



e-law

Better law for the environment

March/April 2019 | Issue 111



Welcome to the March/April edition of elaw.
The focus of this issue is air quality.

Air quality remains in the spotlight in light of the ongoing ClientEarth challenges to the government's air quality plans and growing public concern surrounding the issue of air pollution and its effect on our health. This issue has certainly drawn an array of authors for our themed articles, picking up some of

the many aspects of air pollution!

Firstly, we are grateful to Chloë Anthony provides a thoughtful analysis of the challenges brought by ClientEarth in her article: [ClientEarth changes the enforcement of EU and UK air quality law](#), which sets out how ClientEarth has strengthened the legal basis for challenging Member State action on air quality, mobilised EU infringement action and has acted as an innovator in environmental public interest litigation.

We are also thankful to Veneta Cooney for setting out in her article: [Addressing air pollution: the solution is in our genes?](#) how the genetic drive to survive could facilitate the change in human behavior needed to address environmental harm such as air pollution and how linking environmental harm with human health in the form of the 'pollution and health model' is fundamental to addressing air pollution.

Dr Aleksandra Cavoski's article [Potential risk for an electric vehicle future](#) examines the government's policies to address air pollution from road transport and assesses the risks with the approach taken. For this we are most grateful.

Bethan Pollington and Jessica Slater have also provided us with a useful summary of the discussions and concerns raised at UKELA's recent Air Quality Challenges: Governance and Good Health conference held in Manchester on 7th March. See: [Reflections on air quality challenges: governance and good health](#).

Finally, Bob Pritchard, in his piece [Planning for better air quality](#), reviews recent case law on the interaction between the planning system and the Ambient Air Quality Directive, including the extent to which the Secretary of State is obliged to use planning powers to address air quality issues and the need to ensure that mitigation measures are practical and deliverable. He also considers the role that neighbourhood plans can play in addressing air quality at the local level.

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In this edition we also have the benefit of a fantastic student article, [A critical analysis of whether the UK government has taken adequate protections against fracking in England](#), by Huw Thomas. Finally, don't miss Nicholas Whitsun-Jones' book review: [Principles of Environmental Law edited by Ludwig Krämer and Emanuela Orlando](#).

I would also like to take the opportunity to thank our new editorial assistants, Sefki Bayram and Cecily Kingston for their hard work in preparing their first elaw edition. I'd also like to extend a special thanks to Ben Christman for his hard work, as always, in pulling together the large number of themed articles in this edition.

Best wishes,

Sophie Wilkinson

Sophie Wilkinson
UKELA e-law Editor

E-law editorial team

Sophie Wilkinson, Editor – Sophie is an environmental law specialist at LexisPSL with 13 years' experience, including 11 years' experience in private practice. She moved to LexisNexis from Shoosmiths LLP where she was a Senior Associate. Prior to this Sophie trained at Browne Jacobson LLP and spent 6 years at Eversheds LLP.

Cecily Kingston is a trainee solicitor at R&R Urquhart solicitors based in northern Scotland.

Sefki studied law at the University of Leicester (LLB) and the University of Nottingham (LLM). He is pursuing a career at the Bar in Public and Environmental Law and will begin the BPTC in September 2019.

Words from the Chair



When we eventually come to look back on this period of time, one feature that will really stand out will be our paralysis around the issues we should have recognised as urgent and have been prioritising, namely dealing with climate change and air quality.

This edition of *elaw* contains many thought-provoking articles about a very complex topic. What really strikes me reading it is the need for collaboration between scientists and lawyers and for centralised policy and decision-making. Air quality is an issue that has its greatest effects on a local level, but it needs a societal level solution.

As awareness of the true cost of air pollution rises, there will be increasing pressure to make the kind of transformational changes that the smoking ban introduced. It is quite incredible to think that it is only 12 years since this legislation was introduced in England (13 years in Scotland) and that although controversial at the time, it quickly became normalised and achieved strong public support.

One story that struck me recently was the news that schools in Kent were putting in place plans to keep pupils indoors in the event of a no-deal Brexit causing long tailbacks on the M20. It is an eye-catching story because it seems unbelievable that we would have a situation where it's unsafe for children to play outside. However, there are many schools in densely populated urban areas where this is already the norm. As Dr Veneta Cooney points out in her article, sometimes people will put up with something until a single person or event catalyses a sudden change in perception that leads to irrevocable change.

Young people are demanding action on climate change through the Youth Climate Strikes; they are increasingly likely to define the issues that affect them and take measures into their own hands. We can support them by bringing our knowledge and experience to bear in strengthening legislation.

Regards,

Anne Johnstone

Anne Johnstone
UKELA Chair

UKELA news

We have exciting news from the UKELA staff team. Over the coming months, UKELA will be implementing a new management system called iMIS. We expect this considerable change to the way we operate to have marked improvements on your access to UKELA services as members. Additionally, we expect this change to increase the efficiency of finance management, delivery of mailings, blogs, e-law etc. We are very excited to be able to provide this improved service very soon.

There will be extra demands in order that we can deliver the iMIS system to its full potential. We may be a little less responsive for a short while and thank you all in advance for your patience and co-operation

Thank you all for your continued support of UKELA. We couldn't do it without you.

Kind regards,
The UKELA staff team

Nominations are invited for the 2019 international merit award

What are we looking for?

Someone who has contributed considerably to furthering/securing/achieving environmental law wins in their career. This could be at both the national and global level. This is not necessarily something that is exclusive to international lawyers. This person can have had a 'straight' career in environmental law (practising as a solicitor or barrister or equivalent) but equally they could come from the wider field and work at the NGO level (such as in-house).

How to define success?

We are looking for either someone who has perhaps secured a great victory, such as a ground-breaking case or legislative 'win'. This could be a momentous one-off that has truly helped the environmental law movement move forward and achieve gains beyond that which it would have done in the absence of said wins. Or it could be framed more as a lifetime of service where the individual has contributed over time to a cumulative build-up of successes on a smaller but no less important scale.

Why is UKELA honouring this person?

This award is in recognition of the impact this person has on the broader field but also UKELA specifically; for example, as a consequence of a win or victory UKELA was able to make great steps forward. UKELA may have worked with this individual and they might be part of the UKELA network, or equivalent abroad.

How we judge this award

UKELA will send out a call for nominations on a yearly basis, via elaw. Any submissions will be reviewed by a UKELA panel (VCs and Chair) to determine the 'winner', using the below questions in consideration:

1. How has this individual demonstrated in their career a significant contribution to environmental law
2. What is the most impactful 'win' that this individual has secured (be it a case, a legislative reform, policy intervention etc) to enhance the environmental law (regime)?
3. Please describe in a few sentences the work of this individual and how it contributes to UKELA's aims.
4. Why does this work deserve recognition?

Process

Please send your nominations, in confidence, to [Alison Boyd](#) by close on Wednesday 1 May. The winner will be announced at the UKELA AGM. It is not expected that nominations will be received every year, nor that the award will be made each year.

Membership renewals

If you have not renewed your UKELA membership for 2019 then this may be the last edition of elaw you receive. Don't want to miss out? Then please [contact](#) UKELA's Senior Administrator and membership manager now

Your help is needed! Take our short survey about your membership and win a free Garner lecture ticket!

We are reviewing our membership tiers, so we need to know a bit more about our members to help us make the correct decisions going forward. The [short survey](#) should take you no more than 5 minutes, so please help us by completing it – you could win a free ticket to this year's Garner lecture (or other seminar of your choice, from a selected list). Thank you!

Elections to Council

The United Kingdom Environmental Law Association – Notice of Election to Council

1. Notice is given that an election for members of the Council of Management of the Association will be conducted by electronic ballot under Article 36 of the Articles of Association. Members are advised that, in accordance with article 37.1, Council set the upper limit at 20 for the year until the AGM 2020. It should be noted that an election will not be held in the event that the number of candidates does not exceed the number of places available.
2. The Council regularly examines the skills and services that can be offered by UKELA Council Members with a view to creating a well-balanced and informed Council that can actively contribute to the work of UKELA. With this in mind, UKELA would welcome and encourage nominations from:
 - Private Practice lawyers
 - Government and local government lawyers
 - Academics and
 - Those interested in helping with the production of elaw (UKELA's bi-monthly members' journal)
3. Successful candidates will have opportunities to take active roles in key aspects of UK environmental law. Candidates should state what role or roles they are willing to undertake on the Council – we need people who are willing to give their time and actively participate in the management of UKELA to help build and strengthen our organisation. Council members are expected to attend Council meetings held 3 to 4 times per year and the Annual Conference (this year in Sheffield on 28-30 June).
4. Our Chair, Anne Johnstone, is willing to discuss roles with candidates, as is our Vice Chair team. Their contact details are on our [website](#). You can also contact [Alison Boyd](#).
5. Any person wishing to be nominated to stand for election should serve notice to Alison Boyd, Operations Director, by [email](#) only no later than **midday, on Thursday 16 May 2019**.
6. Candidates must be subscribing members of UKELA [1] and must be proposed by one other subscribing member of UKELA. The nomination should include details of the candidate, such details not to exceed 200 words (as specified in Article 46 of the Articles of Association) and shall be submitted on a plain word document, which does not bear any material other than the candidate's details and manifesto, but must include a telephone number, email address and postal address.

7. Former Council members are eligible to stand again provided they have not served on the Council since the last AGM (22 June 2018). (NB This does not include any currently serving Council members who may be standing for re-election due to retirement by rotation.)
8. If an election is needed details of the candidates will be circulated to members in due course and the results of any election or the names of those invited to join Council, will be declared at the AGM to be held at the Annual Conference on Friday 28 June 2019.

[1] Under corporate membership only the person mentioned first in an organisation's registration is able to stand for election to Council, though any number of those with individual membership in one organisation may stand.

News from the devolved administrations

Wales

Correction

Our attention has been drawn to an error in Nicholas Whitsun-Jones' article in the last issue of e-law on the Law Commission's Report Planning Law In Wales. It was stated that the Commission was proposing no change to the present statutory arrangements in Part 12 of the Town and Country Planning Act 1990 concerning High Court challenges. In fact, the Commission is proposing that Part 12 is **not** restated in the new Planning Bill, but instead that all Court proceedings should be brought by way of judicial review under Part 54 – as the two procedures are now more or less identical.

The author apologises for this mistake.

Working party news

Land contamination working party

With the recent appointment of new co-convenors, Jeff Roberts and Emma Tattersdill, the land contamination working party is looking to “relaunch” and increase its activity in 2019. As well as actively seeking new members, we want to ensure that our membership list is up to date. We should therefore be grateful if you would get in touch even if you are a member of the group already.

The co-convenors would also be interested to hear from you as to what you would like from your working party. Therefore, if you have ideas of any activities or events you would like the group to cover, or if you have any suggestions for the group generally do, please email [Jeff](#) or [Emma](#).

Nature conservation working party

The nature conservation working party has been involved with several consultations:

- The nature conservation working party, working with the planning and sustainable development working party, submitted a response to Defra’s consultation on environmental net gain. The response broadly supports the government’s aim to secure net improvements to biodiversity by using mandatory net gain in certain circumstances. However, it considered that there are a number of issues bearing upon how such a policy may be applied in practice through the mechanisms offered by the existing planning system in England.
- The working party’s response to Defra’s consultation on trees and woodlands opted for a duty on local authorities to consult on: the felling of urban trees; greater transparency in the process; and, the production of best practice guidance for local authority tree and woodland strategies.
- A response to the EU ‘Water Framework Directive fitness check’ was submitted on behalf of the nature conservation and water working parties. Over the last two decades, and where fully implemented, the Water Framework Directive (WFD) has been the driving force behind improvements in water management, and in the status of freshwater ecosystems, biodiversity, and the services these ecosystems provide for people, nature and economies. Whilst much more needs to

be done to implement and enforce this law, the WFD is fit for the purpose for which it was designed and does not need to be revised. However, improved guidance on the implementation of the WFD would be helpful.

- The working party has also engaged with Defra, providing detailed comments on the draft Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and are now broadly content with the final version that has been laid in Parliament.

The May 2019 meeting of the nature conservation working party will include presentations on Favourable Conservation Status from Christina Cork of Natural England and Kate Jennings from the RSPB. At the September 2019 meeting the working party will be celebrating its 30th anniversary with the meeting chaired by Graham Machin, the first Chair, and a reception afterwards.

Wildlife law bursary award 2019

Applications are invited to be submitted to Wyn Jones, former convenor of the nature conservation working party, by **Wednesday 25th September** briefly setting out the proposed research project (suggest no more than a page of A4). The project must address a legal issue or issues affecting nature conservation in the UK or within the UK’s overseas territories.

Applications will be considered by the chair and convenors of the working party together with at least 2 of the wildlife law course tutors. The award will be made by the 25th October.

The successful candidate will produce a paper and be required to give a presentation on the project and the conclusions reached at a meeting of the nature conservation working party, either at the UKELA annual conference 2020 or in September 2020. The paper will be published in the UKELA journal *elaw*.

For further information please contact [Wyn Jones](#), nature conservation working party.

Waste working party

The waste working party has run three events so far this year.

In January, working party members came together for a meeting kindly hosted by 25 Bedford Row where they considered the latest consultations and legislations (which included a number of Brexit SIs) and heard from Hilary Stone on the Resources and Waste Strategy and Phil Conran on the Environmental Protection (Miscellaneous Amendments) (England and Wales) Regulations 2018.

In March, the waste working party held part 2 of their Brexit seminar series at Clyde & Co. This was a well attended and insightful update on the potential impact of Brexit on the waste industry.

The most recent event in April, 'Exploring the pathway to a Circular Economy', included a great line up including the Senior and Junior Vice Presidents of the Chartered Institution of Wastes Management (CIWM). The seminar was a great opportunity for those wanting to know more about the circular economy, including in the context of Brexit. There were six speakers lined up for a panel discussion and providing a legal overview of the circular economy.

Students news

UKELA moot competition 2019

The 2019 UKELA moot semi-finals and finals were held on the 22nd of February at King's College London. The day started off with the senior semi-finals, followed by the junior and senior finals. All participants showed extensive preparation for the complex moot problem regarding the Wednesbury principle, with each pair presenting comprehensive submissions for all three issues for consideration. The first issue was regarding the application of the Wednesbury standard of unreasonableness; the second regarding the standard of scrutiny the Communicant – an environmental conservation NGO – suggests; the third, and last, issue regarding suggestions for a specialist environmental court.

The competitors put forward a diverse array of submissions and exceptional national and international examples, raising interesting arguments that have come before the Aarhus Convention Compliance Committee. The participants were faced with rigorous testing by our outstanding committee, made up of semi-finals judges Thea Osmund-Smith, Ruth Reid and Gayatri Parasarathy, and with Mr Justice Dove judging both finals. The demanding questions posed by our judges were met with prompt responses from the contestants, leading to an extremely lively competition. Following the senior semi-finals, and a quick coffee break, the senior final saw the competitors arguing for the opposite side than in the semi-final. This is emblematic of the unpredictable life of a lawyer, who must argue black one day and white the other.

The high standard of the moot competition was vividly felt in both the senior and the junior finals, and Mr Justice Dove's inquisitive questions created an extremely competitive atmosphere in the room. Finally, after swift deliberation, Mr Justice Dove announced the winners: James Harrison and Melissa Wilson as the Dame Frances Patterson (junior) moot winners (BPP Law School and University of Cambridge); Jennifer Routledge and Abigail Scott as the Lord Slynn (senior) moot winners. The event concluded with a prize giving ceremony, round up thanks from the judges and drinks and a light buffet for the moot participants and guests. The day was an overall success and the competition could not have happened without the students devoting so much time preparing and presenting their submissions to such a high standard.

The eminence of the judges and the environmental focus of this yearly moot are unique to UKELA, and we hope to continue the excellent level of competition in upcoming years. UKELA would like to thank our Moot master, Nina Pindham, and semi-finals judges Thea Osmund-Smith, Ruth Reid and Gayatri Parasarathy, with special thanks to Mr Justice Dove, who kindly offered his time to judge the finals of this competition. We'd like to extend our gratitude to our longstanding hosts, King's College London, and the wonderful catering staff that provided the participants, judges and guests with refreshments throughout the day. We'd also like to give special thanks to our sponsors, No.5 Chambers and Lawtext Publishing, for without them, this event would not be possible.

(Contribution provided by Beatrice Petrescu, UKELA Student Adviser)



Nina Pindham and Mr Justice Dove presenting the junior moot winners and senior moot winners respectively.

UKELA student vocational bursary fund 2019

UKELA are delighted to announce that we will be accepting applications for the Student Vocational Bursary Fund. The UKELA Student Vocational Bursary Fund is intended to enable students to undertake a period of vocational placement (such as an internship or externship) in the field of environmental law. Placements may be with a public body (e.g. a government department, local authority, regulatory agency), with a non-for-profit organisation such as a non-governmental organisation, with a university department, in private practice (legal or otherwise), or any other vocational placement which would further the charitable objectives of UKELA. If you wish to be considered for the 2019 bursary award, please complete the [application form](#), returning it no later than **3pm on 17 May 2019**. A decision will be made by 29 May 2019, with reports being required by November 2019.

Some of our previous recipients explain how the bursary was beneficial for them:

When I was awarded the bursary I was informally involved with projects that focussed on 'instituting the rights of future generations' into political and legal decision-making processes. The bursary gave me the opportunity to pursue the project formally with environmental NGOs working in this area and it enabled me to make new connections with others active in this area – many of whom I am still in touch with now as this work continues to be important and relevant. The bursary is an excellent way to gain experience in an area of work or as part of a project that can lay important foundations for a student's future career. I highly recommend students do think about applying for it!

(Kirsty Schneeberger MBE, UKELA Vice Chair)

In 2015, I was lucky enough to be awarded the UKELA Student Vocational Bursary to fund my attendance at an international summer law school on the topic of 'comparative and international environmental law' in Salerno, Italy. As environmental law is not a core module at any university in the UK, and rarely an optional module at undergraduate level, I had been trying to ascertain whether I was truly passionate about the field, or whether I had simply been swayed by the greater number of opportunities that had been made available to me in this field over others. However, after attending the summer school, it became clear to me that I definitely wanted to develop a legal practice which makes this field special focus. Since then, I have continued to be actively

involved in UKELA as an editorial assistant (2016-18), I have undertaken a masters course in which I was able to study environmental law in depth, and I have secured environmental law internships which have allowed me to gain some practical experience. Without this bursary, I am not sure that I would have applied for any of those and it amazes me that, four years later, my interest in environmental law has not wavered. I still cannot fully express the fullness of my gratitude to UKELA. I would strongly encourage other students to apply!

(Jessica Allen, 2015 recipient and former elaw assistant editor)

I was very fortunate to receive the support of UKELA's student vocational bursary scheme to carry out a three month internship with ClientEarth's energy and coal team at their Hackney office in 2017. My advice to others who may be considering a similar experience? Do it! You will learn a lot, you will contribute to an organisation which does socially valuable work, you will develop your legal skills and you will meet interesting people and make contacts that will be useful in the future.

(Ben Christman, 2017 recipient and current elaw senior editorial assistant)

Student publication opportunity

Interested in co-authoring a hot topic article with an environmental professional? UKELA provides an opportunity for students to publish their work in e-law, our members' journal which is circulated to over 1400 practitioners. Students are invited to email a short abstract of up to 500 words to [Beatrice Petrescu](#) and [Sophie Tremplin](#) our student advisers. If selected, the Editorial Board will endeavour to pair students with a supervising practitioner in that field. Articles can be on the e-law issue theme or on any topic related to environmental law. The theme of the next issue is waste expected to be published in early June 2019.

UKELA events

Wild law weekend: 24 May – 27 May 2019

Organised by Wild Law SIG.

We are delighted to present our 2019 wild law weekend where we are very pleased to be heading to beautiful Whitby in North Yorkshire. The weekend is based at the Boggle Hole Youth Hostel, in Whitby on the edge of Robin Hood's Bay. With activities in the nearby countryside and coast; and environmental discussions in the evenings, a stimulating weekend of exhilarating scenery and good company is on offer; we would love you to join us. All meals and accommodation are included in the cost, along with all the planned activities and talks. Please see the website to [book](#) your place.

Annual conference 2019: 28 June – 30 June 2019

Organised by conference team.

Please join us in Sheffield University's beautiful campus from 28 to 30 June 2019 for The UKELA annual conference 2019.

Our conference programme starts at 11.20am to give you maximum CPD value. Registration is from 10.30am. With seven plenary sessions covering a broad range of topics, there is something for everyone. We also have our working party sessions, always a popular end to the main business of the weekend. With a relaxing social programme to complement the working day, including some new activities such as running and walking clubs, we are sure you will have an enjoyable weekend with colleagues and friends. [Book](#) your place now!

Non-UKELA events

Public Interest Environmental Law (PIEL) UK 13th annual conference: 12 April 2019

Organised by PIEL

PIEL UK invites you to their 13th Annual Conference to explore the theme '12 years to mitigate, legislate and litigate: How can environmental law adapt in time?' and discuss some of the most pressing issues in environmental law surrounding climate change. For further details on the programme and speakers, please visit the [website](#). This event is sponsored by UKELA.

Brownfield and contaminated land 2019 conference: 1 May 2019

Organised by Environment Analyst

This upcoming conference will provide you with practical advice, innovative techniques, and updates on planning and policy frameworks specific to the risk assessment and remediation of brownfield and contaminated land in both Northern Ireland and the Republic of Ireland. UKELA members will receive 10% off the ticket price when using the code: UKELA10. Find out more and book [here](#).

Launch of Halsbury's Laws Environment Law – Thursday 2 May

Consulting Editor: Professor Richard Macrory

LexisNexis is publishing Halsbury's Environment Law in May. This two volume work is the first major revision since 2010 when Halsbury's Environmental Quality and Public Health was published.

To mark the occasion the Centre for Law and the Environment is holding an important seminar involving leading contemporary figures in environmental law. At a time of potential momentous change, the panel will discuss future challenges in environmental law facing this country. Booking and further details are available [here](#) and [here](#).

Ground gas 2019: 9 May 2019

Organised by Environment Analyst

Join over 100 industry professionals at our annual ground gas conference which will be returning for the second year on 9 May in London.

This popular annual conference, designed for regulators, consultants, remediation contractors and other industry experts, will provide you with insight into new strategies, innovations and techniques to tackle your most pressing ground gas challenges. UKELA members will receive 10% off the ticket price when using the code: UKELA10. Booking and further details are available [here](#).

RWM – recycling & waste management expo: 11 – 12 September 2019

Organised by RWM

RWM is the UK's leading trade show for recycling and waste management, providing the biggest platform for the latest innovations shaping the sustainability sector. RWM, in partnership with CIWM, is the only UK event of this scale and brings the entire industry together in one location. To put it into figures: 500 exhibitors, 350 seminars and 50 free-to-attend theatres across the exhibits. Please see the website for more details and to [book](#) your place.

Legal Sustainability Alliance UN Sustainable Development Goals workshop: various dates

Organised by Legal Sustainability Alliance and facilitated by UKSSD

Join us for one of our interactive workshops, each hosted by leading law firm members of the Legal Sustainability Alliance, which will help you to unpack the UN Sustainable Development Goals (the Global Goals) and understand how these can help deliver your firm's sustainability programmes and ambitions. Workshops are free to attend but places are limited. Information and booking details may be found [here](#) or by contacting info@legalsustainabilityalliance.com

UKELA diary dates

UKELA Scotland – Environmental Principles and Governance after Brexit – a half day conference on the consultation: 2 May 2019

Organised by UKELA Scotland

This half day conference, hosted by Edinburgh University, will give delegates an opportunity to discuss and debate the Scottish government consultation on Environmental Principles and Governance. The programme will consider the impact of this consultation for environmental law in Scotland, with views from the legal profession, academia, industry and NGOs all represented on the speaker panels; and draw comparisons with approaches adopted in other UK jurisdictions, in particular Wales which is running its own consultation and England where part 1 of the Environment Bill has been published. [Booking details](#) coming soon.

Young UKELA, the basics – fish and the law: 20 May 2019

Young UKELA is delighted to announce the latest in our series of 'The Basics' Seminars, which aim to explain the fundamentals of environmental law to those in the early(ish) years of practice, in an inclusive format that encourages the presentations to give way to friendly Q&A, debate and networking.

The seminar will focus on an area of law that is both topical and important: the law of fisheries. Our expert contributors will discuss the existing law regulating sea fishing in UK waters, enforcement, the Common Fisheries Policy and issues arising from Brexit. [Booking details](#) coming soon.

London meeting on supply chains: 21 May 2019

Join us at Herbert Smith Freehills in London for an early evening seminar looking at supply chains. [Booking details](#) coming soon.

South West regional group seminar on nuisance and invasive species: 23 May 2019

Join UKELA South West in Exeter for their next event, kindly hosted by the Met Office at their headquarters in Exeter. For those able to arrive by 4pm, the afternoon will start with a tour of this state of the art building. This will be followed at 5:30pm by the seminar focusing on nuisance and invasive species, which will be led by a panel of speakers from Francis Taylor Buildings, Natural England and South West Water. This promises to be a great opportunity to hear more about a highly topical area from three very different perspectives. We hope that the event will be of interest to students and professionals working across environmental law with the chance to benefit

from the wealth of knowledge and experience on the panel. There will also be the chance for informal networking after the seminar, with the evening wrapping up by 8pm. [Booking details](#) coming soon.

Going underground: 4 July 2019

Organised by the planning and sustainable development working party, the British Geological Society (BGS) and Squire Patton Boggs (SPB)

The planning and sustainable development working party along with BGS and SPB will be providing an event exploring the storage of energy in underground strata. BGS will speak about underground resources and the re-use of chambers or fissures in underground strata for storing energy and for extracting ground source heat. SPB speakers will address property issues affecting exploitation, deployment and consenting issues affecting the installations themselves and transmission infrastructure. UKELA working party speaker Peter Dixon will consider its contribution towards achieving sustainable development. Attendance will be limited to 50 with tickets allocated on a first come first served basis. More details to follow; [bookings](#) open soon.

London meeting on natural capital: 23 September 2019

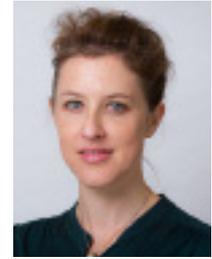
Join us at Herbert Smith Freehills in London for an early evening seminar looking at Natural Capital. [Booking details](#) coming soon.

Annual Scottish conference: 3 October 2019

Organised by UKELA Scotland

We will once again be at the Apex Hotel in Edinburgh for our annual Scottish Conference. [Booking details](#) coming soon.

The e-law 60 second interview



Professor Eloise Scotford, Professor of Environmental Law, Faculty of Laws and Centre for Law and Environment, UCL

Professor Eloise Scotford grew up in Sydney, Australia, with a mother who was active in local politics and environmentalism (she was a local councillor and fought passionately to preserve areas of bushland and foreshore land on Sydney harbour) and a lawyer father (who acted in relation to cases concerning ship pollution amongst other things). Eloise attended the University of Sydney law school, obtaining the University medal in law, before working as Associate to the Chief Justice of Australia at the High Court of Australia in Canberra. After obtaining a scholarship to study postgraduate law in Oxford, her childhood memories must have revived. Since focusing her legal study and scholarship on environmental law, Eloise has held academic posts in Oxford (Career Development Fellowship in Environmental Law at Corpus Christi College), at King's College London (Lecturer and Senior Lecturer), and now at UCL. Her current research focuses on environmental principles, air quality law, and climate change law. Along the way, she has had two girls with her marvellous husband Michael, and is getting involved in local politics.

How did you get into environmental law?

During my studies for postgraduate law at Oxford, I had a 'fork in the road' moment when I chose between studying traditional, revered subjects on the BCL or subjects that I thought would sustain my deep intellectual interest in law for the rest of my career. Environmental law won.

What are the main challenges in your work?

Time is the top challenge. There is so much to study, research, communicate, teach, and critically examine about environmental law. Events often overtake carefully laid research and teaching plans in environmental law, whether they be new landmark cases, major political change (Brexit), or urgent environmental problems that demand action (air quality). None of these events respect the university calendar.

What environmental issue keeps you awake at night?

Air pollution and its many and varied causes.

What's the biggest single thing that would make a difference to environmental protection and well-being?

Informed and generous public engagement and action over environmental issues.

What's your UKELA working party of choice and why?

Waste. This was my first research area in environmental law and an area I still find fascinating.

What's the biggest benefit to you of UKELA membership?

Meeting people from a wide range of sectors and professional backgrounds who have deep practical knowledge about different aspects of environmental law.

Environmental law headlines

A selection of recent environmental law news and updates prepared by the teams at [Lexis®PSL Environment](#) and [Practical Law Environment](#).

Defra launches package of four waste consultations

[LexisPSL Environment](#)

On 18 February 2019 the Department for Environment, Food & Rural Affairs (Defra) launched the following consultations which all close on 12 or 13 May 2019:

Plastic packaging tax

This [consultation](#) follows the March 2018 call for [evidenceTackling the plastic problem](#),—which revealed plastic packaging is typically only used for a short period of time and then disposed of, and accounts for 44% of plastic used in the UK. The [summary of responses](#) was issued by HM Treasury in August 2018.

Announcements made in the October 2018 Budget confirmed that the government would introduce a tax on the production and import of plastic packaging from April 2022—and that subject to consultation, this tax would apply to plastic packaging which does not contain at least 30% recycled plastic, to transform financial incentives for manufacturers to produce more sustainable packaging.

The government hopes this consultation, along with the consultation on reforming packaging producer responsibility, will encourage businesses to design and use plastic packaging that is easier to recycle and discourage them from creating plastic packaging which is difficult to recycle—increasing the supply of easier-to-recycle plastic.

Packaging

Announcements made in the October 2018 Budget confirmed that subject to consultation, the government would reform the packaging producer responsibility system, which will aim to increase producer responsibility for the costs of their packaging waste, including plastic—and that this system would provide an incentive for producers to design packaging that is easier to recycle, and penalise the use of packaging which isn't, such as black plastics.

The [consultation](#) on reforming the UK packaging producer responsibility system seeks views on:

- Suggested reforms to the packaging producer responsibility regulations, to increase the use of packaging that can be and is easily recycled.

- Proposals to place the full net costs of managing packaging waste on businesses who use packaging and who are best placed to influence its design.

Deposit return scheme (DRS)

In March 2018, the government stated that it will consult on a deposit return scheme to increase recycling rates and drastically reduce the amount of waste polluting land and seas, suggesting the deposit return scheme in England will apply to single-use drinks containers, whether plastic, glass or metal. This follows the October 2017 [call for evidence](#) on the issue.

The [consultation](#) published by Defra in February 2019 looks at the details of introducing a deposit return scheme in England, Wales and Northern Ireland, alongside other measures to increase recycling rates and seeks views on how to ensure the DRS will be easy for consumers to return drinks containers, leading to increased recycling rates and a reduction in littering.

Recycling collection

The final [consultation](#) on consistency in household and business recycling collections in England seeks views on:

- Increasing consistency in recycling processes to prevent confusion among consumers, to improve the quantity and quality of what we recycle.
- Improving the quality of material collected to help increase demand for these materials in the UK and help to ensure that they meet higher quality standards for export.

For more information, see: [LNB News 18/02/2019 77](#). [Waste types and controls – plastics](#) provides more information on international, European and national action in relation to plastic waste and [Packaging waste-producer responsibility obligations](#) and [Waste types and controls-packaging waste](#) provide more information on packaging waste.

Government consults on conservation covenants scheme

[Practical Law Environment](#)

A conservation covenant is a voluntary agreement between a landowner and a conservation organisation or public body to do, or not do, something on their land for a conservation purpose (for example, an agreement to maintain a woodland and allow public access). Conservation covenants usually run with the land and bind future landowners as well as the person who entered into the agreement. They are used in many common law jurisdictions (including Scotland), but, currently, not in England and Wales.

By way of background, in June 2014, the Law Commission published a report setting out its recommendations for introducing a scheme of conservation covenants in England and Wales, including a draft Conservation Covenants Bill (see [Legal update, Law Commission recommends statutory scheme of conservation covenants](#)). In December 2018, the government published a consultation on proposals to require a biodiversity net gain for new housing and commercial development in England. The consultation confirmed that the government would separately consider the role of a statutory scheme of conservation covenants to enable landowners to create a legally-binding obligation that would provide long-term assurance that compensatory habitat would be maintained to the standard required. The consultation sought views on the length of conservation covenants (see [Legal update, Government consults on mandatory biodiversity net gain in development](#)).

On 22 February 2019, the Department for Environment, Food and Rural Affairs (Defra) published a [consultation](#) on a new statutory scheme of conservation covenants. The government plans to introduce most of the proposals in the Law Commission's 2014 report, with the following modifications:

- Amending the eligibility criteria for tenants that wish to enter into conservation covenants.
- Requiring additional information in annual reporting by responsible bodies.
- Allowing certain not-for-profit bodies (such as community interest companies) to be responsible bodies.

The consultation seeks views on:

- The demand for, and potential use of, conservation covenants. The government expects there will be a variety of applications for conservation covenants, including payment for ecosystem services (for example, maintaining a river that helps mitigate

localised flooding) and net gain for biodiversity (for example, to allow habitats improved by developers as part of a development to be permanently maintained).

- Safeguards that need to be included to prevent any abuse of the scheme.
- Whether the potential costs and benefits identified are a reasonable estimate or if there are any possible unintended consequences of the proposals.
- Whether the Law Commission's proposals (with the government's suggested amendments) are the right mechanism.
- Whether the proposals for enforcing any breaches of conservation covenants should be supplemented to address breaches that do not warrant injunctions or damages and how this should be done.

The consultation closes on 22 March 2019.

For more information, see [Legal update, Government consults on conservation covenants scheme](#).

UK's draft national energy and climate plan

[LexisPSL Environment](#)

Under Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action (Governance Regulation), Member States are required to prepare national energy and climate plans (NECPs) which outline how they will contribute to achieving the objectives of the Energy Union and particularly its revised targets, as well as the EU's commitments to reduce greenhouse gas emissions under the Paris Agreement 2015.

The Governance Regulation is one element of the Clean Energy Package which also includes the recast of the Renewable Energy Directive 2009/28/EC and the directive amending the Energy Efficiency Directive 2012/27/EU (EED), published at the same time. Both of these directives tighten targets compared to the original directives—the former requires 32% of all energy consumed by 2030 to be renewable, whereas the latter requires there to be a 32% reduction in energy consumption in 2030 compared with 2007 levels. The measures and policies described in the NECPs must contribute towards the achievement of these targets.

NECPs must address the five dimensions of the Energy Union from 2021 to 2030, namely energy security, internal energy market, energy efficiency, decarbonisation and research, innovation and competitiveness.

The NECP must set out the national objectives for

each dimension and the policies and measures which will allow Member States to achieve those objectives. The plan must also comment on the current situation regarding the five dimensions, and the expected impacts of the policies and measures described. The NECPs must be based on robust and consistent data across Member States to allow for fair and accurate comparisons and cumulations when reviewing bloc-wide progress.

On 29 January 2019, the Department for Business, Energy & Industrial Strategy (BEIS) published a draft UK NECP, which sets out the UK's integrated climate and energy objectives, targets, policies and measures, covering the five dimensions of the energy union for the period 2021 to 2030.

The UK NECP comments at length on the existing national framework for emissions reduction, climate action, carbon reporting and forecasting, already in place in the UK on account of the Climate Change Act 2008 (CCA 2008). This includes legally binding emissions reduction targets, carbon budgets for a five year period 15 years ahead, and a cycle of climate risk assessment, response and reporting. The NECP also comments that the Clean Growth Strategy published in 2017 anticipates many of the demands of the NECP, and on the relevance of the 25 year environment plan and the National Allocation Plan (NAP).

The final NECP must be submitted by 31 December 2019. Prior to that, the government must allow a period of public consultation, and include a summary of public views with the final submission. As the government did not consult on the draft plan, it is required to consult on the final plan in order to comply with Governance Regulation, art 10.

For more information, see News Analysis: [Exploring the UK draft national energy and climate plan](#).

Court of Appeal clarifies environmental permitting waste exemption for sludge storage [Practical Law Environment](#)

The appellant, Cleansing Service Group Ltd, removed sludge from customers' septic tanks, transported it to farms and transferred it into storage tanks before it was used as agricultural fertiliser on the farms. The storage tanks were fitted with grids, which allowed any debris in the sludge to be separated out. The debris was collected in a skip and removed to a permitted or exempt facility for disposal.

Storage of residual sludge pending agricultural use is exempt from the requirement to hold an environmental permit (waste exemption S3 under Schedule 3 to the Environmental Permitting (EP)

regime under the Environmental Permitting (England and Wales) Regulations 2016 (*SI 2016/1154*) (EP Regulations 2016)). The Environment Agency (EA) guidance on the S3 exemption states that the screening of sludge to remove debris amounts to treatment which, therefore, requires a permit.

Following the High Court's refusal, in 2017, of permission to bring a judicial review of the EA guidance, the claimant appealed and was granted permission to apply for judicial review.

On 14 February 2019, in [R \(on the application of Cleansing Service Group Ltd\) v Environment Agency \[2019\] EWCA Civ 157 \(14 February 2019\)](#), the Court of Appeal refused the appellant's application for judicial review of the EA's exemption guidance and held:

- The term 'residual sludge' in the S3 exemption under the EP Regulations 2016 meant sludge which, after storage, was in a condition ready to be used in accordance with the Sludge (Use in Agriculture) Regulations 1989 (*SI 1989/1263*) and the Sludge Directive 1986 (*Council Directive 86/278/EEC*) by 'spreading on the soil or any other application on or in the soil'. The residual sludge covered by the exemption was sludge that had been treated and was simply being stored pending use.
- 'Storage' under the exemption meant 'storage'. It did not include any form of treatment. The screening process carried out by the appellant to remove debris from the sludge was unquestionably a form of treatment, which required an environmental permit and did not fall within the exemption in Schedule 3.
- The EA had not erred in law in advising that the screening process was a treatment activity so as to fall outside the exemption.
- The requirements in Schedule 2, paragraph 4(1) to the EP Regulations 2016 for the purposes of the definition of an 'exempt waste operation' were conjunctive, not disjunctive. Consequently, even if an activity fell within the exemption, it would only be exempt if the type and quantity of waste submitted to the operation and the method of recovery were consistent with the objectives in Article 13 of the Waste Framework Directive 2008 (*Directive 2008/98/EC*) to protect human health and the environment (see [Practice note, EU Waste Framework Directive 2008: Disposal](#)).

For more detailed coverage of the case. [Legal update, Environmental Permitting waste exemption for sludge storage clarified \(Court of Appeal\)](#).

Council succeeds in Japanese knotweed prosecution (Bristol City Council v MB Estate Ltd)

[LexisPSL Environment](#)

Following complaints from neighbours about the spread of Japanese knotweed in the garden of a house in Bristol owned by the property company, the local authority served it with a community protection notice under the Anti-social Behaviour, Crime and Policing Act 2014 (ABCPA 2014), s 43. The notice required the company to:

- Submit a management plan for approval.
- Prevent the spread of the knotweed either by digging out or applying glyphosate.
- Install a root barrier membrane on the curtilage of the affected area.
- Provide evidence of removal and ongoing treatment.

The company failed to respond to the notice and was prosecuted by the local authority.

The company did not attend the hearing at the magistrates' court in December 2018 and the district judge found it had neither taken reasonable steps to comply with the notice nor had a reasonable excuse for failing to do so. The company was therefore convicted of an offence under ABCPA 2014, s 48 and was fined £18,000 plus costs. The district judge also imposed an order requiring the company, pursuant to ABCPA 2014, s 49, to remedy the problem by obtaining a plan to resolve the issue from a specialist company within 28 days.

The case is believed to be one of the first prosecutions nationally relating to the highly invasive Japanese knotweed using the ABCPA 2014. ABCPA 2014 applies to anti-social behaviour which includes conduct that is capable of causing nuisance or annoyance to a person in relation to that person's occupation of residential premises or that is capable of causing housing-related nuisance or annoyance to any person. The restriction to residential premises means that community protection notices under ABCPA 2014 cannot be used in respect of Japanese knotweed causing a nuisance to commercial premises but they could be used in respect of Japanese knotweed growing on commercial premises and causing a nuisance or annoyance to an occupier of residential premises.

Viewing platform not a nuisance or Article 8 ECHR breach of privacy

[Practical Law Environment](#)

The claimants' flats were in the Neo Bankside development adjacent to the Tate Modern art gallery in central London. Their living areas looked directly onto a viewing gallery which was open to visitors to the Tate Modern and provided a panoramic view of London. The flats had floor-to-ceiling windows and the winter gardens (which had been conceived by developers as a form of indoor balcony) were used by the claimants as part of their living accommodation. The claimants alleged that they were the subject of close scrutiny by many visitors, and had been photographed and observed through binoculars.

The claimants brought a claim seeking an injunction requiring the Tate Modern to close the relevant part of the gallery. The claim was brought:

- In common law private nuisance.
- Under the Human Rights Act 1998 (HRA 1998) to protect their rights of privacy under Article 8 of the European Convention on Human Rights (ECHR). The claimants argued that they could claim under the HRA 1998 on the basis that the Tate Gallery (of which the Tate Modern was part) was a 'hybrid' public authority under the definition in section 6(3)(b).

On 11 February 2019, in *Fearn and others v The Board of Trustees of the Tate Gallery* [2019] EWHC 246 (Ch) the High Court dismissed the claim.

The court's reasoning was that:

- There was material intrusion into the privacy of the claimants' living accommodation, which was greater than, and of a different order from, that which would be the case if the flats were overlooked by windows, either residential or commercial. Windows afforded a view, but their normal use would not give rise to the same level of study of, or interest in, the interiors of the flats. Unlike a viewing gallery, their primary purpose was not to view.
- In the right circumstances, a deliberate act of overlooking could amount to an actionable nuisance. If there were any doubt about this, it was removed by Article 8 of the ECHR and the HRA 1998. External prying into a home was capable of contravening the privacy protected by Article 8. The courts could give effect to Article 8 by developing existing causes of action. Whether anything was an invasion of privacy depended on whether, and to what extent, there was a legitimate expectation of privacy. There was no claim in the tort of nuisance in this case. If the claimants had lived in flats designed with less

glass, they would not have a nuisance claim because their flats would not be likely to attract the external viewer in the same way. In choosing to buy those flats, the claimants had created or submitted themselves to an increased sensitivity to privacy. Also by moving their living activities into the winter garden area, the claimants had created their own additional sensitivity to the inward gaze. It would be wrong to allow that self-induced exposure to the outside world to create a liability in nuisance.

- The Tate Gallery was not exercising functions of a public nature. Consequently, the Article 8 ECHR privacy claim under section 6 of the HRA 1998 failed.

Notably, the decision was subject to the defendant giving an undertaking to the court to restrict the time of use of the viewing platform and put up suitable signage.

For more information, see [Legal update, Viewing platform not a nuisance or Article 8 ECHR breach of privacy](#).

Air Pollution

ClientEarth changes the enforcement of EU and UK air quality law



Chloë Anthony, Sussex University

At a glance:

- The ClientEarth litigation concerning the UK government's compliance with the EU Air Quality Directive¹ (AQD) has changed how air quality law is enforced in the EU and UK.
- ClientEarth has strengthened the legal basis for challenging Member State action on air quality and mobilised EU infringement action.
- Substantive review of UK government air quality planning has taken place and air quality has been recognised as a public health priority.
- ClientEarth has acted as innovators in environmental public interest litigation, offering insight into the opportunities and limitations of judicial review.

1. Introducing air quality as a legal and policy issue

Air quality is a key and complex environmental issue. In addition to impacting ecosystems, air pollutants are acknowledged to be a significant public health issue.² Ambient air pollution is the top environmental cause of disease and premature death worldwide³ and has been linked to adverse effects on birth outcomes,⁴ children's health⁵ and dementia.⁶ The UK Health Alliance on Climate Change recently reported on the health benefits of acting on air pollution, currently estimated to cause 40,000 deaths a year in the UK with projected health and social care costs of up to £18.6 billion by 2035.⁷

Guidance on limit values for air pollutants are provided by the World Health Organisation.⁸ The EU regime is driven by the 2008 AQD with policy objectives set out in the EU's Environment Action Programmes⁹ and the Clean Air Programme.¹⁰ The AQD aims to avoid, prevent or reduce harmful effects on human health and the environment as a whole and sets mandatory targets for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, carbon monoxide, lead, benzene, particulate matter and ozone. The Annexes contain detailed provision for scientific monitoring and reporting as well as limit values. The AQD has, however, been criticised as a 'remarkable regress in environmental protection'¹¹ due to it no longer requiring standards to be respected over whole territories but in 'zones and agglomerations', the introduction of scope for time extensions to achieve limit values, and the previous requirement of producing short-term action plans for short duration

pollution episodes becoming optional. Non-compliance is widespread, but not universal: nineteen Member States reported exceeding the legal limit for nitrogen dioxide in 2016.¹²

In the UK, the AQD is transposed by the Air Quality Standards Regulations 2010.¹³ The Environment Act 1995, section 80, requires the Secretary of State for Environment, Food and Rural Affairs to set out a national air quality strategy to meet international and EU commitments; section 91 obliges local governments to assess air quality in their areas and take action where statutory objectives are not met; and section 85(3) allows the Secretary of State, Welsh Ministers, the Scottish Environmental Protection Agency and the Mayor of London to issue directions to local authorities. ClientEarth has successfully challenged UK Government's compliance with the AQD's air quality planning obligations and a fully compliant plan is outstanding. In 2017, the Secretary of State issued directions to 23 local authorities and five cities to carry out 'feasibility studies' and make proposals on how to meet nitrogen dioxide targets; in 2018 further authorities received ministerial directions in England and Wales.¹⁴

Nield notes that the statutory air quality framework under the Environment Act 1995 is distinct from the obligations of the AQD, but suggests respective duties are unclear: planning policy and local development control form an important part of the air quality regime, however they introduce air quality as another material consideration without sufficient guidance on assessment and decision-making, and adequate resourcing to produce compliant plans.¹⁵ The UK government has recently published a Clean Air Strategy committing to new legislation and a new local government framework.¹⁶ Clean Air Bills have been introduced in both the House of Commons¹⁷ and House of Lords.¹⁸ The legislative and policy framework for air quality is thus currently in the process of change. How ClientEarth has played a role in shaping this framework will be explored in the following section, beginning with a brief overview of the air quality litigation.

2. Overview of the ClientEarth litigation

ClientEarth is an international public interest charity developing legal strategies to improve environmental protection, access to information and justice for

citizens.¹⁹ Initially, ClientEarth sought a declaration of the breach of limit values for nitrogen dioxide (NO₂) set out in Article 13 of the AQD, and a mandatory order that the government produce an air quality plan ensuring compliance by 2015 under Article 22. The action failed in both the High Court²⁰ and the Court of Appeal²¹ on the basis that the government had already admitted the breach rendering a declaration redundant, that production of a plan under Article 22 was not compulsory, and enforcement should properly take place at EU level. Declaration of the breach was granted on appeal by the Supreme Court, with a preliminary reference to the Court of Justice of the EU (CJEU) to clarify enforcement procedures.²²

The CJEU ruled that Article 22(1) must be interpreted to oblige a Member State to establish an air quality plan in application for postponement of compliance, and it was the responsibility of domestic courts to ensure the national authority establishes a compliant plan.²³ On return to the Supreme Court, a mandatory order was issued requiring the government to produce revised plans for consultation and completion by the end of 2015.²⁴ Due to the expiry of the Article 22 deadline, it was held that Article 23(1) now applied requiring the establishment of an air quality plan. Liberty to apply to the Administrative Court was granted to both parties allowing 'very limited' scope for arguing meeting standards was an 'impossibility' on practical or economic grounds.²⁵ In contrast to the approach of the lower courts, the legal remedy comprised a declaration of the breach and a requirement for reviewing courts to ensure effective enforcement of air quality law.

The second phase of hearings addressed the government's 2015 Air Quality Plan.²⁶ In *ClientEarth (No 2)*,²⁷ the 2015 Air Quality Plan was quashed following substantive review of the government's approach to environmental modelling. Three High Court cases²⁸ followed primarily concerning two issues: postponing the deadline for completion of the new plan and the degree of oversight of the Court. Garnham J reiterated the duties arising from previous judgments and the detrimental impact of ongoing non-compliance on public health. The legal context had shifted decisively towards a willingness of the court to review air quality planning and a recognition of the issue as a public health priority.

The third phase of hearings concerned the lawfulness of the 2017 Air Quality Plan²⁹ and the degree of oversight. In *ClientEarth (No 3)*,³⁰ the 2017 Air Quality Plan was declared unlawful and a mandatory order was issued requiring the production of a supplement to rectify the failings. In light of the legal context and continuing failure to produce a compliant plan, Garnham J stated 'the time has come for the Court to consider exercising a more flexible supervisory jurisdiction in this case than is commonplace',

providing the claimant with liberty to apply on notice for further relief in relation to any issue arising in the preparation of the supplementary plan and as to the lawfulness of the final supplementary plan.³¹ Garnham J articulated a threefold obligation on the Secretary of State in the course of the hearings: compliance must be achieved by the soonest date possible; the route to compliance must reduce exposure as quickly as possible; and the measures chosen must make meeting limit values not just possible, but likely.

In summary, ClientEarth develops from judicial deference, through clarification of the role of domestic courts in EU environmental law enforcement, to a willingness of the reviewing court to examine the evidence base of government environmental policy. This trajectory allows a preliminary conclusion that the Courts' review of government compliance with environmental law has changed with respect to air quality. The impact of the litigation cannot, however, be assessed by viewing the cases in isolation. Analysis of the legal context in more depth is required to determine the impact of ClientEarth.

3. Change in enforcement of EU and UK environmental law

While leaving room for discretion as to implementing measures, the rulings have strengthened the doctrine of direct effect and the role of domestic courts in environmental law enforcement. Since the CJEU ruling, a considerable number of European air quality cases have been heard.³² ClientEarth's strategy has been to support air quality litigation in other European countries.³³ In Germany, for example, ClientEarth have collaborated with Deutsche Umwelthilfe, bringing 16 cases.³⁴ In a judgment of February 2018, the Federal Administrative Court upheld a decision from a regional court permitting restrictions on diesel vehicles, overruling national law and leading to over ten cities receiving orders to restrict diesel vehicles.³⁵

The Commission issued formal notice of legal proceedings against the UK for its breach of NO₂ limit values in 2014.³⁶ Infringement action has been taken against Bulgaria³⁷ and Poland³⁸ for breaching Article 13(1) of the AQD and failing to produce adequate plans. There are currently references pending on the measuring of air quality³⁹ and whether officials can be imprisoned if they refuse to implement a court order requiring the establishment of an air quality plan.⁴⁰ In 2017, the Commission issued final warnings to Germany, France, Spain, Italy, Romania and the UK for breaching limit values,⁴¹ and in May 2018, the Commission announced it had referred these to the CJEU for failing to keep exceedance of air quality limit values as short as possible.⁴² Before *ClientEarth* it was doubted that air quality directives could be enforced.⁴³ Member States are facing coordinated and successful legal action by environmental organisations as well as

the threat of heavy fines by the EU. This is clear evidence of a change in enforcement of EU air quality law.

The future of UK air quality law is now being addressed in the context of UK withdrawal from the EU. It is suggested that while the EU legislative framework is essential to understanding air quality as a legal and policy issue and currently a key driver of UK government action, the review of environmental modelling underpinning the air quality planning and the recognition of air quality as a public health priority may be seen as independent from the EU context and worthy of further attention. The second and third phases of the litigation focused on the UK government's approach to air quality planning and the proportionality of measures to achieve compliance was contested throughout the hearings. The environmental modelling, its assumptions and limitations were presented to the Court, including the impact on compliance of using more accurate information on emissions and alternative models.⁴⁴ *ClientEarth* sets a precedent for an engagement by the Courts with the evidence base for implementing measures and establishes a supervisory role on the part of the Courts. *ClientEarth* challenges the traditional boundaries of UK environmental judicial review and provides insight into its opportunities and limits. This is of relevance considering the government's proposals for environmental enforcement post-Brexit and its reliance on judicial review.⁴⁵

In conclusion, *ClientEarth's* air quality litigation has initiated change in the enforcement of EU and UK air quality law by coordinated action, in collaboration with civil society organisations and academic institutions, in the interests of the environment and the public. Review of air quality planning in cases of breach of environmental obligations has been achieved and air quality has moved up the policy agenda of the EU and UK. A successful legal approach to environmental protection is being carved out by *ClientEarth* with much potential for further development.

Chloë Anthony is studying for the Environmental Law LLM at Sussex University with research interests in how law constrains and facilitates environmental protection and regeneration.

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Addressing air pollution: The solution is in our genes?



Dr Veneta Cooney, Convenor of the UKELA Public Health and Environmental Law Working Party

At a glance:

- Our genes are the architect of the ultimate solution to air pollution and its contribution to climate change.
- Our genetic drive to survive could facilitate the change in human behaviour needed to address environmental harm such as air pollution.
- Where politicians and environmental pressure groups have failed, our DNA may triumph.
- Linking environmental harm with human health in the form of the "Pollution and Health Model" is fundamental to addressing air pollution.

The atmosphere has always been polluted. Volcanoes for example have been churning out a myriad of toxic fumes for millions of years. However, using pre-industrial levels as a baseline, the concentrations of pollutants in the atmosphere have now reached levels that are harmful to humans, and it is this and not the adverse impact on nature, that is unacceptable to what is, a pathologically egocentric species. *Pathologically* egocentric because our behaviour is self-harming on an unprecedented scale.

Our drive to be self-serving has been the architect of advancements in science and technology that are nothing but miraculous. Our capacity to learn and to be curious has created life altering treatments such as gene therapy. We have unlocked the code of life itself, DNA, the potential of which has not even begun to be realised. We can go to the dark side of the moon and send satellites to the furthest reaches of the universe. We can defy gravity, search the deepest recesses of the seabed, grow ears on the back of mice, we are on the brink of replicating the sun on Earth in the form of fusion, and are close to understanding parallel universes and multiple realities through the lens of quantum mechanics.

We could blame natural selection for our inertia and apathy towards addressing the key threat to our long term survival. This is because from an evolutionary perspective, we are hard-wired to look after the 'self' and are driven to pass on what Professor Richard Dawkins has described as our 'selfish genes'.¹ Natural selection does not drive us to think of the 'other'. Instead, it drives us to think of what is best for 'self'. We are hard-wired to think tribal and not global.

However, life is full of ironies and one of the biggest ironies is that our 'selfish genes' could be the basis of the ultimate solution to air pollution and its contribution to climate change. Where politicians and environmental campaigners have failed, our DNA may triumph. This is because as in the words of the novelist, E M Forster, 'Death destroys Man but the thought of it may save him'.²

Our drive to survive can be all consuming, so much so that illness or the thought of it can significantly change a person's behaviour. This can be seen in a tangible way at medical treatment centres for life threatening illnesses such as cancer. The outpatients department will be packed with people who have been diagnosed with pathologies, some of which will be linked to air pollution. Despite the probability that a significant proportion of those patients will die prematurely because of the disease itself, they will have significantly changed their lives to reduce the risk of that happening. Relatives of these patients will also have changed their behaviour to reduce their personal risk of developing the disease themselves. They will have stopped smoking, stopped drinking alcohol, stopped taking recreational drugs, lost weight, started to exercise, started to eat healthily, and some may have moved to areas of the UK thought to have cleaner air.

Linking environmental pollution with ill health to facilitate change in political and societal attitude i.e., the 'Pollution and Health Model', is not a new idea. We have been here before with smoking and its association with a raft of adverse health outcomes. After the Second World War it was noted that there was an exponential increase in the prevalence and incidence of lung cancer. It was the eminent epidemiologist and physician Professor Richard Doll who identified the link between smoking and cancer.³ Despite the evidence being robust and widely accepted amongst scientists and medics, it took 57 years until smoking in public places was banned.⁴ The delay could be argued as being resultant of the lobbying strength of the tobacco industry in combination with the political sclerosis to accept that passive smoking was the health threat that it is.⁵

The health risks associated with active and passive smoking have now been fully accepted. And this has translated into a seismic shift in public attitude towards smoking and smoking in public places. Attitude has changed in such a way that a return to smoked filled bars and restaurants is not an option. The scene of a person driving in their car smoking whilst their two children are strapped in their seats at the back will fill the majority of people with horror. A similar visceral response will be generated when seeing a pregnant woman light up a cigarette.

Smoking is environmental pollution like air pollution from cars. Let's hope it doesn't take 57 years for legislation, politicians and the public to fully understand that and act accordingly.

It may be slightly unfair to place all our hopes of addressing air pollution on evolution and its drive to ensure long term survival of our genes. Science too will need to play its part. Unless we understand more fully how and why our behaviour is causing environmentally-related illness, then the public, politicians and the law cannot respond appropriately.

However, understanding the science of air pollution and its health effects is not easy. The more we know, the more we realise we don't know. The physical and chemical properties inherent to a molecule will determine whether it is an air pollutant and how it behaves outside as well inside the human body.⁶ The degree of complexity of the science outside the body has fuelled the discipline of environmental chemistry, which is a speciality that in turn has created sub-disciplines such as photochemistry, chromatography and thermodynamics.

And this is all before we start to try and understand how these air pollutants are involved with the pathogenic mechanisms of the development of disease in vivo. It will depend upon how these pollutants are absorbed, how they interact with normal cells, how they are metabolised, and how they are excreted. The amount of knowledge is such that we need complex mathematical and toxicological modelling techniques⁷ to distil the data down into relatively easily digestible pieces that are within our boundaries of conceptual understanding.

To make the declaration that air pollution is related to disease requires an understanding of the dynamics of the relationship between exposure and outcome. In terms of air pollution the relationship between exposure and outcome is non-linear,⁸ i.e. just because a person is exposed to a particular air pollutant does not mean they will develop asthma; similarly just because a person smokes does not mean they will develop lung cancer.

To demonstrate a link between air pollution and illness

is further complicated by confounding factors such as whether the person smokes, whether they have allergies to allergens such as animal fur, dairy products or pollen,⁹ or whether they are genetically predisposed to pulmonary pathology such as the link between the alpha 1 anti-trypsin deficiency gene and emphysema.¹⁰ Despite the cerebral gymnastics that one has to perform to try and process the science, there is no need to be disheartened. This is because there is more than enough robust, peer reviewed, reproducible data to create a substantial, credible body of evidence that demonstrates air pollution is related to a raft of diseases that have a significant adverse impact on the quality and quantity of our lives, and the health of the Treasury's purse.¹¹

Our genes are driven to be passed on, hence, our visceral determination to protect our offspring. I have heard many times parents admit that 'they would do anything' to protect their children if under threat. And our children *are* under threat from air pollution like never before. There is a plethora of scientific data demonstrating that children are particularly vulnerable to pathology associated with exposure to air pollutants. Fine particulate matter particles (PM10 and PM2.5) found in exhaust fumes are known to be able to penetrate deep into the lungs with detrimental health effects.¹² These effects are more pronounced in developing cells as found in children. Even though the exact pathogenic mechanism is still not fully understood, there is enough knowledge to prompt further research such as the EXHALE programme (Exploration of Health and Lungs in the Environment),¹³ funded by the National Institute for Health Research Comprehensive Biomedical Research Centre (BRC), which will study children from east London, believed to be most at risk from the negative effects of pollution. One of the main aims of this programme is to inform policy both nationally and internationally. Just like in the 1950's when the scientists knew that smoking was bad for us, the scientists of today know that air pollution is a significant cause of a wide range of illnesses that warrants an appropriate legislative and policy response.

It is often the apparently small things in history that trigger significant political and societal change. It may be a lady who refuses to give up her seat on a bus in America,¹⁴ a fruit seller who resists arrest in Tunisia,¹⁵ or a lone voice of protest in a large crowd during the speech of a dictator in Eastern Europe.¹⁶ Or it may just be a case of a little girl in London who dies because her asthma was fatally aggravated by the air that she was breathing near her home.¹⁷

We are the architects of our own fate. Maybe it will be *because of* our genes and not *despite them* that our fate is to live in harmony with the environment upon which our long term survival depends.

Veneta Cooney's area of interest is the psychology of human behaviour and the factors that influence responses to challenges. She was awarded an MA in Employment Law in 2003 and undertakes medico-legal work for employment tribunals, with a particular interest in discrimination cases under the Equality Act 2010. She has been a Trustee of UKELA since 2017 and was awarded an LLM in Environmental Law in 2018. She is an Consultant Physician in Occupational and Environmental Medicine and the Convenor of the UKELA public health and environmental law working party.

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Potential risks for an electric vehicle future



Dr Aleksandra Cavoski, Birmingham Law School, University of Birmingham

At a glance

- This article examines the UK government's new policy to address air pollution from road transport and assesses certain risks associated with this new approach.
- This policy is premised on technological change which entails a transition to electric vehicles and an end to the sale of new conventional petrol and diesel cars and vans by 2040.
- By taking this primarily technological approach, the government should ensure that other risks are effectively identified and mitigated. These include social and economic, environmental, as well as regulatory and governance risks.

Introduction

Over the last year, we have seen a significant level of governmental activity on air pollution. The government has published several policy papers addressing different issues related to air quality.¹ Most recently, the government has published the Environment Bill which aims to strengthen the air quality regulatory framework as one of its priorities, while the 2019 Clean Air Strategy sets out a comprehensive action plan to address air pollution from different mobile and stationary sources of pollution. Transport still remains a significant area of concern as, along with the industrial sector, it represents a major source of air pollution. The Clean Air Strategy commendably addresses emissions from all transport modes, as well as emissions from non-road mobile machinery. Nonetheless, this will be primarily achieved through measures related to road transport and a transition to electric vehicles by 2040.² Furthermore, the Clean Air Strategy identifies the government's ambition to use this new policy shift as an industrial stimulus 'through leading the world in the development, manufacture and use of technologies, systems and services that tackle air pollution'.³ There is no doubt that this is a very ambitious policy premised on technological change. However, a closer examination of the Clean Air Strategy's measures and its technological focus raises some concerns about potential risks that will be explored in this paper.

The primacy of technology

A technological theme pervades these documents and is indicative of a policy primarily focused on technological change. There is a recent and familiar precedent for this; EU law and policy in this area was

previously based on diesel engine technology, while both the EU and UK's current policies are based on zero emissions vehicles as the new technology that will address the problem of air pollution. This approach can be seen as technological determinism whereby technological change is autonomous and technological development and innovation are the primary drivers of a change in the society.⁴ This approach assumes that other non-technological drivers of change, for example social, economic, cultural or other processes, have little or no effect. If the regulator primarily assumes that technology will be the primary determinant of change then risks and issues in the social, economic and environmental arenas are likely to remain unidentified or under-rated and lead to potential problems. A further risk is the possibility, even likelihood, of unintended consequences. The EU's law and policy on air pollution primarily focused on reducing CO₂ by relying on diesel engine technology and this led to series of unintended consequences, from unlawful levels of air pollution to significant losses for the car industry and car owners.

Risks associated with the transition to electric vehicles

Given the similarity between the EU's and UK's policy approach to road transport, it is worth identifying potential longer-term risks that the regulator should seek to mitigate. In its Clean Air Strategy, the government pledges that the transition to zero emission road transport will be 'industry and consumer led', supported by measures set out in Road to Zero Strategy.⁵ In the first place, UK consumers will face significant costs in purchasing zero emissions vehicles and those with lower incomes will be hit the hardest. Despite this, the government recently reduced the subsidies for electric cars from £4500 to £3500, while the subsidies for plug-in hybrid vehicles were abolished. There will also be higher costs for owners of diesel vehicles who initially bought their vehicles in good faith and were incentivised to do so by the government. It was not surprising to see that one of the initial causes of the yellow vest protests in France was the imposition of higher tax on diesel. This especially affected working people in rural areas who are heavily reliant on cars as the only available means of transport.

Similarly, the transition to zero emission vehicles needs to be considered in the light of changing consumer behaviour. Though recent studies indicate a

decreasing number of younger drivers,⁶ we can see the opposite trend in an increasing number of private vehicles,⁷ which are the most common means of transport accounting for 80 per cent of passenger kilometres.⁸ At the same time, we see a rising number of vans as retailing becomes more delivery based.⁹ Though the European car industry is fast catching up with American and Asian competitors in regard to electric cars, the industry is still faced with a complex and sudden transfer to new technology which requires significant investment in research and development. This is particularly important in regard to the development of new battery technologies which will improve electric cars' performance, as well as technologies for their safe re-use and recycling.¹⁰ To that end, there needs to be a greater focus on cooperation with international and EU partners in technology development and innovation which is essential in securing clean growth and innovation in the UK. Thus, the car industry will face a challenge to scale up production to a level where electrical vehicles will be affordable and accessible.

The Clean Air Strategy recognises the need to deploy funds for development of the infrastructure associated with zero emission vehicles. One of the main measures will be to ensure 'that 95% of the network will have a chargepoint for electric vehicles every 20 miles.'¹¹ However, the development of future infrastructure needs to be assessed in the wider context of future population and traffic growth, as well as the UK's ambition to position itself as a world leader in manufacturing and exporting zero emission vehicles. Aside from the low level of infrastructure investment relative to other European countries, the UK's track record in delivering complex transport infrastructure projects has room for improvement. Furthermore, there should be a better use of green infrastructures (e.g. well sited trees and habitats) as a way of gentrifying our environments and improving air quality.¹²

The transition to zero emission road transport carries several environmental risks that may lead to potential unintended consequences affecting human health and the environment. Although the Clean Air Strategy and the Road to Zero Strategy encourage different forms of active travelling and more investment in public transport, both policy documents are mostly positioned around an 'individual transport' modal form. In the first instance, this raises concerns about sustainable consumption, as this policy approach will gradually lead to an even greater number of vehicles. Equally, there are significant environmental impacts resulting from manufacturing and disposal of electric vehicles which need to be more comprehensively addressed. This is particularly salient in regard to construction and disposal of batteries, processes that require appropriate regulation of battery life cycle and subsequent enforcement. There are concerns about

the environmental impact of mining in countries such as the Philippines and Russia where nickel mining for battery production has led to negative environmental impacts.

A related environmental risk is where the power for electric vehicles will come from. The new regulatory shift to zero emission road transport is highly dependent on the total energy mix. The gap between what is currently used in fossil fuels in cars and the required energy for future electric vehicles should predominantly come from renewable sources of energy. This requires a more detailed policy and better alignment between Clean Air Strategy and the Clean Growth Strategy commitment for 'more diverse and reliable energy mix'.¹³ It is still not clear if the UK will continue to follow EU renewable energy targets, which may lead to slower growth of the renewable energy sector. There is also uncertainty over foreign investments and future capacity in the nuclear energy sector in the UK, which at the moment accounts for 21 per cent of the UK electricity generation mix.¹⁴ Finally, there is the issue of hydraulic fracturing of shale gas and oil in the future energy mix which will inevitably have negative impacts on climate change and poses risks to humans and the environment.

Finally, the new policy approach to air pollution from road transport has potential governance and regulatory risks that may result in unintended consequences. Action at the local level lies at the heart of the Clean Air Strategy. While the government is fully committed to leadership at all levels, it is particularly committed to facilitating action at the local level and to that end wants to ensure that 'responsibility sits at the right tier of local government'.¹⁵ The focus is also on a preventive approach by local authorities promoting an action before unlawful levels of emissions of pollutants occur. While it is commendable to address air pollution locally, activity at the local level will depend on capacity and resources deployed to local governments. Government funding for local authorities has fallen by 50 per cent since 2010.¹⁶ One of the measures set out in the Clean Air Strategy is 'continue working with the Ministry of Housing, Communities and Local Government to strengthen the planning practice guidance on air quality to ensure planning decisions help to drive improvements in air quality'. Providing better guidance will be of great importance for ensuring effective compliance with air pollution legislation. However, planning at the local level is directly linked to capacity and expertise of local authorities to exercise a holistic approach to air pollution by ensuring sustainable housing and infrastructure in the light of rising demands. Equally, the Clean Air Strategy should emphasise a more ambitious action at central level to avoid passing the burden to local government.

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Endnotes

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Reflections on air quality challenges: governance and good health



Bethan Pollington and Jessica Slater, University of Manchester

At a glance

- This article summarises the presentations and discussions at the UKELA Air Quality Challenges: Governance and Good Health conference in Manchester on 7th March.
- Air quality is considered one of the greatest risks to public health and a change in narrative is essential to tackling this problem.
- The legislative framework is unsatisfactory and either a unified local government response and/or central government response is required.
- The inclusion of the scientific community is paramount to create meaningful and effective action plans.
- Air quality affects a variety of sectors, therefore future legislative proposals should take this into consideration.

Introduction

The UKELA Air Quality Challenges: Governance and Good Health conference in Manchester on 7th March was great food for thought, with speakers covering a wide range of topics. This is an interdisciplinary reflection on the afternoon's discussions. As a scientist and a law student, our experiences and take home messages from each of the speakers were very different but a variety of themes stood out to us from both a scientific and legal perspective. A common theme running throughout the conference was collaboration. If we are serious in our commitment to tackling air pollution, there must be collaboration between a range of bodies including central government, local authorities, scientists, the NGO sector, private developers and the public.

The narrative of air pollution

The first talk of the afternoon was given by Dr. Veneta Cooney, a consultant physician specialising in the impacts of air pollution on physical health. As part of Jessica's Atmospheric Science PhD, she is involved in a multidisciplinary project which considers human health. She is therefore well aware of the link between air pollution and diseases, as well as the difficulty in directly attributing public health issues to air pollution. There is often a lack of engagement from

the public in relation to air quality, however we believe attitudes are beginning to change. The media has played a large role in this change with, for example, the recent breach in NO₂ levels in London grabbing the public's attention. Veneta discussed the idea that we are egocentric beings, not ecocentric, therefore the greater the personal connection we have with air quality, the greater the political pressure on reducing air pollution. However, grim messages about the impact of air pollution on human health can and often does have the opposite effect. It can send people into a panic that leads them to bury their heads in the sand rather than inspiring them to act. On top of that, the complexity of the science can be overwhelming and disengage people. Therefore, as part of the narrative change, the scientific community need to ensure that their research is clearly and meaningfully communicated to the public, and that scientists work closely with NGOs, government agencies, local authorities and indeed law and policy makers.

There was discussion that centred around using public health as a tool to lobby for better protection and improvement of air quality – in other words, addressing air pollution as part of the social justice model for health care provision. This 'pollution and health' model has worked when tackling other significant public health issues such as smoking and there is no reason why it cannot work for air quality. This shift in narrative can be achieved in a number of ways. NGOs play a key role and have seen some success in this area (see for example ClientEarth's successful court action against our government).¹ The issue, as stated by Michael Gove, is that the government should not have been in a position where ClientEarth had to take them to court.²

Governance approaches to air quality

In general, the overall feeling shared at the conference was one of dissatisfaction with the legal and governance framework in this area. Not only are there issues with the legislative framework and goals (with two parallel regimes under the Air Quality Directive 2008/50/EC³ and the local air quality management regime under the Environment Act 1995)⁴ there is also

worry over the way the burden is being shifted from central government to local authorities.

There are a range of issues with the legislation on air quality. Are the targets set satisfactory? Is the monitoring technology fit for purpose? Creating clear cut obligations and suitable targets will require a close working relationship with the scientists at the forefront of this area. Also, such a relationship would best aid the creation and implementation of measures to reach these goals. Furthermore, air pollution does not respect geographical boundaries. From a scientific viewpoint, atmospheric particulates, depending on their size, can have a lifetime of a few days so emissions from one city can easily impact another's air quality. Local authorities should therefore, as a minimum, be working together to tackle the issues.

Currently, it is felt that the government is pushing responsibility onto local authorities to create, implement and monitor their own measures to deal with air quality issues in their area. There are widespread and worrying issues with this approach. At a very basic level, it makes us question whether the government is treating this issue as seriously as it should. Furthermore, local authorities do not necessarily have the legal powers needed to tackle emissions from sources that make a significant contribution to air pollution (such as roads and railways). In addition, many local authorities do not have the relevant expertise or the appropriate resources to tackle the problem effectively.

There is also a lack of coherence with the legislative framework itself. Professor Eloise Scotford's presentation discussed the fact that local authorities are confused as to what exactly their obligations are and where they come from. In actuality, their obligations are to review and assess air quality, but ministerial directions have been pushing them to the forefront of dealing 'hands-on' with non-compliance with air quality limits. Ministerial directions have led to action plans being drawn up by various local authorities, however this is felt to have only confused the matter more. The creation of local authority action plans has been hindered by delays, row-backs and a lack of coherence between the approaches of the local authorities.

The conference discussion next focused on clean air zones, where local councils had been forced to address breaches or near breaches of the EU air quality limit for nitrogen dioxide (NO₂) emissions. Ambient NO₂ mostly comes from traffic emissions, particularly diesel vehicles, and most clean air zones focus on reducing emissions from these sources. As an atmospheric scientist, Jessica knows first hand that there are several issues with both monitoring and modelling ambient pollution and so some areas may have higher air pollution than previously considered

and so may be found in the future to be in breach of air quality limits, when technology improves. This further highlights the importance of having a vast array of nationwide air quality monitors and a clean air zone network. The clean air zones themselves are a political issue with many campaigners believing plans do not go far enough. Many councils are not planning to tackle the issue of private car use in city centres but are instead placing levies on heavy duty vehicles and buses. Perhaps this is not surprising as local councillors are elected representatives and are unlikely to want to bring out controversial policies that may be unpopular with voters. Again, we believe this calls for intervention by central government.

Air pollution and planning

The issue of urban planning with respect to air quality is also quite political, especially during times of limited resources for local government. Highlighted in a talk by Bob Pritchard were case studies from his time working within Leeds City Council. The planning of new housing estates with respect to air quality was something we hadn't considered and with pressure on local authorities to build new homes quickly and affordably, it is not surprising that air quality issues come second. An interesting point of the day was during a discussion, where a member of the audience gave his perspective as a property developer. It seemed to me from this discussion that property developers are often worried and confused about their statutory obligations. From Jessica's standpoint as a scientist, this was rather perplexing but from Bethan's legal standpoint, this confusion was understandable. Although law and policy makes reference to the obligations of developers, there is little certainty in this area and higher standards are expected as a result of the case law. There is a huge demand for housing developments. Consequently, high levels of pressure are placed on both local authorities and property developers to meet certain quotas. This pressure along with other variables compound together to lower the importance of air quality considerations when approving planning permission.

Conclusion

Coming away from this conference, we feel we have a better understanding of the importance of each other's expertise in the fight for improved air quality. With so many different contributors and variants, the issue is not an easy one to legislate for. As a law student, Bethan's main take away points from the afternoon are that a unified approach is needed nationally, not only from central government and local authorities but also the scientific community. As a scientist, Jessica and her colleagues often focus on very fine details and so attending conferences such as this is really insightful for Jessica, while reminding her why she decided to study atmospheric science in the first place. The difficulties facing local government and

the confused state of air quality legislation are her main take away from the event, as well as the important role scientists have in changing public perceptions, lobbying the government and informing policy. We must not lose sight of what is at stake here, and that is the quality of the air we breathe.

Bethan Pollington is currently a third-year undergraduate student studying her LLB at the University of Manchester, with hopes of staying on at Manchester to complete a PhD in environmental law.

Jessica Slater is a 3rd year NCAS funded PhD student in Atmospheric Science at the University of Manchester, with a focus on air pollution in Beijing.

Endnotes

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Planning for better air quality



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At a glance

- This article reviews recent case law on the interaction between the planning system and the European Directive governing air quality including the extent to which the Secretary of State is obliged to use planning powers to address air quality issues and the need to ensure that mitigation measures are practical and deliverable.
- It also considers the role that neighbourhood plans can play in addressing air quality at the local level by reference to the approach taken in the Knightsbridge neighbourhood plan which includes policies seeking to control emissions from proposed development.

Introduction

The emergence of the planning system at the turn of the twentieth century was prompted by the need to address public health issues resulting from rapid and largely unregulated urbanisation. For example, Ebenezer Howard's concept of combining the best attributes of the town and the country when planning new settlements was intended to offer an alternative to living and working in 'crowded, unhealthy cities'.¹ Over recent years, what had started as a close relationship between public health and planning has been compromised by a number of factors including the increased separation of regulatory regimes and organisational responsibility. The need to reunite planning and public health and ensure that they operate together has been a theme that the successor to the Garden City Association, The Town and Country Planning Association, have returned to in recent years. Their most recent publication on the topic considers the interaction between public health and planning, including how the planning system can play its role in improving air quality.²

Legislation and guidance

The main legislative regime governing air quality is European. Directive 2008/50/EC ('the Directive') includes limit values on pollutants. The Directive also sets out information to be included in local, regional or national air quality plans for the improvement of ambient air quality. The Directive was implemented in the UK by means of four sets of regulations, one for each of the home nations. In England the Air Quality Standards Regulations 2010 provide that when the levels of nitrogen dioxide (NO₂) (amongst other pollutants) exceeds any limit value, the Secretary of State is obliged to draw up and implement an Air Quality Plan ('AQP') to ensure a reduction of NO₂.

Against this legislative backdrop the government has made a number of attempts to tackle poor air quality through the publication of AQPs, the first of which appeared in 2011. Whilst it was not lacking in good intentions, the first iteration was low on detail and targets and was the subject of a successful challenge in the Supreme Court in 2015 by the non-profit environmental law organisation ClientEarth. The order that accompanied the quashing of the first AQP required the Secretary of State to prepare a new AQP in accordance with a defined timetable. Unhappily the second AQP was also found to be deficient by the High Court and it too was quashed in 2016. It was also not a case of third time lucky for the government as the third AQP met the same fate in February 2018.³ In giving his judgment in the High Court Justice Garnham was clearly unimpressed with a strategy that involved "*polite letters from the government urging additional steps by individual local authorities...*"

In May 2018, the European Commission turned up the heat on the issue by stepping up enforcement proceedings against the UK government to secure compliance with the Directive. In the same month, Defra launched a consultation on its Clean Air Strategy (the Strategy) which was published on 14 January 2019. In terms of specifics when it comes to planning, the Strategy promises guidance for local authorities explaining how cumulative impacts of nitrogen deposition on natural habitats should be mitigated and assessed through the planning system. The Strategy also refers to strengthened planning practice guidance on air quality to ensure planning decisions help to drive improvements in air quality. The final version of the Strategy appears to have rowed back from the May 2018 draft which referred to the possibility of 'statutory' planning guidance. This means that there is no immediate prospect of air quality being elevated beyond the status of a 'bog standard' material consideration that can be displaced by other policy imperatives.

Case law

In the last couple of years the courts have provided guidance on the approach to be adopted to air quality issues when making planning decisions, as well as and also the interaction between the domestic planning regime and the requirements of the Directive. The case of *Gladman Developments Ltd v SCLG & CPRE (Kent)* [2017] EWHC 276 concerned a challenge to an Inspector's decision to refuse planning permission for a

residential scheme in Newington, Kent. CPRE (Kent) had appeared at the public inquiry and made the case that planning permission should be refused because of a failure to mitigate the adverse effects on the Newington and Rainham Air Quality Management Areas (the AQMAs). The developer had proposed a fund, calculated in accordance with Defra's damage cost analysis model. However, the Inspector was not persuaded that the indicative mitigation measures aimed at reducing vehicle usage would be effective and supported the position adopted by the CPRE when it came to the impact on the AQMAs. In challenging the refusal in the High Court, the developer argued that the Inspector had failed to appreciate the government's obligations to produce an AQP to meet the requirements of the Directive. The Inspector was also accused of failing to give effect to the guidance in paragraph 122 in the National Planning Policy framework (NPPF), namely that the planning system should presume that other regimes will operate effectively and of a further failure to explain why the Defra damage-cost analysis and the associated contribution were unlikely to be effective. Finally, the suggestion was made that the Inspector should have considered imposing a negative 'Grampian' planning condition to secure the required mitigation.

Supperstone J rejected all of these grounds of challenge. First of all, he expressed himself satisfied that the Inspector had understood the requirement on government to produce an AQP, but it did not follow that air quality problems at a local level would be addressed.

Accordingly, the Inspector was entitled to consider the evidence before him and not simply assume the UK would soon be compliant with the Directive. Turning to Paragraph 122 of the NPPF, Supperstone J was satisfied that the Directive is not a 'parallel consenting regime' – there is no separate licencing or permitting decision to be made post the grant of planning permission to address any air quality impacts. He was not, however, satisfied that the financial contribution would translate into actual measures likely to reduce the use of petrol or diesel vehicles. Finally, no Grampian condition had been suggested by the developer and in any event, given the Inspector's conclusion on the effectiveness of the proposed mitigation, it was questionable whether such a condition could lawfully have been imposed.

More recently, the case of *R (Shirley) v SSHCLG, Canterbury CC and Corinthian Mountfield Ltd* [2019] EWCA Civ 22 considered the extent to which the Secretary of State was obliged to act in order to give effect to the Directive. Specifically, was it incumbent on him to call in for his determination a planning application for development within an AQMA that could worsen or prolong breaches of limit values for NO₂ or PM₁₀?

The appeal concerned an application for planning permission for a 4,000 dwelling scheme in Canterbury. The possible effect of the development on air quality had been a contentious issue during the determination process but the officer's report to the Planning Committee finally concluded that, with the benefit of identified mitigation measures and a monitoring regime, the development was acceptable. The Council was not, however, in a position to finally determine the planning application until the Secretary of State had decided whether or not he wanted to call the application in for his determination. In December 2016 the Secretary of State decided not to exercise his powers of call-in as he was content that this application was one that should be determined at local authority level. It was this decision not to intervene in the determination process that was challenged. The challenge was rejected by Dove J in the High Court and three grounds of appeal were pursued in the Court of Appeal. The first ground centred on whether the preparation and implementation of an AQP would be a sufficient response to breaches of limit values. The second concerned whether the Secretary of State had a duty as 'competent authority' to use his call-in powers to address these breaches. The third ground focused on whether it was irrational for the Secretary of State to assume that any errors in the Council's approach could be put right when it reconsidered the application or could be addressed in judicial review proceedings if planning permission were granted.

Lindblom LJ gave the leading judgement in the Court of Appeal and rejected all three grounds of appeal. In response to the first ground, he agreed with Dove J's conclusion that the 'specific and bespoke remedy' when it came to breaches of the Directive was the implementation of an AQP. Whilst Member States are free to adopt other measures to address possible breaches, the Directive does not compel them to do so.

Turning to the second ground, whilst Lindblom LJ acknowledged that possible breaches of limit values may be relevant to planning decisions, their potency as material considerations was not such that the decision-maker was obliged to refuse planning permission, nor did it require the Secretary of State to assume the decision-making responsibility.

Finally, Lindblom LJ concluded that it was not irrational for the Secretary of State to take into account the fact that the Council would be able to reconsider the planning application if he did not call it in and also the availability of challenge by way of judicial review.

Neighbourhood planning

One of the more enduring legacies of the localism agenda has been neighbourhood planning. Policies in neighbourhood plans benefit from the enhanced

status given to development plan policies conferred by Section 38(6) of the Planning and Compulsory Purchase Act 2004, so any that make it through the examination process can have a significant role to play in shaping any development proposals in their areas. The Knightsbridge Neighbourhood Plan came into force towards the end of 2018 and includes policies specifically concerned with addressing air quality impacts associated with development proposals which should not 'damage the health of the air' by increasing emissions. In commenting on the policies, whilst acknowledging the relative novelty of these being included in a neighbourhood plan, the examiner applauded their inclusion.

Concluding thoughts

Whilst the outcome of the *Shirley* litigation in the Court of Appeal has done nothing to elevate the status of air quality as just one material planning consideration amongst many, it is clear that planning has a key role to play in addressing air quality issues. Critically, it can provide a means of addressing the problem at source through plan policies which promote development that will enhance air quality. Mitigation can be secured through the development management process and the *Gladman* decision underlines the need to ensure that practical measures are proposed that offer effective solutions to air quality impacts associated with development proposals. Neighbourhood plans offer an opportunity for communities to play a part in addressing the problem at a very local level but their geographical influence will inevitably be limited and plan coverage in those areas worst affected by poor air quality will be patchy at best. The case for enhanced national and sub-national planning policy which encourages a co-ordinated approach to addressing air quality across local authority and organisational boundaries remains compelling.

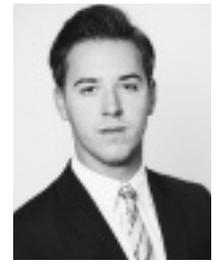
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Student submission

A critical analysis of whether the UK government has taken adequate protections against fracking in England



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At a glance

- Regulation is a key issue in the shale gas debate. Yet, little attention has been given to the state of existing controls, with the promotion of fracking in England largely founded on the assumption that a strong regulatory system is already in place to control any impacts.
- This article will critically analyse and evaluate whether the UK government has taken adequate protections against fracking in England.
- Firstly, it will examine existing regulatory systems, applicable to onshore conventional and unconventional oil and gas operations, before considering the regulatory impact of the Infrastructure Act 2015 and secondary legislation relevant to the development of the shale gas industry.
- Such an examination will highlight regulatory gaps within existing national controls, demonstrating the unsatisfactory state of the regulatory system, supporting the conclusive theme of this essay: the UK government has failed to provide adequate protections against fracking in England.
- Nevertheless, a much more radical approach to regulation and policy will be advocated.

Introduction

Hydraulic fracturing, or fracking 'is a technique used in the extraction of gas from shale rock.'¹ It has been widely credited as having revolutionised the energy market in the United States² (US), with the Environmental Information Administration calculating that 'natural gas production from hydraulically fractured wells now makes up about two-thirds of total US marketed gas production.'³

In contrast to the US, the fracking industry in the United Kingdom (UK) 'remains in its infancy.'⁴ However, a survey undertaken by the British Geological Survey in 2013⁵ estimated that the total volume of gas in the Bowland Basin shale in Northern England alone is some 1300 trillion cubic feet, (STATS) equating to approximately 500 years of gas supply for the UK. Consequently, 'moves are afoot to increase the rate and scale at which fracking takes place.'⁶ This has been met with strong public opposition, with environmental and health impacts a central concern.⁷

Despite this, the UK government has maintained its antecedent position to support the advent of fracking as a means of improving UK energy security and stimulating the economy.

'Regulatory mismatch'⁸

The UK government has, and continues to support shale gas exploration and extraction, and cites energy security, job creation and economic growth in support of its position.⁹ The government contends that the 'UK has a strong regulatory system for exploratory activities, and has 'measures... in place to ensure on-site safety, prevent environmental contamination, mitigate seismic activity and minimise greenhouse gas emissions.'¹⁰ Furthermore, the regulatory regime is considered sufficiently robust 'to counter critics of fracking who cite potential environmental risks and problems being faced by landowners as reasons not to undertake fracking in the UK.'¹¹

Furthermore, despite evidence raised by Watterson and Dinan in the Journal of Environmental and Occupational Health Policy that 'shale gas regulation in Europe and fracking industry practice are currently inadequate,'¹² the UK government's Business and Industry Ministry, and 'Better Regulation Executive Task Force' (Task Force), have still sought to curtail EU regulation. Watterson and Dinan reported that the UK government was advised to oppose strengthening regulation on the grounds that new European legislation could increase costs to business, and threaten the exploitation of this valuable source of energy, without offering any additional environmental protection. Consequently, a post-Brexit deregulatory position may become further entrenched, reinforcing the argument that the government has failed to implement adequate safeguards against fracking.'¹³

There is significant opposition to the government's position from critics of the current regulatory system, whom argue that 'the uncertainty and risk associated with fracking' presents unjustifiable' risks.¹⁴ Many point out that current controls and environmental safeguards applicable to fracking are those used to govern the conventional oil and gas sector,¹⁵ reinforcing the notion that the UK government has failed to provide adequate safeguards against fracking in England.

Evidence on public safety and the environment

As part of its position, the UK government maintains that safeguards are in place, adequate to protect public health and the environment.¹⁶ The government is supported in its position by the Royal Academy of Engineering,¹⁷ and Public Health England.¹⁸ In 2013, a report on shale gas emissions '*Potential Greenhouse Gas Emissions Associated with Shale Gas Extraction And Use*' concluded 'the overall effect of UK shale gas production on national emissions is likely, with the right safeguards, to be relatively small.'¹⁹

In 2017 however, this position was challenged in the Journal of Environmental and Occupational Health Policy²⁰, which presented findings that undermined the research underpinning government policy and regulation. The authors of '*The U.K.'s Dash for Gas*' (2017) concluded that 'the evidence base for robust regulation and good industry practice...was 'currently absent'²¹ and that serious challenges surrounding scale, monitoring, and data deficits faced regulators overseeing onshore [unconventional gas extraction] (UGE) including fracking in the United Kingdom.'

The Infrastructure Act 2015²²

The IA 2015²³, which amended the Petroleum Act 1998, provides an especially good example of the adaption of primary legislation to new technological developments. New safeguards for fracking – including the requirement that an operator must first obtain a 'hydraulic fracturing consent' from the Secretary of State, and provisions relating to inspections, monitoring of groundwater, restoration conditions, and banning hydraulic fracturing within protected areas are all introduced.

Land access

The IA 2015²⁴ also created a new statutory right, giving fracking operators an automatic right of access to 'deep-level land'. Consequently, operators became able to avoid a claim for subterranean trespass (in contrast with *Bocardo v Star Energy UK Onshore Ltd*), making it easier to proceed with drilling. Prior to this, landowners retained a final level of control over whether their subterranean land could be used by third parties, requiring consent in the same way as if such access were required across their surface land.²⁵

The right introduced by the IA 2015 is however restricted, and cannot be exercised at depths of less than 300 metres below the surface, or in 'protected areas' at depths of less than 1,200 metres. However these restrictions are likely to have little practical effect given that 'fracking was expected to take place two to three kilometres' underground.²⁶ The consequence of the rights introduced by the IA 2015 were to render the rules of trespass and compulsory rights under the Mines (Working Facilities and Support) 1996, redundant, and provide a prime

example of an erosion of existing regulatory controls and safeguards around fracking in favour of the development of the shale gas industry in England.

4.2. Potential financial benefits?

The IA 2015 'does confer power upon the Secretary of State to issue regulations requiring companies to make payments in return for the right of use. However, the 'financial benefits of the fracking process to a community, through contributions from fracking companies, are not yet perceived to offset the negative impacts for individual householders.'²⁷ Critically, such initiatives have been criticised for making payments to communities, rather than individual property owners, and not providing the level of pay off which may have been achievable through private negotiation.

Reform

With regards to reform, a number of options are available, including the reform of provisions regulating fracking or the production of revised guidance. However, such proposals 'fail to acknowledge the problems raised by trying to map old regulations onto a new technology'.²⁸ Alternatively, using a temporary moratorium to engage...the current regulation would permit regulatory gaps to be filled, minimising uncertainty surrounding fracking and limiting damage to public health and the environment.²⁹

Conclusion

At present, and despite the existence of national controls built upon conventional oil and gas experience, the risks associated with fracking continue to be exacerbated by a multitude of 'corresponding gaps and uncertainties in current regulation'.³⁰ A lack of coherence and uncertainty surrounding the transposition of regulations from an existing context, to a new technology such as fracking, has clearly resulted in regulatory gaps. These gaps are compounded by the inadequacy of safeguards implemented by the IA 2015.

The existing evidence points to the necessity of the adoption of a cautionary approach to protect the environment and public health from unconventional gas extraction development. In circumstances where public health risks and environmental challenges presented by fracking outweigh any positive benefits and are beyond effective regulation, a temporary moratorium on fracking becomes a major regulatory option.

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Book review

Principles of Environmental Law edited by Ludwig Krämer and Emanuela Orlando

Nicholas Whitsun-Jones

This is an impressive looking tome running to 743 pages, and constitutes Volume VI of the *Elgar Encyclopaedia of Environmental Law* under the general editorship of Professor Michael Faure of Maastricht University. It is masterful, informative and stimulating, with contributions from a host of lawyers from the international environmental law community.

An initiative of the IUCN Academy of Environmental Law, when eventually finished the *Encyclopaedia* will run to twelve volumes. Six volumes, including this one, have been published so far (the others being on *Climate Change Law*, *Decision Making in Environmental Law*, *Biodiversity and Nature Protection Law*, *Compliance and Enforcement of Environmental Law* and *Multilateral Environmental Treaties*).

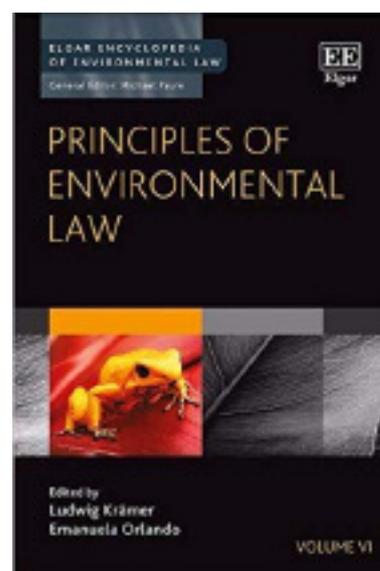
This particular volume is edited by Ludwig Krämer and Emanuela Orlando. In an impressive introductory chapter, Krämer gives a comprehensive, discursive overview of the topic that stands alone and is worth reading in its own right. Indeed, it would be difficult to better what he says in terms of an informative precis of and commentary on the subject as expanded by other contributors in the rest of the book. For instance, Krämer poses the question: to what extent do environmental principles translate into legal norms and standards? He makes the point that some are more easily translated than others: an example is environmental impact assessment (given legislative effect in many jurisdictions, including the EU and UK) contrasted with sustainable development, the latter still open to diverse interpretation and varying legal utility. See, for example, the English planning policy view of sustainable development in the National Planning Policy Framework (policy only, with no statutory effect) compared with the statutory obligation on public authorities to carry out sustainable development now to be found in section 3 of the Welsh government's Well-being of Future Generations (Wales) Act 2015. How far this legal obligation is of practical effect remains to be seen, as with other similar legislative provisions in UK law. The approach of the courts to this and similar provisions will be instructive, especially post any Brexit. Which brings us on to something else that Krämer has to say in a depressing, somewhat pessimistic conclusion to his Introduction: the need for a greater role by the courts in recognising, developing and enforcing

environmental principles, and a right for greater public participation in environmental decision-making coupled with standing before the courts to bring cases concerned with environmental protection and the enforcement of environmental principles.

The book adheres to the general style of the series in using authors from various jurisdictions (not just common law) covering discrete topics within the overall title umbrella. It contains six Parts (*General Principles*, *The Principles – Existing and Emerging*, *Geographical Differentiation of Principles*, *The Principles of International Environmental Agreements*, *The Principles in Court* and *The Principles In International Practice*) and forty-nine chapters within those Parts, an indication of both breadth and depth (Part 2 alone is 17 chapters).

In some ways Part 2 – *The Principles, Existing and Emerging* – is the primary part of this book which the other parts and chapters complement. There are individual chapters on specific principles: sovereignty of states over their natural resources, transboundary harm, sustainable development, use of natural resources, sustainable production and consumption, integration, equity and future generations, the prevention principle, the precautionary principle, fighting environmental harm at source, Environmental Impact Assessment (EIA), extended producer responsibility, the proximity principle, substitution, non-regression, polluter pays, and liability. A significant list. Two will be considered here: sustainable development, and equity and future generations.

In her chapter on sustainable development (Chapter VI.7), Virginie Barral discusses the various definitional variations of the term (your reviewer particularly liked the apparent simplicity of 'development that does not degrade the biosphere', publicly comprehensible albeit arguably made complex by its' very simplicity), and argues that there is now judicial authority³¹ to say that the term is now accepted as a legal principle³², but goes on to allude to the vagaries of interpretation



that do not assist with applicational utility. As Barral says, '... sustainable development may mean different things to different people, to the point of emptying it of any coherent meaning and function.' Such malleability allows for distortion of the original meaning but is inevitable with such an evolutionary concept that needs to gain legal authority and understanding by judicial development on a case by case basis, both domestically and internationally. Its' development in international law continues. Some academic commentators already think that it has become a customary principle in international law, even a corpus of international law in its' own right. It has also been used as an aid to dispute conciliation and as an interpretive aid by the judiciary, although Barral argues that it needs to be much more than this. What is needed is a vision of:

sustainable development as a new social model where environmental protection and economic and social justice are not mutually exclusive ... but are rather complementary and mutually supportive pillars.

Isabelle Michallet draws attention (Chapter VI.11) to the failure of modern legal systems to provide effectively for future generations despite the constant reference to them as a reason for sustainable environmental protection. In a review of the principles, notably the concept of intergenerational equity and its' development at both an international and domestic level, she comments:

... this general acknowledgment of the interests of future generations remains largely symbolic. It is most often found in texts that are not legally binding or in preambles to treaties ... future generations may be observed wandering through the various documents and existing primarily in a world of legal potentials.

Michallet says that well know environmental principles (such as the prevention principle, the precautionary principle, the principle of non-regression and the principle of resilience) all have a role to play in preserving the interests of future generations. On the latter principle (resilience) she refers to how some commentators see this as being less of a constraint on future generations than a principle of non-regression, as the latter seeks to impose on our successors our environmental values of today that they may not share.

Generally, this Chapter makes for depressing, albeit informative, reading as Michallet concludes that:

In spite of the considerable thought put into the doctrine of future generations, their interests are in fact ignored. Intergenerational equity and the responsibilities of the current generation have

been studied in depth, but actual protective measures have yet to be implemented to ensure effective justice for future generations.

She calls for a 'representative entity' – an Ombudsman – to speak for future generations and defend their rights and interests, referring to the few countries who have taken the lead here, such as Hungary, which has a Parliamentary Commissioner for Future Generations (perhaps ironic, given the current situation pertaining to the rule of law in that country). Other countries with similar but not identical bodies are Finland, Canada and New Zealand.

For the latter type of Ombudsman to be effective 'the role of judges will be decisive' as the person charged with acting for future generations will need to have standing before the courts. Michallet concludes by drawing attention to the:

... pending catastrophe of climate change [that] has paved the way for the acknowledgment of the need for true equity for future generations ... [t]he environmental crisis has shortened time lines and made very clear the links between generations. It is now up to the legal systems to address this new situation.

There is much of value in this book and it is highly recommended.

Nicholas Whitsun-Jones is a non-practising chartered legal executive advocate. He retired after 47 years in private practice and local government legal departments working as a litigator specialising in planning and environmental law. With a Master's degree in Environmental Law (De Montfort University), he is now pursuing academic interests in environmental law and legal history. He also does voluntary work for CPRE.

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