attempt to immediately ameliorate local air quality by distributing pollutants internationally. The common practice of the construction of raised chimneys between the 1600s and the 1970s sought to resolve local pollution issues by simply "making them invisible". 32 Such practices were endorsed domestically in statute and common law³³ but resulted in international consternation.³⁴ The approach of the UK undermined overall European ambient air quality by contributing to transboundary pollution, causing acid rain particularly in Scandinavian countries – and necessitating international (and, eventually, European) efforts to reduce emissions and transboundary harm.³⁵

²⁸ 1956 and 1968.

²⁹ Dorota Galeza, "The Evolution of Regulatory Thought in the UK Over the Last Two Decades: How Does this Reflect Regulatory and Academic Thinking More Widely?" (2013) 1 Institute of Advanced Legal Studies 1, 38 and Christian Zuidema, *Decentralization in Environmental Governance: A Post–Contingency Approach* (Routledge 2017), p. 43.

 $^{^{30}}$ J.S. Bower *et al.*, "A Winter NO $_2$ Smog Episode in the U.K." (1994) 28 Atmospheric Environment 3, pp. 461–475.

³¹ Elizabeth Fisher, Bettina Lange, and Eloise Scotford, *Environmental Law* (Oxford University Press, 2nd edition, 2019), p. 536.

³² *Ibidem*, p. 561.

³³ Clean Air Act 1956 and *Manchester Corporation v Farnworth* [1930] AC 171 (HL) respectively.

³⁴ See Mark Wilde, "Best Available Techniques (BAT) and Coal–Fired Power Stations: Can the Energy Gap Be Plugged without Increasing Emissions" (2007) 20 Journal of Environmental Law 87, pp. 91–93.

³⁵ Stuart Bell *et al.*, Environmental Law (9th edition, Oxford University Press 2017), p. 353.

The United Kingdom repealed the European Communities Act³⁶ and withdrew from the European Union on 31 January 2020 – "exit day".³⁷ During the transition period³⁸ between 31 January 2020 and 31 December 2020, EU law continued to apply in the UK subject to the European Union (Withdrawal Agreement) Act 2020 (the "Withdrawal Agreement Act"). During this time, the UK continued to be treated as though it were a member of the EU.³⁹ During the transition period, ministers were empowered to correct deficiencies in domestic legislation to accommodate any retained EU law. Deficiencies were at risk of arising where the law would no longer function appropriately, such as where legislation referenced an obligation "under EU law", which would no longer be applicable at the end of the transition period.⁴⁰ Further deficiencies were anticipated where reciprocal obligations were referenced, such as between the UK and the Commission, and those obligations would no longer be applicable at the end of the transition period.⁴¹ Therefore, the transition period provided for the continuation of EU law in the UK whilst such deficiencies were addressed and corrected to ensure that any flawed legislation remains functional in 2021 and beyond.

31 December 2020 signalled the end of the transition period. Directly applicable EU legislation continued to have effect, 42 and EU Directives such as the CAFE and NEC Directives remain in domestic law due to their transposition by virtue of the Air Quality Standards Regulations 2010 and National Emission Ceilings Regulations 2018. 43 Whilst these legislations were safeguarded during the transition period, there is no guarantee that the transposing legislation will be retained now that the transition period has ended. The original 2018 Brexit Withdrawal Agreement contained a non-regression clause that would have ensured that post-Brexit environmental controls would have been "at least as rigorous" as those applicable during membership of the EU the clause was removed prior to the ratification of the Withdrawal Agreement. Article 184 of the Withdrawal Agreement requires the EU and UK to "use their best endeavours, in good faith and in full respect of their respective legal orders, to... negotiate expeditiously the agreements governing their future relationship... with a view to ensuring that those agreements apply, to the extent possible, as from the end of the transition period".44 Article 184 is broad and seemingly without enforcement; it has been argued

³⁰ 1972

European Union (Withdrawal) Act 2020 (Exit Day) (Amendment) (No. 3) Regulations 2019 SI 1423.

The term "transition period" is used in Parliamentary papers, although "implementation period" is the statutory wording. See Part 1 of the European Union (Withdrawal) Act 2020 and Nigel Walker, "Brexit Timeline: Events Leading to the UK's Exit from the European Union" (Briefing Paper 7960, House of Commons Library, 2020).

Section 1A(3)(e) of the European Union (Withdrawal Agreement) Act 2020.

Explanatory Notes to the European Union (Withdrawal Agreement) Act 2020, para 25a.

¹¹ *Ibidem*, para 25b.

⁴² (n 39) Section 3(1).

⁴³ SI 2010/1001 and SI 2018/129 respectively.

⁴⁴ European Commission, "Consolidated Version of the Withdrawal Agreement Following Revision of Protocol on Ireland/Northern Ireland and Technical Adaptions to Article 184 'Negotiations on the Future Relationship' and Article 185 'Entry into Force and Application' (Document TF50(2019)64), as Agreed at Negotiators' level and Endorsed by the European Council" (Task Force for the Prepara-

that Article 184 commitments are weak and contradicted by "conducting the negotiations by press conference [and] stating publicly in advance what the red lines are". Such unyielding conduct suggests non-collaborative approaches to negotiations – these are less likely to be productive. Additionally, climate and pollution negotiations have been hindered a number of times by the COVID-19 pandemic. 46

The non-regression clause would have been of fundamental importance in maintaining a general standard of environmental protection, and so its seemingly arbitrary removal – without a suitable replacement – is not only nonsensical but perversely injurious to environmental standards in the UK. The seemoval enables the UK to legally "backtrack" and remove protections afforded by EU law. For example, the domestic legislation that transposes the CAFE and NEC Directives can be legally repealed, eradicating the standards, obligations, and protections attributed to both Directives. This would have been unlawful during the UK's membership of the EU. When considered in light of the UK's failures to meet, for example, NO $_{\rm x}$ concentration standards during membership of the EU, the ability to renege on such obligations without legal consequence is of great concern. The Secretary of State for Environment, Food and Rural Affairs' hopes that the UK would "use the opportunity presented by leaving the EU to become a world leader in environmental excellence" offers little reassurance – without standards, enforcement procedures, and accountability, the future prospects of environmental protections in the UK are bleak.

Clause 26 of the Withdrawal Agreement Act allows for UK courts to disapply retained EU case law after the end of the transition period, a power which will produce significant legal uncertainty and exacerbate concerns about the potential for regression. ⁴⁹ First, the power to depart from precedential case law undermines the "long-standing constitutional principles such as the structure and hierarchy of the court system." ⁵⁰ This would eviscerate any certainty attributed to a precedential judicial system. Second, no definite, specified procedure exists to outline how a departure from precedent would

tion and Conduct of the Negotiations with the United Kingdom under Article 50 TEU, 2019) https://ec.europa.eu/commission/sites/beta-political/files/consolidated_withdrawal_agreement.pdf [accessed: 2020.06.25].

Mark Phillips QC, "Brexit: To IP Completion Day and Beyond" (South Square, 2020) https://souths-quare.com/articles/brexit-to-ip-completion-day-and-beyond/ [accessed: 2020.06.25].

BBC News. "Brexit: Top-level Talks Suspended After Positive Covid Tark" (South Tark)" (South Tark)" (South Tark) (South Tark) (South Tark)

⁴⁶ BBC News, "Brexit: Top–Level Talks Suspended After Positive Covid Test" (London, 19 November 2020). More broadly, the COP26 UN climate change conference was postponed for at least a year. See World Meteorological Organization, "COP26 is Postponed Because of Coronavirus Pandemic" (2 April 2020)

^{4/} HL Deb 15 January 2020, c773–782.

⁴⁸ The Lancet, "New Strategy for Clean Air in the UK – is it Enough?" (2019) 7 *The Lancet Respiratory Medicine* 3.

⁴⁹ Theodore Konstadinides and Riccardo Sallustio, "Clause 26 of the European Union (Withdrawal Agreement) Bill 2019–20: An Exercise of Constitutional Impropriety?" (*UK Constitutional Law Association*, 14 January 2020) https://ukconstitutionallaw.org/2020/01/14/theodore–konstadinides–and–riccardo–sallustio–clause–26–of–the–european–union–withdrawal–agreement–bill–2019–20–an–exercise–of–constitutional–impropriety/ [accessed: 2020.06.19].

HC Deb 8 January 2020, vol. 669, col 433 (Robin Walker).

work in practice. Third, the implication of removing the non-regression clause is significantly worsened by the common law regression potential produced by Clause 26. This is because even where EU-derived legislation is unchanged, Clause 26 would allow UK courts to interpret the retained, unchanged EU law independently from CJEU judgements⁵¹ – again departing from precedent and certainty. The attributed legal uncertainties are considerable; enabling a judicial derogation from well-established environmental legal principles and case law would result in a severe lack of judicial consistency.⁵²

III. Post-Brexit Enforcement: International Developments

i. The United Nations

Outside of the EU, additional protections could be afforded to the UK environment by way of international agreements. The Convention on Long-Range Transboundary Pollution (CLRTAP) contains emission limits that are implemented in the UK by virtue of the NEC Directive and the Medium Combustion Plants Directive. 53 However, the uncertain future of these Directives in UK law creates doubts as to their efficacy post-IP completion day. These uncertainties and doubts are somewhat ameliorable by CLR-TAP, which imposes the same emission limit obligations on the UK as the EU Directives, but under the ambit of the United Nations (UN). CLRTAP's amended Gothenburg Protocol contains emission limits for particulate matter and nitrogen oxides and, similarly to the work of the Alkali Inspectorate in the 19th century, encourages the adoption and utilisation of "best available techniques" (BATs). BATs are the most efficient preventative technologies to prevent or minimise emissions and their impacts. However, the UN limits and the emphasis on BATs are both hindered by a lack of enforcement. Notably, the EU's enforcement of Directive obligations was widely criticisable for its weakness, yet the UN lacks any enforcement capabilities at all. Compliance with UN environmental regulation is widely considered to be a solely reputational issue. 54

Recent developments, however, suggest that the once-reputational, soft-law approach of the UN is shifting. The Court of Appeal's recent judgement in *Plan B Earth* indicates that derogation from international agreements may be rendered unlawful even where such international agreements are not transposed within domestic law.

⁵¹ Colin Reid, "The Withdrawal Agreement Bill: New Legal Uncertainty?" (*Brexit & Environment*, 6 January 2020), https://www.brexitenvironment.co.uk/2020/01/06/withdrawal-agreement-bill-legal-uncertainty/ [accessed: 2020.06.17].

⁵² Ibidem.

Council Directive (EU) 2015/2193 on the limitation of emissions of certain pollutants into the air from medium combustion plants [2015] OJ L313/1.

⁵⁴ Environmental Industries Commission, "Improving Air Quality After Brexit" (Environmental Industries Commission, 2019).

Plan B Earth v Secretary of State for Transport [2020] EWCA Civ 214.

Further, there is a small but realistic potential for the United Kingdom to be held accountable to its "soft" international obligations.

ii. Plan B Earth and Environmental Policy

In June 2018, the Government designated the Airports National Policy Statement (ANSAP),⁵⁶ within which the Government issued its support of Heathrow Airport's third runway expansion. Section 5(8) of the Planning Act⁵⁷ requires the 'consideration of Government policy relating to the mitigation of, and adaption to, climate change' when designating policy statements. However, the issuance of support of Heathrow's expansion would contravene the climate change goals and obligations set out in the Paris Agreement.⁵⁸ The Court of Appeal held that the Paris Agreement forms part of "Government Policy" which, under the Planning Act, must be considered when designating an ANSAP. This means that the Government's failure to consider its Paris Agreement obligations when supporting the expansion of Heathrow Airport is unlawful by virtue of the Planning Act.

Despite the UK's signing and ratification of the Paris Agreement,⁵⁹ its obligations and limits under the Agreement are not legally binding. The Paris Agreement has been criticised as "a fraud" and comprising mere "promises",⁶⁰ and there is no legally enforceable State compliance obligation under the Agreement or the UN. However, the Court of Appeal's judgement in *Plan B* will, pending further appeal, provide a foundation for holding the UK Government accountable to its Paris Agreement obligations. This sets a foundation for a legal challenge where the Government does not take proper account of its international obligations – regardless of those obligations being 'soft law'. This widens the scope for Government accountability to its environmental obligations significantly; policy, including soft-law international agreements, are effectively regarded as legally-binding.⁶¹

It could be suggested that although *Plan B* lays a theoretical foundation for accountability, the lack of any enforcing body (such as the CJEU within the scope of the EU) ensures that little or no consequence will be imposed for derogation from international agreements. However, the Environment Act 2020 may, in conjunction with the *Plan B* judgement, provide a novel – and potentially unintended – recourse.

⁵⁶ Under Section 5 of the Planning Act 2008.

⁵⁷ Ihidem

⁵⁸ The Paris Agreement sets a global framework for climate change reduction and mitigation. Governments agreed to pursue efforts to limit global warming temperatures.

Independently and, formerly, as a Member State of the European Union. The UK's ratification of the Paris Agreement whilst holding membership of the EU will seemingly persist post–transition period completion day.

⁶⁰ Oliver Milman, "James Hansen, Father of Climate Change Awareness, Calls Paris Talks 'A Fraud" *The Guardian* (London, 12 December 2012).

⁽n 55) at [244], government policy must be considerations in the designation of ANSAPs must be "necessarily broader than legislation" (Lindblom LJ, Singh LJ, Haddon–Cave LJ).

iii. The Office for Environmental Protection

The Environment Bill was introduced to Parliament in October 2019, seeking to "help deliver the Government's manifesto commitment to delivering the most ambitious environmental programme of any country on Earth. It is part of the wider government response to the clear and scientific case, and growing public demand, for a step-change in environmental protection and recovery." The optimism of the Bill's goal to deliver the most ambitious environmental programme on Earth is largely meaningless; the Bill itself outlines the framework for target setting but provides no committal to existing EU or World Health Organisation (WHO) quantifiable targets. Furthermore, it does not even cite any actual targets independent from the EU or WHO. The reality is that this Bill comprises "warm words and [empty] promises." Considering that the UK failed to meet its legally binding targets under the EU's jurisdiction, the lack of any targets in the Environment Bill presents an unquestionable opportunity for a sizeable regression of environmental protection.

Further compounded by the loss of the CJEU's jurisdiction to enforce any targets, it seems almost certain that environmental protections in the UK will deteriorate. UK Government Ministers have voted against proposals to introduce a legally binding PM_{2.5} limit in line with WHO guidelines. Although PM_{2.5} levels have reduced since the early 2000s,⁶⁴ the Environment Bill suffers an absence of WHO guidelines due to the economic viability of such limits⁶⁵ – the protection of atmospheric quality and human health are, evidently, secondary to economic considerations despite the severity of health problems presented by exceedance of particulate matter limit values. As a result, there is a realistic potential for the regression of legislation limiting or mitigating PM_{2.5}.

A small vestige of hope is provided by the proposed creation of the Office for Environmental Protection (OEP) under the Environment Bill.⁶⁶ The Government's ambition to establish the OEP is to create a "new, world-leading, independent environmental watchdog", which will monitor and advise on environmental laws and targets. It is the government's hope that where public bodies derogate from legal standards, the OEP is empowered to issue statements of non-compliance and grant "any remedy that could be granted by the court on a judicial review other than damages".⁶⁷ Further, "if the OEP believes that additional targets should be set... or that an update to a target is necessary as a result of new evidence, it can recommend this in its annual report...

⁶² HCWS80, 30 January 2020 (Theresa Viliers).

⁶³ ClientEarth, "The Environment Bill: Another Missed Opportunity for Clean Air" (*ClientEarth*, 31 January 2020), https://www.clientearth.org/were-demanding-urgent-action-on-uk-air-pollution/[accessed: 2020.06.07].

⁶⁴ HC Deb 17 March 2020, col 187 (Alan Whitehead).

⁶⁵ Ibidem (Rebecca Pow).

⁶⁶ Clauses 21–24 and Schedule 1 of the Environment Bill.

Rafe Jennings, "The New Environment Bill: What Does it Have in Store?" (UK Human Rights Blog, March 2020) https://ukhumanrightsblog.com/2020/03/13/the-new-environmental-bill-what-does-it-have-in-store/[accessed: 2020.06.19].

The Government will then have to publish and lay before Parliament a response to any such report by the OEP. This process ensures Parliament, supported by the OEP, can hold the Government to account on the sufficiency of its measures to improve the natural environment."⁶⁸ The OEP will, in theory, be a well-supported, independent enforcement body with powers to bring judicial review action. However, this is subject to further criticism; as the power to bring judicial review is the strongest action the OEP can take, its enforcement of environmental law and obligations is weaker than, for example, that of the CJEU. As judicial review is an existing method of legal challenge, the OEP does not introduce any substantial, new method of challenging unlawful pollution. The OEP's inability to issue fines further undermines its enforcement efficacy, justifying its colloquial description of being "all bark and no bite".⁶⁹ To summarise, the Government's ambitions in creating the OEP are overly optimistic – the OEP would have little, if any, power to enforce environmental law or hold the Government accountable for derogations from such law.

A further criticism is levied at the independence of the proposed OEP. The allocation of budget and the appointment of non-executive board members will be the responsibility of the Secretary of State for Environment, Food and Rural Affairs (the "Secretary of State"). This was identified in pre-legislative scrutiny as producing the potential for OEP budget-reductions, substantially hindering its efficacy. Under the current budget allocation and board member appointment procedures, the Secretary of State can retain elements of control from the OEP's conception and throughout its function. The Chair of the Environment, Food and Rural Affairs Committee concisely summarises: If you squeeze the funding, you can control the organisation... [and] the operation of the OEP". As the OEP will seemingly lack effective enforcement capabilities or any genuine Governmental independence, its suitability as a replacement for the CJEU is questionable.

The proposed OEP would be fundamentally ineffective when acting solely based on the powers conferred upon it by the Environment Bill. However, since the *Plan B*⁷³ judgement, there is a clear legal potential for enforcing policy considerations pertaining to the environment – albeit a limited potential. If the Government can be held accountable to the Paris Agreement by virtue of the Planning Act within existing domestic courts, it stands to reason that the Government could be held accountable to additional international agreements. When considered in addition to the OEP enforce-

⁶⁸ (n 65) (Rebecca Pow)

See Department for Environment, Food and Rural Affairs, *Pre–Legislative Scrutiny of the Draft Environment (Principles and Governance) Bill* (2019) Weston, "All Bark and No Bite? Why the Government's New Environment Watchdog Must Have Teeth" (*Independent*, 15 October 2019) https://www.independent.co.uk/independentpremium/politics-explained/environment-protection-office-brexit-watchdog-nature-oep-eu-a9157306.html [accessed: 2020.06.18].

Schedule 1 Section 2(1) of the Environment Bill 2019–21.

Environment, Food and Rural Affairs Committee, *Oral Evidence: Pre–Legislative Scrutiny of the Draft Environment (Principles and Governance) Bill* (2019) HC1893 (Neil Parish).

⁷² *Ibidem* (Neil Parish) [Q246] and [Q285].

⁷³ (n 55)

ment procedures – weak or otherwise – a combined effort between the OEP and the *Plan B* judgement may provide a unique, unprecedented, and potentially unintentional layer of protection.

The ability to bring legal action against the Government for derogations from limits has been exercised before, such as in the *ClientEarth* litigation.⁷⁴ However, those limits were enshrined in legislation; the Paris Agreement is not. Therefore, the establishment and function of the OEP may serve to provide additional, unforeseen protections to the UK environment. The pollution limits set by the amended protocols to CLRTAP are not enshrined in legislation, but the UK is signatory to those "soft law" protocols. If it can be established under any existing legislation that the CLRTAP limits constitute government policy – as the Paris Agreement constituted government policy under the Planning Act – then derogations from these limits can be challenged with legal justification. The OEP will be able to support such a challenge by virtue of its enforcement powers under Clauses 28-38 of the Environment Bill. Whilst the litigatory process would be far from simple, the theoretical underpinnings mean that there is a potential that additional layers of protections will be afforded by the OEP and the common law stemming from Plan B. This potential is threatened, however, by OEP budgeting and independence issues and the possibility that the Plan B judgement is reversed on appeal.

IV. Conclusion

Environmental protection has been secondary to economic facilitation throughout history, and it seems unlikely that this will change imminently. The threats presented to human health by atmospheric pollutants are evidenced as significant, causing a range of acute, chronic, and fatal diseases, yet the reduction of these pollutants is not regarded seriously enough by Parliament or the Government. The removal of EU law and the jurisdiction of the CJEU presents an opportunity for severe regression in environmental protections, and the Environment Bill offers little reassurance that such regression will be prevented.

A small vestige of hope exists by virtue of a possible combined protective effect under the OEP and the *Plan B* judgement; the hypothesised ability to hold the Government accountable to soft-law agreements and environmental policy is potentially

⁷⁴ *R* (on the application of ClientEarth) v Secretary of State for the Environment, Food and Rural Affairs [2013] UKSC 25. Notably, the ClientEarth litigation began in 2013; unlawful emission practices have persisted since whilst the litigation process is completed. See ClientEarth, "What do ClientEarth's legal cases mean for local authority plans to deliver nitrogen dioxide compliance in England and Wales?" (ClientEarth, 2019), *R* (on the application of ClientEarth) (Appellant) v Secretary of State for the Environment, Food and Rural Affairs (Respondent) [2015] UKSC 28 and *R* (ClientEarth (No 2)) v Secretary of State for Environment, Food and Rural Affairs [2016] EWHC 2740 (Admin), and *R* (on the application of ClientEarth (No 3)) v Secretary of State for Environment, Food and Rural Affairs & Ors [2018] EWCA 315 (Admin).

ground-breaking – provided *Plan B* is not overturned and the OEP functions efficiently. If this combined protective effect is not realised or utilised, there will be minimal opportunity for Government accountability for non-compliance with environmental standards. At present, the ability for private persons to bring action against the UK Government for derogations from international agreements are confined to limited circumstances. The loss of accountability to a supranational body will be undeniably detrimental to environmental protections, but the establishment and function of the OEP may be able to mitigate such detriment.

The future of environmental protections in the UK is shrouded in uncertainty, but there is a possibility – albeit a small possibility – that the UK can realise its optimistic goal of setting a golden standard for environmental protection and delivering the most ambitious environmental programme on Earth. However, the potential for severe regression of environmental protections is also realistic.

Environmental laws, protections, and conservation efforts must be enhanced – particularly in respect of enforcement. Without improvement and effective, stringent regulation, the UK's consistent disregard for its environment – and its people – will be of fatal consequence and signify a retrograde to a shameful time in the UK's environmental regulatory history where she was labelled as the Dirty Man of Europe.

Literature

- Aftalion F., A History of the International Chemical Industry (2nd edition, Chemical Heritage Press
- Bell M.L., Davis D.L., and Fletcher T., A Retrospective Assessment of Mortality from the London Smog Episode of 1952: The Role of Influenza and Pollution' (2004) 112 Environmental Health Perspectives 1.
- Bell S., McGillivray D., and Pedersen O., *Environmental Law* (8th edition, Oxford University Press 2013).
- Bell S., McGillivray D., Pedersen O., Lees E., and Stokes E., *Environmental Law* (9th edition, Oxford University Press 2017).
- Bower J.S., Broughton G.F., Stedman J.R., and Williams M.L., "A Winter NO₂ Smog Episode in the U.K." (1994) 28 Atmospheric Environment 3.
- Brimblecombe P., "Attitudes and Responses Towards Air Pollution in Medieval England" (1976) 26 Journal of the Air Pollution Control Association 10. Corton C., London Fog: The Biography (Cambridge University Press 2015).
- Brimblecombe P., "The Clean Air Act after 50 Years" (2006) 61 Weather 11.
- Brown Weiss E., "The Evolution of International Environmental Law" (2011) 54 Japanese Yearbook of International Law 1.
- Burns C. and Carter N., "Brexit and UK Environmental Policy and Politics" (2018) XXIII Revue Français de Civilisation Britannique 3.
- Calman K., "The 1848 Public Health Act and its relevance to improving public health in England now" (1998) 317 British Medical Journal 7158.
- Cavert, "The Environmental Policy of Charles I: Coal Smoke and the English Monarchy, 1624–40" (2014) 53 Journal of British Studies 2.

- Davis D.L., Bell M.L., and Fletcher T., "Guest Editorial: A Look Back at the London Smog of 1952 and the Half Century Since" (2002) 110 Environmental Health Perspectives 734.
- Eccles R., "The European Union (Withdrawal) Act 2018 as amended by the European Union (Withdrawal Agreement) Act 2020" Bird & Bird (London, January 2020), https://www.two-birds.com/en/news/articles/2018/uk/european-union-withdrawal-act-2018 [accessed: 2020.02.04].
- Eskenazi B., Warner M., Brambilla P., Signorini S., Ames J., and Mocarelli P., "The Seveso Accident: A Look at 40 Years of Health Research and Beyond" (2018) 121 Environment International 1.
- Fisher E., Lange B., and Scotford E., *Environmental Law* (2nd edition, Oxford University Press 2019). Fletcher A., "The Present State of the Law Concerning the Pollution of Air and Water:" (1888) 36
- Fletcher A., "The Present State of the Law Concerning the Pollution of Air and Water:" (1888) 36 Journal of the Society of Arts 573.
- Flick C., "The Movement for Smoke Abatement in 19th-Century Britain" (1980) 21 Technology and Culture 1.
- Galeza D., 'The Evolution of Regulatory Thought in the UK Over the Last Two Decades: How Does this Reflect Regulatory and Academic Thinking More Widely?' (2013) 1 Institute of Advanced Legal Studies 1.
- Garwood C., "Green Crusaders or Captives of Industry? The British Alkali Inspectorate and the Ethics of Environmental Decision Making, 1864–95" (2004) 61 Annals of Science 1.
- Graham A.M. *et al.*, "Impact of Weather Types on UK Ambient Particulate Matter Concentrations" (2020) 5 Atmospheric Environment 10.
- Hanley J.G., "Parliament, Physicians, and Nuisances: The Demedicalization of Nuisance Law, 1831 1855" (2006) 80 Bulletin of the History of Medicine 4.
- Hardin G., "The Tragedy of the Commons" (1968) 162 Science 3859.
- Harvey F., "Air pollution: UK government loses third court case as plans ruled "unlawful" (*The Guardian*, 21 February 2018) https://www.theguardian.com/environment/2018/feb/21/high-court-rules-uk-air-pollution-plans-unlawful [accessed: 2020.03.05].
- Hawes R., "The Control of Alkali Pollution in St. Helens, 1862–1890" (1995) 1 Environment and History 2.
- Heyvaert V., "Governing Climate Change: Towards a New Paradigm for Risk Regulation" (2011) 74 Modern Law Review 6.
- Hildebrand P.M., "The European Community's Environmental Policy, 1957 to '1992': From Incidental Measures to an International Regime?" (1992) 1 Environmental Politics 4.
- Hilson C., "The Impact of Brexit on the Environment: Exploring the Dynamics of a Complex Relationship" (2018) 7 Transnational Environmental Law 1.
- Kaijser A., "The Trail from Trail: New Challenges for Historians of Technology" (2011) 52 Technology and Culture 1.
- Krämer L., "Statistics on Environmental Judgements by the EC Court of Justice" (2006) 18 Journal of Environmental Law 3.
- Landrigan P.J. et al., "The Lancet Commission on Pollution and Health" (2018) 391 The Lancet Commissions 10119.
- Lee R., "Always Keep a Hold of Nurse: British Environmental Law and Exit from the European Union" (2017) 29 Journal of Environmental Law 155.
- Longhurst J.W.S., "Changing Air Quality in The Greater Manchester Conurbation" (1994) 3 Transactions on Ecology and the Environment 352.

- Longhurst J.W.S., Hayes E.T., Chatterton T.J., and Williams E.T., "Progress with Air Quality Management in the 60 Years since the UK Clean Air Act, 1956: Lessons, Failures, Challenges and Opportunities" (2016) 11 International Journal of Sustainable Development and Planning 4.
- Lynham G., "The Sic Utere Principle as Customary International Law: A Case of Wishful Thinking?" (1995) 2 James Cook University Law Review.
- MacLeod R.M., "The Alkali Acts Administration, 1863–84: The Emergence of the Civil Scientist" (1965) 9 Victorian Studies 2 85–112.
- Macrory R., "Environmental Law in the United Kingdom post Brexit" (2019) 19 ERA Forum Journal of the Academy of European Law 643–657.
- Martill B. and Staiger U., Brexit and Beyond: Rethinking the Futures of Europe (UCL Press, 2018).
- Mickelson K., "Notes and Comments: Rereading Trail Smelter" (1994) 31 Canadian Yearbook of International Law 219.
- Miller M.R. and Newby D.E., "Air Pollution and Cardiovascular Disease: *Car Sick*" (2020) 116 Cardiovascular Research 2 279–294.
- Mister A., "Britain's Clean Air Acts" (1970) 20 University of Toronto Law Journal 268.
- Moody A. and Tate J., "In Service CO2 and NOX Emissions of Euro 6/VI Cars, Light- and Heavy- dutygoods Vehicles in Real London Driving: Taking the Road into the Laboratory" (2017) 7 Journal of Earth Sciences and Geotechnical Engineering 1.
- Morag-Levine N., "Is Precautionary Regulation a Civil Law Instrument? Lessons from the History of the Alkali Act" (2011) 23 Journal of Environmental Law 1.
- Morawska L., Ristovski Z., Jayaratne E.R., Keogh D.U., and Ling X., "Ambient Nano and Ultrafine Particles from Motor Vehicle Emissions: Characteristics, Ambient Processing and Implications on human exposure" (2008) 42 Atmospheric Environment 35.
- Reed P., Acid Rain and the Rise of the Environmental Chemist in Nineteenth-Century Britain (Routledge 2016).
- Reed P., "Robert Angus Smith and the Alkali Inspectorate" [in:] *The Chemical Industry in Europe,* 1850–1914: Industrial Growth, Pollution, and Professionalization Ersnt Homburg, eds Anthony S. Travis, and Harm G. Schröter, (Springer Science+Business Media 1998).
- Reid C.T., "Brexit and the Future of UK Environmental Law" [2016] 34 Journal of Energy and Natural Resources Law 407.
- Reid C.T., "Brexit: Challenges for Environmental Law" (2016) 27 Scots Law Times 143–14.
- Rivas et al., "Source Apportionment of Particle Number Size Distribution in Urban Background and Traffic Stations in Four European Cities" (2020) 135 Environment International 105345.
- Sanderson J.B., "The National Smoke Abatement Society and the Clean Air Act (1956)" (1961) 9 Political Studies 316.
- Schaufnagel D.E., "The Health Effects of Ultrafine Particles" (2020) 52 Experimental and Molecular Medicine 311.
- Scotford E. and Bowman M., "Brexit and Environmental Law: Challenges and Opportunities" [2016] 27 King's Law Journal 3.
- Smith R.A., "What Amendments Are Required in the Legislation Necessary to Prevent the Evils Arising from Noxious Vapours and Smoke?" (1877) Transactions of the National Association for the Promotion of Social Science 532.
- Stirling E. *et al.*, "Quantifying the Transboundary Contribution of Nitrogen Oxides to UK Air Quality" (2020) 21 Atmospheric Science Letters 2.
- Stradling D. and Thorsheim P., "The Smoke of Great Cities: British and American Efforts to Control Air Pollution, 1860–1914" (1999) 4 Environmental History 1.

- The Lancet, "New Strategy for Clean Air in the UK is it Enough?" (2019) 7 The Lancet Respiratory Medicine 3.
- Urbinato D., "London's Historic 'Pea-soupers.' (Smog in London, England)" (1994) 20 Environmental Protection Agency Journal 1.
- Veinla H., "Determination of the Level of Environmental Protection and the Proportionality of Environmental Measures in Community Law" (2004) 9 Juridica International Law Review 89–98.
- Wilde M., "Best Available Techniques (BAT) and Coal-Fired Power Stations: Can the Energy Gap Be Plugged without Increasing Emissions" (2007) 20 Journal of Environmental Law 87.
- Wilde M., "The New Directive on Ambient Air Quality and Cleaner Air for Europe" (2010) 12 Environmental Law Review 282.
- Wils W.P.J., "The Birds Directive 15 Years Later: A Survey of the Case Law and a Comparison with the Habitats Directive" (1994) 6 Journal of Environmental Law 2.
- Wisniak J., "Sodium Carbonate From Natural Resources to Leblanc and Back" (2004) 10 Indian Journal of Chemical Technology 109.
- Yamineva Y. and Romppanen S., "Is Law Failing to Address Air Pollution? Reflections on International and EU Developments" (2017) Review of European, Comparative & International Environmental Law 189–200.
- Milman O., "James Hansen, Father of Climate Change Awareness, Calls Paris Talks 'A Fraud" The Guardian (London, 12 Dec 2012).
- Weston P., "All Bark and No Bite? Why the Government's New Environment Watchdog Must Have Teeth" (*Independent*, 15 October 2019) https://www.independent.co.uk/independentpremium/politics-explained/environment-protection-office-brexit-watchdog-nature-oepeu-a9157306.html [accessed: 2020.06.05].
- Zuidema C., Decentralization in Environmental Governance: A Post-Contingency Approach (Routledge 2017).

Summary

Joseph McMullen, Tilak Ginige

Clearing the Air. An Analysis of Atmospheric Protections and Pollutant Regulation in the United Kingdom Before, During, and After the EU

Air pollution is a severe issue in the United Kingdom. Legal and scientific efforts to combat the deleterious health effects arising from polluted air are wide-ranging but suffer a lack of enforcement. The issue of enforcement is a central theme within this paper; the most stringent or ambitious limits are meaningless without enforcement. Legal responses to specific pollutants and polluting industries are first explored to establish a narrative of the United Kingdom's approach to air quality protection throughout the Industrial Revolution. Legal issues and regulatory methods during the United Kingdom's membership of the European Union are then discussed in juxtaposition to domestic historical approaches, acknowledging the United Kingdom's utilisation of displacement methods and general failures to adhere to European Union law. Beyond 2020, the retention and function of EU-derived and domestic legislation is considered in light of Brexit. The United Kingdom faces – post-Brexit – an opportunity for improvement in its atmospheric

quality. However, without the enforcement capabilities of the Court of Justice of the European Union there is a real possibility that atmospheric quality in the United Kingdom will face a severe and dangerous regression – becoming, once again, the "dirty man of Europe".

Keywords: environmental law; air pollution; United Kingdom; European Union; particulate matter.

Streszczenie

Joseph McMullen, Tilak Ginige

Przeciwdziałanie emisjom do powietrza. Analiza ochrony atmosfery i regulacji dotyczących zanieczyszczeń w Wielkiej Brytanii przed przystąpieniem, w trakcie i po opuszczeniu UE

Zanieczyszczenie powietrza to poważny problem w Wielkiej Brytanii. Wysiłki prawne i naukowe, mające na celu zwalczanie szkodliwych skutków zdrowotnych wynikających z zanieczyszczonego powietrza, są szeroko zakrojone. Dużym problemem pozostaje jednak egzekwowanie norm w tym zakresie. To właśnie kwestia egzekwowania stosownych norm prawnych jest centralnym tematem tego artykułu; najbardziej rygorystyczne lub ambitne ograniczenia sa bez znaczenia bez ich efektywnej egzekucji. W artykule wpierw analizie poddano badane określone zanieczyszczenia i specyficzne gałęzie przemysłu generujące wiekszość emisji. W oparciu o te analize konstruuje się narracje na temat podejścia Wielkiej Brytanii do ochrony jakości powietrza podczas rewolucji przemysłowej. Kwestie prawne i metody regulacyjne w okresie członkostwa Wielkiej Brytanii w Unii Europejskiej są następnie omawiane w zestawieniu z krajowymi podejściami historycznymi, uznając stosowanie przez Wielką Brytanię metod wysiedleń i ogólne problemy z implementacia norm prawa Unii Europeiskiei. Po 2020 r. w świetle Brexitu analizie poddane zostały zachowania i funkcja prawodawstwa unijnego i krajowego. Wielka Brytania stoi przed – po Brexicie – szansą na poprawę jakości powietrza atmosferycznego. Jednak bez możliwości egzekwowania prawa przez Trybunał Sprawiedliwości Unii Europejskiej istnieje realna możliwość, że jej jakość w Wielkiej Brytanii stanie w obliczu poważnego i niebezpiecznego regresu – stając się ponownie "brudnym człowiekiem Europy".

Słowa kluczowe: prawo ochrony środowiska, zanieczyszczenie powietrza, Wielka Brytania, Unia Europejska, pył zawieszony.