VOLUME 26 ISSUES 3-4

ENVIRONMENTAL LAW & MANAGEMENT

SPECIAL ISSUE

UNITED KINGDOM ENVIRONMENTAL LAW ASSOCIATION UKELA CONFERENCE PAPERS 2014

The Interaction between Energy and Environmental Law

CONTENTS

Foreword RICHARD KIMBLIN

Financing the transition to a greener economy EUAN McVICAR

Regulating energy for the protection of the environment LIN BUNTEN

EIA, SEA and energy projects: better decision-making or a game of snakes and ladders? STEPHEN TROMANS QC

Hydraulic fracturing: growth, regulation and challenges in the United States GENE SMARY, FORD TURRELL

Balancing nature and renewable energy PROFESSOR COLIN REID

Tensions between energy and the environment: reconciling energy needs with the water environment – hydropower BEVERLEY WALKER

Protecting wild land from inappropriate energy developments HELEN McDADE

Energy markets and the environment ALEX COOKE

European perspectives on energy and the environment: towards the 'Europeanisation' of renewable energy regulation ANATOLE BOUTE

Hot cases 2014: the changing environmental landscape JAMES FINDLAY QC, HARRIET TOWNSEND, ESTELLE DEHON

Working Party Presentations

Climate Change and Energy An introduction to Contracts for Difference FIONA ROSS Environmental Litigation The Scots law of nuisance – a brief overview FRANCIS McMANUS









UNITED KINGDOM ENVIRONMENTAL LAW ASSOCIATION (UKELA) CONFERENCE PAPERS 2014

The University of Edinburgh, 20-22 June 2014

The Interaction between Energy and Environmental Law

RICHARD KIMBLIN Chair, UKELA	Foreword The interaction between energy and environmental law	67
EUAN McVICAR General Counsel, Green Investment Bank	Financing the transition to a greener economy	70
LIN BUNTEN Head of Operations (SE), Scottish Environment Protection Agency	Regulating energy for the protection of the environment	78
STEPHEN TROMANS QC Thirty Nine Essex Street Chambers, London	EIA, SEA and energy projects: better decision-making or a game of snakes and ladders?	83
GENE SMARY FORD TURRELL Warner Norcross & Judd LLP, Michigan	Hydraulic fracturing: growth, regulation and challenges in the United States	92
PROFESSOR COLIN REID School of Law, University of Dundee	Balancing nature and renewable energy	100
BEVERLEY WALKER Managing Director, BlueWind Consulting Ltd	Tensions between energy and the environment: reconciling energy needs with the water environment – hydropower	105
HELEN McDADE Head of Policy, John Muir Trust	Protecting wild land from inappropriate energy developments	3
ALEX COOKE Department of Energy and Climate Change (DECC)	Energy markets and the environment	118
ANATOLE BOUTE University of Aberdeen	European perspectives on energy and the environment: towards the 'Europeanisation' of renewable energy regulation	2
JAMES FINDLAY QC, HARRIET TOWNSEND, ESTELLE DEHON Cornerstone Barristers, London, Birmingham, Cardiff	Hot cases 2014: the changing environmental landscape	124
	WORKING PARTY PRESENTATIONS	
FIONA ROSS Pinsent Masons LLP, London	Climate Change and Energy Working Party An introduction to Contracts for Difference (CfDs)	4
FRANCIS McMANUS	Environmental Litigation Working Party	

The Scots law of nuisance - a brief overview

144

FRANCIS McMANUS Honorary Professor of Law, University of Stirling, Emeritus Professor of Law, Edinburgh Napier University



Environmental Law & Management www.lawtext.com ISSN 1067 6058

Volume 26 (2014) 6 issues plus index £575

CONTRIBUTIONS The editors and publisher welcome submissions for publication. Articles, letters and other material should be submitted to:

> The Publishing Editor Environmental Law and Management Lawtext Publishing Limited Office G18 – Spinners Court 55 West End, Witney Oxon, OX28 INH

> > E-mail: elm@lawtext.com Tel: +44 (0) 1993 706183 Fax: +44 (0) 1993 709410

This journal is a refereed journal and may be cited as: (2014) 26 ELM 00

Environmental Law & Management is published by Lawtext Publishing Limited

© 2014 Lawtext Publishing Limited All rights reserved.

Any UK statutory material in this publication is acknowledged as Crown Copyright.

No part of this publication may be reproduced or transmitted in any form, or by any means, or stored in any retrieval system of any nature without the written permission of the publishers.

Permitted fair dealing under the Copyright, Designs and Patents Act 1988, or in accordance with the terms of a licence issued by the Copyright Licensing Agency in respect of photocopying and/or reprographic reproduction is excepted.

Any application for other use of copyright material including permission to reproduce extracts in other published works must be made to the publishers, and in the event of such permission being granted full acknowledgement of author, publishers and source must be given.

Lawtext Publishing takes no responsibility for the accuracy of URLs of external websites given in this publication nor for the accuracy or relevance of their content.

> PUBLISHER Nicholas Gingell

PUBLISHING EDITOR Rachel Caldin

Typeset by: The Studio Publishing Services Ltd e-mail: studio@publishingservicesuk.co.uk www.publishingservicesuk.co.uk

Printed and Bound in the United Kingdom by Information Press, Eynsham

MANAGING EDITOR Dr Ben Pontin Principal Lecturer in Law, Bristol Law School, University of the West of England

EDITORS

CASE LAW EDITOR Jason Lowther School of Law, University of Plymouth

EUROPEAN UNION EDITOR Joanne Sellick School of Law, University of Plymouth

SCOTTISH EDITOR Sarah Hendry Lecturer in Law, Centre for Water Law, Policy and Science, University of Dundee

CURRENT SURVEY Sherryll L'Oken, Linda Fletcher Pinsent Masons

BEHIND THE HEADLINES Dr David Pocklington Director, Policy, Law and Practice

BOOK REVIEW EDITOR Neil Parpworth Leicester De Montfort Law School

EDITORIAL BOARD

Andrew Bryce Andrew Bryce & Co

Professor Malcolm Forster Principal Consultant, Freshfields Bruckhaus Deringer, British Institute for International and Comparative Law

Professor Malcolm Grant *Chairman*, NHS England

Brian Greenwood Partner, Osborne Clarke

Professor William Howarth Professor of Environmental Law, University of Kent at Canterbury

Tim Jewell Barrister, Visiting Senior Fellow, Faculty of Law University of Southampton

Owen Lomas Consultant, Environment and Safety Group, Travers Smith

Gordon McCreath Partner, Pinsent Masons

Professor Colin Reid Department of Law, University of Dundee

Paul Rice Partner, Head of Energy Sector Pinsent Masons

Andrew Waite Partner, Environment Group Co-ordinator, Berwin Leighton Paisner

Professor Dermot Walsh Department of Law, University of Limerick, Ireland

Chris Willmore School of Law, University of Bristol

Andrew Wiseman Partner, Harrison Grant Solicitors

United Kingdom Environmental Law Association

UKELA Conference 2014 In association with the University of Edinburgh Pollock Halls, Edinburgh, 20–22 June 2014

The Interaction between Energy and Environmental Law

Foreword

Dialogue between disciplines

The Council of UKELA welcomes you to UKELA's Annual Conference and to this first and keynote session. By way of introduction to UKELA and to this year's conference theme, we invite you to consider dialogue between disciplines – discussion between people who are different – different because of their area of practice or different because of the sector or interest to which they are attached.

We hope that during your time at the Conference this weekend you will meet those in both allied and different areas and enjoy the network which is UKELA. That way new ideas and insights are formed. We think that the interaction between sectors of interest is how constructive understanding may at least germinate, and thus solutions and accommodations may be found.

En route to Edinburgh, I re-acquainted myself with a name I have not come across for some time. He was a Scot, and an eminent one at that. He was interested in the world around him and he was a lawyer, called to the bar at Lincoln's Inn in 1820. He was Charles Lyell.¹

He did not much care for the law and took up observation of the way that modern geological processes worked and tried to relate them to what he found in geological exposures. He did it in grand style, by touring. He visited Mt Etna and saw how volcanoes were formed. He then made the link to certain igneous rocks and related their formation to what he could see happening now. He did the same with sedimentary processes, including rivers and along sea shores, and thus he could explain the layering and structures of sandstones and limestones.

So, he established a principle that 'the present is the key to our past'. That fundamental principle of 'uniformitarianism' was one of the major advances in thinking which came out of the Scottish Enlightenment. Indeed, he was really advancing theories first put in print by another Edinburgh thinker, James Hutton, who was also briefly a lawyer.

If you want to see a key landscape feature which was explained and understood via the work of these gentlemen, then you need look no further than Edinburgh Castle and Arthur's Seat. Hutton and Lyell realised that they are the remains of volcanic plugs from the Lower Carboniferous.

Just before Charles Darwin set off on the *Beagle* to collect the specimens which led him to form evolutionary theories, Charles Lyell gave Darwin a copy of his book, *Principles of Geology*. The Scottish geologists/lawyers gave their ideas about formation of rocks to the man who was to explain how species are as they are. One discipline and point of view influenced great things in another:

We have a different kind of problem to understand and to solve. Our past approaches to providing energy are unlikely to be the key to the future. Rather, we are obliged to evolve. We have to learn how to preserve and conserve valuable environmental assets but still provide essential infrastructure and secure supplies of energy. The tensions are sometimes self-evident and sometimes more subtle. They have been expertly distilled and explained by our speakers. We look forward to hearing from them all, then to the dialogue which it produces.

So, we are in a great city with a history of great ideas. We wish you all a great time while at the UKELA Conference in Edinburgh this year. Part of what will be great is the opportunity to hear from different disciplines, both within the law and from without, and then to engage in the dialogue.

Next year's conference will be held in Liverpool from 3-5 July 2015, and we do hope you will join us there.

Richard Kimblin Chair UK Environmental Law Association² www.ukela.org³ 19 June 2014

- I Sir Charles Lyell FRS, 1797–1875.
- 2 Barrister, No 5 Chambers, London, Birmingham, Bristol.
- 3 Registered Charity in England and Wales 299498. Company registered in England number 2133283. Registered office: City Point, One Ropemaker Street, London, EC2Y 9SS. The postal address is PO Box 487, Dorking, RH4 9BH.

Editorial note:

Since the conference in June 2014 the editors and some authors have added information about the recent developments where relevant to the original texts. Footnotes have also been inserted to provide general references.

Principal speakers at the UKELA Annual Conference 20–22 June 2014

Anatole Boute is a Lecturer in Law at the University of Aberdeen and Legal Adviser to the International Finance Corporation's Russia Renewable Energy Program (The World Bank Group) and in general on Russian electricity and investment law. In 2013, he participated in the in-depth review of the Russian energy sector conducted by the International Energy Agency. Anatole has published widely in numerous journals on energy and environmental law.

Lin C Bunten joined the Scottish Environment Protection Agency (SEPA) in May 1999 and has worked on regulation of large industrial complexes before moving into a geographical management role as Head of Operations for the East of Scotland; since April 2013 she has been assigned to coordinate a range of energy-related activities for SEPA.

Alex Cooke joined the Department of Energy and Climate Change (DECC) on its creation in 2008 after working in the legal section of the Department of Environment, Farming and Rural Affairs (Defra) on the reform of the common agricultural policy, the creation of Natural England and the Climate Change Bill. Alex currently advises on carbon capture and storage, feed-in tariffs and various aspects of onshore petroleum law.

Estelle Dehon practises in public law at Cornerstone Barristers, where she works across a wide range of areas, including planning and environmental law, the EIA Directive and the Habitats Directive. She has particular expertise in public inquiries and High Court work (concerning wind turbines) and has experience of such matters reaching the Supreme Court. She regularly advises and appears in statutory appeals and judicial reviews, and is a member of the Attorney-General's C Panel.

James Findlay QC practises from Cornerstone Barristers/ Terra Firma Chambers in both England (called 1984) and Scotland (called 2008). James specialises in planning and environment, administrative, local government and licensing law. He was appointed Standing Junior to the Scottish Government in 2013 and has extensive experience in windfarm and waste-to-energy facilities both at inquiries and in court.

Helen McDade is Head of Policy at the John MuirTrust – a UK charity whose aims are to protect and enhance wild land and increase awareness of the value of wild places in society. Helen has been with the Trust since 2005 and has increasingly been involved in both individual energy development planning applications and in strategic energy issues, due to the rapid increase of proposed energy developments which would impact on wild areas.

Professor Francis McManus is Honorary Professor of Law, University of Stirling and Emeritus Professor of Law, Edinburgh Napier University and specialises in environmental law and the law of delict. He has a particular interest in noise law and has carried out research for both the Scottish Executive and Defra, and is the author a number of textbooks and articles. **Euan McVicar** is General Counsel and Company Secretary at the Green Investment Bank which he joined in August 2013 with responsibility for managing the Group's legal risk and corporate governance. Euan is Chair of the Investment Committee, which is responsible for approving each of the Group's investments. For 18 years Euan was a legal advisor to the energy industry, latterly as a partner leading the Energy Projects team of an international law firm.

Professor Colin Reid joined the University of Dundee in 1991 and has been Professor of Environmental Law since 1995. He has written widely on environmental issues, including three editions of a book on Nature Conservation Law, and recent work on the Climate Change (Scotland) Act 2009. He was the founding Convener of the Environmental Law Section of the Society of Legal Scholars, a founding member of UKELA and is a member of the IUCN Environmental Law Commission, of the Law Society of Scotland's Environmental Law Sub-Committee, and of the editorial boards of several leading academic journals.

Fiona Ross is a specialist environmental lawyer, with a focus on the energy, industrial and waste sectors. Fiona has followed the development of the contracts for difference regime since it was first proposed, and has recently advised on eligibility and the application and allocation process.

Eugene E Smary is a member of the American Bar Association (ABA), and a partner with Warner Norcross & Judd LLP in the Michigan office. He has been practicing environmental and resources law for over 30 years. Much of his current focus is on cross-border (Canada–United States) environmental, natural resource and infrastructure issues, and on resource extraction with an emphasis on metallic mineral mining. He is the past Chair of the Section of Environment Energy and Resources (SEER) of the ABA, the former Chair of the Environmental Law Section of the State Bar of Michigan, and the immediate past Chair of the International Bar Association's Environment Health and Safety Law Committee.

Stephen Tromans QC is Joint Head of Chambers, Thirty Nine Essex Street and is recognised as a leading practitioner in environmental, energy and planning law. He has been involved in some of the leading cases in matters such as EIA, habitats, nuisance and waste, including the application for Hinkley Point C nuclear power station, current applications for unconventional gas exploration and in high profile incidents such as the Buncefield explosion and the *Trafigura* case. Stephen is a founder member and past Chair of UKELA.

Beverley Walker is a senior environmental consultant at BlueWind Consulting Ltd, and has over 26 years onshore and offshore experience in the fields of freshwater, ports and harbours, major infrastructure and Renewable Energy. In Australia she acted as a regulator with the Department of Environmental Protection where she was responsible for the assessment of over 300 EIAs and SEAs and the development of policy.

Address at the 2014 Conference gala dinner

Lord Hope of Craighead, former Deputy President of the Supreme Court of the United Kingdom, gave the address at the Conference gala dinner. His personal perspective on the changes in bird populations in the UK, as an indication of wider species loss and changes to the environment, led to his mention of an osprey that regularly flew past his cottage in Perthshire since 1976 and was potentially threatened by proposals for windfarms nearby. He quoted from his speech in the judgment of *Walton v Scottish Ministers* [2012] UKSC 44:

'Take, for example, the risk that a route used by an osprey as it moves to and from a favourite fishing loch will be impeded by the proposed erection across it of a cluster of wind turbines. Does the fact that this proposal cannot reasonably be said to affect any individual's property rights or interests mean that it is not open to an individual to challenge the proposed development on this ground? That would seem to be contrary to the purpose of environmental law, which proceeds on the basis that the quality of the natural environment is of legitimate concern to everyone. The osprey has no means of taking that step on its own behalf, any more than any other wild creature. If its interests are to be protected someone has to be allowed to speak up on its behalf.' (paragraph 152)

He went on to point out that other changes in land use may be just as, or even more, damaging and that the effects of climate change are causing changes in species numbers and in bird migration habits.

Lord Hope reflected on how environmental law has developed since the days of the oil-related inquiries of the 1970s and 1980s when '*It was as if the word "environment*"

had not been invented ... the EEC changed all that with a succession of directives which are now at everyone's fingertips'. He went on to comment on the inclusion of specific provision of environmental matters in the Scottish Independence Bill and its draft Constitution for Scotland as 'a remarkable demonstration of how conscious we all now are of these issues'.

Lord Hope concluded by paying a warm compliment to the work of UKELA and its members: 'For my part, I pay tribute to the work of your association in improving an understanding of all the many issues that affect, in one way or another, the environment that surrounds us and which we will, one day, be handing on to the generations that will come after us'.

A vote of thanks was given by UKELA Patron, Sir Crispin Agnew QC.

Lord Hope of Craighead (David Hope) was admitted to practise at the Scottish Bar as a member of the Faculty of Advocates in 1965. He remained in private practice there for 24 years, becoming a Queen's Counsel in 1978. In 1989 he was appointed direct from the bar to the bench as Lord Justice General of Scotland and Lord President of the Court of Session. He held these offices for seven years until 1996, when he was appointed a Lord of Appeal in Ordinary. In 2009 he became the first Deputy President of the Supreme Court of the United Kingdom. He retired in 2013 and is now active as a crossbencher in the House of Lords. His leisure interests include hill walking and ornithology, and he has held a BTO bird ringing permit for over 40 years.

Financing the transition to a greener economy

Euan McVicar General Counsel, Green Investment Bank

Introduction

Thank you very much for your welcome, and to the Association for inviting me here today. It is a good opportunity for the Green Investment Bank (GIB) and for me to engage with what we recognise as being a broad church of those involved in environmental law and policy, and hopefully it could be the start of a dialogue between the Association and the Green Investment Bank, which we would welcome and I will return to later.

I thought Richard Kimblin's remarks on different disciplines were very pertinent.¹ To my mind there is a range of different disciplines that are absolutely vital in helping to look at the interaction between energy and environmental law. Until recently I did not think of myself in any way as being a 'private finance' lawyer, but looking at environmental legal issues is becoming increasingly pertinent to how we go about doing what we do and I see these disciplines coming closer together.

First, however, a few remarks about how timely I think this topic is as a theme for the UKELA conference. Energy policy, energy law and energy strategy have always been very political in nature. The exploitation of natural resources to deliver energy, how energy feeds into industrial strategy, how it impacts on the life of individual consumers of energy, and the difference between energy consumption in rich and poor countries are all political issues. Added to that, in recent years, is the impact of energy consumption and generation on the natural environment and on our climate, which is a very political subject. Over the last 12 months in particular in the UK we have seen a real maelstrom of political activity and political debate around energy, which has highlighted a number of things that are key to the debate.

The 'trilemma'

It sometimes surprises me that people of different political persuasions have become almost ideological in their approach to the different energy technologies, strongly supporting or condemning nuclear power or wind power generation or forms of energy from waste recycling for instance, rather than looking at the techniques objectively on their merits. There seems to have been a real politicisation of some technology types. There is talk about what is called a trilemma, not a particularly nice word, in terms of energy policy. The trilemma is how do we deal with the cost of energy; how do we deal with security of supply and how do we deal with the impact energy production and consumption has on the climate and the environment? Over the last 12 months we have seen at different times each of these being focused upon by the media, by commentators and by politicians.

The Labour Party Conference of 2013 heralded an intense debate about energy pricing and whether there should be a price cap on the amount that individual consumers are paying on their energy bills. The amount that people are paying for their energy then has an impact on how energy infrastructure will be financed going forward, particularly if the move towards more expensive forms of electricity generation is part of other policy objectives. At the same time it opened up a debate about whether there was sufficient competition between the big six suppliers, as they are known, and whether the structure in the electricity supply industry is efficient, as well as whether the suppliers are acting in a way which is fair and delivering the right kind of pricing. Competition law has become a big part of the debate, which has led some of the industrial community in the UK to question the payment of additional subsidies, or green subsidies, or the imposition of other forms of 'climate change mitigation' regulation, saying that Britain was being too proactive in pursuing the climate change agenda and making British industry uncompetitive on a global basis.

Security of supply

Events in the Crimea, the Ukraine and more recently in the Middle East have brought back to the fore the question of security of supply. Is the security of supply of energy in the UK sufficient? Many people would say the supply is not secure, that we are too dependent on imports of gas from overseas and that we do not generate enough of our own electricity to rely on over the medium and short term. On a longer-term basis, that position becomes even more suspect and this has raised the question of fracking of unconventional gas, leading to an examination of whether this is going to be a valuable income stream that can help the country economically and will improve security of supply – but at what environmental cost? Is that cost quantifiable and manageable?

Politicisation

During the last 12 months there have been two events which have led to the return of the climate change agenda to the forefront. The dreadful flooding in the south-west of England, particularly in the area of the Somerset Levels, brought into focus that the volatility in the weather may be grounded in climate change and raised questions as to how the government is planning to deal with it. Cost was off the agenda and climate change was back on. And then the publication of the UN IPCC report² in March 2014 was of

² Intergovernmental Panel on Climate Change Climate Change 2014: Impacts, Adaptation, and Vulnerability C B Field and others (eds) Cambridge University Press, Cambridge, United Kingdom and NewYork http://www.ipcc.ch/report/ar5/wg2/.

I See Foreword.

great importance. But it seemed to fade away very quickly. The message that was probably given more emphasis was the fact that there is a manageable solution to deal with climate change rather than the true message of the report, which was that if we do not do something soon we are going to have a very big problem. We have to do what we can now to help manage the consequences of climate change and recognise that there will be some climate change but also recognise that it is manageable if we act in the right way.

These important worldwide as well as national issues are bubbling away in the public debate and I think we are going to see increasing politicisation of the energy, climate change and environmental debates, with the political parties seeking to differentiate themselves on their attitudes. The part played by environmental law and by the Green Investment Bank will become increasingly critical.

Environmental law and energy

In the 1990s during the 'dash to gas', when I was working principally in CHP (combined heat and power) and on the CCGT (combined-cycle gas turbine) projects, environmental law was very much seen as an area to be left to the experts in the backroom to go and fight about indemnities and it was not really at the forefront of an energy project. As a much wider range of energy projects began to be developed, it was environmental law and environmental policy that became the drivers, and provided the incentives for particular types of energy project. It is environmental law and policy that drive the policy instruments that create the financing and income stream of a renewable energy project and make it deliverable. Without the environmental agenda, these projects do not become financeable or attractive; and a market can be created through those instruments which have more than one objective. Thus, having more than one objective is very much at the heart of GIB policy.

As I understand it, UKELA defines environmental law as the body of law that seeks to protect and enhance the environment. This is also core to our mission. It is the language enshrined in the legislation which set up the GIB and which is hard-wired into our constitution. Our mission is to help accelerate the UK's transition to a green economy, to create an enduring institution and to operate independently of government; all for reasons I will come back to. So, with the role of protecting and enhancing the environment, as well as operating independently – which means becoming a profitable institution – the bank sees itself as being at the interface between energy and environmental law. Energy is the biggest single area that we invest in and green energy projects provide the greatest scope for the bank and have the widest impact on achieving the bank's mission.

When the bank is assessing whether to be involved in a project, it has to be confident that the project is going to protect or enhance the environment in some way. It will also examine the typical legal concepts around good practice, what makes for a firm and robust project, and what makes an environmentally acceptable project. Sometimes environmental law can be a barrier to raising finance when there are particular objectives or planning conditions to be met, or concerns about the regulatory environment. We believe it is very important to try to work constructively to find ways to overcome those issues, to try and meet the needs of a variety of stakeholders and still promote projects that are financially viable, as well as environmentally acceptable and in accordance with the legislation.

The GIB

To introduce the Green Investment Bank, first, there is \pounds 3.8 billion available to the organisation. The bank is 100 per cent owned by the UK Government, which requires us to act independently as a normal listed plc. The government has given an undertaking to Parliament that it will not interfere with the management of the bank. And because we and the government recognise that \pounds 3.8 billion is nowhere near enough to have the impact that is required, we have to mobilise private sector investment. We are trying to use that money as seed capital to build on and help the transition to a green economy.

We do have to work within certain legal requirements – some of which I will mention here (see *diagram I* p 72). The bank is established as an institution under the Enterprise and Regulatory Reform Act 2013. It has five green objectives, which can only be changed by a resolution in both Houses of Parliament, thus protecting us against political interference on a short-term basis. The bank is subject to state aid rules and has to comply with those when making investments. Investments can only be made in certain areas that have been agreed with the Commission, and are ones where there has been an element of market failure, where it is clear that the market needs the products the bank is offering.

We also have to comply with the concept that was entirely new to me when I joined GIB, that is the market economy investor principle, which is that even if there is no other investor in one of our projects we have to show that a hypothetical market investor would be prepared to invest on the same terms as us. Lastly, the bank has to be additional. It cannot crowd other money out of the market; it has to bring other investors into the market to support what it is doing. The bank is also subject to all the other usual things that apply to a public body owned by the government, such as procurement rules, the Freedom of Information Act etc and all of the financial regulations that you would expect to apply.

This is embedded into our policy and our work. Our board of directors has to be satisfied that every investment made will contribute to one of the green objectives, so there is a governance structure in place to check out every stage of what we do.Vince Cable, the Secretary of State for Business, Innovation and Skills requires the bank to make an overall portfolio return of a targeted amount, to show that it is building the capital base, producing an enduring green impact and mobilising private sector investment (see *diagram 2* p 72).

The UK commitments

The UK has statutory commitments to move to a more sustainable low carbon economy and despite all of the



Green Investment Bank STATUTORY CONTEXT

GIB's obligations under UK law



Diagram 2.



Notes: 1) vs 1990 levels; 2) from 3% in 2010; 3) vs 1995 levels; 4) Source: Vivid Economics. Estimates of required green investment in the UK varies between £220bn and £500bn depending on sources

Diagram 3.

political discussion there is still, across all the political parties, a real commitment to a low carbon economy in the longer term. Those commitments are backed by some ambitious and familiar targets, set out in international and national regulations:³ reducing greenhouse gas emissions is clearly important, increasing the proportion of renewable energy and being more efficient in generation and use of energy. This last aim is a hugely important aspect of the debate, and one that is frequently overlooked. Reducing biodegradable waste sent to landfill is also important – less immediately relevant, perhaps – but there is considerable overlap.

So, by our reckoning, an almost unprecedented amount of infrastructure investment is required to achieve those targets: \pounds 330 billion of investment by 2020, an average of \pounds 33 billion every year, and that in what has been a straitened financial environment (see *diagram 3* above).

However, the amount of investment in the green economy to develop infrastructure falls well short of what is required. That £33 billion in 2014 will not be met. This is the challenge facing the bank: to have a serious impact in real terms, to have a meaningful green impact whilst making good use of the public purse and attracting other people's money to support green projects and make them profitable. The best way of achieving this is not by giving soft loans or grants or financing the unfinanceable, but by showing institutional investors and private capitalists that they can be green but also profitable. Many large institutions see the attraction of being green - maybe cynically from a PR perspective, or maybe because they are concerned genuinely about sustainability in the longer term - but if they can be green and profitable, the projects promoted by the bank will benefit.

We are expecting to be able to invest our £3.8 billion by the end of March 2016. We can do everything across the financial sector in terms of products: we can do senior debt, we can do equity investments and we could also act as guarantors, and so on. However, what we will not do, for the reasons I have outlined, is provide soft capital, regional assistance grants and development capital. We need to make sure that we offer incentives and policies which are going to attract people's support.

Where the GIB is investing - purposes and principles

Diagram 4 (p 74) sets out those areas on which the bank is concentrating. Of these, 80 per cent of capital will be directed towards energy efficiency, offshore wind, waste recycling and energy from waste. The other 20 per cent of capital is targeted at a wide variety of projects that can be researched, such as carbon capture and storage (which could be very exciting but is probably not financeable at the moment), biomass power, marine energy, renewable heat and biofuels for transport, all of which will come on stream in the future.

The bank has been involved in 29 complex transactions so far (see *diagram 5*, p 74). It has invested \pounds 1.3 billion of its own money and brought in a total of \pounds 4.6 billion, which is a mobilisation ratio – as it is called – of one to three. The message of being green and profitable is having the desired effect.

In *diagram 6* (p 75) on the left side of the equation, you can see the five green purposes. The bank has been able to demonstrate that any project it wants to invest in will have at least one of the following benefits:

- reduce greenhouse gas emissions
- result in improved efficiency in the use of natural resources
- protect or enhance the natural environment
- protect or enhance biodiversity
- promote environmental sustainability.

We take this very seriously. A team of experts helps us to review any investment proposition, to test whether it is going to meet one of those green purposes. Clearly, what the bank will not ever want to do is to make an investment where it turns out there is no green, which looks green on

³ Including the Kyoto Protocol, the EU Renewable Energy Directive, the EU Waste Framework Directive and the Climate Change Act 2008.



To accelerate the UK's transition to a greener economy and to create an enduring institution independent of Government.







the face of it but is not delivering the results. We would be criticised hugely and it would be very detrimental to the achievement of our mission if that were to be the case. Next, on the profitable side, we make sure that we are operating on market terms, for profit, within state aid rules, on the same commercial terms that equivalent investors at the same part of the capital structure would look for, and ensuring that capital is additional.

The bank has therefore developed some green investment principles, drawing considerably on concepts from environmental law (see *diagram* 7, p 75).

The bank is also keen to help implement best practice. In October 2013 we gathered together what we grandly called a Green Bank Congress, bringing together similar organisations from around the world that have been set up with similar aims to those of the bank. In the discussions that followed, the one thing that stood out was that, whilst there are many well known and well understood principles – like the Equator Principles, for example⁴ – there is not much that is tailored towards helping investors and organi-

⁴ The Equator Principles (EPs) is a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects and is primarily intended to provide a minimum standard for due diligence to support responsible risk decision-making. The EPs have also helped spur the development of other responsible environmental and social management practices in the financial sector and banking industry (for example, Carbon Principles in the US, Climate Principles worldwide) and have provided a platform for engagement with a broad range of interested stakeholders, including non-governmental organisations (NGOs), clients and industry bodies. http://www.equator-principles.com.



Green Investment INTEGRATING GREEN IN OUR INVESTMENT PROCESS Bank

We have developed a framework to mainstream green investment. Our '**Green Investment Principles**' are an integral part of our investment process

Principle 1	Positive contribution to a recognised green purpose
Principle 2	Reduction of global greenhouse gas emissions
Principle 3	Enduring green impact
Principle 4	Clear and firm investment criteria
Principle 5	Robust green impact evaluation
Principle 6	Effective covenants, monitoring and engagement
Principle 7	Transparent reporting



Implemented through our Green and Responsible Investment Policies



Diagram 7.

sations to understand the environmental impact of their investments. A greater degree of standardisation could help to attract capital from investors who see the benefit of sustainability in their investment strategy (see *diagram 8*, p 76).

The policy is to ensure 'green impact' throughout the project lifecycle, and to share that best practice with the marketplace in due course. First, assessment is made on the basis of the green purposes, followed by identifying the green impact that is envisaged, where that is quantifiable. Every stage of the investment process is monitored going forward. Under the contractual position agreed with borrowers and investee companies we ensure that all the information needed to continue to show the green impact of our investments is transparent. Finally, the reporting process is carried out; we think that we have ensured that green reporting is now up to a very high standard.

The requirement that has been introduced through the Companies Act 2006, which took effect in October 2013, to disclose in our annual report and accounts our own carbon emissions is beginning to drive activities, particularly of FTSE 100 and 250 companies, and this is a development that can only improve the 'greening' of companies.

Examples of the five green purposes (see diagram 9, p 76) Looking at the five green purposes referred to above (diagram 7), an example of reducing greenhouse gas emissions would be an offshore wind project that will ultimately replace fossil fuel power generation, measured in terms of



Committed to market leading green assessment, monitoring and reporting practice.

We ensure 'green impact' throughout the project lifecycle:

≝ ASSESS	>९ MONITOR	REPORT		
 Every investment must make a meaningful contribution to one or more green purpose before being considered. 'Green Impact' is quantified where practicable Each stage of the pre-approval process requires green compliance sign-off We are committed to con Adoption of best practice: Equator Prior 	 All approved investments include covenants relating to green performance and penalties for non- compliance All investment recipients are required to submit an annual green report of performance tinuous improvement and o nciples & Principles for Responsible Invest 	 We forecast the green impact of every investment with its announcement We report annually on our green impact against each of our five measures, for the reporting period and the projected lifetime impact 		
Diagram 8.				
een vestment		ENTAL LAW UNDERPINS OUI		

Positive green impact defined through five measures: our Green Purposes



1) Enterprise and Regulatory Reform Act 2013, Part 1.



the greenhouse gas avoided by the wind power coming on to the grid. In respect of *increasing natural resource efficiency*, an example would be investing in a waste recycling facility, leading to energy demand reduction, which counts towards the efficiency of natural resources.

Protecting or enhancing the natural environment might be achieved through diverting the waste away from landfill. As part of the investment process, the impact identified by the environmental impact assessment (EIA) process would be examined so as to ensure there is not some downside that would otherwise escape attention. That tool is used in helping to assess whether a project does meet the objective. For protecting or enhancing biodiversity, there is perhaps more of an art than a science associated with this purpose. Again, the EIA summary is important, looking, in effect, at ecology and biodiversity and the presence of biodiversity offsets where appropriate; although we are aware that this is a controversial topic.

Finally, with regard to *promoting environmental sustainability*, this might be something that will have a demonstrable effect on the market, and will encourage others to invest in similar projects or develop similar projects. As an important driver the bank reports a 'double bottom line' that is consistent with this purpose – profitable and green – showing an environmental profit and loss published alongside the normal financial profit and loss.

Continuing projects

Finally, we continue to invest, and have committed more than £1.3 billion by investing in 27 projects, as well as capitalising five funds. We have invested in all our principal sectors all over the UK, including financing the UK's first large-scale coal to biomass conversion project and we have closed the funding gap for a new high-technology waste plant that had been held up for four years owing to a lack of funding. Other projects have included investing in the UK's operating offshore wind capacity, Northern Ireland's largest waste wood power plant and we have delivered the UK's first listed renewable energy infrastructure fund. We have backed a large NHS energy efficiency project, which will save trusts £20 million. When these projects are completed, our investments will have produced sufficient renewable electricity to meet the energy needs of 2.7 million homes and will have cut CO2 emissions by the equivalent of taking 1.4 million cars off our roads.

It is important to us to learn what is holding back the development of green infrastructure. Many of you here will be involved in different stages of projects, going through a planning process or assessing whether they're having the right impact. So feedback on where you on the front line are seeing projects around the green economy being held back would be valuable. Are there legal barriers that together we could all try to diminish? Are there ways we can identify that would achieve a positive impact on the environment? And can we help influence a pragmatic environmental law or indeed energy law environment? We throw out an invitation to the Association. If you think it would be helpful to form some sort of working group or perhaps a one-off workshop to investigate joint working on this we think that would be a very helpful and constructive dialogue. And any other thoughts that you may have on how to mobilise the market or maximise green impact, please let us know.

Regulating energy for the protection of the environment

Lin Bunten Head of Operations (South East), Scottish Environment Protection Agency (SEPA)

SEPA

SEPA is a non-departmental public body and is the principal environmental regulator for Scotland. SEPA has a wide range of powers and duties to protect and improve the environment across the areas of air, land, water and waste, as well as to protect human health. As Scotland's environment protection agency, SEPA aims to ensure that Scotland's environment is recognised as being amongst the best in the world, and to enable Scotland to trade successfully on an outstanding environmental record.

SEPA's mission statement, highlighted in the 2005 Vision for Regulation,¹ stated that SEPA's main aim requires that it should provide 'an efficient and integrated environmental protection system for Scotland, which will both improve the environment and contribute to the Scottish Ministers' goal of sustainable development'. In 2007 this evolved to become the Scottish Ministers' goals of sustainable economic growth and a greener and healthier Scotland.

The Agency has a key role in helping Scotland to respond to climate change and sustainable resource use through its activities as a regulator, adviser and a statutory consultee in planning. The Climate Change (Scotland) Act 2009² sets a target to reduce greenhouse gas emissions by at least 80 per cent by 2050, with an interim reduction target of at least 42 per cent by 2020.

Since 2009, SEPA's agenda has been one of 'better environmental regulation' and, to that end, in February 2014 the Regulatory Reform (Scotland) Act gained royal assent.³ This Act paves the way for subsidiary legislation that will bring forward the detail of better environmental regulation in Scotland, starting with new enforcement powers and new licensing arrangements, whilst also introducing a new general purpose for SEPA.

The general role of SEPA

The Regulatory Reform (Scotland) Act 2014 reinforces SEPA's primary role of protecting and improving the environment (including managing natural resources in a sustainable way) and it also requires that, where it is not inconsistent with that primary role, SEPA must also contribute to improving the health and wellbeing of people in Scotland, as well as achieving sustainable economic growth.

This clearly recognises the importance of the environment to the economy, health and wellbeing of communities

http://www.sepa.org.uk/about_us/what_we_do/regulating.aspx.

in Scotland. Having a stated general purpose for SEPA is, indeed, an innovation. However, the need to balance the environment and economic and social considerations is not new and SEPA uses balancing judgments daily to prioritise the issues to tackle and in selecting the tools to use in that process. The general thrust of all of the changes that SEPA is making is to allow it to enhance and develop a joined-up, flexible and outcome-focused approach to deliver greater benefits for the environment, communities and the economy.

The Scottish Government is currently consulting on 'Statutory Guidance on the General Purpose for the Scottish Environment Protection Agency and its contribution towards Sustainable Development'. This consultation focuses on how SEPA should deliver this purpose and how these duties interrelate.⁴

Balancing a number of factors when making regulatory decisions is not a new concept for SEPA. Such balancing decisions are commonplace in the realm of water use, where it is often necessary to weigh the balance of the benefits of the activity against the impact on the water environment. Ecological status is the yardstick against which benefit is measured. An interesting decision taken in recent years was to permit the temporary displacement of a sizeable, downgraded water body, with the requirement that this displacement was reversed and the status of the water body raised to the standard required by European legislation within an acceptable timescale. In this instance, part of the decision-making involved considering the positive economic benefit to be accrued as a result of the displacement and this was confirmed by the qualified planning consent issued by the relevant planning authority.

However, it is not always the case that the SEPA licensing process and the land use planning process result in the same conclusions. A number of years ago a decision was taken to reject an application for the construction of a run-of-river hydropower scheme, which had obtained permission from the local planning authority. In this instance, in SEPA's view the benefit of the development did not outweigh the impact on the environment and the river's amenity value.

In both of these examples the parties were aggrieved by the decision taken by SEPA and applications were made to the Scottish Government to have the decisions reviewed. SEPA aims to achieve impartiality and to act in the best interests of the environment in accordance with the vision statement.

http://www.scotland.gov.uk/topics/environment/climatechange/ scotlands-action/climatechangeact.

³ http://www.legislation.gov.uk/asp/2014/3/enacted.

⁴ The consultation can be found on the Scottish Government's website and was open for comment until 4 August 2014.

The environment and energy

SEPA has a strong role to play in the management of Scotland's excellent energy resources. Harnessing these resources has many economic and environmental benefits, but can also have environmental consequences, which vary according to a number of factors. The mining (or exploitation – depending on the emotional connotations of both descriptors) of raw energy sources in the form of coal, oil, gas, biomass or water, the techniques and technologies used to source or extract the energy, the location and scale of the development and the mitigation and management of the activity all contribute to the scale of environmental consequences that will ensue. The energy wealth of a nation is important in both political and societal terms. Policies in matters such as land use planning, resource ownership attribution and environmental standards, to name but three, can all be modified to drive the nature and scope of the balancing decisions environmental regulators have to face in carrying out a duty to protect the environment and in the use and conservation of natural resources.

Market forces can both encourage and impede the types of developments that are brought forward. So too can government policies, such as the Scottish strategy for a low carbon economy⁵ and electricity market reform, as well as government incentives such as feed-in tariffs. The existing renewables market, for example, only makes economic sense in the context of government subsidies. Imagine a see-saw with the environmental regulatory decision at the fulcrum and the competing government policies sitting at either end. Perhaps for lawyers a better analogy would be a set of scales. SEPA's role in supporting the policies of the Scottish Government is to work with all stakeholders to identify the drivers and barriers to development and to support industry to overcome any barriers. This does not mean that barriers to development are simply swept away. SEPA and other bodies are collaborating to support the development of environmental and clean technologies, focusing in the first instance on recovery and recycling, on water and waste treatment, on sustainable transport and buildings and on environmental monitoring and instrumentation.

To quote the Scottish Government: 'Low carbon is an environmental and economic imperative'.⁶ SEPA considers these areas as important ones in which to exert its influence. Whilst SEPA may often have limited direct regulatory engagement, there are areas such as considering the need for, and appropriate level of, regulation for hydrogen production and storage for transportation usage, where there is a wider role for SEPA to determine a regulatory model which enables innovation whilst providing assurance and security of appropriate regulatory oversight.

SEPA and energy

Our environment is essential to our health and wellbeing, and for a successful economy. It provides the resources (such as raw materials, water, air and energy) and the services (such as diluting pollutants and breaking down wastes) on which all of us depend. Protecting and improving our environment really is in everybody's best interests. Protecting and improving the environment is also everyone's responsibility.

SEPA recently published a revised position statement on energy, which lays out an energy structure.⁷ This is intended to provide a framework to guide energy decisionmaking towards more sustainable options. SEPA believes that a hierarchy provides a useful approach to considering and making robust energy decisions and that this position statement provides clarity on SEPA's interaction with the Scottish Government and other key stakeholders.

Data provided by the Department of Energy and Climate Change indicates that in 2010 SEPA had direct regulatory control over nearly 10.5 GW of installed electricity generation capacity (including thermal, nuclear, energy from waste and some renewables). The thermal component of that figure will today be lower and it is likely that the hydropower component will have risen as the energy generation mix is constantly evolving and the grid is reducing in carbon intensity. SEPA has a role as statutory consultee in relation to wind farms (plus regulatory controls that exist for water and can cover construction activities) and has worked with others to develop guidance appropriate to their development. SEPA also has regulatory controls that apply to raw energy production techniques, which are discussed below.

Waste is also a valuable source of energy. SEPA regulates waste in numerous forms, from anaerobic digester plants to thermal treatment of waste in incinerators. Zero Waste Scotland predicts that energy from waste could contribute up to 31 per cent of Scotland's renewable heat target and 4.3 per cent of our renewable electricity target under the Climate Change (Scotland) Act 2009.⁸

SEPA's position on energy from waste

Scotland needs to generate less waste, recycle more waste and maximise safely the use of the resources left in residual waste, in line with the zero waste plan and the waste hierarchy. Facilities to recover energy from waste have a part to play in an integrated national network of waste management facilities. Appropriately located and well managed energy from waste facilities that meet modern requirements and the stringent emission standards contained in the European Waste Incineration Directive (2000/76/EC) should not cause significant pollution of the

⁵ Scottish Government 'Low Carbon Scotland: Behaviours Framework' 4 March 2013. 'This Framework outlines what the Scottish Government will do to drive and support the move to low carbon living in the leadup to the first key climate change target in 2020.' http://www.scotland. gov.uk/Publications/2013/03/8172.

⁷ http://www.sepa.org.uk/system_pages/search.aspx?q=position%20 statement.
8 Zero Waste Scotland is a Scotland-based organisation funded by

⁸ Zero Waste Scotland is a Scotland-based organisation funded by the Scottish Government to deliver its Zero Waste Plan (June 2010 http://www.scotland.gov.uk/Publications/2010/06/08092645/0) http://www.zerowastescotland.org.uk/.

⁶ See The Scottish Government 'A low carbon economic strategy for Scotland' 2010.

environment or harm to human health. Finally, energy must be recovered with a high degree of efficiency.

In respect of the position statement referred to above, SEPA proposes an energy hierarchy in order to enable a consistent approach to the complexities of the energy generation field (see diagram, p 82). SEPA supports the development of renewable energy production where it contributes to tackling climate change and to supporting local, secure supply and where it provides economic benefits commensurate with the environmental impact caused by the development.

The Agency believes that new electricity generating installations should be appropriately located and scaled to avoid adverse offsite impacts, to minimise energy losses through heat use and recovery, to minimise greenhouse gas emissions and to optimise energy productivity, taking individual and cumulative impacts into consideration. SEPA supports the development of sustainability standards for bio energy. SEPA also regulates nuclear installations within the context of the Scottish Government's policy on nuclear energy and is consistent in its message that decisions being taken now should not lock Scotland into a higher than necessary carbon future. Finally, SEPA supports the need for carbon capture and storage and heat readiness for any new appropriately sized thermal plant.

SEPA works with industry sectors and other stakeholders to develop guidance for numerous activities, including thermal treatment of waste (which was reissued in an updated form in late 2013), wind farm construction, developments on peat management, forestry waste and unconventional gas guidance.⁹

SEPA and hydro power

SEPA has a specific interest in hydropower. This is because even small hydropower schemes can cause an unacceptably high level of impact on the water environment if they are situated in the wrong place or inappropriately managed. So it is important to get it right, irrespective of the size of the scheme. The problems that can arise during construction are pollution and/or sediment in the river, which can lead to fish and freshwater pearl mussel kills and pollution of drinking water supplies. Long-term impacts can include impeding fish movements owing to badly designed or badly built structures, fish entrainment in intakes, denuded flows causing changes/damage to the ecology the water course can support, and raised water flow rates, which can attract fish to the wrong location.

In 2010 the Scottish Government issued a policy statement supporting the balancing decision SEPA has to take in order for hydropower schemes to be permissible.¹⁰ It states that schemes of a capacity of 100 kW or more can be allowed to result in some deterioration to the water environment. Such deterioration must be justifiable in terms of both costs and benefits and therefore considerations such as the wider social or economic benefits or impacts on other users of the water environment will continue to be important factors in decision-making for schemes in this category. The Scottish Government further stated that schemes of less than 100 kW should show no adverse impact on the water environment unless the level of benefit is proportionally greater, in which case it may be possible for the scheme to be permitted. In summary, schemes of less than 100 kW need to tread very lightly on the water environment in order to be permissible. Feed-in tariff levels were making small schemes very attractive – picture that see-saw again.

In order to help to support the hydropower industry SEPA has worked with Scottish Natural Heritage to develop joint guidance on best practice in the construction of hydropower schemes.¹¹ The construction stage is the key time when environmental damage can occur, which can leave SEPA with no option but to take enforcement action and which could include referring the matter to the Procurator Fiscal for consideration of prosecution.

SEPA's role in unconventional gas developments

Unconventional gas exploration in general and, more specifically, the process of hydraulic fracturing (sometimes referred to as fracking) is making headlines across the UK, with coverage focusing on both the potential positive contribution it can make to UK energy security and the potential negative health and environmental impacts. Although some of the technologies being used in this area are new to environmental regulators, many of the processes (such as borehole or well construction) are not – and neither is the job of regulating those practices.

Unconventional gas is the collective term for natural gas held in formations that are different from conventional reservoirs. These are typically shale and coal formations. Alternative techniques will be needed to unlock these unconventional gas resources but it is not correct to associate the technique of hydraulic fracturing with all unconventional gas extraction. That said, SEPA anticipates that extraction of gas from shale will almost always require fracturing. This involves pumping foam or water into seams at pressures high enough to generate microfractures in the shale, thereby creating a pathway to allow the subsequent release of gas. The water also contains tiny quantities of propants to prop open the microfractures, and chemicals to improve the efficiency of the operation.

Although fracturing can be used for extracting coalbed methane, use of this technique is not always necessary to ensure commercially viable extraction. More likely (and as currently proposed in the most advanced project in Scotland) is the use of the technique of pumping water out from the coal seam to release the pressure and with it the gas.

⁹ http://www.sepa.org.uk/customer_information/energy_industry.aspx.

http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Energysources/19185/17851-1/HydroPolicy.

¹¹ Natural Scotland, Scotlish Government, SEPA 'Guide to hydropower construction best practice' March 2012 http://www.sepa.org.uk/water/ hydropower.aspx.

There are a number of potential environmental impacts – some of which may also be associated with conventional oil and gas activities – identified as being associated with unconventional gas exploration and production. These include:

- possible adverse effects on the water environment as a result of drilling, dewatering and fracturing operations
- possible increased seismic activity during fracturing operations
- potentially increased greenhouse gas emissions and health impacts from released gas (known as fugitive emissions).

Water environment impacts associated with operations may include:

- cross-contamination of aquifers owing to poor borehole construction
- pollution from an unexpected release of gas or fracturing fluid into other parts of the water environment
- pollution from the illegal disposal of liquid or solid waste
- abstraction of higher than permitted quantities of water, which could lead to an unacceptable impact on the water environment.

SEPA is but one of a number of organisations involved in regulating unconventional gas extraction in Scotland, along with DECC, local authorities, the Health and Safety Executive and – where coal is involved – the Coal Authority. SEPA has been working closely with these regulators to ensure that regulation of unconventional gas exploration and production is joined-up, effective and efficiently delivered. In brief, the roles of the other regulators are as follows:

- DECC administers a licensing system under the Petroleum Act 1998,¹² which authorises each particular drilling and development activity. A petroleum exploration and development licence (PEDL) grants exclusivity to operators in the licence area to explore for and produce petroleum, but does not confer any exemption from other legal/regulatory requirements. DECC has published its 'Regulatory Roadmap for Onshore Oil and Gas Exploration in the UK: regulation and best practice',¹³ which provides a clear overview of the permitting and planning processes that apply in each part of the United Kingdom.
- The local authority deals with applications for planning permission and monitors developments through other regulatory controls such as environmental impact assessments, local air quality management and the Management of Extractive Waste Scotland Regulations 2010.¹⁴

- The Health and Safety Executive (HSE) regulates the safety aspects, which also contribute to mitigating the environmental risk. In particular, it is responsible for ensuring the appropriate design and construction of well casings for any unconventional gas borehole for the protection of the workforce, and here SEPA's and the HSE's requirements are currently complementary.
- The Coal Authority regulates access to the nation's coal.

SEPA's role is to regulate the environmental impacts from the exploration and extraction of unconventional gas resources. Through the Water Environment (Controlled Activities) Regulations 2011 (known as CAR)¹⁵ SEPA regulates abstractions and the discharges of drilling or fracturing fluid to groundwater and surface water, with the aim of preventing significant adverse impacts on the water environment.

Should the gas require further treatment, such as refining, then this activity will also fall within the Pollution Prevention and Control (Scotland) 2012 (PPC) Regulations¹⁶ and, as such, additional regulatory controls would apply to the treatment activities. SEPA is working with the Scottish Government to ensure that there is clarity in this area. Should a project move into production it, like other activities in Scotland, will sit within the target set by the Climate Change (Scotland) Act.

In developing its regulatory guidance,¹⁷ SEPA has examined all aspects of the process of exploration and production of unconventional gas and compared these aspects to the regulations that are currently available. Where it was considered that the activity went beyond the scope of the controls that were in place, such as the general binding rule for borehole drilling, originally envisaged for the purpose of drinking water boreholes which would be shallower than 200 m, SEPA has analysed the risk of the new activity (boreholes of greater than 200 m) and concluded that, in order to ensure that appropriate controls were in place, this required the escalation of the activity to one requiring a complex licence. This would require much detailed scientific evidence and assessment to be undertaken both by the operator and by SEPA's environmental regulator. The same process of analysis could apply to wind farm construction projects and here SEPA is considering future project-based licensing, where currently multiple CAR registrations and simple licences are required to facilitate both construction and maintenance access.

SEPA and climate change

SEPA recognises the serious threat posed by climate change. Solving the problems of climate change must involve addressing the sustainability and environmental impacts within the energy system. Clearly, SEPA has a pivotal role in delivering climate change priorities through direct

¹² http://www.legislation.gov.uk/ukpga/1998/17/contents.

¹³ December 2013 https://www.gov.uk/government/publications/regulatoryroadmap-onshore-oil-and-gas-exploration-in-the-uk-regulation-andbest-practice.

¹⁴ http://www.legislation.gov.uk/ssi/2010/60/contents/. SEPA guidance: http://www.scotland.gov.uk/Topics/archive/National-Planning-Policy/ themes/minerals/mwg.

¹⁵ http://www.sepa.org.uk/water/water_regulation.aspx.

¹⁶ http://www.sepa.org.uk/air/process_industry_regulation/pollution_ prevention_control.aspx.

http://www.sepa.org.uk/system_pages/quicklinks_2/unconventional_ gas_guidance.aspx.

regulation, through the provision of information on an informal and statutory basis and by influencing the choices and decisions of others in order to support the Scottish Government in delivering a low carbon future.

The peat calculator was developed to assess the carbon footprint of wind farms of built capacity of greater than 50 MW and therefore needing the consent of the Scottish Government. SEPA believes that this is now influential in the layout design of wind farms to ensure that the minimum amount of peat is disturbed, and therefore the minimum amount of carbon is released during the construction process. The theory will also apply to other developments, such as onshore oil and gas and, possibly, to pumped storage hydro.

Conclusion

SEPA is all about regulation to support business and communities by protecting the environment. SEPA intends to be as far as possible on the cutting edge of good regulatory practice by developing and using the state-ofthe-art toolkit that the Regulatory Reform Scotland Act will provide. We at the Agency believe that the purpose of environmental regulation is not simply to implement a set of rigid rules but to use regulation the better to protect the essential resources and services our environment provides and, where possible, to change behaviours. That belief applies equally to the regulation of energy to protect the environment in the broadest sense.



EIA, SEA and energy projects: better decision-making or a game of snakes and ladders?

Stephen Tromans QC Thirty Nine Essex Street Chambers¹

EIA and **SEA**

EIA and SEA have two key purposes, which are linked. One is to ensure better decision-making by ensuring that the environmental impacts of a project (or in the case of SEA a plan or programme) are fully considered as part of the decision-making process before development consent is given (or the plan or programme adopted). This involves both a systematic examination and evaluation of the impacts through an environmental statement, and taking into account the views of both relevant public bodies and the interested and potentially affected public. The other purpose is to secure public participation in the process, through proper publicity and consultation, and transparency in decision-making. In some cases, the process may result in consent being refused on the grounds of the environmental impact. Much more often, however, the beneficial result is that the project or plan is modified to mitigate the environmental impacts, and in the case of a project conditions are imposed to secure this. In the case of SEA (although not necessarily EIA) it may also lead to the examination of alternatives and the need to justify the chosen course.

The reality is of course somewhat messier. The two Directives on EIA and SEA (particularly SEA) are cryptic in some of their terminology.² The CJEU has consistently mandated a 'generous purposive approach' to interpreting their scope and effect:³ 'The provisions which limit the Directive's scope, in particular those measures setting out the definitions of the measures envisaged by the Directive, must be interpreted broadly'.⁴

Many projects will of course attract much local opposition, or in some cases national opposition. The opponents simply do not want the project to go ahead. Since the planning system rests fundamentally upon the exercise of judgment in applying policies to the local facts by either the elected local authority or by central government, there are precious few ways in which opponents can use the courts to upset a decision in favour of a project, or a plan which will facilitate future projects. EIA and SEA are exceptions to this. They present procedural requirements which the decision-maker can all too easily get wrong.⁵ They provide a handle for objectors to grasp, which may if successful result in the consent being quashed and the whole project derailed, or if unsuccessful will at least have delayed the project and have provided the objectors with the satisfaction, or otherwise, of their day in court. Developers may, understandably, view the system as somewhat akin to a game of snakes and ladders, with themselves as the potential loser.

It must be accepted that some claims based both on EIA and SEA have been notable successes and forces for good, both in establishing important points of principle and in rectifying what were thoroughly bad decision-making processes at the individual level. These have often involved taking cases all the way through to the House of Lords/ Supreme Court or CJEU: it is not only developers who may feel the law involves a game of snakes and ladders. The points of principle include the relevance of EIA to all stages of the process, including later approvals,⁶ the application to decisions on enforcement,⁷ application to the demolition of important buildings,⁸ the obligation to give reasons for a negative screening opinion,⁹ the ability of individual claimants to rely on the doctrine of horizontal direct effect;¹⁰ and in SEA the application to revocation of policies¹¹ and the fundamental importance of proper consideration of alternatives.¹²

A fine example of the role of EIA in challenging slipshod decision-making is *R* (*Friends of Basildon Golf Course*) *v Basildon District Council*,¹³ where planning permission was granted for 'construction of new clubhouse and maintenance sheds and the development of a golf driving range'. It was proposed to tip a very substantial amount of waste onto the site. The negative screening opinion was based on a massive under-statement of the amount of waste to be deposited. Quashing the permission, the Court said:¹⁴

- 8 R (Save Britain's Heritage) v SSCLG [2011] EWCA Civ 334.
- 9 Case C-75/08 R (Mellor) v SSCLG [2009] ECR I-03799.
- 10 Case C–201/04 R (Wells) v SSTLGR [2004] ECR I–723; R v Durham County Council, ex p Huddleston [2000] Env LR 488.
- II R (Cala Homes (South) Limited) v SSCLG [2010] EWHC 2866 (Admin).
- St Albans City and District Council v SSCLG [2009] EWHC 1280 (Admin). See also later discussion on alternatives.
- 13 [2010] EWCA Civ 1432.
- 14 Pill LJ, Carnwath and Rimer LJJ agreeing.

I Part of this article relating to SEA is adapted from a paper given in May 2014 to the PEBA Annual Conference. I was greatly assisted in preparation of that part by Ned Helme of 39 Essex Street, in terms of research and drafting, and his input is gratefully acknowledged. All errors are of course my own.

^{2 &#}x27;I have read it 40 or 50 times, altogether, and with a steadily increasing pleasurable disgust' (Mark Twain 1870) http://www.twainquotes.com/ Galaxy/187006d.html.

³ See R (*Cala Homes* (South) Limited) v SSCLG [2010] EWHC 2866 (Admin) per Sales J at para. 57.

⁴ Case C–567/10 Inter-Environnement Bruxelles ASBL and Others v Région de Bruxelles-Capitale para 37.

⁵ It may be commented that the less clear and full guidance on EIA which is now to be found online in the NPPG (ID 4-001-201040306) will not make such slip-ups any less likely.

⁶ R v Bromley LBC, ex p Barker [2000] I AC 397.

⁷ R (Ardagh Glass Ltd) v Chester City Council [2010] 2 P & CR 15.

55. The Opinion was in my judgment legally defective in its treatment of the imported fill ... The amount of waste to be deposited on the site was grossly understated in the Opinion which, as a result, was seriously misleading. Moreover, the impact on the local environment of the deposit of large quantities of waste forming massive and extensive bunds was not mentioned or considered in the Opinion ...

61. I have had difficulty in the course of this appeal in understanding why colours have been nailed so firmly to the mast of declining an EIA. Substantial bunding was contemplated . . . It is difficult to understand why a decision that an EIA was necessary should present the psychological barrier it appears to have done. The need for an EIA may of course involve delay, and there may be other factors of which I am unaware, but on any view it was arguable that an EIA was required in this case and the sensible and convenient course might well have been to require one. The decision is for the planning authority to make and I am not doubting that the courts will be slow to interfere with the authority's exercise of judgment when making that decision but it may not always be in the interests of the parties or of the public if a tough stance against requiring an EIA is readily adopted.

Another example is the more recent decision in *R* (*Padden*) *v Maidstone Borough Council*,¹⁵ where retrospective permission had been given for change of use of land to fish farm, regularising the deposit of waste material, which caused groundwater flooding to Mr Padden's land. The court held that retrospective permission for EIA development should be given only in exceptional circumstances and provided it was not giving the developer an unfair advantage. The correct test had not been applied and the ES was seriously defective as to the base date for considering effects. The council had failed to make reasonable enquiries to obtain necessary factual information. Permission was quashed.

Unfortunately, there are also of course many more unmeritorious and bad challenges. Despite the courts having stressed repeatedly that planning authorities are exercising judgment when deciding if likely effects are 'significant' as part of the screening process,¹⁶ and in deciding whether the information contained in an ES is adequate,¹⁷ unsuccessful challenges are persistently brought on these grounds and fall at the insurmountable hurdle of Wednesbury unreasonableness (although often only after judgments of seemingly interminable length). The courts are generally able to see through such bad challenges for what they are – a misguided attack on the merits of a decision. In one recent case, Moses LJ concluded his judgment by saying:¹⁸ 'This type of unsuccessful challenge was not in fact focused on the real grounds of objection and in my view should not have been deployed to inhibit the successful regeneration of Margate'.

Much the same is true of the growing number of SEA cases. The courts are emphasising their relatively limited role in reviewing the adequacy of environmental reports and rejecting criticisms of a 'highly detailed nature';¹⁹ they are also showing a reluctance to accept that a deficiency at an early stage of the plan- making process is incapable of being cured so as to vitiate the final plan.²⁰ It is clear there is a great deal of symbiosis between EIA and SEA jurisprudence in this regard.

It is sometimes essential to stand back and apply common sense, as the Court of Appeal did in R (*Champion*) v*North Norfolk District Council.*²¹ The imposition of conditions to protect the environment plainly does not mean that the planning authority could only have rationally concluded that significant effects were likely, as the first instance deputy judge had found. Too dogmatic an approach can indeed be counterproductive to proper protection of the environment.

Energy projects

Energy projects are interesting in the EIA context for two reasons. First, they are controversial. From nuclear, through waste to energy in its various forms, to wind and PV, energy schemes arouse wrath and indignation the length and breadth of the land. That is even before considering fracking. Secondly, such schemes are of course of vital importance nationally in achieving energy security and carbon reduction and renewable targets.²² This creates a huge tension in the planning system and in the legal system as the inevitable challenges are made. It is no surprise how many of the recent cases on EIA involve energy projects.

The tension on fracking appears at EU level in the debate leading to the adoption of the EIA amending Directive 2014/52/EU, adopted on 16 April 2014. Member States are of course deeply divided on this issue, and public opposition in some countries (such as Bulgaria) has led to U-turns in policy and to outright bans. Reflecting this, the European Parliament on 9 October 2013 narrowly voted²³ for an amendment which would have included exploration and extraction of shale gas or oil by hydraulic fracturing within Annex I, regardless of the amount of gas or oil extracted.²⁴ However, the amendment was not agreed to by the Council of Ministers, leaving fracking development to be screened as an Annex II project.²⁵ That is certainly a more sensible outcome than automatic EIA in every case, although it would be a foolhardy developer of a fracking project who would set out to dispense with producing an ES.

22 See 'Renewable and low carbon energy' NPPG (ID 5-001-20140306).

^{15 [2014]} EWHC 51 Admin.

¹⁶ R (Jones) v Mansfield DC [2003] EWCA Civ 1408, paras 14–18 (Dyson LJ); R (Loader) v SSCLG [2012] EWCA Civ 869; R (Evans) v SSCLG [2013] EWCA Civ 114.

¹⁷ R (Blewett) v Derbyshire CC [2003] EWHC 2775 (Admin) para 41 (Sullivan J) as applied in numerous subsequent cases.

¹⁸ R (Oldfield) v SSCLG [2013] EWHC 4269, para 67.

¹⁹ See Shadwell Estates Ltd v Breckland DC [2013] EWHC 12 (Admin) paras 71–77 (Beatson J).

²⁰ See eg Cogent Land LLP v Rochford DC [2013] | P & CR 2 paras | 12–13 and | 122–27 (Singh J).

^{21 [2013]} EWCA Civ 1657.

²³ By 339 votes to 293, with 28 abstentions.

²⁴ Contrary to the position under Annex I, whereby the amount extracted needs to exceed 500 tonnes per day for oil and 500,000 cubic metres for gas (para 14).

²⁵ See Annex II para 2(d) (deep drillings) and (e) (surface industrial installations for extraction of natural gas).

There is of course much to be said for having a clear and certain framework.²⁶ A developer of a fracking site in the UK will have a number of assessments to undertake, in the context of licensing by DECC, planning permission and environmental permitting. There will be both overlap and synergy between these assessments.

Recommendation 2014/70/EU on Minimum Principles for high-volume environmental fracturing, adopted on 22 January 2014, builds on the 'Golden Rules' for safe development of unconventional gas developed by the IAEA. They list the raft of EU legislation which is relevant (including the EIA and SEA Directives) but acknowledge that the Union's environmental legislation was developed at a time when high-volume fracking was not used in Europe.²⁷ Among the minimum principles are that Member States should prepare a SEA before granting exploration or production licences (para 3.1), should provide clear rules on possible restrictions of activities (para 3.2), should ensure that an EIA is carried out on the basis of the requirements of the EIA Directive (para 3.3) and provide the public concerned with an early and effective opportunity to participate in these processes (para 3.4). The recommendations on site selection, risk assessment and site baseline studies are also of course bound up with the EIA and SEA processes.

The current licensing round conducted by DECC, which will include shale oil and gas, is subject to SEA. The environmental report produced by AMEC Environment and Infrastructure was published by DECC in December 2013.

Solar/PV farms are not without their opponents and, whilst they do not figure expressly in the Annexes, are plainly being routinely screened in the UK, Spain and elsewhere.²⁸

Alternatives

One of the most controversial issues in EIA is the consideration of alternatives. Directive 2011/92/EU referred to 'an outline of the main alternatives studied by the developer, and an indication of the main reasons for his choice, taking into account the environmental effects' (Article 5(3)(d)). The wording, after amendment by Directive 2014/ 52/EU, is somewhat modified: 'a description of the reasonable alternatives studied by the developer, which are relevant to the project and is specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment'.

The proposal for the Amending Directive (COM(2012) 628 final) had proposed that the ES should include: 'a description of the alternatives considered, including the identification of the least environmentally damaging one,

and an indication of the main reasons for the choice made, taking into account the environmental effects' (Annex IV para 2). As part of the mandatory scoping process proposed by the Commission, it would have been for the competent authority to determine the 'reasonable alternatives' which were relevant (Article 5(2)(d)).

The SEA Directive of course requires alternatives, at least reasonable alternatives, to be addressed in the environmental report. Art 5(1) states that:

... an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.

Annex I(h) refers to: 'an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information'.

In its 2009 Report on the application and effectiveness of the SEA Directive,²⁹ the Commission noted that some Member States had adopted extensive national guidelines to provide support for the identification and selection of reasonable alternatives, but the majority of Member States had not done so, nor had they sought to define reasonable alternatives, leaving each plan to be considered on a case-by-case basis. That is the approach in the UK.

The NPPG is categorical that under EIA it is not considered that an applicant for EIA development must consider alternatives, but that where alternatives have been considered, the ES must include an outline of the main alternatives considered, and the main reasons for the choice.³⁰

The requirement to consider alternatives is what distinguishes SEA from EIA and has been a potent weapon for objectors in the SEA context. That the SEA Directive can act as a trap for the unwary in this respect was demonstrated in the case of Save Historic Newmarket Ltd v Forest Heath DC.³¹ In that case, the claimants sought to quash policies in the Forest Heath Core Strategy relating to an urban extension to the north-east of Newmarket for approximately 1200 dwellings as part of a mixed use development. They suggested that the SEA Directive and Regulations had been breached because the final environmental report submitted for approval with the final draft strategy had not identified any of the alternative locations considered and had failed to state why those alternatives had been rejected, a contention accepted by Collins | (see paragraph 40). The case is of general interest because of the guidance given by Collins J on quality of environmental reports and the importance of alternatives. He stated at paragraph 17:

²⁶ This appears to be the experience in the US, where federal requirements on EIA do not apply to fracking, unless undertaken on federal land. Some states such as Texas and Pennsylvania have streamlined their EIA procedures to facilitate fracking. In others, such as California, development has been hindered by a regulatory quagmire involving various state agencies.

²⁷ Recitals (7) and (8).

²⁸ See Annex II, para $3(a)\,-\,$ industrial installations for the production of energy.

²⁹ COM(2009) 469 final, para 3.5.

³⁰ ID 4-041-20140306.

^{31 [2011]} EWHC 606.

It is clear from the terms of art 5 of the Directive and the guidance from the Commission that the authority responsible for the adoption of the plan or programme as well as the authorities and public consulted must be presented with an accurate picture of what reasonable alternatives there are and why they are not considered to be the best option (See Commission Guidance paras 5.11 to 5.14). Equally, the environmental assessment and the draft plan must operate together so that consultees can consider each in the light of the other. ... However that does not mean that when the draft plan finally decided on by the authority and the accompanying environmental assessment are put out to consultation before the necessary examination is held there cannot have been during the iterative process a prior ruling out of alternatives. But this is subject to the important proviso that reasons have been given for the rejection of the alternatives, that those reasons are still valid if there has been any change in the proposals in the draft plan or any other material change of circumstances and that the consultees are able, whether by reference to the part of the earlier assessment giving the reasons or by summary of those reasons or, if necessary, by repeating them, to know from the assessment accompanying the draft plan what those reasons are.

Applying this to the facts before him, Collins J found at paragraph 40 that:

... the final report accompanying the proposed Core Strategy to be put to the inspector was flawed. It was not possible for the consultees to know from it what were the reasons for rejecting any alternatives to the urban development where it was proposed or to know why the increase in the residential development made no difference. The previous reports did not properly give the necessary explanations and reasons and in any event were not sufficiently summarised nor were the relevant passages identified in the final report. There was thus a failure to comply with the requirements of the Directive and so relief must be given to the Claimants.

Save Historic Newmarket was followed by Heard v Broadland DC in which Ouseley J upheld a challenge to a joint core strategy on the basis that, despite the considerable effort put into its preparation, the authorities had breached Article 5(1) of the SEA Directive.³² In so finding, he adopted a broad and purposive approach to construction, finding that there was no express requirement in the directive or regulations for the reasons for the selection of the preferred option (as distinct from the reasons for the selection of the alternatives) to be considered, but that: ... a teleological interpretation of the directive, to my mind, requires an outline of the reasons for the selection of a preferred option, if any, even where a number of alternatives are also still being considered' (paragraph 69). He also found that there was no express requirement that alternatives be appraised to the same level as the preferred option but he considered that the directive was best interpreted as requiring an equal examination of the alternatives that it is reasonable to select alongside the preferred option.

Despite the fact that the Commission's proposal on alternatives did not make it into the revised EIA Directive, it seems unlikely that this issue is closed. Objectors to proposals such as wind turbines will frequently wish to argue that there are alternatives in terms of siting, design, or even alternative energy sources. Of course, where a plan or programme is being considered many options will be open, including alternative locations, routes, technologies and 'do nothing'. Where a project is under consideration, alternative locations may well not be open or of interest to the specific promoter. That does not mean to say, however, that there are no alternatives. There may be different locations or configurations within the site, numbers of turbines, heights of turbines etc.

It is interesting in this respect to note how the Court of Appeal dealt with the issue in *Holder v Gedling BC*,³³ a successful challenge to permission for a 66 m wind turbine.³⁴ One of the successful grounds was error by officers in regarding alternative locations outside the green belt, and alternative methods of producing reasonable energy as 'non-material planning issues'. Maurice Kay LJ, Patten LJ and Sir Stanley Burnton agreeing, said this (at paragraph 17):

The question of alternatives raises two different considerations: alternative sites, away from the Green Belt, and alternatives on the same site. I do not propose to dwell on alternative sites away from the Green Belt. Plainly, [the developers] were interested only in the erection of wind turbines on their own farm. However, alternatives on that farm were a potential issue. Strikingly, there was the extant planning permission for the two smaller turbines ... It seems to me that in a case concerning inappropriate development within the Green Belt which can only be justified by 'very special circumstances' these were and remained material considerations. The fact that very special circumstances had been found in relation to the two significantly smaller turbines located in a different position within the farm did not mean that very special circumstances would also attach to the single significantly larger wind turbine in a different position within the farm. As I have related, it was common ground that the two smaller turbines could generate sufficient power to meet the needs of [the developers] (albeit following feeding into the grid). In my judgment, it was a legal error to proceed on the basis that it was immaterial that other alternative methods of producing reasonable energy existed. It was a factor for the Planning Committee to weigh in the balance.

Breadth of the directives: towards a more principled approach?

The scope of the EIA Directive, whilst it can and has given rise to problems in particular cases, is relatively straightforward when compared with the SEA Directive,

^{33 [2014]} EWCA Civ 599.

³⁴ The challenge to a permission granted on 3 November 2011 was dismissed by the Administrative Court in June 2013 and heard by the Court of Appeal in April 2014 – delays described by Sullivan LJ and endorsed by Maurice Kay LJ as 'lamentable', 'procedural and systemic'.

^{32 [2012]} EWHC 344 (Admin).

the language of which was a compromise intended to make the proposal acceptable to Member States that had great difficulty with the idea of applying SEA to all 'policies', as was the original proposal. The SEA Directive therefore does not apply to all 'plans and programmes'. As Baroness Hale noted in *R* (*Buckinghamshire CC*) *v* Secretary of State for Transport it would have been 'so much simpler if it did'.³⁵

The scope of the SEA Directive is defined by Article 3, paragraphs I-3 of which provide for environmental assessment of (inter alia):

all plans and programmes ... (a) which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use *and which set the framework for future development consent* of projects listed in Annexes I and II to Directive 85/337/EEC. (emphasis added)

The SEA Directive is intended to apply only to a subset of plans and programmes, and the definition used to define this subset is not straightforward. Some definitional uncertainty is hard to avoid in EU legislation, which must be interpreted across a disparate range of national systems. However, the definition of the scope of the SEA Directive can fairly be criticised as very unclear. Part of the difficulty is that 'plans and programmes' are only partially defined, Article 2(a) provides merely that they mean:

plans and programmes, \ldots as well as any modifications to them:

- which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and
- which are required by legislative, regulatory or administrative provisions. (emphasis added)

The italicised words in the passages set out above are particularly obscure. Part of the difficulty is the tension between, on the one hand, the need for definitional certainty and, on the other, the need to avoid a lacuna between the protection afforded by the EIA and SEA Directives. It is, by way of example, this latter imperative which caused the SEA Directive to be based on a 'very broad concept of "framework" ', as Advocate General Kokott made clear at point 64 of her opinion in *Terre Wallonne*.³⁶ The final part of the difficulty is the uncertainty injected into the definition by the purposive construction required of all European directives, although Advocate General Kokott suggested a particular logic for a purposive approach to the scope of both the SEA and EIA Directives at points 29 and 30 of her opinion in *Terre Wallonne*:

29. ... According to Article I, the objective of the SEA Directive is to provide for a high level of protection of the

environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes by ensuring that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

30. The interpretation of the pair of terms 'plans' and 'projects' should consequently ensure that measures likely to have significant effects on the environment undergo an environmental assessment . . .

A broad, purposive approach was applied with enthusiasm by the CJEU in Case C–567/10 Inter-Environnement Bruxelles ASBL, Pétitions-Patrimoine ASBL, Atelier de Recherche et d'Action Urbaines ASBL v Région de Bruxelles-Capitale.³⁷ In that case, which concerned the Brussels town planning code, the Court stated at paragraph 37 that: 'the provisions which delimit the directive's scope, in particular those setting out the definitions of the measures envisaged by the directive, must be interpreted broadly'.

In that case, the Court subjected the word 'required' under Article 2(a) to a very broad purposive construction which led it to the conclusion (at paragraph 31) that: '... plans and programmes whose adoption is regulated by national legislative or regulatory provisions, which determine the competent authorities for adopting them and the procedure for preparing them, must be regarded as "required" '.

This approach was directly contrary to that of the Advocate General, who has followed the line in *Terre Wallonne* in giving the mandatory meaning to 'required', which was suggested by all the language versions except for Italian ('previsto', meaning 'provided for'). The Advocate General had also rejected an argument that the policy in favour of public participation – this she said 'did not justify an interpretation contrary to the recognisable intention of the legislature' (para 24).

The definition of 'plans and programmes' came before the Supreme Court in *Walton v Scottish Ministers*, in which the claimant sought to challenge the validity of schemes and orders made by the Scottish Ministers under the Roads (Scotland) Act 1984 to allow the construction of a road network bypassing Aberdeen.³⁸ However, given the relatively clear nature of the SEA issue in that case, it did not present an ideal opportunity for the Supreme Court to address the definitional and interpretative complexities concerning the scope of the SEA Directive.

It was hoped such an opportunity might arise in the appeal against the decision of the Court of Appeal in Northern Ireland in *Re Central Graigavon Ltd's Application for Judicial Review.*³⁹ In that case, the Court had found, first, that a draft PPS proposing to alter an earlier PPS was not 'required by legislative, regulatory or administrative provisions' for the purposes of Article 2(a) of the SEA Directive

^{35 [2014]} I WLR 324 para 134.

³⁶ Joined Cases C–105/09 and C–110/09 Terre Wallonne ASBL v Région Wallonne and Inter-Environnement Wallonie ASBL v Région Wallonne [2010] ECR I–5611.

³⁷ Case C–567/10 Inter-Environnement Bruxelles ASBL, Pétitions-Patrimoine ASBL, Atelier de Recherche et d'Action Urbaines ASBL v Région de Bruxelles-Capitale.

^{38 [2012]} UKSC 44.

^{39 [2011]} NICA 17.

because it was not something that the Department of the Environment was 'obliged' to produce (paragraph 37). Secondly, it found that the draft PPS did not 'set the framework for future development consents' for the purposes of Article 3 since it merely pointed to existing material considerations (paragraph 43). Both elements of the *Craigavon* decision were controversial.⁴⁰ It was hoped that an appeal to the Supreme Court would resolve matters. The Supreme Court was due to hear the *Central Craigavon* appeal in May 2013, but shortly before the hearing the appeal was unfortunately withdrawn.

However, a further opportunity was presented to the Supreme Court to address SEA (and EIA) in the recent HS2 challenge, *R* (Buckinghamshire CC) v Secretary of State for Transport.⁴¹ The judgments in the case present a fascinating exploration of these two Directives, the interpretative approach to European legislation and the relationship between the CJEU, Parliament and the domestic courts. The Buckinghamshire appeal arose out of the decision of the Secretary of State for Transport to publish a command paper entitled High Speed Rail: Investing in Britain's Future – Decisions and Next Steps (DNS),⁴² which set out the government's strategy for the promotion, construction and operation of High Speed Two (HS2), a new national high speed rail network from London to Birmingham, Manchester and Leeds.

The issues for the Supreme Court so far as SEA were concerned were whether the DNS was a 'plan or programme' which 'set the framework for development consent' and was 'required by administrative provisions' within the meaning of Articles 2 and 3 of the SEA Directive and whether Article 3(2)(a) of the SEA Directive was inconsistent with Article 7 of the Aarhus Convention on Access to information, public participation in decision-making and access to justice in environmental matters (1998) (Aarhus Convention). There was also an issue concerning whether the hybrid Bill procedure proposed by the Secretary of State for gaining of development consent for HS2 met the requirements of the EIA Directive.

Lord Carnwath gave the main judgment concerning the SEA issues. He was 'prepared to proceed' on the assumption that the DNS was 'required by administrative provisions' for the purposes of Article 2(a) or 'at least that there is a referable issue on the meaning of that part of the definition' (paragraph 22) and devoted the majority of his judgment to the question of whether the DNS 'set the framework' for the purposes of Article 3. He concluded that 'influence' in the ordinary sense was not sufficient to set the framework. Rather, the influence 'must be such as to constrain subsequent consideration, and to prevent appropriate account from being taken of all of the

41 [2014] I WLR 324.

42 Cm 8247.

environmental effects which might otherwise be relevant' (paragraph 40).

He considered at paragraph 38 that the DNS was:

... a very elaborate description of the HS2 project, including the thinking behind it and the Government's reasons for rejecting alternatives. In one sense, it might be seen as helping to set the framework for the subsequent debate, and it is intended to influence its result. But it does not in any way constrain the decision-making process of the authority responsible, which in this case is Parliament.

Lord Carnwath also rejected the contention that Article 7 of the Aarhus Convention required that any plans or programmes covered by it were also subject to the SEA procedure. His reasoning on this issue is found at paragraph 52:

There is no reason to assume that article 7 and the SEA Directive are intended to cover exactly the same ground. The differences in wording are clear and must be assumed to be deliberate. Indeed the United Nations Economic Commission for Europe guidance on the Convention (The Aarhus Convention: An Implementation Guide (2nd edn 2013) 118-19) accepts that its reference to plans and programmes relating to the environment is broader than the equivalent definition in the SEA Directive. The SEA Directive must be interpreted and applied in its own terms. If this falls short of full compliance with the Aarhus Convention, it does not invalidate the Directive so far as it goes. It simply means that a possible breach of the Convention may have to be considered as a separate and additional issue. In the present case the point is academic because no such breach is alleged.

Lord Sumption gave a robust judgment concurring with Lord Carnwath on the SEA issues. He characterised the 'setting the framework' test in this way at paragraph 123:

... the policy framework must operate as a constraint on the discretion of the authority charged with making the subsequent decision about development consent. It must at least limit the range of discretionary factors which can be taken into account in making that decision, or affect the weight to be attached to them. Thus a development plan may set the framework for future development consent although the only obligation of the planning authority in dealing with development consent is to take account of it. In that sense the development plan may be described as influential rather than determinative. But it cannot be enough that a statement or rule is influential in some broader sense, for example because it presents a highly persuasive view of the merits of the project which the decision-maker is perfectly free to ignore but likely in practice to accept. Nor can it be enough that it comes from a source such as a governmental proposal or a ministerial press statement, or a resolution at a party conference, or an editorial in a mass circulation newspaper which the decision-maker is at liberty to ignore but may in practice be reluctant to offend.

The other great interest of the *Buckinghamshire* case so far as SEA is concerned (and perhaps with the most wideranging implications) is the remarkably trenchant criticism by Lords Neuberger and Mance (in a joint judgment with

⁴⁰ See, for example Gregory Jones QC, Ned Westaway and Roger Watts 'Why *Central Craigavon* was wrongly decided (and other problems with the incorporation of the Strategic Environmental Assessment Directive into domestic law)' [2013] JPL 1074, suggesting that in the *Inter-Environnement Bruxelles* case the CJEU took a 'broader and more principled approach' than the Advocate General (at 1079).

which the remainder of the Court agreed) of the CJEU's decision in the *Inter-Environnement Bruxelles* case. They began their judgment by considering the constitutional basis for European Union legislation and the role of the courts in construing it. They accepted the 'vital role of case law in interpreting legislation' but stated that 'interpretation is only necessary when legislation, construed in the light of its language, context and objectives, is unclear' (paragraph 166). They then went on to consider at paragraphs 170–71 that:

170 It is a common place in legislation that objectives may not be fully achievable or achieved. Compromises or concessions have to be made if legislators are to achieve the enactment of particular provisions. This is perhaps especially so at the international European level, in the case of measures agreed by the Council of Ministers where different member states may only have been prepared to go part of the way with a Commission proposal (or parliamentary proposal for amendment) and qualifications may have to be introduced to arrive at any agreement. The structure of the European Union involves a balance of interests which must be respected if the structure is to be stable.

171 When reading or interpreting legislation, it can never therefore be assumed that particular objectives have been achieved to the fullest possible degree. Limitations on the scope or application of a legislative measure may have been necessary to achieve agreement. There may also have been good reasons for limitations, of which courts are unaware or are not the best judge. Where the legislature has agreed a clearly expressed measure, reflecting the legislators' choices and compromises in order to achieve agreement, it is not for courts to rewrite the legislation, to extend or 'improve' it in respects which the legislator clearly did not intend.

They then turned to the *Inter-Environnement Bruxelles* case and referred with approval to the approach and conclusions of Advocate General Kokott before subjecting the reasoning of the CJEU to strong criticism. Their conclusions on this issue at paragraphs 187–89 are very striking:

187 Had the meaning of article 2(a) come before the Supreme Court without there being any Court of Justice decision to assist, we would unhesitatingly have reached the same conclusion as Advocate General Kokott, and for the reasons she (as well as the Governments and the Commission represented before the Fourth Chamber) so convincingly gave. We would, like her, have concluded that 'the legislature clearly did not intend' plans and programmes not based on a legal obligation to require an environmental assessment, even though they might have significant effects on the environment: para 20.

188 We would also have regarded this as clear to the point where no reference under the CILFIT principles was required. The reasons given by the Fourth Chamber of the Court of Justice would not have persuaded us to the contrary. While they allude, in the briefest of terms, to the fact that the Governments made submissions based on the clear language of article 2(a) and on the legislative history, they do not actually address or answer them or any other aspect of Advocate General Kokott's reasoning.

189 In the result, a national court is faced with a clear legislative provision, to which the Fourth Chamber of the European Court of Justice has, in the interests of a more complete regulation of environmental developments, given a meaning which the European legislature clearly did not intend. For this reason, we would, had it been necessary, have wished to have the matter referred back to the European Court of Justice for it to reconsider, hopefully in a fully reasoned judgment of the Grand Chamber, the correctness of its previous decision.

The approach of the Supreme Court in *Buckinghamshire* is therefore to assert a more literal role to the interpretation of European legislation, involving less willingness to strain construction to give effect to broad policy objectives. Its narrow approach to the word 'required' is supportive of the approach of the Court of Appeal in Northern Ireland in *Craigavon*, although that case was not raised in argument or referred to in the *Buckinghamshire* judgment.

Since it was unnecessary to make a reference to the CJEU, the extent of any conflict between the interpretative approaches to European Union legislation at domestic and European levels remains to be seen. However, it seems clear from the *Buckinghamshire* case that the Supreme Court will be entirely willing in appropriate cases to challenge the CJEU where it considers it to have overstepped the mark. The uncertainty surrounding the bounds of the purposive principle is regrettable, since it leads to inevitable uncertainty concerning the scope and application of the SEA Directive and European legislation generally.

Discretion

If the system of SEA is to work effectively, it is important that the ability to challenge decisions is not unduly hampered by restrictive rules on standing. In this regard, the decision of the Supreme Court in *Walton* is to be welcomed. In that case, Lords Reed and Hope both emphasised the breadth of the 'person aggrieved' test, and the rules for standing to invoke judicial review, such that a personal interest need not necessarily be shown if the individual is acting in the public interest and can genuinely say that the issue directly affects the section of the public that he seeks to represent.⁴³

However, all three judgments in *Walton* made clear that the interest of an individual was not merely a threshold issue concerning standing, but 'may also bear on the court's exercise of its discretion as to the remedy, if any, which it should grant in the event that the challenge is well founded'.⁴⁴ The issue of discretion did not fall for decision in *Walton* but Lord Carnwath addressed it obiter in very considerable detail so as 'to dispel what seem to me misconceptions as to the effect of some of the authorities, in the hope of clearing the way to fuller argument in another case'.⁴⁵ Having analysed the speeches in *Berkeley v*

⁴³ At paras 91–92 (Lord Reed) and para 154 (Lord Hope).

⁴⁴ See para 95 (Lord Reed); para 103 (Lord Carnwath); para 155 (Lord

Hope). 45 At para 115.

Secretary of State for the Environment (No 1)⁴⁶ in the light of the subsequent authorities, Lord Carnwath concluded at paragraph 139 that:

Where the court is satisfied that the Applicant has been able in practice to enjoy the rights conferred by the European legislation, and where a procedural challenge would fail under domestic law because the breach has caused no substantial prejudice, I see nothing in principle or authority to require the courts to adopt a different approach merely because the procedural requirement arises from a European rather than a domestic source.

Lord Hope agreed with Lord Carnwath on this issue,⁴⁷ although Lord Reed reserved his position.⁴⁸

The approach in Walton was applied by Lindblom J in West Kensington Estate Tenants and Residents Association v Hammersmith and Fulham LBC.⁴⁹ In that case the claimant residents challenged the Earl's Court and West Kensington Opportunity Area Joint Supplementary Planning Document, which made provision for redevelopment of the Earl's Court area of London (including by way of housing estates to which the claimant residents objected). Lindblom J found that, although adequate SEA had been undertaken both for the core strategies and for the SPD, there was a breach of Article 9(1) of the SEA Directive and Regulation 16 of the SEA Regulations in failing to provide a 'single, compendious statement' gathering all the required particulars and cross-referencing them to the relevant material (see paragraph 204). However, Lindblom | refused to quash the SPD. Having referred to the *Walton* case, he continued:

[207] If, as I believe, there was a breach of art 9 of the SEA directive and reg 16 of the SEA regulations in this case, I do not accept that the jurisprudence on discretion points towards an order to quash the SPD. The remedy need go no further than the kind of relief contemplated by the Court of Appeal in R. (on the application of Richardson) v North Yorkshire County Council [2003] EWCA Civ 1860, [2004] 2 All ER 31, [2004] 1 WLR 1920. In that case there had been a breach of reg 21(1) of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, which required the authority granting permission to make available for public inspection a statement containing the main reasons and considerations on which its decision was based. In para 38 of his judgment Simon Brown LJ, as he then was, referred to what Richards J, as he then was, had said at first instance: that reg 21(1) 'looks to the position after the grant of planning permission' and is 'concerned with making information available to the public as to what has been decided and why it has been decided, rather than laying down requirements for the decision-making process itself. He accepted that in such circumstances the court was not compelled to quash the planning permission; a mandatory order would suffice (see paras 33 and 38 of his judgment).

[208] The same essential reasoning, now strengthened by the Supreme Court's decision in *Walton*, applies in this

case too. The error I have found was one of omission in the procedure followed after the adoption of the SPD. It did not infect either the process in which the SPD was prepared or that in which the SEA for it was carried out. It could readily be put right, without either process having to be rerun, by a mandatory order requiring LBHF and RBKC to issue a statement that meets the requirements of reg 16. And, as Mr Elvin said, the Mayor could do that anyway if, as he intends, he adopts the SPD as supplementary planning guidance. I do not think the Claimants have suffered any real prejudice as a result of the authorities' failure to provide a statement complying with reg 16. Nor has anyone else. Certainly, there is no prejudice that could not be wholly overcome by a suitable statement being issued at this stage. The requirements of the SEA directive and the SEA regulations for the preparation of an environmental report and for public consultation have been complied with, not only in the development plan-making process but also in the preparation of the SPD. The Claimants were able to participate in those processes.

[209] In these circumstances I can see no justification for the draconian step of quashing the SPD. A mandatory order, however, is appropriate, requiring LBHF and RBKC to publish a statement of the matters referred to in reg 16(4). The submissions on delay made by the parties opposing the claim – which at this stage went only to discretion – do not dissuade me from taking that course.

This less stringent approach to discretion in *Walton*, *West Kensington* and some other recent cases⁵⁰ has been the subject of strong criticism by Robert McCracken QC and Dennis Edwards in a recent article in the *Journal of Planning and Environmental Law*.⁵¹ They contend that the approach is inconsistent with the European principle of effectiveness and the ratio of the House of Lords decision in *Berkeley*. Other commentators, however, have welcomed the approach, with Nathalie Lieven QC describing it as a 'long overdue rowing back from the principles set out in *Berkeley*'. ⁵²

This is likely to be a major battleground in future cases. Stepping back, some readers may recall the seminal book *The Ideologies of Planning Law* published in 1980 by Professor Patrick McAuslan. This identified three competing 'ideologies' underlying the approach of the courts: (1) the traditional common law view that the role of the law is to protect private property; (2) that the law exists to serve the public interest; and (3) the law exists to serve the cause of public participation. Of these, the third was in 1980 by far the least developed, and did not occupy a significant position. In her 2014 article 'Revisiting the Ideologies of Planning Law',⁵³ Julie Adshead shows how public participation as an ideology has developed, not least through the mechanism of EIA. She describes the House of Lords decision in *Berkeley v Secretary of State for the Environment*

^{46 [2001] 2} AC 603.

⁴⁷ At para 155.

⁴⁸ At para 77.

^{49 [2013]} EWHC 2834 (Admin).

⁵⁰ See McGinty v Scottish Ministers [2013] CSIH 78; Oxford Diocesan Board of Finance v Secretary of State for Communities and Local Government [2013] EWHC 802 (Admin).

^{51 &#}x27;Standing and discretion in environmental challenges: Walton, a curate's egg' [2014] JPL 304.

^{52 &#}x27;Untangling the golden thread' [2013] JPL 13 Supp OP149-OP160.

^{53 (2014) 6(1/2)} International Journal of Law in the Built Environment 174.

in 2000 as having appeared to be a 'culture shift' in the way the courts accorded importance to public participation, citing Lord Hoffmann's judgment:⁵⁴

The directly enforceable right of the citizen which is accorded by the directive is not merely a right to a fully informed decision on the substantive issue. It must have been adopted on an appropriate basis and that requires the inclusive and democratic procedure prescribed by the directive in which the public, however misguided or wrongheaded its views may be, is given an opportunity to express its opinion on the environmental issues.

She also, however, points out that Lord Hoffmann left the door very slightly ajar with his caveat that:

I would accept that if there was a failure to observe some procedural step which was clearly superfluous to the requirements of the Directive, it would be possible to exercise the discretion not to quash the permission without any infringement of our obligations under European law ...

and that subsequent cases have capitalised on that marginal flexibility: $^{\rm 55}$

A recurring theme emerges from cases decided before Berkeley and subsequent cases, which continued to diminish the significance of the House of Lords' decision. This is the tension between a speedy and 'efficient' decision-making process for planning matters and the involvement of the public in decisions that impact upon both themselves and their environment.

Nowhere is that tension more likely to manifest itself than in large infrastructure projects and in energy projects in particular.

Conclusions

The EIA and SEA Directives are of central importance to the European system of environmental protection. Although they are only of a procedural nature, the identification of environmental effects under the directives is a powerful means of ensuring that environmental issues are appropriately addressed.

However, if the legislation is to work effectively in practice, its scope and operation must be clear. Following *Walton* the fundamental issue of discretion in EU challenges is uncertain. Even more fundamentally, the bounds of the purposive principle are unclear as a result of the divergent approaches of the CJEU (in *Inter-Environnement Bruxelles*) and the Supreme Court (in *Buckinghamshire*). This uncertainty is not conducive to the effective operation of SEA (or indeed EIA) in practice.

^{54 [2000]} UKHL 36, [2001] 2 AC 603, Lords Hope, Hutton and Millett

agreeing. 55 At 188.

Hydraulic Fracturing: Growth, Regulation, and Challenges in the United States

Eugene E. SmaryPartner, Warner Norcross & Judd LLP, MichiganFord J. H. TurrellAssociate, Warner Norcross & Judd LLP, Michigan

Introduction

Hydraulic fracturing in the United States is a lightning rod. It generates sparks and controversy whenever the subject is raised. How much of that controversy is based on science, on facts, or on policy grounds is a matter of discussion if not outright debate. There is not even an agreement among the participants in the discussion on whether to call it "fracturing", "fracking", "fracing", or "fraccing". Words become ideological symbols and that is certainly true for the words used to describe the process of fracturing rock in tight formations to liberate natural gas stored in those formations.

For simplicity, this article will use what is now becoming the more common spelling "fracking" and will focus principally on the debate surrounding the drilling of horizontal fracking wells, as opposed to the more traditional vertical fracking wells. And because this article focuses on the developments in the United States of America, there is a preliminary discussion of the contextual legal framework within the United States and its 50 member states.¹ The degree to which and the extent to which other legal systems, even those closely related to the United States' system, such as the United Kingdom or Canada, can draw upon the experience of the United States in addressing the issues surrounding fracking is difficult to tell. One can only hope that in the discussion of the overall trends in the United States, readers can find "nuggets" of information that will be of assistance in helping them to evaluate whatever subsidiary issues are of concern at the moment.

I. United States Legal Framework

The political and constitutional framework in the United States is different from many other areas of the world. In the United States, there are typically multiple levels to the regulatory structure: federal, state, and local. Local units of government traditionally are counties, municipalities, and townships. Municipalities and townships are where much of the battle over fracking in the United States is happening and, despite the smaller size of these entities, they have become the key battleground. There are also regional compact entities, which are a form of hybrid federal-state agency, that regulate across state borders. Regional water

I For additional information on US Environmental regulation, see Eugene Smary and Scott Watson, Chapter on US Environmental Law in International Environmental Law: The Practitioner's Guide to the Laws of the Planet, Part III, Chapter 17, pp. 299–319, American Bar Association (Grosko and Martella, eds., 2014). basin commissions are an example of such entities involved in the fracking debate.

Another important characteristic to the legal framework in the United States is the principle of preemption. This principle impacts the way in which townships or municipalities can enact regulations that block development. Sometimes, federal laws and regulations preempt state laws and regulations. Although this power has rarely been used in relation to hydraulic fracturing, if the federal government becomes increasingly involved in regulating fracking, its standards may preempt state law standards. In addition to federal laws preempting state laws, some state laws and regulations preempt local laws. In fact, some state regulations have a provision expressly establishing that state regulations control and displace any local regulation.

Not surprisingly, preemption has generated litigation. In the state of Pennsylvania recently, the Pennsylvania Supreme Court ruled that a state statute restricting local regulation of oil and gas operations was unconstitutional. The court reasoned that the state law violated the implicit powers of local autonomy and control, as well as provisions of the state constitution establishing environmental protection obligations.²

It is important in considering this very basic legal framework for the United States that mineral ownership should also be considered. It is possible to find privately-owned, state-owned, and federally-owned minerals in a single area. It is also possible to have a split estate where the surface and sub-surface are owned by different people or entities. Where the surface owner is also the mineral owner, there is an incentive to allow fracking on the property because the mineral owner will receive a royalty. Royalties in the United States generally can range from 12.5 percent to 20 percent.

Currently, there is no uniformity of regulation of hydraulic fracturing in the United States and, in reality, no national energy policy, despite the fact that there are various statutes called "Energy Policy Acts". The political, geographic, and geological diversity in the U.S. virtually precludes uniformity. Michigan, for example, does not have a problem with seismic disturbances, and the geology appears ideally suited to fracking. Geographically, the state is surrounded by the Great Lakes and that makes any potential impact on the Great Lakes very important. But being a water-rich state, drillers can put anywhere from I to 21 million gallons of water into fracking a well, provided

Robinson Township v. Pennsylvania, ____A.3d ___, 2013 WL 6687290 (Pa. Dec. 19, 2013).

there is otherwise no adverse impact on the environment as a result of the water withdrawal.³ Other states do not have these same resources. But that does not mean that the arguments against fracking in Pennsylvania or Oklahoma are any different from those used in Michigan.

II. Importance of Fracking

So how important has fracking become? Natural gas is becoming more and more important, and is now seen by many as the key to U.S. energy independence (see *diagram 1*, pg 94). Shale gas supply has grown dramatically in the last 10 years⁴ (see *diagram 2*, pg 94). Fracking is a process that creates artificial permeability in hydrocarbon-bearing formations through the injection of water under pressure. It is a "completion technology". The term is used broadly, but hydraulic fracturing is only one stage in the overall process – it is the final stage after drilling.

Fracking has been used as a completion technology since 1903 and was first used commercially in 1948. By 1988 over a million wells in the United States had been fracked, and most of those were vertical. The horizontal drilling process was not sufficiently developed until the 1980s in Texas and North Dakota. The shale play map of the lower 48 states provides perspective regarding the size of the 'play', as it is called in the United States (see pg 95).

Some of the plays that are currently most active are near the Canadian border at the Bakken in North Dakota and in New York and Pennsylvania are currently among the most controversial in the United States.

One important argument made by industry and not accepted by opponents is that the surface impacts between horizontal and vertical wells can differ dramatically. One horizontal well that is hydraulically fractured can capture the equivalent of up to 32 vertical wells. The initial impacts are wide surface disruption from vehicles, tanks, and truck-beds holding flow-back water for later disposal in deep underground injection wells. While much more water is used in horizontal fracturing than in vertical wells – between 2 and 30 million gallons versus a mere 600,000 – the visible impact, once completed, may be substantially smaller.

III. Process

Generally, the process of locating suitable land and formations to develop can take 3–5 years. The planning process prior to drilling may last 12–18 months. Pad site and well construction can take 2–3 months. The hydraulic fracturing process lasts 2–3 days, and a well may be producing for 30 or more years. One pad site can be 1.5 miles away from the underground formation that is being developed. A single pad site can support up to 32 wells. Pads range from 3.5 acres up to 12 acres. Once a well is connected to a pipeline and begins producing, typically 80 to 90 percent of the site is then restored. Increasingly, this type of reclamation is a condition of permit issuance.

The industry asserts that 99.5 percent of fracking fluid is water along with proppant to keep open the fractures. Proppant is usually very high quality small particle sand, and there are some states in the United States that specialize in mining fracking sand. Ceramic beads and other microgranules are also used to prop open the fractures. One of the most controversial aspects of fracking is the 0.5 percent of fracking fluid that consists of chemicals, including viscosifiers, friction-reducers, biocides, and corrosion inhibitors, and sometimes diesel. Between 20 and 40 percent of the water used for fracking returns to the surface for disposal by injection, treatment or reuse; the rest stays underground in deep underground formations.

IV. Environmental Concerns

There are multiple environmental concerns that have been raised as part of the fracking dialogue in the United States. These include water quantity use, water quality, air quality, earthquakes, habitat fragmentation, and nuisances like noise, odor, light, and traffic.

I. Water Quantity Issues

With respect to water quantity, fracking can use between 2 to 30 million gallons of water over a two- to threeday period. There are concerns that this potentially impacts aquatic organisms and depletes or stresses groundwater resources. There are currently mechanisms being developed to measure potential impacts of large volume withdrawals on surface and groundwater. For example, Michigan has a tool called the Water Withdrawal Assessment Tool for measuring whether a proposed water withdrawal will have an adverse impact on a river, stream or lake.⁵

Under Michigan's regime, adverse impacts are analyzed for the ability of a stream to support characteristic fish populations, which are seen as biological indicators of the overall health of rivers and streams. Use of the tool is required of anyone proposing to make a new or increased large quantity withdrawal from the waters of the state, including all groundwater and surface water sources, prior to beginning the withdrawal. There have been questions about its effectiveness, but it is at least a benchmark to indicate whether there could be an impact: for instance whether a river flow might be reduced, or whether fishing could be affected. And if adverse impacts are possible, then fracking cannot take place without further evaluation.

In order to keep the issue of water quantity in context, proponents note that fracking may consume significantly less water than other traditional water uses. For example, one 2005 study claimed that while Pennsylvania withdrew 9.48 billion gallons of water per day from various resources for a variety of uses, such as public water supplies, irrigation, and feeding livestock, only 1.9 million gallons of that water

Mich. Comp. L § 324.32701 et seq.; Mich. Comp. L § 324.31701 et seq.
 Tight gas is gas from reservoirs that have extremely low permeability.

⁵ Available at http://www.deq.state.mi.us/wwat/.



Diagram 1.





Diagram 2.



was for fracking.⁶ So is that significant water usage? Fracking proponents would say no; others might say it is still important to conserve.

2. Water Quality Issues

The possible impacts on water quality are highly controversial and widely debated. Individuals have claimed that fracking causes contamination of useable aquifers or results in surface spills. Others claim that the chemicals used in the fracking process, or methane migration resulting from fracking, cause eye and skin irritation, respiratory illness, tumors, and birth defects. The sources of concern are drilling, fracking, and the "downstream" infrastructure. One commonly raised concern is that methane will enter the water supply and cause drinking water to ignite. Methane occurs naturally. A recent study by the National Academy of Sciences suggested that such incidents were not the result of fracking, but were instead a result of poor well construction, which led naturally occurring methane to migrate into the local aquifer.' The act of fracking takes place typically several thousand meters below the surface of the ground.

Two other studies have concluded that the primary risks related to water quality and fracking wastewater are from improper handling, improper onsite storage and the injection of wastewater into disposal wells – not from fracking itself.⁸ Other objections, related to lined storage units, pipeline incidents, wells, and associated drilling equipment, could be the bases for objecting to any form of natural gas and oil production, not just hydraulic fracturing.

3. Air Quality Concerns

Air quality concerns related to fracking include emissions from volatile organic compounds and greenhouse gases (GHG), including methane. More specifically, diesel engines, gas compressor stations, produced wastewater air emissions, particulate matter, and methane releases during and after drilling are the primary concerns.⁹

4. Earthquakes

It has also been suggested that fracking causes earthquakes. Multiple small quakes have been reported in Texas, Ohio, Oklahoma, and Arkansas – mainly related to the process of injecting produced wastewater into deep formations. Several states produced reports stating there was no direct link between fracking and seismic activity or that such impacts were impossible to predict.¹⁰ A 2014 study in the *Seismological Research Letters Journal*, however, documented several hundred small earthquakes on a fault in Ohio directly under three fracking operations.¹¹ This is currently a significant area of concern. For this reason, knowing the geology of a particular area is very important. And, in fact, Texas has recently proposed regulations requiring a seismic evaluation of an area before any new fracking permits would be issued.¹²

V. Federal, State, and Local Regulation

I. Federal Regulation

The United States has a very robust environmental regulatory regime, and a few of the more relevant laws for purposes of hydraulic fracturing are highlighted here.¹³ In the United States, Congress enacts an environmental law and typically delegates rulemaking authority under that law to a federal agency like the United States Environmental Protection Agency (EPA). But an agency like the EPA can sometimes delegate oversight for implementing the federal law and regulations to the states. If the EPA determines that a state's regulatory program meets the standards of the federal law, then responsibility for the program may be delegated to the state.

The Clean Water Act and the Clean Air Act are frequently delegated to states. The Clean Water Act regulates discharges into surface water and groundwater, requiring a permit from either the federal government or the state to discharge into surface waters.¹⁴ Wetlands are also regulated under the Clean Water Act. The Clean Air Act regulates releases into the air.¹⁵ With respect to fracking, the Clean Air Act regulates pollutants from surface equipment, materials pumped into the well, and from the produced gases and liquids. Where authority to implement the law is not delegated, the federal government retains primary authority over implementation and enforcement of the law.

The Underground Injection Control Program of the Safe Drinking Water Act requires a permit for injection wells, including those associated with oil and gas production.¹⁶ However, like many other laws, the injection law

⁶ J.F. Kenney, et al., *Estimated Use of Water in the United States in 2005*. US Geological Survey Circular 1344 (2009).

⁷ Darah et al., Noble gases identify the mechanisms of fugitive gas contamination in drinking-water wells overlying the Marcellus and Barnett Shales, Proceedings of the National Academy of Sciences (2014), available at http://sites.biology.duke.edu/jackson/pnas2014a.pdf.

⁸ Krupnick et al., Pathways to Dialogue: What the Experts Say about the Environmental Risks of Shale Gas Development (Feb. 2013), available at http://www.rff.org/Documents/RFF-RptPathwaystoDialogue_FullReport. pdf; Kiparsky et al., Regulation of Hydraulic Fracturing in California: A Wastewater and Water Quality Perspective (Apr. 2013), available at http:// www.law.berkeley.edu/files/ccelp/Wheeler_HydraulicFracturing_April 2013(1).pdf.

⁹ Schneising et al., 'Remote sensing of fugitive methane emissions from oil and gas production in North American tight geologic formations', *Earth's Future* (Oct. 2014), *available at* http://onlinelibrary.wiley.com/doi/10. 1002/2014EF000265/abstract.

^{10 &#}x27;Some Blame Hydraulic Fracturing for Earthquake Epidemic', New York Times (Dec. 13, 2011), available at http://www.nytimes.com/2011/12/13/ science/some-blame-hydraulic-fracturing-for-earthquake-epidemic.html? pagewanted=all; http://www.sciencemag.org/content/345/6195/448. abstract; 'Ohio Confirms Probable Connection Between Fracking and Earthquakes', Salon (April 4, 2014), available at http://www.salon.com/ 2014/04/11/ohio_confirms_probable_connection_between_fracking_ and_earthquakes/.

 ^{&#}x27;Fracking Caused Ohio Earthquakes', Live Science, available at http:// www.livescience.com/48294-fracking-caused-ohio-earthquakes.html.

¹² For a version of the proposed rules, see http://www.rcc.state.tx.us/ media/22606/prop-amend-3-9and3-46-seismic-activity-sig-august2014. pdf.

¹³ For additional information on United States Environmental regulation, see Eugene Smary and Scott Watson (n 1).

^{14 33} U.S.C. § 1251 et seq.

^{15 42} U.S.C. § 7401 et seq.

^{16 42} U.S.C. § 300f.

has exemptions for the oil and gas industry. For example, the injection law exempts fracking fluids or propping agents other than diesel fuel from permitting requirements.¹⁷ Other federal laws exempt drilling fluids, produced water, and other wastes from federal oversight.¹⁸ Other potentially relevant federal laws include the Oil Pollution Control Act,¹⁹ the Toxic Substance Control Act,²⁰ and the Endangered Species Act.²¹

2. State Regulation

State regulation varies. Some states have general regulations related to "mineral development", including oil and gas, prior to the recent wave of hydraulic fracturing projects. Those states regulate mineral development, drilling, injection, and most of the other activities associated with fracking. In other states, fracking has been the new regulatory driver and state environmental agencies have tailored regulations to fracking, requiring permits, well construction requirements, and chemical disclosures. One state thus far, Vermont, has completely banned fracking.²² Other states, such as New York, have imposed moratoria.²³

Some states have wastewater recycling programs, particularly those states that are not as water-rich as others. Pennsylvania reuses a large percentage of produced water for beneficial uses such as deicing roads or dust control.

Interstate compact commissions such as the Delaware River Basin Commission are a hybrid federal-state agency. For example, the Delaware River Basin Commission manages water resources in the Delaware River basin in Pennsylvania, New York, and New Jersey.²⁴ Interstate commissions can initiate special rules for natural gas drilling, require permits for gas extraction, and can also prohibit any drilling within their jurisdiction.

Local Regulation 3.

Regulation of fracking by local units of government, such as municipalities and townships, comes in the form of zoning ordinances prohibiting or allowing certain activities such as property setbacks, as well as noise, light, odor, and traffic regulation. The central issue with local regulation is whether it is preempted by state regulation. West Virginia and Colorado courts have recently ruled that local bans on fracking activities were in conflict with state interests in efficient development of oil and gas, the prevention of waste, and protection of property owners' rights.²⁵ By

21 7 U.S.C. § 136 et seq.; 16 U.S.C. § 1531 et seq.

contrast, New York's highest court recently ruled that a local law banning oil and gas mining was not preempted by a state regulation stating that it superseded all local laws relating to oil and gas mining. The court reasoned that the legislative history of the statute did not support preempting the local enactment.²⁶ As discussed previously, Pennsylvania enacted a law to restrict local authorities from regulating oil and gas operations.²⁷ The Pennsylvania Supreme Court ultimately declared portions of the law restricting local regulation unconstitutional, based on constitutional guarantees of local self-governance and environmental protection.²⁸

During the United States' 2014 November elections, there were several ballot initiatives to ban fracking.²⁹ Bans were passed in towns in California, Ohio, and Texas.³⁰ Not surprisingly, lawsuits quickly followed.³¹

VI. Litigation

Litigation involving fracking can arise in many ways, and can be loosely categorized as follows: mineral ownership, neighboring owner, surface owner, government, well operator lawsuits, challenges to government agency decisions, third party citizen suits for nuisance type claims, and even free speech claims. A sampling of the types of litigation arising within these categories follows.

Mineral ownership lawsuits typically involve a question about who owns the gas and what duties a mineral owner has to the surface owner where the estate is split. Ten states have enacted surface damage statutes to protect surface owners.³² The statutes generally have notice, negotiation, and bonding requirements.

Neighboring owners' lawsuits might arise where fracking on adjacent land makes it possible for gas to flow/drain from an area beneath another person's property or neighboring mineral lease holder's play. In Coastal Oil & Gas Corp. v. Garza Energy Trust, the Texas Supreme Court declined to decide whether such a situation would give rise to an action for trespass.³³ Instead, the court held that the rule of capture prevented a trespass claim from arising.

In addition to breach of contract or fraud claims against a mineral rights owner, surface owners' claims may be based on theories of negligence, trespass or nuisance, and might allege water, soil or air contamination. Water

33 268 S.W.3d | (Tex. 2008).

^{17 42} U.S.C. § 15801 et seq.

¹⁸ See EPA Guidance at http://www.epa.gov/osw/nonhaz/industrial/special/ oil/oil-gas.pdf.

^{19 33} U.S.C. § 2701 et seq. 20 15 U.S.C. § 2601 et seq.

²² For a copy of the legislation, see http://www.leg.state.vt.us/docs/2012/ Acts/ACT152.pdf.

^{23 &#}x27;New York Assembly Approves Fracking Moratorium', New York Times (Nov. 30, 2010), available at http://green.blogs.nytimes.com/2010/11/30/ n-y-assembly-approves-fracking-moratorium/?scp=1&sq=approves%20 fracking%20moratorium&st=Search.

²⁴ For more information on the Compact, see http://www.state.nj.us/drbc/.

²⁵ Northeast Natural Energy LLC v. The City of Morgantown, Case No. 11-C-

^{411 (}Monongalia Co., West Virginia Dist. Ct. 2011); Colorado Oil and Gas Association v. City of Longmont, No. 13CV63 (Colo. Dist. Ct. July 24, 2014).

²⁶ Wallach v Town of Dryden, 16 N.E.3d 1188 (N.Y. Ct. App. 2014).

²⁷ Robinson Township v. Pennsylvania (n 2).

²⁸ Id.

^{29 &#}x27;On Election Day, Fracking is on the Ballot', Newsweek (Nov. 4, 2014), available at http://www.newsweek.com/election-day-fracking-ballot-282161.

^{30 &#}x27;Fracking Bans Pass in California, Ohio, Texas Towns', Daily Caller (Nov. 5, 2014), available at http://dailycaller.com/2014/11/05/fracking-bans-passin-california-ohio-texas-towns/; 'Voters in Texas Approve Ban on Fracking', NPR (Nov. 5, 2014), available at http://www.npr.org/blogs/the two-way/2014/11/05/361732151/voters-in-texas-city-approve-ban-onfracking.

^{31 &#}x27;Split Decision by Voters on Local Fracking Bans', New York Times (Nov. 6, 2014) (discussing lawsuits in Texas), available at http://www.nytimes.com/ 2014/11/06/business/energy-environment/split-decision-by-voters-onlocal-fracking-bans-.html?_r=0.

³² For a collection of states with such legislation, see http://www.earth worksaction.org/issues/detail/suface_owner_protection_legislation# STATELAWS

contamination claims might arise because the water has changed color, tastes bad, smells bad, becomes flammable or contains chemicals. Soil contamination claims might arise from surface spills or improper disposal of waste water. Air contamination claims might be based on fumes from diesel engines or releases of particulate matter from the fracking process. In *Parr v. Aruba Petroleum Inc.*, the Parr family alleged air pollution from wells within two miles of their home (although none of the wells was on their land) caused them to be physically ill.³⁴ A jury awarded the Parr family US\$2.9 million for their claim, including US\$275,000 for loss of value to their land, US\$2 million for past pain and suffering, US\$250,000 for future pain and suffering, and US\$400,000 for mental anguish.³⁵

Governmental entities can also file suit against oil and gas companies. For example, in *Town of Dish v.Atmos Energy Corp*, the town sued oil and gas companies on theories of trespass (from air particles) and private and public nuisance (for emissions of noise and light from compressor stations).³⁶ Similarly, the federal Environmental Protection Agency (EPA) brought suit against an oil and gas developer alleging that the developer was supposed to conduct water surveys of the wells within 3000 feet of drilling, but failed to do so, and EPA found contamination in the wells.³⁷ The company claimed it was not responsible for the contamination and requested a hearing, EPA ultimately voluntarily dismissed the suit.³⁸

People on both sides of the fracking debate bring suits challenging agency actions related to regulating fracking. For example, in Center for Biological Diversity v. BLM, the Center for Biological Diversity challenged the Bureau of Land Management's (BLM) determination that there were would no significant environmental impacts in an area leased by BLM for oil and gas development.³⁹ The court agreed that BLM's analysis was inadequate because it did not account for the possibility that hydraulic fracturing might occur within the leased area and the potential impacts of that process.⁴⁰ A similar suit was brought in Michigan against the Michigan Department of Natural Resources (DNR) which had leased land for oil and gas development. The challengers alleged that DNR did not consider the potential impacts of fracking on the land and natural resources. The court dismissed the case because the issued leases had been classified as nondevelopmental and could not be reclassified as developmental without further administrative oversight and public input.⁴¹

The fracking debate has even given rise to a free speech claim. In *Natural Resources Defense Council v.Town of Sanford*, the Town of Sanford's town board adopted a resolution barring any discussion of natural gas development and fracking during the public participation portion of town meetings.⁴² The Natural Resources Defense Council filed a lawsuit claiming the policy violated the free speech clause of the United States Constitution. The town ultimately rescinded the policy.

Conclusion

One overall theme to keep in mind is that the evolution of environmental law and policy, as well as energy law and policy, in the United States has been intensely political – some would even say ideological – in its foundation. It is often difficult to rise above the various political "movements" that seem to buffet the argument on all sides of the issues. This article attempts to do that, although there will obviously be certain inherent biases that color perceptions.

Hopefully this brief overview has provided a basic understanding of recent legal developments in the United States concerning hydraulic fracturing. It is a constantly evolving mosaic. Nearly every day there is another development that is of interest to those following the issues. Some of the resources identified at the end of this article can provide more context and analysis; other resources offer updates on the issues as they unfold.

Selected Resources

- American Petroleum Institute, Hydraulic Fracturing Operations – Well Construction and Identity Guidelines (1st ed. Oct. 2009).
- Arnold and Porter Hydraulic Fracturing Litigation Case Collection, *available at* http://www.arnoldporter.com/ resources/documents/Hydraulic%20Fracturing%20 Case%20Chart.pdf (last updated Nov. 12, 2014).
- Beyond the Fracking Wars: A Guide for Lawyers, Public Officials, Planners, and Citizens, American Bar Association (Levine Powers and Kinne, eds., 2014).
- Brian J. Preston, 'Unconventional Natural Gas in the Courts: An Overview', 42 *Journal of Energy & Natural Resources Law* 377–424 (November 2014).
- Fred Breedlove, Bureau of Land Management's Proposed Fracking Rule Update Impacts Indian Lands in Native American Resources Newsletter, American Bar Association, Section of Environment, Energy, and Resources (May 2014).
- Government Accountability Office, Information on the Quantity, Quality, and Management of Water Produced During Oil and Gas Production (Jan. 2012).
- International Developments Surrounding the Regulation of Shale Gas Extraction, EHS Strategies, Bloomberg BNA (December 2013).

³⁴ Parr v. Aruba Petroleum Inc., Docket No. CC-11-01650-E (Dallas Co. Ct., Texas, April 2014).

³⁵ See Arnold & Porter Hydraulic Fracturing Case Chart for more information on civil tort claims (and all other types of claims) in the context of hydraulic fracturing, available at http://www.arnoldporter.com/ resources/documents/Hydraulic%20Fracturing%20Case%20Chart.pdf.

³⁶ Town of Dish v. Atmos Energy Corp, No. 2011-40097-362 (Tex. Dist. Ct. Feb. 28, 2011).

³⁷ United States v. Range Prod. Co., 793 F. Supp. 2d 814 (N.D. Tex. 2011).

³⁸ http://www.environmentalandenergylawbrief.com/hydraulic-fracturing/ supreme-courts-sackett-opinion-prompts-epa-to-drop-case-againstrange-resources/.

^{39 937} F. Supp. 2d 1140 (N.D. Cal. 2013).

⁴⁰ Id.

Michigan Land Air Water Defense v. Michigan DNR, No. 12-507-CE (Barry Co. Circ. Ct., Aug. 13, 2013).

⁴² Natural Resources Defense Council v. Town of Sanford, No. 3:13-CV-163 (N.D.N.Y. 2013), available at http://www.arnoldporter.com/resources/ documents/NRDC%20v%20Town%20of%20Sanford.pdf.

- Interstate Oil and Gas Compact Commission (IOGCC), available at http://iogcc.publishpath.com/ hydraulic-Fracturing.
- Krupnick et al., Pathways to Dialogue: What the Experts Say about the Environmental Risks of Shale Gas Development, Resources for the Future (Feb. 2013).
- Kiparsky et al., Regulation of Hydraulic Fracturing in California: A Wastewater and Water Quality Perspective (Apr. 2013).
- LeRoy C. Paddock and Jessica Anne Wentz, Emerging Regulatory Frameworks for Hydraulic Fracturing and Shale Gas Development in the United States, in The Law of Energy Underground: Understanding New Developments

in Subsurface production, Transmission, and Storage (Zillman et al., eds., 2014).

- Michael N. Mills and Robin B. Seifried, What is Fracking Wastewater and How Should We Manage It? American Bar Association, Natural Resources & Environment, Section of Environment, Energy, & Resources (vol. 28, no. 3, Winter 2014).
- The Law of Energy Underground: Understanding New Developments in Subsurface Production, Transmission, and Storage, Oxford University Press (Zillman, et al., eds., 2014).
- Thomas E. Kurth et al., American Law and Jurisprudence on Fracking, 58 Rocky Mt. Min. L. Inst. 4-1 (2012).
Balancing nature and renewable energy

Professor Colin T Reid School of Law, University of Dundee

Once upon a time, life was simple in the environmental world. On the one side there was nasty, dirty industry, destroying nature and spewing into our air and waters pollution that was instantly visible and offensive to all our senses. On the other side was the green and beautiful countryside, to be preserved and left on its own to flourish. The Goodies and the Baddies were easy to identify. Now things are more complex. Not only does the law rely on scientific definitions and equations that defy ready comprehension,¹ but the Goodies and Baddies are less clear. Expanding renewable energy production is an environmentally desirable goal to pursue - until it threatens biodiversity. Renewable energy can help to save us from the worst extremes of climate change, but hydro dams can drown whole landscapes, wind turbines can kill birds and marine operations can disturb whales and other species. What is the environmentally correct choice in these 'green on green' conflicts? Who are the Goodies now?

These conflicts between different environmental objectives not only create difficult challenges for decision-makers – and sometimes odd alliances among those campaigning for or against particular developments – but also lead to tensions in the law.² Both the conservation of nature and the development of renewable energy generation are clear policy goals embodied in increasingly strong legal measures and the resolution of the conflicts that emerge is not easy. This article aims to explore some of the issues that arise in this context.

The biodiversity goal is well known in EU and domestic law. In particular, the Habitats (92/43/EEC) and Birds (2009/147/EC) Directives set out clear rules for the protection of nature, aiming to ensure the conservation both of the Natura network of special protection areas (SPAs) and special areas of conservation (SACs) and of a wide range of species. The objective of developing renewables can be illustrated by considering the Renewable Energy Directive (2009/28/EC). This sets a target for the share of energy from renewable sources that is used in each Member State of the EU by 2020. For the UK the target figure is 15 per cent of the energy used.³ In considering this it is important to realise that the target is set for energy, not just electricity, and the key definition is: 'gross final consumption of energy' means the energy commodities delivered for energy purposes to industry, transport, households, services including public services, agriculture, forestry and fisheries, including the consumption of electricity and heat by the energy branch for electricity and heat production and including losses of electricity and heat in distribution and transmission.⁴

The target figure is thus based not on the generation of electricity from renewable sources, where the UK is already achieving a figure of almost 15 per cent,⁵ but on all uses of energy, including for heating and transport, which sets a much more demanding challenge. The need to expand further renewable energy generation is thus clear.

Impact of renewable sources

All sources of renewable energy create at least the potential for adverse impacts on biodiversity,⁶ and a broad outline was conveniently presented in a paper produced by BirdLife International in 2011.⁷ Some technologies are likely to have little impact, eg rooftop solar installations,⁸ but others may have significant effects. In many cases, careful siting, good design and proper operation can greatly reduce the risks of harm,⁹ whilst the indirect impacts vary hugely depending on the details of particular schemes.

Wind: All wind turbines can disrupt the flight paths of flying animals (birds, bats and insects), displace them from foraging areas and create a risk of collisions with blades. Onshore wind farms require significant groundworks and roads that may disturb fragile habitats in remote areas and disrupt drainage patterns, whilst offshore ones create an artificial intrusion into the ocean, which (based on experience of oil platforms) will have varying effects of different species.

Hydro: The construction of a hydro-power dam and consequent flooding of the landscape obviously has a dramatic effect on the environment as well as on the wild-life that relies on the flowing river and the ability to move up- and down-stream for breeding etc. Even schemes that

I See, for example, the equations in Annex II of the Renewable Energy Directive (2009/28/EC) for accounting for electricity produced by hydro and wind generation.

² A Pillai, CT Reid and A R Black 'Reconciling renewable energy and the local impacts of hydro-electric development' (2005) 7 Env LR 110; L Warren 'Habitats, birds, renewables and tidal power – energy versus species' (2010) 22 ELM 233.

³ Within this, a separate target of 10% is set for transport; Directive 2009/28/EC, art 3 and Annex I.

⁴ ibid art 2(f).

⁵ Department of Energy & Climate Change/National Office of Statistics *UK Energy in Brief* (July 2014) 30, giving figures for 2013.

⁶ The following examples do not take account of the effects of manufacturing the equipment required nor of extracting and processing the raw materials concerned in such manufacture.

⁷ BirdLife Europe (I Scrase and B Gove eds) Meeting Europe's Renewable Energy Targets in Harmony with Nature (RSPB 2011).

⁸ Although even those might displace those birds such as oystercatchers that sometimes nest on urban flat roofs.

⁹ See for example Wind Farms and Birds: An Updated Analysis of the Effects of Wind Farms on Birds, and Best Practice Guidance on Integrated Planning and Impact Assessment (Council of Europe T-PVS/Inf 2013) 15.

rely more on the natural flow of the river will create obstacles and disrupt natural flows of sediments and species.

Tidal: Schemes based on tidal flows, with underwater turbines, pose the same threats to marine creatures as wind turbines do to aerial ones, whilst the controversy over various proposals for a Severn Barrage has shown the massive impacts of such schemes in altering, if not destroying, the rich inter-tidal habitats which are used by many species.

Wave: Wave energy installations again create obstacles in the sea and the risks of collision and entanglement, whilst the increase in marine traffic for any offshore technology risks pollution, collisions and the spread of non-native species.

Solar: The fear of aquatic birds mistaking large solar arrays for bodies of water appears largely unfounded (although insects that lay eggs in water have been found depositing eggs on arrays), so that the major impact will be habitat change, which may be positive or negative for biodiversity, depending on what was there before and how a site is managed.

Biomass: Although the transport of bulk materials and emissions will always be issues, the impact of biomass depends largely on the source of the feedstock materials. Cutting down first-growth forests, digging large areas of peat or converting undeveloped habitat to intensive cultivation to feed biomass boilers would obviously have very serious consequences for biodiversity, whereas using materials that are otherwise waste or are sustainably produced in an ecologically responsible way may be much more benign.

Biofuels: The same applies to biofuels, with the potential for serious impacts if these are produced from crops grown unsustainably and in ecologically damaging ways or locations, with the risk of valuable habitats being destroyed by land being brought into intensive production.

Biogas (eg landfill, sewage): To the extent that such schemes are simply capturing what would otherwise be atmospheric emissions from existing plants, the impact is positive, but the financial value of such emissions may hinder the development of more sustainable options for reducing or redirecting waste.

Whatever technology is used, there will be added environmental disruption during the *construction* phase. For example, there is major concern over the impact on many species, including cetaceans, of the noise made by piling operations for offshore installations and a major loss of freshwater pearl mussels (leading to a fine of £11,000 for the contractors) which occurred as a result of construction works for a hydro scheme on the River Lyon in 2013.¹⁰ The *operational* phase is likely to involve traffic and continuing disturbance, whilst *decommissioning* again is likely to create a surge in disturbance from the activity, as well as the problems of restoring the environment.

Electricity *transmission* is also a concern, with the effect of construction works, birds hitting power lines and the little explored impacts on fish, especially sharks, sensitive to the electrical currents created by undersea lines.

In all of this, however, there are considerable uncertainties. Even onshore, where these things can be studied with relative ease, we do not have a full understanding of the distribution and movement of species, the interactions between them and how they will react to disturbance.¹¹ Offshore, where so much of the emphasis is today, we often have very little idea of even the basic data of where species gather and move when out of sight of land.¹² We are not sure how physical objects, noise, vibration and electrical currents will affect marine species, nor the effectiveness of any proposed mitigation measures. On top of that, what little we do know may be undermined by the effects of climate change, already apparent in the seas surrounding us. Important and long-term decisions are therefore having to be taken in the face of considerable uncertainty.

This litany makes the picture look bleak for renewable energy if biodiversity concerns are to be taken seriously. Yet it must be remembered that all technologies have the potential to have negative impacts for biodiversity. The landscape scars of open-cast coal mines, the devastated shorelines from wrecked oil tankers, the cumulative emissions from 'clean' gas-powered plants and the impact of shipping and storage facilities for hydrocarbon fuels are none the less substantial and potentially devastating for being all the more familiar. Indeed, every building poses some risks to birds that may be more likely to fly into windows and struts than into turbine blades, and our society is full of other risks as well.¹³ A sense of proportion must be maintained in considering the negative aspects of renewable technologies and the comparative impacts of different options assessed.¹⁴

Decision-making

Despite the policy drive to develop renewable energy, conservation concerns are not being completely squeezed out and can indeed be the decisive factor in decision-making. In the past this was not the case. Looking at the proposals for hydro-electric schemes in Scotland in the middle of the last century it is clear that concern for nature was not a significant consideration. Other than a brief mention of landscape, the only element of nature given any attention

¹⁰ See http://www.copfs.gov.uk/media-site/media-releases/95-environmentalcriminals-fined-15-000-for-major-water-pollution.

¹¹ Projects such as the Scottish Wind Farm Steering Group are trying to fill the gaps in our knowledge; see http://www.swbsg.org/.

¹² For example it is only in the last few years that tracking projects have begun to reveal where the basking sharks seen in summer off the west coast of Scotland spend the rest of the year; see http://www.snh.gov.uk/ about-scotlands-nature/species/fish/sea-fish/shark-tagging-project/.

¹³ Hence the 'cap-and-trade' scheme proposed on 1 April 2013, whereby turbine operators could offset the likely bird deaths resulting from their turbine by 'surrendering' a number of domestic cats, which are also responsible for a large number of bird deaths. See http://www.rstreet.org/ news-release/r-street-proposes-cat-and-trade-offset-system-for-windpower/.

¹⁴ See the very last sentence of this article.

was salmon and then only from the perspective of private fishing rights, rather than biodiversity.¹⁵ This has now changed, influenced by the need for environmental impact assessment and the effect of EU conservation law. In 2004 a hydro scheme at Shieldaig was refused because of the impact on pearl mussels and black-throated divers.¹⁶ In 2008 a huge wind farm on Lewis was refused permission because of its impact on Natura sites.¹⁷ Earlier in 2014, plans for offshore wind generation at the Argyll/Tiree Array were put on hold in part because of concerns over the effect on basking sharks and diving birds.¹⁸ Conservation does sometimes win.

The place of the law in setting the framework for such decisions rests largely on three measures which are derived from EU law, Environmental Impact Assessment (EIA), based originally on Directive 85/337/EEC,¹⁹ and the Habitats and Birds Directives. A further consideration worthy of note is the role of wildlife crime offences, especially since one aspect of this is currently exercising the Law Commission in England and Wales.

In considering the legal approach, note must be taken of the prevailing judicial attitude in such matters. This is very much to leave matters as far as possible in the hands of the bodies formally vested with responsibility for taking decisions and assessing the consequences of proposals for nature. This is typified in R (Morge) v Hampshire County Council,²⁰ where the Supreme Court expressed the view that where Natural England, the body with primary responsibility for ensuring compliance with the Directives, has expressed itself satisfied that a proposed development will be compliant, then others are entitled to presume that that is so.²¹ Similar judicial reliance on the conclusions of the statutory conservation body or the decision-making body, once satisfied that it has asked itself the right question and addressed the relevant issues, is shown in a series of other cases.²² Where a contrary view is taken, such as at first instance in the Sustainable Shetland case discussed later, it is not because the court takes a different view after a detailed examination of the contentions, but because it is not able 'to identify any meaningful engagement by the respondents' with the relevant provisions in the law.²³ It must be remembered, however, that the obligations under EU law are not as procedurally-focused as the traditional approach to judicial review. The Birds and Habitats

21 ibid (Lord Brown) at [30].

Directives are concerned with outcomes, not simply processes. The obligations are not only to consider various factors, but to achieve certain results in terms of the conservation of sites and species. It is not enough that the decision-maker looked at all the relevant considerations, the acceptable outcome must be delivered, and the tension between these two approaches is a factor in much of the litigation.

Legal requirements

The requirement to carry out an EIA is fundamental to taking account of biodiversity issues, ensuring that these cannot be overlooked in the way that they were for the older schemes. This is emphasised in the text of the revised Directive, recently approved, which elevates biodiversity to a separate factor to be considered in the assessment, as opposed to being in the general category of 'human beings, fauna and flora'.²⁴ Energy projects fall within the categories of project requiring an EIA under Annex II of the Directive and any substantial works will meet the test of being 'likely to have significant effects of the environment'. This brings into play all the standard procedures and requirements, which can offer fertile ground for dispute over screening, mitigating measures etc. At the policy level, strategic environmental assessment (SEA) will also be necessary,²⁵ and the requirements of the Aarhus Convention must also be borne in mind. The UK has been criticised by the Aarhus Compliance Committee for inadequate public consultation on the National Renewable Energy Action Plan.²⁶

If a Natura site is to be affected, whether a SPA under the Birds Directive or a SAC under the Habitats Directive, then an 'appropriate assessment' must be carried out to identify the likely impact on the site.²⁷ Projects should only proceed if they are not likely to 'affect the integrity of the site', a conclusion to be reached on the basis of a precautionary approach.²⁸ The detailed rules here continue to generate considerable case law. A recent High Court decision in England has taken a narrow approach to the objectives of protecting sites. In *RSPB v Secretary of State for Environment, Food and Rural Affairs*,²⁹ Mitting J determined that the focus of decisions must be the effect solely on the integrity of the site, not the wider conservation objectives that lie behind the designation. In Luxembourg the European Court has given more emphasis to conservation,

- 25 Under Directive 2001/42/EC.
- 26 Case ACCC/C/2012/68; C T Reid 'Aarhus complaint partly successful' (2013) 160 Scottish Planning and Environmental Law 126.
- 27 Directive 92/43/EEC art 6(3).
- 28 Case C–127/02 Landelijke Vereniging tot Behoud van de Waddenzee, Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij [2004] ECR I–7405.
- 29 [2014] EWHC 1645.

¹⁵ C T Reid 'Things were simpler then: environmental controls on early hydro-electric dams in Scotland' (2002) 13 Water Law 382; C T Reid, A Pillai and A R Black 'The emergence of environmental concerns: hydroelectric Schemes in Scotland' (2005) 17 JEL 361, 373–75.

¹⁶ Pillai and others (n 2).

¹⁷ See http://www.scotland.gov.uk/News/Releases/2008/04/21102611.

¹⁸ See http://www.scottishpowerrenewables.com/pages/argyll_array.asp.

Now Directive 2011/92/EU, recently amended by Directive 2014/52/EU (revised rules to be implemented by May 2017).

^{20 [2011]} UKSC 2.

²² Recent examples include R (Corbett) v Cornwall Council [2013] EWHC 3958; R (Kavanagh) v Carmarthenshire [2013] EWHC 4650; R (Prideaux) v Buckinghamshire County Council [2013] EWHC 1054, Bagmoor Wind Ltd v Scottish Ministers [2012] CSIH 93.

²³ Sustainable Shetland v Scottish Ministers [2013] CSOH 158 at [290]. In the Inner House the court was satisfied that there had been sufficient consideration of the issue: see [2014] CSIH 60.

²⁴ Article 3(1)(a) of Directive 2011/92/EU; art 3(1) of the EIA Directive as amended by Directive 2014/52/EU (to be implemented by 16 May 2017) reads: 'The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors: ... (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC'.

noting in *Sweetman* the need to be alert to the risk of the cumulative effect of minor incursions and seeking to prevent 'death by a thousand cuts'.³⁰ More recently in *Briels* it has noted the distinction between measures genuinely aimed at limiting the impact on the integrity of a site and those which seek to compensate for harm done. Only the former can be relevant in determining whether the integrity of a site is being affected and there is a need to ensure that taking 'compensatory' measures is not used to claim the absence of an overall adverse impact and thus as a means of by-passing the strict tests in Article 6 of the Directive for when damaging projects can nevertheless be approved.³¹

Even if there is an adverse effect on a Natura site, a project may proceed, but only if there is no alternative solution, there are imperative reasons of overriding public interest to justify the project and compensating measures are taken.³² These tests may be met for some renewable energy projects, but providing the compensating habitat may be difficult and expensive, as shown by the litigation involved in acquiring land to provide inter-tidal habitats to compensate for those lost by the establishment of the Cardiff Bay barrage.³³ In practice, therefore, developers are likely to avoid Natura sites for all but exceptional projects, although given that matters are still developing in the offshore environment, in terms of the designation of sites, the understanding of impacts and the effectiveness of any mitigation and compensation measures, there is more to be learned in handling such sites at sea.

The species provisions of the Habitats Directive also come into play, eg in relation to bats and wind turbines, and otters and hydro projects, with the potential for many species to be affected by construction works in undeveloped areas.³⁴ Again, the marine environment is likely to throw up significant challenges and potentially disputes, with the protected species (including all cetaceans) ranging over wide areas and being susceptible (to an unknown degree) to disturbance by noise and other intrusions into the sea, during construction and operational phases. Licences authorising disturbance can be issued,³⁵ but only so long as the actions will not be detrimental to maintenance of the population at favourable conservation status. The fairly broad licensing criteria here are a contrast to the narrower grounds available under the Birds Directive.

SPAs under the Birds Directive are, of course, governed by the rules in the Habitats Directive but other provisions also come into play. Some of these were discussed recently in *Sustainable Shetland v Scottish Ministers*.³⁶ This has proved a controversial case because of Lady Clark's decision that the developer/operator must have a generating licence under the Electricity Act 1989 before being eligible for consent under the Act to build and install new generating equipment. This threw the renewables industry into some disarray since it did not match the way in which responsibilities and legal formalities have been divided between developers and operators, potentially rendering invalid many recent and pending consents. A contrary legal view was expressed in another Outer House case³⁷ and subsequently confirmed by the Inner House when it upheld the appeal against the first instance decision in *Sustainable Shetland*.³⁸

The case, however, is also significant because of what is said about the Birds Directive. The proposed wind farm in question, the Viking scheme on mainland Shetland, would have an effect on the local population of whimbrel,³⁹ which is a rare and declining species in the UK (even though fairly abundant elsewhere). At first instance, Lady Clark concluded that the decision-makers had paid insufficient attention to Article 2 of the Directive:

Member States shall take the requisite measures to maintain the population of the species referred to in Article I at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or to adapt the population of these species to that level.

This, it was held, imposes a legal obligation, not merely an aspiration, with regard to population levels.⁴⁰ There is room for the Member State to determine how this is to be achieved, but the obligation is there to maintain sufficient numbers of the species concerned to be capable of survival and reproduction. Economic factors may have a role in determining the specific measures to be adopted, but cannot be used to circumvent the core obligation to achieve this result, an obligation that was a never properly taken into account in this case by those determining the application. Lady Clark's approach can be contrasted with that of Mitting | in RSPB v Secretary of State for Environment, Food and Rural Affairs,⁴¹ where he dismissed an argument based on this obligation of this 'obscure' provision, saying that: '[Article 2] stipulates a level of population ... without making it possible to discern what that level should be'.

On appeal, in *Sustainable Shetland*, a rather different approach was taken. The Inner House accepted that the Birds Directive may present 'certain difficulties in its interpretation and application' but held that the fundamental question that affected the legality of the Ministers' decision to approve the project was whether it was 'likely to have a materially adverse effect on one or other of the wild bird populations that the Directive is intended to protect'.⁴² There was ample evidence to support the Ministers' conclusion that there was no such effect here and that the

- 39 Numenius phaeopus, similar to the curlew.
- 40 [2013] CSOH 158 at [265].
- 41 [2014] EWHC 1645 at [8].
- 42 [2014] CSIH 60 at [27].

³⁰ Case C–258/11 Sweetman v An Bord Pleanála CJEU (11 April 2014); the phrase is used by Advocate General Sharpston at [67] and [74].

Case C-521/12 Briels v Minister van Infrastructuur en Milieu CJEU (15 May 2014).

³² Directive 92/43/EEC art 6(4).

³³ For example Waters v Welsh Development Agency [2004] UKHL 19.

³⁴ Directive 92/43/EEC arts 12-16.

³⁵ ibid art 16.

^{36 [2013]} CSOH 158.

³⁷ Trump International Golf Club Scotland Ltd v Scottish Ministers [2014] CSOH 22.

^{38 [2014]} CSIH 60.

Directive had been considered and therefore there was substantive compliance with the duties under EU law. There was no need for a thorough preamble considering the precise nature of those duties and setting out every step of the Ministers' reasoning, and Lady Clark had been wrong to focus on that rather than the essentially factual question the Ministers had to answer:

These decisions leave us rather unclear on where we stand in relation to the general obligations under the Birds Directive and future discussion in court can be expected. Where activities interfering with birds are to be taken, it must be remembered that the grounds for a licence under the Birds Directive⁴³ are narrower than those under the Habitats Directive and do not include a general category of overriding public interest which can potentially be used in relation to renewable projects for European protected species under the latter Directive.⁴⁴

Wildlife crime

A further legal issue comes into play in relation to possible criminal liability. EU law prohibits the 'deliberate' killing of protected birds and animals⁴⁵ and, in *Commission v Spain*,⁴⁶ it was held that this covers not just those who act 'intentionally' but also covers those who 'accept the possibility of such killing' in their actions. To an English lawyer this will sound like the test for recklessness in criminal law, based on a person who knowingly takes a risk of harm being caused,⁴⁷ so that it would appear not only desirable but necessary to extend the current criminal offence from simply intentionally killing birds⁴⁸ to include reckless acts as well. Yet if this is strictly applied there is a potential liability for the operator of a wind turbine. If the assessment before it is built identifies a risk of the turbine causing collisions that kill protected birds, but its construction is approved and the operators proceed to operate the turbine and fatalities occur, then the operators appear to be meeting the test for recklessness and thus would be committing an offence - carrying on even though they are aware of a risk of the relevant harm being caused. Is the turbine operator in these circumstances a criminal? This argument has been raised in the Court of Appeal where it was said that there was 'no realistic prospect' of conviction in such circumstances,⁴⁹ but it has considerably exercised the Law

Commission in its review of wildlife crime south of the border. We are awaiting the Law Commission's formal proposals, although it has already suggested that there should be a special provision to qualify the breadth of recklessness to exclude the possibility of liability in such cases.⁵⁰

In Scotland the relevant offences already include reckless killing,⁵¹ but recklessness is usually defined in a more objective way, often described as taking an 'unacceptable' risk, one 'which the reasonable person would not have taken'.⁵² How this might apply in these circumstances has not been explored, but if the 'unreasonable' element is given weight, then it may be that an operator working fully within the terms of a valid consent issued after proper completion of the proper procedure is not doing something that is unreasonable, even though some bird deaths are foreseen. If this interpretation is followed, then, for once, the objective view of recklessness may actually be narrower (and some would say fairer) than the subjective one.

Conclusion

In thinking about securing the future of biodiversity, the underlying propositions here are straightforward. First, climate change will be harmful to biodiversity and therefore we need a big push to develop renewable energy. Secondly, however, renewable energy projects can be harmful to biodiversity, and harmful development should be prevented. Good design, siting and operation can limit the harm caused and therefore help to reconcile these conflicting goals, although difficult questions remain. How far should we sacrifice some biodiversity today to create the chance for there to be some future for nature in the decades to come? Stopping renewable energy projects in order to preserve hill-tops for the mountain hare and the ptarmigan is pointless if changing climate means an end to snowy winters and the conditions they need to thrive. But if climate gains can be won only at the expense of devastating our biodiversity, that too seems pointless. The real tragedy, perhaps, is that we are being forced into making such difficult choices when so little is being done to achieve the blindingly obvious alternative of achieving greater efficiency and reduced demand for energy.

⁴³ Directive 2009/147/EC art 9.

⁴⁴ Directive 92/43/EEC art 16(1)(c).

⁴⁵ Directive 92/43/EEC art 12 and Directive 2009/147/EC art 5.

^{46 [2006]} ECR I-4515 at [71].

⁴⁷ $R \lor G$ [2003] UKHL 50, which resolved a long running dispute in favour of a subjective, rather than an objective, meaning of recklessness.

⁴⁸ Wildlife and Countryside Act 1981 s 1 – the provision on killing European protected species uses the word 'deliberately'; Conservation of Habitats and Species Regulations 2010 (SI 2010/490) reg.41.

⁴⁹ Eaton v Natural England [2013] EWCA Civ 628 at [7].

⁵⁰ Law Commission Wildlife Law Interim Statement (October 2013) http://lawcommission.justice.gov.uk/areas/wildlife.htm.

⁵¹ Wildlife and Countryside Act 1981 s I, as amended by Nature Conservation (Scotland) Act 2004; Conservation (Natural Habitats, &c.) Regulations 1994 (SI 1994/2716) reg.39.

⁵² P R Ferguson, C McDiarmid Scots Criminal Law: A Critical Analysis (Dundee University Press 2009) 150–51.

Tensions between energy and the environment: reconciling energy needs with the water environment – hydropower

Beverley Walker BlueWind Consulting Ltd

I. Introduction

Water is used in every energy sector and its use in refineries, nuclear power stations and conventional power stations is well regulated. The impacts of energy production on the environment and on water quality and quantity are monitored and understood. However, new technologies introduce uncertainty, both in understanding how best to respond to them and how to identify the baseline environment. This affects the ability of all those dealing with these new technologies, including environmental consultants and regulators, to predict impacts. It is this level of uncertainty that causes tension for all concerned.

New types of energy projects where these tensions and pressures arise include the following:

Surface waters

- hydropower
- onshore wind (impact over peatland and potential sedimentation of salmonid special protection areas (SPAs)

Groundwater

fracking (groundwater contamination and quantity used)

Marine/coastal waters

- offshore wind
- wave and tidal
- offshore grid connections (array cables and international interconnectors).

This article will examine the impacts and consenting regimes for hydropower developments.

2. Hydropower and the freshwater environment

2.1 Background

Hydropower schemes harness the energy from flowing water to generate electricity, using a turbine or other device. The amount of electricity produced depends on the 'head' (ie the height of the water or distance from the highest point of the water to where it enters the turbine), and the flow (ie how much water moves through the system). In the UK the term hydropower generally refers to use in river systems, although in Europe the term 'hydropower' can also be used to refer to installing turbines into fixed weirs to make use of tidal energy. Hydroelectric energy uses proven and efficient technology; the most modern plants have energy conversion efficiencies of 90 per cent and above.²

There are three main categories used to define the output from hydroelectric power:

- large-scale capacity: hydro plant producing more than 5 megawatts (MW)
- small-scale capacity: hydro plant producing less than 5 megawatts (MVV)
- micro-scale capacity: hydro plant producing less than 50 kilowatts (0.5 MW).

2.2 Types of schemes

There are three main types of hydroelectric schemes in use in the UK.

Storage schemes

In storage schemes, a large dam is constructed, which impounds water in a reservoir. This elevates the water, providing an hydraulic 'head', which feeds the turbine and generator that are usually located at the bottom of the dam wall itself.

Run-of-river schemes

Run-of-river schemes use the natural flow of a river to power the turbines and a weir is usually constructed, which elevates the water level to ensure continuity of flow. Old style weirs were frequently built to a considerable height; however, nowadays they tend to be much lower in order to minimise environmental impacts.

Both storage and run-of-river schemes can be used as diversion schemes, where water is channelled from a river, lake or reservoir to a remote powerhouse containing the turbine and generator. This type of scheme can minimise environmental impacts, and most microhydro schemes are currently constructed in this manner to avoid creating barriers to fish passage.

Pump storage schemes Pumped storage schemes are large and incorporate two reservoirs. At times of low demand, generally at night, electricity that has been obtained from conven-

I 29/3 Comely Bank Rd Edinburgh EH4 IDS. beverley.walker@bluewind consulting.co.uk.

tional or nuclear power stations is used to pump water from the lower to the upper basin. This water is then released to create power at a time when demand is high. Although the energy so generated is not considered to be a renewable energy (because of its reliance on electricity), pumped storage schemes are very useful for managing base load and peak demand.

Only five pumped storage schemes exist in the UK. The Dinorwig facility in Wales (1780 MW) is most often used to address the 'Eastenders' effect when, from the time that the credits start to roll more than 2800 MW of additional energy is often required. The most recent approval for a pumped storage scheme was granted in December 2013 and is at Lochabar in Scotland (600 MW).

All schemes involve modification of the natural river environment and hence breach the objectives of the Water Framework Directive (WFD).³

2.3 Hydropower in the UK

In 2012 the UK generated approximately 1.65 GW or 1.8 per cent of its electricity from hydroelectric schemes, of which 90 per cent was generated by large-scale schemes in the Scottish Highlands. In the same year, hydropower contributed 12.5 per cent of Scotland's electricity generation.

Opportunities to use this technology on a large scale are now limited, not only because of environmental concerns and constraints brought about by the WFD, but also because many of the most economically attractive sites for schemes have already been used. There are, however, significant opportunities to increase the amount of hydropower generated through the use of small-scale and microscale hydro schemes.

Studies (*discussed below*) estimate there is a remaining viable hydro potential of between 850–1550 MW total in the UK. However, these opportunities are viewed very differently in Scotland from the rest of the UK, which leads to differences in consenting approaches. This is discussed further below (section 4.2).

2.3.1 Future opportunities in England and Wales

In 2010, a study undertaken by the Environment Agency,⁴ estimated that the total new opportunities for power generation were 117.7 MW, reduced from previous estimates of 146–248 MW. While the study identified nearly 260,000 barriers in rivers that could generate sufficient 'head' to power a hydro-scheme, additional feasibility based on hydrological information and then screening for nature conservation status and fish sensitivities was applied. However, these schemes were not tested for financial viability or any other environmental parameters, and the final potential hydro-generating capacity is likely to be much less. Total hydro generation capacity (2011) (excluding pumped storage schemes) in England and Wales was estimated at 150 MW generated from approximately 20 schemes, most of which are in Wales.

Almost all schemes would be smaller than 1.5 MW capacity (83 MW of small-scale and 31 MW of micro-scale capacities). Schemes capable of generating more than 1.5 MW, which have higher potential water flows, would have to be mainly confined to upland areas in Wales, the North West, Yorkshire and the Humbers.

Interestingly, approximately 50 per cent of these future schemes could arise from opportunities to improve the ecological status of existing heavily modified water bodies (HMWBs) (see *below section 4.2.1*). England and Wales currently have more than 2800 classified HMWBs, many of which have fish barriers. The opportunity to remove these barriers through the intervention of hydropower with modern fish screens or ladders is thought to result in a 'win-win' position.

2.3.2 Future opportunities in Scotland

In comparison, and based upon another research project undertaken at the same time as the above, hydro generation capacity in Scotland was estimated to be about 10 times that of the rest of the UK, or 1500 MW from more than 150 hydroelectric schemes. This study⁵ also examined hydropower opportunities based on hydrological information and environmental sensitivities, however the projects were then screened for financial viability. This resulted in a more realistic projection than the study undertaken for England and Wales.

The study identified more than 7000 additional schemes with a combined potential capacity of 1204 MW (sufficient to supply around I million homes), again 10 times higher than for England and Wales. However, almost all of them were smaller than 5 MW capacity (ie small- and micro-scale) and instead of being used as opportunities to improve degraded rivers as in England and Wales, almost all of the schemes in Scotland would occur in relatively unpolluted, unmodified rivers of high ecological status.

The study identified that challenges in the future would include finding sufficient skilled labour and issues around grid connections, but that the most significant obstacle to meeting 2020 targets for hydropower would be obtaining regulatory planning permission and CAR licensing.⁶

³ Directive 2000/60/EC OJ L 327. The Water Environment and Water Services (Scotland) Act 2003 is the enabling act for the European Water Framework Directive, which introduced a new integrated approach to the protection, improvement and sustainable use of the water environment.

⁴ Environment Agency (February 2010). Mapping Hydropower Opportunities in England and Wales.

⁵ Nick Forest Associates (September 2009) 'The employment potential of Scotland's hydro resources'.

⁶ The Water Environment (Controlled Activities) (Scotland) Regulations 2005 (CAR) (now superseded by the Water Environment (Controlled Activities) (Scotland) Regulations 2011) introduced controls on previously unregulated activities, including water abstraction and impoundment, which are of significant relevance to hydropower developments, which require a Controlled Activities Regulation (CAR) authorisation for abstractions, impounding works (weirs and dams) and any other engineering works associated with the scheme.

- at least 3850 consents would be required over 10 years (if all schemes were to be developed by 2020)
- more than 1540 would be required over 10 years (if all were to be developed by 2025) and
- at least 850 consents would be required over 10 years (if all were to be developed by 2030).

3. Impacts on the water environment

Key impacts, (which are also impact parameters defined by the Water Framework Directive), are:

- reduction of fish populations and harm caused to fish by turbines
- potential sedimentation due to construction activities
- storage schemes leading to
 - upstream flooding
 - $_{\odot}$ loss of wildlands, wetlands and habitat
 - death of vegetation
 - anaerobic decomposition and production of greenhouse gases
- upstream changes in water quality lack of dissolved oxygen near the bottom of the reservoirs (toxic to fish)
- downstream changes in water quality loss of nutrients and reduction in biological activity
- downstream changes to flow rate and water quantity
- loss of natural sediment transport (changes to geomorphology)
- blocking fish migration
- impacts on nature conservation values
- flood risk
- changes to land drainage
- social impacts.

Clearly the scale of the impact will depend on the size of the scheme, with future small schemes tending to avoid the upstream flooding and other issues inherent in dams and large reservoirs. Although the opportunity for large storage schemes or pumped storage is now limited, the most recently approved pumped storage scheme (Lochabar) was strongly objected to on grounds of the impacts to the landscape.

4. Consenting regimes

Developing a hydropower scheme involves obtaining permissions from several organisations. All schemes will need to meet the objectives of the WFD as it is applied in each country and therefore environmental licensing/permits are required from one of the following agencies – the Environment Agency (EA England), Natural Resources Wales (NRW), the Scottish Environmental Protection Agency (SEPA) or the Northern Ireland Environment Agency.

Planning permission is also required in all jurisdictions, and should be sought in parallel with the licensing process. However, while the information required for an EIA or planning application in Scotland directly feeds into the water licensing regime, it is unclear how the planning regime and the water licensing process in England and Wales are integrated.

4.1 England and Wales

4.1.1 Licence application

Permits are granted under The Water Act 2003 (as amended by The Water Act 2014) and a two stage application process is involved. The Environment Agency has published guidance on the information requirements for each stage of the application.⁷ There are numerous forms and separate licences required, depending on the nature of the scheme. In contrast to the Scottish process, however (see *below*), there is little information available on the assessment criteria/decision-making methodology or the process which follows once an application is submitted.

Stage *I* – *Pre-application*: 15 hours free advice from the Environment Agency is provided and a hydropower account manager allocated; a hydroelectric power scheme pre-application form and an environmental site audit checklist must be completed.

Stage 2 – Application consisting of:

- scheme details
- power and efficiency
- construction and construction management details, including transport.

The following licences will apply depending on the type of scheme:

- a full or partial water abstraction licence
- an impounding licence
- a full, transfer or impoundment licence
- a fish pass approval
- a flood defence consent.

4.1.2 Planning permission

None of the schemes in England and Wales will fall under the Planning Act 2008 as Nationally Significant Infrastructure Projects. As most schemes in England and Wales are predicted to be <1.5 MW an 'automatic' EIA would not be required as they would fall under the power generation threshold. However more than 50 per cent of the potential schemes identified in England and Wales occur along special Protected Areas (SPAs), and a Habitats Regulation Assessment (HRA) and consideration of the WFD protected areas will be required. Given the information requirements of the planning application, undertaking a formal EIA may be required, or considered prudent, particularly if there are a large number of stakeholders and competing water users.

In terms of the local authority planning application, the following information is required:

- screening opinion (recommended)
- supporting environmental information
- the physical appearance of any buildings
- landscape (LVIA and photomontages)

⁷ See eg Environment Agency 'Guidance for run-of-river hydropower development' December 2013.

- noise
- archaeology
- amenity (SIA)
- contaminated land
- ecology and HRA
- hydrology
- geomorphology
- flood risk.

The last four groups overlap with the EA/NRW licensing information requirements.

An assessment would need to be undertaken by the EA/NRW to consider whether each scheme will meet the objectives of the WFD. It is assumed this assessment would consider cumulative impacts, although this is not referred to in any of the guidance.

In the event of refusal of a permit there are 28 days to appeal to the Secretary of State, and a hearing/inquiry will be held. However, it is unclear what precedents are to be applied.

4.2 Scotland

In Scotland, which has the potential for the larger schemes, the following thresholds apply:

Size (installed capacity)	Consent	Determining authority	Environmental impact assessment?
>I MW	Section 36, Electricity Act 1989 – possible s37 for overhead lines	Scottish Ministers	Yes
>500kW to ≤I MW	Town and Country Planning Act 1997	Local authority	Yes
≤500 kW	Town and Country Planning Act 1997	Local authority	lf in a 'sensitive area'*

* Schedule 2 of the respective EIA regulations would apply

4.2.1 Licence application

Permits are granted under The Water Environment and Water Services (Scotland) Act 2003 via the Water Environment (Controlled Activities) (Scotland) Regulations 2011. SEPA also requires a two stage application process, although the main application stage provides a 'one-stopshop' CAR authorisation for abstractions, impounding works (weirs and dams), water use and any other engineering works associated with the scheme.

However as discussed above, the majority of Scotland's waters are currently unmodified or have high ecological status. Nearly all hydropower schemes will fail an assessment of the impact on environmental standards. This requires application of the 'exemption' or 'derogation' tests under the WFD, and the main emphasis in the Scottish guidance is to explain the assessment/decision-making process for those seeking derogation.

Environmental standards

The WFD provides that surface water bodies must reach a minimum ecological and chemical standard. Good ecological status is defined in Annex V of the WFD in terms of the quality of the biological environment, the hydrological characteristics and the chemical characteristics. As no absolute standards for biological quality can be set which apply across the EU Community because of ecological variability, the controls are specified as allowing only a slight departure from the biological environment which would be expected in conditions of minimal anthropogenic impact.

A set of procedures for identifying that point for a given body of water, and establishing particular chemical or hydro-morphological standards to achieve it, is provided within the WFD, together with a system for ensuring that each Member State interprets the procedure in a consistent way (to ensure comparability).

Environmental standards in the United Kingdom have been determined by the UKTAG Working Groups. In Scotland, these are captured within 'The Scotland River Basin District (Classification of Water Bodies) Directions 2009', ⁸ and Policy Statement 'Implementing the Water Environment & Water Services (Scotland) Act 2003: Developments of environmental standards and conditions'.⁹

However the WFD also recognises that there is a set of uses which adversely affect the status of water but which are considered essential on their own terms and are overriding policy objectives. The key examples are flood protection and essential drinking water supply, and the problem is dealt with by providing derogations from the requirement to achieve good status for these cases, *so long as all appropriate mitigation measures are taken.* Less clearcut cases are navigation and power generation, where the activity is open to alternative approaches (transport can be switched to land, other means of power generation can be used). Derogations are provided for those cases, but subject to three tests:

- (i) that the alternatives are technically impossible
- (ii) that they are prohibitively expensive, or
- (iii) that they produce a worse overall environmental result.

Certain hydropower developments may also result in a water body being derogated as a HMWB. The criteria for this derogation are:

- (i) the bodies are not artificial water bodies
- (ii) their physical characteristics (that is, hydromorphological characteristics) have been substantially changed in character as a result of human activity
- (iii) the improvements to their modified physical characteristics needed to achieve good ecological status would have a significant adverse impact on one or more water uses or on the wider environment; and
- (iv) the benefits provided by the use or uses cannot, for reasons of technical feasibility or disproportionate costs, reasonably be achieved by other means, which are a significantly better environmental option.

⁸ http://www.scotland.gov.uk/Publications/2009/12/14130729/0.

⁹ March 2007 http://www.scotland.gov.uk/Publications/2007/03/29111642/0.

4.2.2 Licence application stages



4.2.3 Derogation

SEPA's approach to any application or variation of a CAR authorisation is first to assess if there is likely to be *significant adverse impact*. This includes:

- any breach of an environmental standard or condition limit, whether or not that breach is of a sufficient spatial extent to threaten the status of a water body
- 2. any impact which would lead to deterioration of status (ie drop in class) of a water body
- any impact which would compromise the achievement of a river basin management plan objective relating to the status of a water body (ie an environmental objective, set by Scottish Ministers and identified in a river basin management plan).

Points 2 and 3 are reasonably coarse values and would require a high magnitude of impact to reflect a change at the water body status level. However Point I appears very sensitive and it is likely that most projects would be stalled by this test (it includes temporary disruption to third party interests, or nature conservation interests).

SEPA can potentially apply five derogation tests, of which four are applicable to hydropower applications, namely:

Annex (Test) A:	New sustainable human development activity (Discharges) (not relevant to hydropower)
Annex (Test) B:	All practicable mitigation measures
Annex (Test) C:	Do benefits of proposal to human health, human safety or sustainable development outweigh the benefits of preventing its impact on water environment? Part I: Steps involved in applying the test Part 2: Assessing test results for any benefits A: Benefits to sustainable development B: Benefits to human health and safety
Annex (Test) D:	Significantly better environmental option
Annex (Test) E:	Compliance with other legislative require- ments (ie the achievement of the objectives of a protected area will not be compromised)

SEPA applies 'Regulatory Methods WAT-RM-34: Derogation Determination - Adverse Impacts on the Water Environment' to carry out these tests. Test B mitigation measures - is factored into the balancing test -Test C, which requires SEPA to undertake an assessment of the potential benefits of the development against the potential negative environmental impact and balance this with any positive environmental, socio-economic benefits. For Test C SEPA has supplied supporting guidance ('WAT-SG-67: Assessing the Significance of Impacts - Social, Economic, Environmental') which defines the criteria of magnitude, importance and significance of the proposal under assessment. This means that SEPA is required to step outside its traditional role as a water regulator that only considers water law, and take on the role of planning/sustainability assessor

A wide range of environmental, social and environmental topics are considered as part of the balance test:

Economic impacts	Social impacts	Environmental impacts
Scottish economy	Health	Water environment
	Safety	Biodiversity
	Recreation	Landscape
	Visual amenity	Climate change
	Nuisance	Built heritage
	Vulnerable/ disadvantaged groups	{ Earth heritage { Waste and resource use

Minimum information requirements include:

- scheme design, photographs, installed capacity
- hydrological information including natural flows, expected abstraction and expected change to the water environment
- fish screening design
- mitigation measures (including case for 'best practicable'... (author's words)
- Information on fish and fish habitat
- information on fish for schemes in protected areas

- information on other protected species
- bryophytes and hydro schemes
- information on morphological characteristics
- cumulative impact assessment (at catchment level, in terms of impacts on the water environment and other social users . . . (author's words)
- built heritage
- climate change
- landscape
- recreational use
- direct economic impacts
- indirect economic impacts.

There is a mandatory consultation period for CAR applications which are assessed to have adverse environmental impacts. Third party interests and other water users have significant input into the determination via the statutory advertising process.

Exemption Test E only relates to Natura sites or protected areas as prescribed under the WFD and the respective river basin management plan (RBMP).

- Where a project falls within a Natura site or has the potential to impact a qualifying feature of a Natura site, SEPA acts as the competent authority and is required to undertake an appropriate assessment.
- If insufficient detail is provided to allow SEPA to ascertain whether the integrity of a European site will not be adversely affected, the application must be refused,

unless there are imperative reasons of overriding public interest.

 More than one appropriate assessment may be undertaken for a single development, one by SEPA, and another by the relevant planning authority. The same information may be relevant for both appropriate assessments.

Unless deterioration of status of a water body would result from a proposal, or the achievement of a RBMP objective would be compromised, (ie if only a small adverse impact is predicted by failure of environmental standards) the above tests will only be applied to engineering proposals if a third party has raised concerns following an advertisement. Exemption Test D only applies if Test C fails.

4.2.4 The derogation process

Once adequate information has been received, the following process is followed by SEPA.

The balance test (see *below*), namely weighing the benefits versus the adverse impacts, is complex, and in my opinion potentially open to challenge, particularly if summing numbers of un-weighted environmental factors are used. This can lead to 'doubling up' of both benefits and impacts.

It is also possible for applicants to undertake self-assessment and submit their own derogation case (mimicking the Planning Statement which is normally submitted with



SEPA 'WAT-SG-67: Assessing the Significance of Impacts – Social, Economic, Environmental'.

applications under Town & Country Planning developments). This opportunity is important if a grant of authorisation is in doubt, to ensure all commercial and economic factors are put forward to SEPA when they undertake the 'balance' test.

Indicative guide to determining the overall balance of the positive and negative impacts relevant to the assessment being made

- (a) Is there a clear difference between the significance of the most significant positive impact compared with the significance of the most significant negative impact?
- (b) If (a) is not decisive; is there a clear difference in the numbers of the most significant positive impacts compared with the numbers of the most significant negative impacts?
- (c) If neither (a) or (b) is decisive, is there a clear difference between the number of positive and negative impacts assigned to the next lowest significance category?
- (d) If none of (a), (b) or (c) is decisive because there are the same numbers of positive and negative impacts and they have been assigned to corresponding significance categories, can the balance of positive and negative impacts be distinguished by considering where each impact lies within its assigned significance category (e.g. if there are two positive and two negative impacts, is one or both positive impacts clearly at the top end of the significance category whilst both the negative impacts are clearly at the bottom end of the significance category?
- (e) If the circumstances in (d) apply but (d) is not decisive, is one or more of the factors positively impacted clearly more important (as determined in accordance with Annex I of this guidance) than any of the factors that are negatively impacted or vice versa?

SEPA 'WAT-SG-67: Assessing the Significance of Impacts'.

4.2.5 Planning permission and other relevant consents

Most of the above information requirements can be supplied in an EIA as part of the planning application, and the planning documentation and consultation exercises undertaken through the planning process can be included as part of the information required for the CAR licence/derogation determination.

The local authority provides information on land use planning issues, including:

- the contribution of the project to the Scottish Government's renewable energy targets
- landscaping/appropriate siting of structures associated with the proposals; routing of supporting pipelines and road networks
- potential impact on sensitive habitats, protected species and existing water users.

Consultees to this process include:

- Fish and Fisheries Advisory Group (FFAG) (which includes the former Fisheries (Electricity) Committee), district salmon fishery boards and rivers and fisheries trusts of Scotland
- Scottish Natural Heritage.

Consent is also required under the Salmon (Fish Passes and Screens) (Scotland) Regulations 1994.

4.2.6 Rights of appeal

There are appeal provisions in the CAR Regulations:

- for a proposer who has been refused the grant of an authorisation
- for a proposer who has been granted a form of authorisation which is different from that which the proposer believes ought to have been granted
- for a proposer who is aggrieved by the terms and conditions attached to the authorisation.

At present these appeals are handled by Scottish Ministers, when a reporter is appointed and the process is similar to a public enquiry. In due course it is envisaged that a new type of environmental appeals system will be introduced as part of a river basin management structure. It is unclear, however, to what extent a previous planning inquiry or EIA case law could apply, particularly if a formal EIA has not been submitted.

5. Conclusions

- Significant opportunities have been identified for the expansion of small scale and micro-hydro schemes in the UK, as a means of meeting current UK renewable energy targets.
- Most of these will be in Scotland (estimated 7000 potential schemes), with small schemes <0.5 MW more prominent in England.
- If these are to be realised, one of the most significant challenges will be the processing of the amount of planning and permit applications.
- The application processes can be complex and require specialist input; however, considerable assistance is provided by all agencies.
- 5. The approach taken in England and Wales is to improve the current ecological status of HMWB ('winwin' projects). It may be more difficult to obtain approval on 'good status' sites due to the 'better environmental options' test if the project is large and potentially fails to meet an environmental standard.
- 6. In Scotland, however, nearly all hydropower schemes will result in a failure to meet environmental standards: This results in:
 - a large part of SEPA's assessment effort being placed on the exemption or derogation tests requiring an assessment of the social and economic impacts and benefits, including LVIA (landscape and visual impact assessment), recreational fishing and other water uses (eg canoeing).
 - SEPA also acting as the competent authority in terms of HRA/SACs for salmonid rivers, and cumulative impacts at the catchment level.
- 7. The derogation test requires significant input from the developer, has specific assessment criteria and appears to be a *de facto* EIA, leading to a risk of duplication with the planning process.

- 8. If the development application falls under the EIA regulations, it makes sense to adopt the impact assessment criteria contained within the SEPA permitting process. However, this methodology is currently not verified by IEMA (Institute of Environmental Management and Assessment) and requires a skilled practitioner to incorporate ecological sensitivity criteria into the assessment (in addition to the anthropocentric 'importance' values applied by SEPA).
- 9. It is unclear if decisions from planning or EIA case law would be applicable to appeals hearings on SEPA's decisions.
- 10. The full potential for hydropower in the UK requires significant efforts and resources allocated towards loan finance for site-owners and developers, technical support for developers involving training in site identification, operation, maintenance and repair and business management.¹⁰ Statistics from the Department of Energy and Climate change (DECC) (June 2014), however, show increases in energy coming from all renewable sources apart from hydro, which fell by 11 per cent. It is unclear if finance, lack of technical expertise or the complexities of the consenting regime are factors.

¹⁰ J Palmer (undated) 'Hydropower projects report' http://www.uea.ac. uk/~e680/energy/Old_modules/env2e02/individual_reports/Group_d/ hydro.pdf.

Protecting wild land from inappropriate energy developments

Helen McDade Head of Policy, John Muir Trust, Pitlochry, Scotland

Why does the John Muir Trust exist?

The John Muir Trust was founded 31 years ago to protect and care for wild land and landscapes.¹ Most of the finest UK wild land is in Scotland. The Trust started by raising money to buy some particular areas of wild land that were thought to be under specific threat. Named after John Muir, we are a membership organisation (currently about 10,000 members), and hopefully, it is his ethos we are trying to bring back to the UK. John Muir was born in Scotland and went as a teenager to America, where he is widely regarded as the founder of the modern conservation movement. One reason for this is that he was a lobbyist as well as a writer and he is particularly remembered for guiding President Roosevelt out into the Yosemite wilderness for a three day camping trip and persuading him of the need for a network of national parks, of which Yosemite was the first.

The Trust has three ways of protecting and enhancing wild land. The first area of activity is by owning wild areas – currently about 24,000 hectares. The Trust manages the land and aims to make a difference by improving the habitat and increasing biodiversity. One major problem with wild land areas is over-grazing by both livestock and, particularly, deer. There are estimated to be about three times the number of red deer now in Scotland than there were 50 years ago and so significant culling is often required to allow the habitat to flourish. This can lead to conflict with traditionally-run sporting estates, which are valued by the number of stags running on the property.

Secondly, the Trust works to raise awareness of the many ways in which wild land is valuable. The Trust does this mainly through a programme called the John Muir Award, which runs throughout the UK. Thirdly, the Trust works through advocacy at Scottish and UK level to achieve better legal or regulatory protection.

What is wild land?

Where and what is wild land? Helpfully, Scottish Natural Heritage (SNH) has put a great deal of effort into using geographic information systems and other technical data to map these wild land areas (WLAs). I will come back to this later. However, a more picturesque definition of wild land which I think is helpful in an holistic concept is what the Trust's past chairman Dick Balharry used to use: 'Wild land is where the eagle flies', meaning it is landscapes where habitats are suitable for eagles, with the associated specialised biodiversity. There is unfortunately sometimes a kind of authoritarian attitude to conservation in some environmental organisations, which sees 'biodiversity' as a worthy aim, but 'landscapes' as some kind of a human construct.

Such people appear to think that our especially valued landscapes are not of major importance in their own right (until classified or designated as a specific listed habitat). However, appreciation of wild landscapes is one important way people relate to land and the Trust believes that value deserves recognition.

There is another definition of wild land – the holistic concept – which encompasses both appreciation of the landscape with protection and enhancement of the habitat. The Trust is working towards and promoting this holistic ideal to help combat loss of biodiversity and to reach national and international targets, whilst protecting the landscapes that people value and connect with. The link between people and the natural world is increasingly recognised as being important for health and wellbeing.

Why protecting wild land is important for achieving environmental targets

Most wild land in Britain is peatland, which is our equivalent of the rain forest. Since wild land is heavily associated with peatlands, this leads to one of the ironies of climate change discussion. The biggest current threat to our WLAs is the construction of massive industrial-scale wind developments, which are facilitated with the worthy aim of contributing to the UK greenhouse gas emissions (GHGs) reduction targets. However, the disturbance of the peat which these sites consist of leads to very significant emission of GHGs. This is not just owing to the direct impacts of the required newly constructed miles of tracks and swimming pool-sized concrete bases, but also because of the drying out of the peat around those disturbed sites.

Peat is an accumulation of partially decayed vegetation or organic matter that is unique. The peatlands ecosystem is the most efficient carbon sink on the planet because peatlands plants, such as Sphagnum mosses, capture the carbon dioxide. Once peat dries out, the ground is no longer an anaerobic environment enabling those mosses to grow. There is debate about how much peat around such a track or base will be badly affected. However, it is increasingly acknowledged that this is a serious problem and the well respected academic team led by Dr Jo Smith wrote to the journal *Nature*, saying: We contend that wind farms on peatlands will probably not reduce emissions, unlike those on mineral soils'. With carbon emissions for power production set to drop in the future, the scientists added:

¹ http://www.jmt.org/. UK conservation charity dedicated to conserving wild places. Founded in 1983, the Trust takes its inspiration from John Muir (1838–1914), founder of the modern conservation movement.

'Peatland sites would be less likely to generate a reduction in carbon emissions, even with careful management'. So surely the precautionary approach is best – avoiding siting industrial developments on deep peat areas?

Yet the Trust is looked upon as the bad guy (going back to Colin Reid's green-on-green description see pp 100-104) because we dare to say: 'Wait a minute, perhaps it isn't acceptable to destroy one bit of the environment in the name of protecting the environment and, moreover, people are not looking at the scientific evidence about gains and losses - even just with regard to GHGs!'When considering containing greenhouse gas emissions, there is no simple solution that means everyone can say 'I'm for renewables' and then they are the good guys. We need to do the sums and consider all the losses and gains across all sectors of the environment, as well as considering the social and economic impacts. That is difficult and therefore it is something that people do not like to talk about. Raising it makes us unpopular but it is very necessary in order to achieve rational policy change.

Engaging people with the natural world

In working to raise awareness of the value of wild land the Trust attempts to engage people in wild places. More than 200,000 people have now taken part in the Trust's educational initiative, the John Muir award,² of whom about 25 per cent have special needs or difficulties. With a recent considerable grant from the Heritage Lottery Fund we will be doing more work in England. Conservation is about changing hearts and minds and making special natural places available to everyone. The Trust works in prisons, schools and hospitals. To quote one Big Issue seller: 'I grew up in Easterhouse [Glasgow], and you know the first time I got took up the hill, it totally changes your whole outlook, it's like, there's a lot more out there, a lot of people who grew up on housing estates just can't see past that housing estate. But once you get took out, it's just a whole new world'.

Campaigning for better regulation

Finally, the Trust is developing a more overt advocacy campaign to protect wild land everywhere. Better statutory and regulatory protection at both national and international levels and a wild land designation are the longterm goals.

Contributing towards those goals, the Trust is campaigning for an independent National Energy Commission and a National Energy Strategy in both the UK and Scotland. You may ask what energy has to do with a small NGO, which should be concerned with looking after its lands and telling people how nice they are. The answer is found in the SNH indicator 'Visual influence of built development and land use change',³ where 'between 2002 and 2009 the extent of Scotland unaffected by any form of visual influence declined from 41 per cent to 28 per cent' and 'a dominant change was wind farm development and transmission infrastructure'. To make a comparison, England has nearly twice the land mass of Scotland and about one-third of the wind energy (operational); and the level of threat of operational onshore wind capacity that could be developed is 1743 MW for England, 537 MW for Wales and 4420 MW for Scotland. This puts Scotland in a different league.

Engaging with individual planning applications

Electricity grid infrastructure

The Trust has tried addressing the threat to wild land from inappropriately-sited energy developments through the (Scottish) planning system. The Trust has attended planning inquiries but so far the natural landscape has not appeared to be a determining consideration. One public local inquiry (PLI) with which the Trust collaborated, together with five other environmental NGOs to make substantive objection (and which lasted for nearly a year) was the Beauly–Denny 400 kV transmission line inquiry in 2007. This PLI was concerned with what will be the largest industrial development of the Highlands since the hydro-electric schemes of the mid-20th century.

By approving (in 2011) this line, despite more than 20,000 objections, the Scottish Government will leave a 220 km scar across Scotland's Highland landscape. Some 600 giant pylons, each between 50 and 65 metres tall, will desecrate some of our most exceptional scenery, from the Correyairick pass through the Monadhliadh, Loch Kinardochy and the Cairngorms National Park. (Undoubtedly, it would be unthinkable that such a line would be permitted in an English or Welsh national park.)

Another major impact from the line is the bulldozed tracks. There were planning conditions that these tracks would be removed but much of the major track alongside the line has now been given retrospective planning permission. The installation of the Beauly–Denny line is significant with regard to this comment from the Scottish Government, in response to the Trust's petition to the Scottish Parliament on wild land: 'as far as wind farms are concerned, strengthened electricity grid connections may in future years generate more interest in development in our remoter areas of wild land in the far north and west, which have hitherto been less developed'. So the Trust, like others, has had little success in steering development away from key wild landscapes.

Lessons learned from some major energy development applications

It is worth looking at a couple of planning cases to illustrate flaws in the system. There was a public local inquiry in 2009

² The John Muir Award is the educational initiative of the Trust and is an environmental award scheme focused on wild places. It encourages awareness and responsibility for the natural environment and involves courses, gatherings and training programmes, taking place anywhere in England and Scotland and in all national parks. See http://www.jmt.org/ jmaward-home.asp.

³ http://www.snh.gov.uk/docs/B551046.pdf.

into the plans for the Muaitheabhal wind farm in the Western Isles in a national scenic area (NSA). This led to the reporter finding the landscape and visual impacts to be unacceptable. However, the developer redesigned the wind farm outside the NSA (and I have no doubt that he was given a tip-off to do this before the report was released). This substantial redesign of the wind farm was treated as if it was a minor addendum - rather than tabled as a new application as we believe it should have been - and so the usual planning process for such a development was sidestepped and there was no further public inquiry. Is this the right development in the right place? The Trust does not think so. Amongst other reasons, the UK Government has to find £750 million - at the last estimate - for the transmission line needed in order to connect the Muaitheabhal wind farm to the mainland grid. Is that good planning?

An illustration of the 'green-on-green' dilemma referred to by Colin Reid is the proposed Strathy wind farm development on the edge of a site in the far north, currently proposed for World Heritage Site status for its unique Flow Country peatlands. There are three contiguous wind farm sites at Strathy; one has been consented, and two others are in the planning process. Together, if consented, there will be 106 turbines - each taller than the London Eye at around 476 feet high (145 metres). Which of the two ambitions for the area is going to be the most efficient at mitigating climate change or at meeting the targets for mitigation? Even if the carbon calculation appeared to be more favourable towards the wind farm, should a potential world heritage site be developed in this way? That holistic assessment will not be undertaken as development progresses - large chunk by large chunk.

The Viking Energy scheme, on mainland Shetland, a case already mentioned by Colin Reid with regard to the EU Birds Directive also impacts on humans -71 out of the 103 turbines will be less than 2 km away from a house or houses. So much for the Scottish Government's 2 km exclusion zone *recommendation.*⁴

The Trust hoped that, in 2014, new Scottish planning policy and the SNH WLAs map would bring some clarity to decision-making in this area. The WLAs map (of areas provisionally called Core Areas of Wild Land, or CAWLs) was put out for consultation alongside the planning policy review in 2013. There was huge pressure from the energy industry for the reference to the CAWL map to be dropped from the finalised planning documents, or restrictively amended. However, the Trust regards our campaigning as contributing significantly to the retention of the maps in the final outcome. On 23 June 2014, when the government released the final National Planning Framework (NPF) 3, the Scottish Planning Policy (SPP) 2, SNH released its finalised WLAs map. Although the maps are not included in the finalised planning documents, NPF 3 and SPP 2, they are explicitly linked to them in the text.

Is the glass half-full or half-empty?

The NPF 3 recognises wild land as a 'nationally important asset' and intimates that Scotland's wildest landscapes merit strong protection. SPP 2 sets out how this should be achieved, including the identification of wild land and its safeguarding in development plans and in spatial frameworks for onshore wind farms, and the need for development to 'demonstrate that any significant effects on the qualities of these areas can be substantially overcome by siting, design or other mitigation'.

So far so good. However, there are several very significant problems with the implementation. One is the interpretation of 'mitigating significant effects'. Another is a very significant change introduced to the WLAs map two weeks before the release of the map and the reason for that change. A large part of the Core Area of Wild Land in the Monadhliaths, which had been consulted on, had been removed because the Scottish Government had given consent for a huge windfarm in it – Stronelairg.

Stronelairg wind farm approval – actions speak louder than words

The Scottish Government's intentions, if we consider its decision-making since June, do not look as promising as the words on the policy. An absolutely key development is Stronelairg, near Fort Augustus. This Scottish and Southern Energy (SSE) renewables' £300 million, 67-turbine scheme was given the go-ahead on 7 June 2014, two weeks before the release of the WLAs map and policy. Objections that this area was included in the draft WLAs map and that it is wild land were not accepted by the Energy Minister, on account of the land having been already impacted by SSE's Glen Doe hydro development built in 2009. (Ironically, at the time the hydro was built, the Trust had publicly congratulated SSE on minimising environmental impacts. So the Trust does not accept that the area is badly damaged as a result of the hydro, rendering it 'not wild land'.)

The Stronelairg wind farm development is a very different proposition from the hydro dam. The footprint of Stronelairg is about the same as Inverness, which has a population of around 62,000. In fact, we know from a freedom of information request that the Scottish Government invited SNH to revise its latest map, two weeks before the release of the map and planning policy, because of the Stronelairg consent. So the version of SNH's map of wild land (2013), which was available to the minister at the time of decision had included Stronelairg in a WLA but had been ignored. This is one of many reasons that the Trust has reluctantly decided to pursue a judicial review against the Scottish Government on that decision and Scottish and Southern Energy has come in as a third party.

The Trust applied for a protective expenses order (PEO), the application for which was heard on 8 and 9 October 2014. Whilst it was clear from the outset that it was quite difficult for the Trust to prove 'prohibitively expensive' since we are a medium-sized NGO with land holdings, there were two aspects of the procedure, which was surprising. First, all legal representatives had agreed that

⁴ One house can be taken as an example: it would have three turbines within 1.1 km and five or six within 2 km, a quarry nearby and the road leading to the converter station and the western half of the wind farm site within 100 yards. The owner is elderly, has no children and lives alone in this previously isolated area.

the PEO hearing should take about half a day in the Court of Session but the PEO hearing, which is designed to be a simple procedure, then took two full days in court. Counsel for both SG and SSE spoke for more than seven hours over the two days. Secondly, there was considerable examination of aspects of the Trust's accounts, raising questions that could have been raised in writing in advance. Clearly, if accounts are going to be examined in such detail, justice would suggest that the Trust's financial director should have been given an opportunity to answer the queries.

Lord Philip acknowledged that there were significant factors to be considered in this case, with almost no previous case law, and so he took time to consider. We took that to mean he was seriously considering the EU Aarhus aspect of the consequences of the decision. Three weeks later, he gave an oral judgment on 31 October. His judgment was that the case would not be prohibitively expensive for the Trust, based on the number of days that had been originally agreed for the judicial review itself (three) and the resulting estimate of costs for all three parties, about £160,000. He did not take into account the length of time and extra costs of the unusually long PEO hearing - which had been pointed out by counsel for the Trust at the end of the two days. The judge had replied along the lines of 'whose fault is that?' Clearly, it was counsel for the respondents who had taken seven hours. This increased our potential costs liability considerably.

The respondents immediately sought costs for the PEO hearing, including for specialist financial advice and attendance at the hearing. Our QC argued for (and obtained) that the costs follow the result of the judicial review result. With no sense of irony, Lord Philip said that he was granting this as he was mindful of the Aarhus principle of allowing NGO participation. However, he refused leave to appeal this judgment. At the time of writing, the Trust is considering whether it can prudently continue the judicial review.

Both the Viking Shetland and Stronelairg developments attracted substantive SNH objections. The planning authority (which is consulted by the government in these big developments, applied for under section 36 of the Electricity Act 1989) did not object in either case, and this is critical to ensuring a public inquiry is called. The developer in Viking is SSE again, partnered with Shetland Charitable Trust whose board of directors, at the time of the planning application, was mainly made up of councillors from Shetland Council. Shetland Council was also the planning authority – a clear conflict of interest. So neither Viking Shetland nor Stronelairg went to any kind of public examination, despite their massive size, the impacts identified and substantive objections from SNH, the government's agency.

These consents suggest that very large developments appear to be accepted because of the perceived impact they will have on achieving the renewables and greenhouse gas emissions targets. Whereas proposals for smaller projects are frequently rejected, large developments (ie those lodged under section 36 of the Electricity Act 1989) are very rarely refused by the Scottish Government. The record shows this is especially true for SSE developments.

So what about public engagement?

There is a strong indication that public consultations are conducted as a process but that responses are rarely taken into account and that objections at inquiries which are based on good scientific research are not considered properly. The emphasis in planning changes around the UK has been on 'front-loading' the consultation system. This theory is that most of the opportunities for the public to engage are provided early on in the planning application process. This is assumed to mean that difficulties in the application are dealt with at that point and there will be a more acceptable application at the final stage and, therefore, the public will not require another way reasonably to enable them to challenge at the end of the process. However, the evidence since the introduction of the Planning (Scotland) Act 2006 does not suggest that this is satisfactory and, therefore, front-loading of the planning system does not justify there being no reasonable remedy for objectors later on, such as an equal right of appeal (or third party right of appeal).

Public local inquiries

Public local inquiries (PLIs) are hierarchical, incredibly stressful, confrontational, quasi-legal and do not give due weight to good evidence from non-professionals. Judicial review is really only for the financially flush 'big boys'; it is not for individuals, NGOs or communities. I do not see evidence that the legal and planning professions and the courts have any understanding of the enormous hurdles and real costs involved in taking a judicial review. In the case of Stronelairg, in 2013, the John Muir Trust commenced an action against Highland Council, the planning authority for that area, because the planning report issued by the Highland Council's planners, in our view, misled councillors into making the wrong decision of non-objection. This meant that the Scottish Government did not have to call a PLI, although it could choose to do so. (It subsequently gave approval with no PLI.)

However, the Trust was refused a protective expenses order (PEO) on the grounds of having sufficient funds. The Trust had spent at least \pounds 20,000 to reach that point but then withdrew the claim. The Trust has now, following the Government's 2014 approval, had to take action against the Scottish Government on Stronelairg, and has spent considerably more than \pounds 20,000 already, just to get to the PEO hearing stage! The hearing was expected to take three hours but, in the end, took two days – with QCs for both the government and SSE making very substantive arguments, meaning that their costs for this will be high.

Why should NGOs get a PEO?

PEOs can currently be granted where a court is of the view that the issues being raised in a case are of wider public interest. They are intended to ensure that judicial reviews against public bodies are not prevented from proceeding because an applicant might not be able to pay that body's costs in the event that the application is dismissed.

Public Participation Directive

Under the Aarhus Convention, public bodies must ensure that the public has access to a procedure to challenge decisions relating to the environment to the extent permitted by national law. Amongst other things, the Convention specifies that this procedure should not be 'prohibitively expensive'. However, 'prohibitively expensive' is a very difficult test for a medium-sized organisation to meet. For example, in the Trust's case, we manage land and so our annual turnover is significant. Could we make staff across the Trust redundant in the event of major costs being awarded against us? That is theoretically possible but, of course, the trustees have to make decisions in the best interests of the overall aims of the Trust - not simply one aspect – and this would certainly not be considered to be good management of the Trust. Was this sort of hard choice envisaged as acceptable when the Aarhus Convention was first drafted? Undoubtedly not. Quite simply, is the potential provision of protection against costs supposed to be available to charitable bodies such as ours? I am sure it is.

Were this not the case, NGOs would need to seek people with no assets and receiving benefits to take a case in his or her own individual name in order to obtain a PEO. Subsequently, the NGO would funnel that person the money. Morally, this seems wrong – being involved in the legal process is incredibly stressful and it cannot be right that an individual should have to shoulder the burden of taking a case in the environmental and public interest. Organisations such as the Trust receive support from members of the public to do this work on their behalf. The system should enable us to take a case in the public interest without the risk of endangering other areas of Trust work. Anecdotally, a fairly severe attitude against awarding PEOs to NGOs or groups of individuals seems to be a particular problem in Scotland.

A better way?

Even if organisations taking action in the public interest can seek and obtain PEOs more easily, this would not deal with one of the most problematic aspects of judicial review. In most instances, a judicial review is not able to examine the quality of a decision, but will only investigate whether due process has been properly followed. In instances such as Viking Shetland and Stronelairg, the public had never had the right to have the evidence examined fully through a PLI. If the developments had been refused, the developer would be entitled to appeal the decision and have it reconsidered. That option is not available to the public. Surely, in this day and age, a level playing field is a reasonable ask? Equal rights of appeal (sometimes called third party rights of appeal or community rights of appeal) need to be raised again in the light of experience of the Planning (Scotland) Act 2006. The Trust has joined with others to campaign for this planning change.

John Muir understood the value of keeping something you cannot get back if it is lost, and that is what the Trust is fighting for.

Energy markets and the environment

Alex Cooke Department of Energy and Climate Change (DECC)

The train journey from London to Edinburgh provides an interesting view of energy developments and why they are where they are. You see the start of some of the fairly large, by English standards, onshore windfarms near Peterborough. And then just past Doncaster you reach Drax power station, the massive coal-powered generating station with interests in biomass¹ and carbon capture and storage. Reaching Berwick-upon-Tweed, you can see a very unusual pattern of Golden Shield Lichen on the roofs of the houses growing on some, but not all, of the tiled roofs that were clearly built at the same time. Why, and why some and not others? It is probably something to do with nitrogen, because it is a nitrogen loving species. There are solar panels all along the route. And then, finally, you see the Torness nuclear power station. It is an energy and environmental lawyer's dream journey.

As an energy and environmental lawyer you can ask the same question that the ecologist asks when he sees the Golden Shield Lichen: why are those examples of energy infrastructure where they are? What were the market forces that led to their development? The energy markets started as many markets do – from the basic instinct to supply a product to a market in order to make money.

Oil and gas production in the North Sea is an example of a relatively simple market: the oil and gas is extracted, shipped to refineries onshore and then distributed. Electricity and gas markets are rather different in that recognition of their universal importance as essential supplies evolved during the last century, and public interest factors began to influence their market development. This is seen in the original purpose of the establishment of the gas and electricity regulators and the legislation of the 1980s; it was clearly set out that the purpose of regulation was to ensure a safe and secure supply of electricity and gas at the lowest possible cost to consumers.

Generating technologies developed where the resources could be found and where their products could be most quickly, efficiently and cheaply delivered to the customer. So Drax is close to coalfields and several large conurbations; the nuclear power stations are usually near water, and gas stations are near the major import areas and major conurbations, such as London. This meant that there was a secure supply of electricity because there was a diversity of fuel sources – coal, gas and nuclear – which met the market demand for both baseload (providing for the steady and consistent consumption of electricity) and peaking plant (the 'World Cup kettle' issue, where there is a spike in demand for electricity as kettles are switched on after a match). Environmental regulation, involving safety precautions and controls over emissions of sulphur dioxide and particulates, increased gradually during the 20th century and, with the development of environmental law generally, standards steadily rose. However, it was not until the developed world woke up to the dangers of greenhouse gases that it was recognised that emissions from energy production were uncontrolled, with no calculation of the cost of the impact of carbon emissions on the price of energy and its transport. Lord Stern, who has slightly God-like status amongst some civil servants, described climate change as the 'greatest market failure the world has seen'.

Since the late 1990s the rapid increase in public and political awareness of climate change has had a dramatic effect on domestic energy production and markets. Secure energy supplies for the people of this country, and for the economy, are of vital importance and underpin the way the country runs. There is public policy interest in making sure it works.

Democratic governments tend to have a short-term attitude; immediate risks absorb attention in preference to consideration of the possibility of long-term risks. This reflects normal human reactions to risk and we should not be surprised by it, or disappointed. Sometimes, however, a more strategic view ought to be taken if we are to achieve long-term goals. There have been several approaches to embedding strategic thinking in law.

Statutory bodies such as SEPA, the Environment Agency and Natural England often manage to embed a degree of strategic thinking; they are given a set of strategic objectives to focus on and can be held to account through the management of their funds and other powers. These objectives can be very effective, as we see from the example of the Green Investment Bank (see *Euan McVicar*, p 70). However, governments are rather harder to hold to account because the mechanisms are not as clear.

Another approach is to impose duties to take things into account. So, for example, there is a duty to take into account the purpose of conserving biodiversity in section 40 of the Natural Environment and Rural Communities Act 2006, and every public authority has to take this into account in virtually every decision it makes. But these duties have their limitations because they deal with a process and not an outcome. This is seen most clearly in, say, the *Buglife*² case, which considered how section 40 of the 2006 Act should be approached in practice. Provided that the purpose of conserving biodiversity is taken into account – which it almost certainly will be through the

See for example R (on the application of Drax Power Ltd) v Secretary of State for Energy and Climate Change [2014] EWCA Civ 1153.

² R (on the application of Buglife (the Invertebrate Conservation Trust)) v Thurrock Thames Gateway Development Corporation [2008] EWHC 475 (Admin).

environment impact assessment process – it can form part of an overall assessment which reaches a different conclusion. Ultimately, whilst duties to take things into account may be useful in setting a change of direction, they have not yet shown that they can deliver strategic outcomes in practice.

Finally, the old approach included imposing duties to publish reports and strategies for dealing with different problems. However, it is all too easy for these kinds of documents to end up in a filing cabinet. When a new government comes in, the old strategy may not represent the new policy.

The Climate Change Act 2008 marked a positive change in attitude and a recognition that a new approach was needed. The climate change targets in the Act are legally binding and set long-term objectives to reduce emissions by 80 per cent by 2050, with carbon budgets set between 12 and 17 years ahead to meet those targets. The budgets set a medium-term trajectory for emissions reductions in line with the investment frameworks established for industry and the energy industry in particular. The targets and budgets are in line with, and in many cases exceed, those set at international and EU level.

There is one question that always interests lawyers: what happens if a target is not met? That is not completely clear, but some of the questions are beginning to be answered through the *ClientEarth* case, which concerned European air pollution targets; so, for instance, we know from the Supreme Court's decision³ that questions of whether domestic targets have been met are likely to be justiciable and that the court will be minded to make declarations. However, the Supreme Court also referred several questions to the Court of Justice of the EU,⁴ where judgment has not yet been given. It is possible that the Court of Justice's decision on which remedies are appropriate for breaches of European law may be read across to the domestic regime.

One can also argue that the question of precise remedies for breach is the wrong question altogether. In the UK, the ministerial and civil service codes of conduct both require compliance with the law; that is a 'soft lever' but an effective one – the general application of the rule of law almost always means that legal duties are complied with in practice. In addition, the system should be viewed as a whole. The targets are measurable, whereas many targets are not measurable. Regular reporting is mandatory and a Committee on climate change exists to hold the government to account. The system in Part I of the Climate Change Act 2008, taken as a whole, places pressure on the government to act strategically. These arrangements have affected government approaches to all of those public policy issues that in turn influence the energy markets. Previously the attitude was: 'climate change is a problem: how can emissions be reduced within the existing system?', which led to investment in research and development, the Renewables Obligation (which set duties on electricity suppliers to increase the amount of renewable energy in the system) and improvements in energy efficiency through building regulations. These measures were accompanied by a general assumption that carbon markets would achieve the rest, by adding a cost to emissions and therefore an incentive to reduce them. Unfortunately, whilst carbon markets are fascinating, the EU Emissions Trading Scheme is not necessarily doing the job it was intended to do.

The real benefit of the statutory framework of targets is that it requires us to ask ourselves a different question: 'what energy system do we need to meet the challenge of climate change, and how are we going to get there?'

DECC has a developed a 2050 calculator tool⁵ for working out how to meet our targets and still deliver our energy needs. It allows users to weigh up the different types of generation technology, their emissions, their costs and the associated risks, and identify a system that would meet our objectives. One also has to remember that the *status quo* of energy needs will change; if the whole of the transport system and the whole of the heat system are decarbonised, there will be much greater demand for electricity. And that does not include the problem of decarbonising air transport.

We still have a free market approach, where the market will dictate many of the decisions, although it is clear that there is a significant change in the approach DECC is taking to incentivising that market and how it is pushing it in different ways. A prime consideration is to reduce barriers to investment and to encourage and help finance new technologies such as carbon capture and storage (CCS) needed to create a secure, low carbon energy system. The private sector is unlikely to invest in CCS until the technology has progressed and the risks involved are not as large and intangible as they are at present.

Reductions in consumption are equally important, and the Energy Company Obligation (ECO) and the Green Deal schemes are intended to address this, providing funding for energy efficiency measures to provide funding for and encourage home insulation, which can reduce heating costs and reduce carbon emissions associated with them. The CRC Energy Efficiency Scheme is a scheme designed to reduce energy consumption in the commercial sector.

One relatively straightforward way of achieving the low carbon energy system we need to meet our targets is to support nuclear power. Much work has been done to change the regulatory framework to support 'new nuclear', such as the steps which have led to the creation of the Office for Nuclear Regulation, and enable the industry to raise the finance it needs to build nuclear power stations. Other measures include improving the way in which

5 https://www.gov.uk/2050-pathways-analysis.

³ R (on the application of ClientEarth) v Secretary of State for the Environment, Food and Rural Affairs [2013] UKSC 25.

⁴ Case C-404/13. The Supreme Court's fourth question is: 'In the event of non-compliance with Articles 13 or 22 Air Quality Directive (2008/50/EC), what (if any) remedies must a national court provide as a matter of European law in order to comply with Article 30 of the Directive and/or Article 4 or Article 19 TEU?' (Article 30 states:'Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this directive [...] the penalties [...] must be effective, proportionate and dissuasive).

market signals are used, so smart meters are being rolled out in order to change the way people use electricity, and the carbon price floor is designed to make up for the failure of carbon markets to change the way electricity is produced.

Finally, there is heat. Each and every one of us, certainly in the past, has always been a direct emitter of carbon dioxide, either through burning wood or burning gas or by burning oil in our homes. Diversification of heat supplies is essential if we are to meet our targets, and schemes such as the new Renewable Heat Incentive (RHI) scheme are being introduced to bring new technologies into the heat market to try and change the way people make their choices as to how to heat their homes. What we are seeing as a result of our domestic targets represents a massive change. That is not to say there is not a great deal more to be done and my reflection after this morning's session is that, whilst we have seen this massive change in thinking about how we can decarbonise the way we use energy in our homes and our economy, we need to find a way of reconciling some of the side effects such as the new impact on our landscape and the conflict with other environmental issues (the 'green-on-green' conflicts). Can we come up with a really sophisticated way of reconciling the green-on-green issues now that we are beginning to understand them fully? I think that is going to be something for us to focus on into the future in government, and it will be interesting to see how we rise to the challenge.

European perspectives on energy and the environment: towards the 'Europeanisation' of renewable energy regulation

Anatole Boute University of Aberdeen

The following text is a transcript of a recording of the presentation given by the author at the Conference.

My focus will be on decarbonisation – the European energy and climate or decarbonisation policy, and my central question will be as to whether or not the EU has taken a free market or public intervention approach to achieve the decarbonisation objectives. It is very important to look at these questions from a legal and regulatory perspective as well as examine their important economic and social relevance. The issue of cost of our decarbonisation policy, of our renewable energy policy, will determine the credibility of renewable energies and the viability of integrating renewable energies in our electricity systems, in our heating systems; and the ability to reduce the cost of this policy will determine the attractiveness of this policy in the long term.

So what can we do to reduce the cost of decarbonisation policies? There are two options, two challenges: market exposure versus public support. Where are we going to, what is the vision of the European Union on this aspect? And this issue of cost is closely related to the question of sovereignty: EU versus national approaches to decarbonisation of energy supply. What is the vision of the European Union in this respect? And is there scope for national policies within this European long-term perspective?

We first need to look at the dichotomy between liberalisation and subsidisation. And then look at the founding principles of Europe's energy policy, at the main directives, initially from a conceptual perspective, and then from that basis we will focus first on the 2020 horizon before looking at more recent policy documents outlining the 2030 policy perspective. I will then conclude with some critical assessment of these policy developments.

When we speak about decarbonisation of energy systems, and of the European electricity system in particular, I think it is essential to highlight the fact that, according to the Internal Electricity Market Directive (Directive 2009/72), the liberalised market is expected to deliver on decarbonisation. The liberalised market – free market pricing and competition – is expected to attract, or to generate, investment including in renewable resources. Recital 6 of the Directive states in this respect that:

A well-functioning internal market in electricity should provide producers with the appropriate incentives for investing in new power generation, including in electricity from renewable energy sources.

But are investments taking place based on this paradigm of liberalisation? This can be seen in development not only in relation to renewable but also in terms of thermal power. In Belgium we are currently organising a tender to attract new investments in thermal power plants. So is this liberalised market working? I think serious questions can be raised, and this already affects thermal generation without even speaking about renewables. So the assumption about Europe's liberalisation policy can be questioned.

The second pillar is of course the Emissions Trading Scheme, where the idea is to internalise the carbon energy prices into the price of electricity. Reading the ETS Directive 2003/87, there is no reference to investments, or to stimulating investments, low carbon investments or investment in the decarbonisation of energy supply. The objective of the ETS Directive is to reduce greenhouse gas emissions, not necessarily to attract low carbon investments.

So the ETS is not necessarily originally about investments. The idea of generating investments through the ETS is now becoming increasingly important in the context of the reform and modernisation of the ETS. In the Commission documents there is a clear focus on attracting low carbon investment through the ETS or to 'create the right incentives for forward looking low carbon investment decisions by reinforcing a clear, undistorted and long term carbon price signal' (COM(2008) 16 final). It is important to highlight that this is a recent policy development, because it has consequences for the design of this policy and the regulatory instrument. Is the EU ETS delivering its objectives? Clearly the answer is no. There is too much regulatory instability and unpredictability and an important discrepancy between the policy cycle and the investment timeline for power plants. Important amendments were made in 2009, but serious unpredictability remains for investors.

So what remains? Subsidisation? Or renewable energy investment, which is heavily dependent today on public support because of market failure? It is because of the lack of internalisation of the carbon externality – with the failing of the EU ETS – that public support is required. This is of course a very controversial issue, in particular because of the difficulty in determining the right level of public support, the right price and the real cost of renewable energy.

It is difficult because policy-makers do not necessarily have access to the real price or cost information. It is also extremely difficult because the cost of renewable energy equipment decreased rapidly. And policy-makers find it difficult to react to these challenges. So we are in a situation where in many countries in Europe and all over the world, we are facing over-compensation. We are overcompensating because we are facing the challenge of determining the right level of support. This is also an important problem for investors, because over-compensation has triggered regulatory changes. Member States, including the UK, have changed the level of support, for instance for small solar power installations. Regulatory changes generate a climate of unpredictability and instability and that clearly undermines the attractiveness of this new economic sector.

Another major renewable energy policy challenge concerns the delicate relationship with liberalisation. New entrants in the electricity sector build their businesses mainly in the field of renewable energy. So it could be argued that renewable energy policies have contributed to creating or attracting new investments, thereby introducing a certain level of competition in the market. However, this has been mainly made based on a regulated price guarantee, not based on a free market price.

Another key issue is the interplay with emissions trading: mandatory targets and renewable energy support schemes reduce the amount of CO_2 emitted by the electricity sector, and therefore reduce the effectiveness of the carbon signal, creating a problem of interaction with the ETS.

To turn now to the 2020 approach, and in particular to the targets, Directive 2009/28 establishes mandatory renewable energy targets for every Member State. Why do we have mandatory targets? According to the Directive and the Commission proposals, it is to create investor certainty, trust in the market, predictability, stability and to provide the right signals to the investment community (2009/28 Directive recital 8). In particular, according to the Directive and the Commission, we need mandatory targets to achieve the objective of stability and predictability. A key question here about the effectiveness of this policy approach is will the Commission in 2020 be serious in enforcing these mandatory targets? In my view, enforcement of the targets is essential to keep the trust of the investment community in this policy mechanism. The Commission will need to launch infringement proceedings against the Member States that fail to respect their targets. If the Commission does not do this, the credibility of Europe's policy will be undermined.

I expect that, as the 2020 deadline approaches, we will see increasing criticism from Member States, in particular from Member States failing to meet their targets, which may perhaps include references to Articles 192 and 194 of the Treaty on the Functioning of the European Union establishing unanimity of policy-making and of regulation for decisions affecting the right of Member States to determine their energy sources and structure of their energy supply.

Another important renewable energy policy instrument is priority access to the network, an obligation under the directive now also expanded to high efficiency combined power generation.

Regarding the support of renewable energy investments, states have the possibility to cooperate through flexible mechanisms, joint projects and even cooperate with third, non-EU countries. But the principle, the starting point, is that it is a national prerogative, a national competence. The Member States have a sovereign power to determine how they will subsidise and support renewable energy. Besides state aid issues, it is not a matter for the European Commission. The European Commission only intervenes at the moment where the Member States fail, or are at risk of failing to achieve their targets.

However, this national-based approach to renewable energy is coming under increasing pressure. Reading the 2013 and 2014 Communications by the EU Commission on renewable energy policy, it is evident that there is an important paradigm shift from a national to a European approach, a moving away from binding national targets, moving away from the top-down approach towards a bottom-up approach, where Member States need to propose plans, assisted by the European Commission, with a view to achieving a 27 per cent renewable energy target. The European Commission is referring to a new binding target. But how will that target be enforced? What is the added value of a European target if there is no mechanism in place in a body like the European Commission that will monitor and enforce the target? The Commission is referring to an EU governance model to achieve this new target. But are there EU regulatory powers to achieve its objective? Powers to determine and promote renewable energy sources in case Member States fail to adopt the necessary policy instruments to achieve that target? We are facing here an important challenge.

In terms of energy efficiency, the European Commission is disappointed by the progress made by Member States towards the 2020 energy efficiency improvement target. It is important to highlight that the Energy Efficiency Directive 2012/27/EU does not include binding national energy efficiency targets. The absence of binding targets is seen by many analysts as the reason for the limited success of this policy. The directive is based on the bottom-up approach, with national plans to be assessed by the Commission. This is what the Commission is proposing for renewable energy and, therefore, there are great challenges ahead regarding the effectiveness of Europe's renewable energy policy.

What is proposed in terms of the important issue of market exposure and the introduction and integration of renewable energies in the energy system? First, the Commission insists on phasing out subsidies. This includes the primary subsidy for fossil fuels and also the subsidy for renewable energy. Secondly, the Commission aims to phase out price caps. According to studies by the Agency for the Cooperation of Energy Regulators (ACER), most Member States still regulate the consumer price of electricity. This affects investments. Thirdly, and perhaps most importantly, the EU Commission proposes to phase out feed-in tariffs and instead using floating premiums in connection with tenders.

This is a very important development, because it will contribute to improving the cost-effectiveness of Europe's renewable energy policy, and therefore its credibility. It will also contribute to the liberalisation of the electricity market. Interestingly, the Commission highlights the fact that this approach will also contribute to investment certainty. If feed-in tariffs are phased out, the risks of regulatory changes that have affected feed-in tariffs are reduced. The EU advocates an EU-wide approach, referring to the important economies of scale that can be achieved by 2030. But what this actually means is a move away from a national sovereign approach towards an EU approach. This 'Europeanisation' also concerns access to the network, as the European Commission proposes to phase out priority access to the network in favour of a more European approach towards balancing and back-up capacity.

These developments must be seen in parallel to the reform of the European Emissions Trading Scheme. In order to improve the stability of investment conditions, the 2009 Internal Electricity Market Directive introduced the principle of auctioning, together with a more predictable timeline and progressive reduction of greenhouse gas emissions. Furthermore, the European Commission recently proposed to interfere with the price of carbon - an important development because it touches upon the free market basis of the EU ETS Directive. I said initially that the ETS was not about investments. However, the European Commission is now concerned about investments and advocates the ETS as the new pillar to promote clean energy investments. Therefore, it needs to address the issue of price stability. It needs to ensure the stability and predictability of the pricing signal. And it proposes to do that through the market stability reserves - ie by interfering with the carbon price.

In the 2010 Arcelor judgment (Arcelor SA v Parliament and Council Case T–16/04), the General Court rejected Arcelor's claim that the lack of predictability of carbon prices affected the principle of freedom of establishment and legal certainty. The Court considered that there can be no right of stable price and predictable prices under the EU ETS because this goes against the market-based foundation of this policy instrument. The recent Commission proposals are going in a totally opposite direction to this free market basis of the ETS: the Commission will interfere with the ETS in order to create stability and predictability and therefore attract clean energy investment.

So what conclusions can we draw from this overview? First of all, the essential importance of policy coherence, something that has been highly under-estimated in the 2009 directives and throughout Europe's energy and climate policy. Europe has been working with a renewable energy policy and renewable energy targets, an energy efficiency policy and energy efficiency targets, and a climate policy and greenhouse gas emission reduction target. But this separate approach towards different low carbon objectives has affected the different policy instruments, in particular the ETS. There is a need for coherence; a need for an all-encompassing approach between renewable energy, energy efficiency and emissions trading.

There is also a need for coherence between liberalisation and decarbonisation. And this is key now in the

discussions on the creation of a capacity mechanism. A capacity mechanism remunerates the ability (ie readiness) to produce electricity. How will variable renewable energy sources be integrated into this new investment policy instrument in the investment sector? This is a further guestion that we need to ask ourselves when we are looking at security of supply and reliability of supply. The important interaction between liberalisation and subsidisation is addressed by the Commission by promoting the market exposure of renewable energy sources, including in relation to access to the network. This may be very good, but importantly this affects and undermines the right of Member States to choose feed-in tariffs, and we all know that feed-in tariffs are the most efficient support mechanism for renewable energy. So the Commission is proposing to prevent Member States from using the feed-in tariffs, the most efficient support mechanisms for renewable energy.

Flexibility versus stability is another key challenge. Investors in renewable energy need predictable and stable signals. Therefore, according to the Commission we need to avoid over-compensation and the Commission aims to achieve that by increased market exposure. At the same time, the Commission introduces a considerable level of policy unpredictability because this paradigm shift will mean that the Member States will have to revise their policy schemes and adopt new approaches. So by trying to achieve increased stability and predictability, the Commission is in fact also generating important signals of policy unpredictability.

The final important development is the call for Europeanisation. This is not new. An important debate preceded the adoption of Directive 2001/77. Should we go for an EU approach or for a national approach? We chose the nationally-based approach. A very similar debate took place when Directive 2009/28 was adopted, and again we chose a nationally-based approach with the possibility for Member States to take the sovereign decision to cooperate with other Member States, as Sweden has been doing with Norway. But cooperation was and still is the sovereign right of Member States.

The more recent call by the EU Commission for a market-based approach to the support of renewable energy policies risks affecting the sovereign right of Member States to determine their renewable energy policies. We are moving towards a European renewable energy policy for large scale projects. Is that policy credible? Is that policy acceptable? A debate on this policy development, taking into account national renewable energy policy priorities, is urgently needed.

Hot cases 2014: the changing environmental landscape

James Findlay QC, Harriet Townsend, Estelle Dehon Cornerstone Barristers, London, Birmingham, Cardiff

Introduction

Christine de Luca, who is the new Edinburgh Makar (akin to poet laureate), wrote several poems in the Shetlandic language in her 2005 collection 'Parallel Worlds'. In translation, the opening of her poem Chance of a Lifetime reflects on the Scottish landscape from above:

> From the airplane, streaks of light pick out a little town, plumped down there by chance: an accidence of streams and slopes, heads and tails of nature's providence.

Attendees at this conference may have different views on the impact of chance, and whether the complex web of planning and environmental requirements combine to strike a predictable balance between 'nature's providence' and the built environment. This is especially so in the sphere of energy, which is a particular focus of this year's conference.

Our task in highlighting 2013–2014's 'hot cases' has been to pick out from the voluminous case law of the last 12 months those decisions which cast light on the changing environmental landscape, either because of their importance as landmark cases, or because they are part of key trends in decision-making. We begin with a procedural round-up, spotlighting issues raised by the Aarhus Convention. We then move on to the acronym-laden heartland of environmental law: strategic environmental assessment (SEA), environmental impact assessment (EIA) and appropriate assessment (AA), as well as highlighting some interesting energy cases. Finally, we mention some other important matters that defy easy categorisation. We have attempted to present the law as at the beginning of June 2014, although we have mentioned some developments that occurred after that date.

Procedure

Before looking at the cases themselves, it is worth recording the significant procedural changes that affect practitioners in the High Court of England and Wales, and flagging up the changes on their way in Scotland.

By the 71st update to the Civil Procedure Rules (CPR), a planning court overseen by a judge of the Queen's Bench Division was created and put to work on 6 April 2014. As the new CPR r54.21 states, a 'planning court claim' includes any claim arising from EU Environmental legislation and can include an application for judicial review or a statutory appeal. A new practice direction (PD 54E) governs planning court claims, and identifies 'target' timescales for the determination of claims identified as 'significant' by the planning liaison judge, currently Mr Justice Lindblom.

An interesting early example of the use of this procedure is to be found in Harrier Developments Ltd v Fenland District Council,¹ a 'store wars' case (Harrier Developments had been seeking a judicial review of Fenland District Council's decision to grant planning permission for a new Sainsbury's store in King's Lynn). Following transfer to the planning court in early April, the claim was categorised as 'significant' at the end of April, which meant that it became subject to the timescales in the new regime, and Sainsburys was refused permission to bring the claim on 22 May 2014. The swiftness of the process was matched by the robustness of the decision, in which Mr Justice Mitting certified Harrier's claim as being 'totally without merit' under the new CPR r54.12(7), thereby preventing Harrier from seeking a reconsideration of the decision at an oral permission hearing, although it has appealed to the Court of Appeal. (The phrase 'totally without merit' means simply 'bound to fail' and not completely hopeless or misconceived; see the unreported case of R (Grace) v SOSHD.²)

Not surprisingly, none of the cases to which we refer has been brought to a substantive hearing under the new procedures, but our experience has been that the greater efficiency with which claims are dealt once made are broadly welcomed by practitioners. However, it does mean that the days of firing off a claim form in May and sitting back to enjoy a long summer are over. It also reinforces the need to ensure the best points in the claim are identified at the outset to reduce the risk of a 'totally without merit' label.

Further, a note of warning to Scots practitioners; changes to judicial review are on their way in Scotland too, with the probable inclusion of a permission stage (written and oral) and a time limit of three months (with a discretion to extend), see clause 85 Courts Reform (Scotland) Bill. The concepts of mora, taciturnity and acquiescence, which currently govern delay, will be restricted to nonpublic claims. This brings matters closer to the position in England. As at 8 June 2014, amendments have been tabled even suggesting reducing the limit to six weeks in the case of certain challenges.

The cases we consider on procedure fall neatly into two categories:

- the cost of proceedings
- the standard of review.

L CO/1489/2014

² Court of Appeal (9 June 2014).

The cost/expense of proceedings

It is now well over 10 years since the Aarhus Convention came into force,³ and the Guide to Implementation is in its second edition (April 2013), extending to some 300 pages.

Recent cases illustrate the long reach of the Convention and its impact on costs awards where claimants seek access to justice in environmental matters. We consider that whilst this may be the end of the beginning in terms of the Aarhus jurisprudence, it is certainly not the beginning of the end. When considering the accuracy of that forecast, bring to mind the following extract from the preamble to the Convention:

Recognising also that every person has the right to live in an environment adequate to his or her health and wellbeing, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future generations ...

Considering that, to be able to assert this right and observe this duty, citizens must have access to information, be entitled to participate in decision-making and have access to justice in environmental matters, and acknowledging in this regard that citizens may need assistance in order to exercise their rights . . .

By way of context, the public participation provisions⁴ of the Aarhus Convention had been incorporated into the 1985 EIA Directive by Articles 3(7) and 4(4) of Directive 2003/35.⁵ These give a member of the public the right to 'a review procedure before a court of law or [equivalent]' which must 'be fair, equitable, timely and not prohibitively expensive'.⁶ It is this right which is under scrutiny in the cases on costs which are considered here.

In this part of the article we will look at decisions such as *Edwards v Environment Agency* in the CJEU⁷ and SC,⁸ and at the CJEU's definition of the phrase 'prohibitively expensive', and in the Court's approach to that task. We will also look at the infringement proceedings against the UK which were concluded on 13 February 2014 (*Commission v UK* Case C–530/11). We end with references to the first instance decision of Mrs Justice Lang in *Venn v SSCLG*⁹ in granting a Protective Costs Order (PCO) on a section 288 challenge¹⁰ and to the opinion of Lord Drummond Young concerning Protective Expenses Orders (PEOs) in *Sally Carroll v Scottish Borders Council*.¹¹

In the infringement proceedings against the UK the Commission, in late 2007, had asked the UK to respond to the complaint that the UK had not complied with its obligations under the public participation provisions including that the review procedure should be "not prohibitively expensive". This did not result in a finding until well over six years later. What is important to note, and is indeed frustrating, is that the Court considers the law as it was six years ago, before *Garner v Elmbridge*,¹² and the Court did not provide much, if any, assistance for the post-*Garner* and CPR r45 (England and Wales)¹³ or post-RCS r58A (Scotland)¹⁴ world, of which more below.

The Court of Appeal had, in *R*(*Garner*) *v Elmbridge BC* significantly developed the *Corner House*¹⁵ principles for making PCOs in the context of environmental law.¹⁶ In effect, a separate system of costs was being developed for environmental cases. The Supreme Court had then referred certain related questions to the CJEU for a ruling in *Edwards* (May 2011) which was given in April 2013 (well after the complaint was made against the UK but before argument was heard in July 2013). The same Advocate General (AG Kokott) was involved in both cases.

In Edwards, the question that prompted the reference to the CJEU was whether an unsuccessful claimant should be required to pay the costs of the successful defence of an application for judicial review and, if so, to what extent. In unusual circumstances, the claimant in guestion, Mrs Pallikaropoulos,¹⁷ had been substituted for a legally aided individual, Edwards, and was relatively well resourced. The unusual facts of the case make it less useful as an indication to the answer a court is likely to give to the question of what costs order should be made in any particular case. However, the Supreme Court's interpretation and application of the CJEU's ruling provides essential guidance on the approach that the courts must now take to awards of costs against claimants who seek the review of decisions which are subject to the public participation provisions of European directives concerning the environment.

It will be seen that none of the five *Corner House* principles now stands without substantial qualification where environmental issues are concerned. The Supreme Court's judgment in *Edwards* was given by Lord Carnwath, with the agreement of the other four members of the judicial panel. It sets out the substantive guidance of the CJEU and extracts five significant points from the CJEU's judgment. From these and the CJEU judgment itself, it emerges that there are some issues of approach on which clear and definitive guidance has now been given, and that some further considerations 'may' influence the decision in a particular case, although how this will impact on the current CPR r45 or RCS r58A is still unclear.¹⁸

^{3 30} October 2001.

⁴ But importantly, note the provisions of art 9(3), which are not so incorporated and which extend this right to national law but only in certain circumstances.

⁵ The 2011 EIA Directive, which codifies previous amendments to the 1985 Directive so as to provide a single and coherent source, makes no changes of significance.

⁶ Extracted from art 10a of the 1985 EIA Directive as inserted by the Directive 2003/35/EC.

⁷ Case C-260/11 [2013] 1 WLR 2914, [2013] 3 CMLR 13.

^{8 [2013]} UKSC 78, [2014] I WLR 55, [2014] Env LR 17.

^{9 [2013]} EWHC 3546 (Admin).

¹⁰ A statutory appeal under s 288 of the Town and Country Planning Act 1990.

II [2014] CSOH 30. Note that, although the order is called a PCO in England and Wales and a PEO in Scotland, it operates in the same way to limit a litigant's exposure to costs.

^{12 [2011]} EWCA Civ 891.

¹³ See Appendix below.

¹⁴ See Appendix below.

^{15 [2005]} EWCA Civ 192.

¹⁶ Note 12.

¹⁷ Confusingly, not Edwards (who was legally aided, but withdrew instructions during the Court of Appeal hearing) but Mrs Pallikaropoulos, who was substituted at that time and was not entitled to legal aid.

¹⁸ See eg the exchange in R (Baggus) v Forest of Dean DC [2013] EWHC 4397 (Admin).

As to clear and definitive guidance, the following is now clear from the judgment of the CJEU:

- The need for the uniform application of European Union law requires that (in cases where there is no express reference to the law of the Member States for the purpose of determining its meaning and scope) there be an autonomous and uniform interpretation of the provisions throughout the EU.¹⁹
- 2. The cost of proceedings must neither exceed the financial resources of the person concerned nor appear in any event to be objectively unreasonable.²⁰
- 3. The requirement that judicial proceedings should not be prohibitively expensive cannot be assessed differently at first instance and on appeal.²¹
- 4. The fact that the claimant has not in fact been deterred from bringing proceedings, cannot be sufficient to establish that the proceedings are not prohibitively expensive for that claimant.²²

As to those considerations which may influence the decision whether a particular costs order would make the review procedure prohibitively expensive, the following are identified by the CJEU: 23

- The situation of the parties (although it is not immediately obvious quite how this should influence the question, and it is not given any particular consideration by the Supreme Court).
- 2. The prospects of success as the Supreme Court suggested: 'Lack of a reasonable prospect of success in the claim may, it seems, be a reason for allowing the respondents to recover a higher proportion of their costs. The fact that ''frivolity'' is mentioned separately (see below) suggests that something more demanding is envisaged than, for example, the threshold test of reasonable arguability' (SC judgment para 28 (i)).
- 3. The importance of what is at stake to the claimant, which is likely to be a factor capable of increasing the costs recoverable by the respondent.
- 4. The complexity of the relevant law and procedure. The Supreme Court interpreted this to suggest that a complex case is likely to require higher expenditure by respondents and thus, objectively, to justify a higher award of costs.
- 5. The potentially frivolous nature of the claim.

In Commission v UK,²⁴ the question before the CJEU was naturally wider in scope than in *Edwards*, in that it was argued that the UK had not adequately transposed the relevant provisions of the relevant directive into UK law. The discretionary protective costs order (PCO) was under attack.

- 22 Edwards v Environment Agency (n 7) para 56.
- 23 ibid para 46.

The UK argued that the practice of the courts in England and Wales had codified the principles governing such orders and that the flexibility of this approach was not only legitimate but desirable. It may be worth noting for general interest that, in relation to the size of UK lawyers' fees, it was said by the UK Government that this 'results from the nature of the legal system, which is adversarial and in which oral argument plays a predominant role'.²⁵

Again, the court's judgment is definitive that the law as at 2010 was not Directive compliant. In particular it is clear that:

- 1. The *Corner House* requirement that the issues must be of public interest 'is not appropriate'. Protection may be granted even where it is only the particular interest of the claimant which is involved.²⁶
- 2. The courts must grant protection where the cost of the proceedings is objectively unreasonable (even if they are affordable to the individual claimant).²⁷
- 3. The PCO 'regime' was not judged sufficiently predictable.²⁸ To put this another way, the degree of uncertainty and imprecision as to the costs implications of proceedings for claimants is too great.
- 4. Where cross-undertakings in damages are being contemplated (in connection with an interim order, for example) these must not make the proceedings as a whole prohibitively expensive.²⁹ The current system 'constitutes an additional element of uncertainty and imprecision so far as concerns compliance with the requirement that proceedings not be prohibitively expensive'.

However, the Commission's complaint about the reciprocal cap (a restriction on the amount of costs which a successful claimant may recover) was insufficiently supported by evidence to be examined.³⁰ This leaves the issue available for further argument, and hence uncertain.

At the time of writing, only one important High Court decision has had to grapple with the Supreme Court's judgment on an application for a PCO, namely Venn v SSCLG.³¹ As a section 288 challenge,³² the claim did not benefit from the revisions to the Civil Procedure Rules in England and Wales for judicial reviews in Aarhus Convention claims and it did not raise an environmental issue that engaged the provisions of a European directive. The four grounds of challenge were fairly typical of planning cases generally, albeit one of them concerned the defendant's approach to residential development on garden land, and was accordingly judged to raise 'environmental matters' within the meaning of Article 9(3) of the Convention.³³

- 30 ibid para 62.
- 31 [2013] EWHC 3546 (Admin), [2014] JPL 447.
- 32 An application to the High Court for a decision to be quashed and the matter referred back to the Secretary of State, made under s 288 of the Town and Country Planning Act 1990.
- 33 [2013] EWHC 3546 (Admin), judgment paras 16, 24.

¹⁹ Edwards v Environment Agency (n 7) paras 29, 30.

²⁰ ibid para 40.

²¹ ibid para 45. The same order need not be made, but at each stage of the proceedings the same principles apply to assessment at each stage. See Supreme Court judgment (n 8) para 24.

²⁴ Case C-530/11 (13 February 2014).

²⁵ Judgment para 27.

²⁶ ibid para 57.

²⁷ ibid.

²⁸ ibid para 58.

²⁹ ibid para 66.

Mrs Justice Lang noted that no European directive could be relied upon and, accordingly, for the purposes of the ground in question, that the Aarhus Convention was not part of UK domestic law. Nevertheless, she held that the *Corner House* criteria 'should be relaxed to give effect to the requirements of the Aarhus Convention'³⁴ and considered herself unable to extend the CPR to such claims.³⁵ She granted a PCO,³⁶ stating that 'it would be prohibitively expensive for [the claimant] to raise more than £3500'.³⁷ There is no mention of a reciprocal cap. The Secretary of State's appeal remains outstanding.

In Scotland, helpful judicial guidance in relation to RCS 58A was given by Lord Drummond Young in January of this year in Sally Carroll v Scottish Borders Council,³⁸ although his decision is based on argument from the summer of 2013 and so does not take account of the most recent authorities. RCS r58A is in quite different terms from CPR r45 – it is far narrower for a start, applying only to EAI/IPPC cases – but, arguably, it survives comparatively well in terms of the judgments of the SC and the CJEU in Edwards. In addition, it covers both judicial review and statutory appeals, unlike its English counterpart. What is less clear is how it would fare if assessed against the Convention and the requirements in respect of national law under Article 9(3), that is, claims concerning decisions that contravene the provisions of the national law relating to the environment which the High Court was dealing with in Venn. Most importantly, it is clear from the terms of the rule and the opinion of Lord Drummond Young that the approach of the Scottish courts will be more intrusive than of those in England. They will consider issues such as the genuineness of the interest of the petitioner, the requirement for a real prospect of success and whether or not the proceedings are still prohibitively expensive. There is still greater scope for satellite litigation in Scotland than in England, and no threat of indemnity costs either. The very recent decision of Lord Malcolm in Petition of Friends of Loch Etive³⁹ is a good example, with a PCO refused to a charitable company that was funded by a sole individual.

A number of important questions remain unanswered (or not fully answered), and are thus areas in which the hot cases of future conferences may germinate. Our top picks for fertile future discussion and litigation are:

- Are reciprocal caps lawful?
- Is £5000 a sensible limit?
- What to do on appeal, not only to the Court of Appeal but beyond?
- What are the limits of the Aarhus Convention does it apply to a strict questioning of listing/historical significance, for example?

The standard of review

Given the general controversy surrounding Prince Charles's correspondence with government departments and the efforts made by them to resist publication, we touch briefly on the case of *Evans*, *R* (on the application of) v HM Attorney General & Anor.⁴⁰ If information is power, the Court of Appeal has shed some light on the question of where, ultimately, the seat of power lies as between two parts of the constitutional framework (in this case the AG and the UpperTribunal – although the Prince of Wales has an important walk-on part). It engages, potentially at least, with the question of how meaningful is it to say that the British constitution supports the rule of law.

The background to the case lies in the efforts of a journalist (Mr Evans of *The Guardian*) to obtain disclosure of correspondence between Prince Charles and various departments of government during 2004–2005 under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004.

Mr Evans was unsuccessful before the Information Commissioner, but the Upper Tribunal (UT) ruled (after a full contested hearing and having read the disputed correspondence) that the communications should be disclosed to the extent that they fell into a category which the UT defined as 'advocacy correspondence'. The essential reason for the UT's decision was 'that it will generally be in the overall public interest for there to be transparency as to how and when Prince Charles seeks to influence government'.

The Aarhus Convention was in play again, of course, as the progenitor of the Environmental Information Directive,⁴¹ to which the Environmental Information Regulations 2004 give effect. Both the FOIA and the EIR make provision for the 'accountable person' (the Attorney General) to give the Information Commissioner a certificate, which has the effect of overriding a notice to disclose information. That certificate must state that the accountable person 'has on reasonable grounds formed the opinion that ...' there was no failure to comply with the Act or regulations in relation to the provision of information.

Despite the UT's decision, the Attorney General issued a certificate to that effect, following which Mr Evans sought judicial review of his exercise of that power. He was unsuccessful before the divisional court but its decision was overturned by a robust ruling from a unanimous Court of Appeal (led by the Master of the Rolls). The main points are these:

- It is not reasonable for the accountable person simply to disagree with the evaluation of the tribunal. The Court of Appeal drew support for this view from a range of authorities, including *R v Warwickshire ex parte Powergen.*⁴²
- 2. The Attorney General had simply disagreed with the evaluation made by the UT, and this was insufficient to amount to 'reasonable grounds'.⁴³

³⁴ ibid para 36.

³⁵ ibid para 32.

³⁶ ibid. The judge agreed with the claimant that: 'it seems inconsistent to exclude section 288 claims from costs protection' (para 32).

³⁷ ibid para 43.

^{38 [2014]} CSOH 30.

^{39 [2014]} CSOH 116.

^{40 [2014]} EWCA Civ 254, [2014] 2WLR 1334.

⁴¹ Directive 2003/4/EC.

^{42 (1998) 75} P&CR 89 para 37.

⁴³ At para 40.

- 3. The certificate provided for by both the FOIA and the EIR is incompatible with Article 6(2) of the Environmental Information Directive (where environmental information is concerned) for three reasons.⁴⁴
- 4. Had it been necessary to decide whether Article 6(2) requires a full appeal on the merits, the Court would have referred the question to the CJEU.⁴⁵
- 5. The certificate was unlawful insofar as it prevented disclosure of environmental information and this tainted the entire certificate which should be quashed.⁴⁶

The Court of Appeal granted permission to appeal to the Supreme Court, and we understand that the appeal is being pursued.

In Cairngorms Campaign and Others v Cairngorms National Park Authority⁴⁷ it was argued that the appropriate assessment required by the Habitats Regulations and Directive for development having the potential to cause an adverse effect on a Natura site had been unlawfully postponed wholesale to a later stage of the process (from the adoption of the local plan to the assessment of applications for planning permission). It was argued for the appellants that the assessment could not be adequate since it left matters (which could have been assessed at that stage) still to be assessed in a subsequent planning application. The Inner House of the Court of Session reframed the argument as a Wednesbury challenge to the appropriate assessment (AA) itself, and noted, in discussing the rival submissions in that context:

- 1. The expertise within, and the function of, the National Park Authority itself.
- 2. The lack of statutory guidance as to what must be done by way of an AA, citing *Waddenzee*.⁴⁸
- 3. There was no suggestion that a potential problem or issue had been omitted.
- Safeguarding or mitigating provisions are legitimate at the plan-making stage – citing for example Feeney v Oxford City Council.⁴⁹
- There is no obligation (established either in case law or in other general guidance) to assess broadly at the local plan stage whether or not a particular housing allocation would pass the Habitats test.⁵⁰
- 6. On the facts the local plan would not be rendered ineffective or illegal if one or more of the housing allocations did not come forward since it failed to satisfy the safeguarding policies at the time of the application.

The Court dismissed the appeal, holding that the AA should be considered as a whole and judged according to well known *Wednesbury* principles. In particular, a planning

49 [2008] 2 P&CR 16.

authority, at the plan-making stage, may use safeguarding policies to ensure the requirements of the Directive are met. Note that it may be that an appeal against this decision will be heard later this year in the SC, but a question mark hangs over that given the outcome of a PCO application. The approach of the Inner House and its recourse to the *Wednesbury* test reflects a growing judicial recognition both north and south of the border that procedures for environmental protection should not be seen as an obstacle course. This infects all areas of law, and is reflected in the relatively lower rate of success in challenges discussed below. Coupled with the 'Carnwath approach' to discretionary relief as expounded in *Walton* (see below), the question is whether the pendulum has swung too far.

Strategic environmental assessment – losing purpose?

It has also been almost 10 years since EU Directive 2001/ 42/EC (the SEA Directive) was transposed into the law of England and Wales through the Environmental Assessment of Plans and Programmes Regulations 2004 (SI 2004/ 1633), and into the law of Scotland through SSI 2004/258 and then the Environmental Assessment (Scotland) Act 2005. It requires an environmental assessment to be carried out for 'all plans and programmes' that 'set the framework for future development consent projects', and which are 'likely to have significant environmental effects' and are 'required by administrative provision'.⁵¹ The Supreme Court in *Walton*,⁵² following the CJEU, has made it clear that SEA is not coextensive with EIA, even though there is a potential for overlap between the two processes.

HS2 – What price the purposive approach?

The Supreme Court has spoken again in the HS2 litigation, concerning the proposed HS2 high speed rail network from London to Manchester and Leeds, via Birmingham in *R* (Buckinghamshire CC) v SST.⁵³ As is well known, the proceedings were sparked by the Secretary of State for Transport's publication of a command paper, 'High speed rail: investing in Britain's future – decisions and next steps' (DNS). The DNS set out the government's decision to press ahead with HS2 and outlined the steps by which it was to be realised, including the proposal that there should be hybrid bills in Parliament, which would contain development consent in the form of deemed planning permission.

A key question before the Supreme Court was whether the DNS was a plan or programme which set the framework for development consent and was required by administrative provision. The leading judgment on the SEA issues was given by Lord Carnwath, who held that the DNS did not set the framework for the purposes of Article 3. Despite recognising that the 'very elaborate description of the HS2 project, including the thinking behind it and the

⁴⁴ Referred to at paras 55–57.

⁴⁵ At para 73.

⁴⁶ At paras 80-81.

^{47 [2013]} SCIH 65.

⁴⁸ Landelijike Waddenzee v Staatsecretaris can Landbouw [2004] ECR I-7405; [2005] Env LR I4.

⁵⁰ Cairngorms Campaign and Others v Cairngorms National Park Authority (n 47) para 62(4).

⁵¹ SEA Directive art 2 and art 3 paras 1–3.

⁵² Walton v Scottish Ministers [2012] UKSC 44, [2013] PTSR 51 at para 28.

^{53 [2014]} UKSC 3, [2014] I WLR 324.

government's reasons for rejecting alternatives' could be seen as 'helping to set the framework for subsequent debate', Lord Carnwath was swayed by the fact that the DNS 'does not in any way constrain the decision-making process of the authority responsible, which in this case is Parliament'.⁵⁴ Accordingly, even if a document is intended to influence the result of subsequent debate, as it was acknowledged the DNS was, that is not sufficient for the contents to be a plan or programme that 'sets the framework'. 'Influence', in the ordinary sense of the word, is insufficient; what is required is influence 'such as to constrain subsequent consideration, and to prevent appropriate account from being taken of all the environmental effects which might otherwise be relevant'.⁵⁵

Although Lord Carnwath recognised that a development plan is not 'prescriptive', but is still 'an obvious example' of a plan or programme, he reasoned that the development plan 'defines the criteria by which the application is to be determined, and thus sets the framework for the grant of consent', in a way that was materially different from the DNS.⁵⁶

Lord Sumption was in forceful agreement with Lord Carnwath.⁵⁷ Baroness Hale was rather more cautious, even framing a question to be referred to the CJEU, but she then reasoned such a reference was unnecessary.⁵⁸ She was particularly persuaded by the aim of the SEA Directive:

... the aim of the Directive is not to ensure that all development proposals which will have major environmental effects are preceded by a strategic environmental assessment; rather, it is to ensure that future development consent for projects is not constrained by decisions which have been taken 'upstream' without such assessment, thus pre-empting the environmental assessment to be made at project level.⁵⁹

Whilst this discussion alone would have been sufficient to make the HS2 decision of importance, the joint judgment of Lords Neuberger and Mance (with whom the remainder of the Court agreed) is arguably even more significant. The justices take the opportunity to make 'some further observations' concerning the decisions of the CJEU which they 'have found problematic' (paragraph 158). What follows is a biting critique of the purposive approach adopted by the CJEU in interpreting EU legislation, and in particular the decision in *Inter-Environnement Bruxelles ASBL* v *Région de Bruxelles-Capitale.*⁶⁰

In an analysis that arguably reflects peculiarly British concerns, forged in the crucible of a system of parliamentary sovereignty, the Justices assert at paragraphs 170–71 that it is

... a common place in legislation that objectives may not fully be achievable or achieved. Compromises or concessions have to be made if legislators are to achieve the enactment of particular provisions ... When reading or interpreting legislation, it can never therefore be assumed that particular objectives have been achieved to the fullest possible degree ... Where the legislature has agreed a clearly expressed measure, reflecting the legislators' choices and compromises in order to achieve agreement, it is not for the court to rewrite the legislation, to extend or 'improve' it in respects which the legislator clearly did not intend.

Accordingly, the Justices assert that interpretation 'is only necessary when legislation, construed in the light of its language, context and objectives, is unclear' (paragraph 166), and that such interpretation must respect the limitations and qualifications which may 'may have to be introduced to arrive at any agreement' (paragraph 170). There then followed a scathing analysis of the CJEU's reasoning in *Inter-Environnement Bruxelles*, which supported the CJEU's holding that plans and programmes 'required by legislative, regulatory or administrative provisions' in Article 2 was not restricted to those plans whose adoption was compulsory (paragraphs 175–89).

The Supreme Court thus asserted its preference for a narrower approach to the word 'required', and also stepped away from purposive interpretation to a more literalist approach, underpinned by a type of original intent theory. This represents a very significant departure indeed from the approach adopted by the CJEU, and seeks to drain much of the potency out of the clear objectives that are articulated at the outset of EU directives (and which, it must be pointed out, are the expressly agreed articulation of the objectives of the legislation as set down by the legislators).⁶¹

Despite the trenchant disagreement with the CJEU, the way in which it arose meant that a reference to the CJEU was not forthcoming, with the result that this disagreement on domestic interpretation of EU legislation presents real difficulty for practitioners. Clearly, those relying on well-established CJEU jurisprudence to urge a broad purposive interpretation of EU legislation will have to overcome not only the Supreme Court's disapproval of that approach, but also the willingness of that Court to criticise and break away from CJEU case law. Quite what the future holds for the purposive approach is unclear.

⁵⁴ ibid para 30.

⁵⁵ ibid para 40. In coming to this conclusion, Lord Carnwath found strong support in the approach of the Advocate General and the CJEU to the facts of the Terre Wallonne case [2010] ECR I–5611 and by the formula enunciated in Inter-Environnement Bruxelles ASBL v Région de Bruxelles-Capitale [2012] 2 CMLR 909 and adopted by the Grand Chamber in the Nomarchiaki case [2013] Env LR 453.

⁵⁶ R (Buckinghamshire CC) v SST (n 52) para 37.

⁵⁷ ibid para 123.

⁵⁸ ibid paras 154-55.

⁵⁹ ibid para 155.

⁶⁰ Case C–567/10 [2012] 2 CMLR 909. This applied a broad, purposive approach to art 2 of the SEA Directive, in which the word 'required' was given a wide meaning.

⁶¹ Article I of the SEA Directive, for example, states: The objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment¹.

SEA in practice

Recent SEA decisions show a trend that is also discernible in EIA and AA case law: insistence by the courts that deficiencies in an authority's assessment process are not always substantively fatal (ie rejecting a counsel of perfection) and the adoption by the courts of a more flexible approach to remedy (ie the exercise of discretion). This trend means that it is increasingly difficult to succeed in challenges based on the EU environmental directives.

A number of recent cases reject the counsel of perfection, including the following.

• Shadwell Estates v Breckland DC⁶²

This case concerned a challenge to the sustainability appraisal supporting the Thetford Area Action Plan, based on criticisms of a 'highly detailed nature' concerning alternatives, biodiversity issues and impacts on stone curlews. The judge emphasised that review of environmental documents takes place 'on conventional *Wednesbury* grounds', meaning that any deficiencies identified must be so serious that the document cannot be described, in substance, as an environmental statement (paragraphs 73–78). Citing *Seaport Investments Ltd*,⁶³ the judge held that the court 'will not examine the fine detail of the contents of such a report', but 'will seek to establish whether there has been substantial compliance with the information required' (paragraph 78). The challenge failed.⁶⁴

No Adastral New Town v Suffolk Coastal DC⁶⁵

This case involved a challenge to the adoption of a core strategy. The AA ground is discussed below but, in relation to SEA, the claimant submitted that there was a requirement for there to be an assessment at each stage of the development plan process, which meant that each stage of the development plan had to be accompanied by a sustainability appraisal. The judge accepted that significant steps had been taken over four years during the preparation of the draft plan, which should have been informed by a sustainability appraisal in order to comply with the directive and the regulations. However, the judge held that the publication of the preferred option, together with a sustainability appraisal and public consultation, had allowed the local authority to make a properly informed decision and hence the authority had acted correctly and rationally at the critical stage of the development plan process (paragraphs 122-24). The challenge failed.

Zurich Assurance Ltd v Winchester City Council⁶⁶
This case also related to a challenge to a joint core
strategy on a number of bases, including that no further
sustainability or strategic environmental appraisal had

been carried out following modifications to the core strategy through the inclusion of an additional housing requirement of 1500 dwellings. The judge emphasised that the question of whether the modifications would be likely to have any significant additional environmental effects beyond those that had already been the subject of appraisal was a matter for the planning judgment, first for the inspector and then for the local authority. The judge accepted that the reasons given by the inspector and the authority for deciding there would not be significant environmental effects were neither irrational nor unlawful. The challenge failed.⁶⁷

The effects of the Supreme Court's decision in Walton⁶⁸ concerning discretion as to remedy⁶⁹ have begun to be felt in the recent case law.⁷⁰ South of the border, in West Kensington Estate Tenants and Residents' Association v Hammersmith and Fulham LBC,⁷¹ Lindblom J refused to quash the Earl's Court and West Kensington Opportunity Area Joint Supplementary Planning Document (SPD), which made provision for the redevelopment of Earl's Court, including through the construction of housing estates. Although the SEA conducted for the SPD was found to be adequate and lawful, the judge found there had been a failure to provide a proper statement of compliance, as required by Article 9(1) of the SEA Directive and regulation 16 of the SEA Regulations (paragraphs 200-204). Following Walton, the judge held that there was 'no justification for the draconian step of quashing the SPD' (paragraph 209). Rather, given the error was one of omission, the judge made a mandatory order requiring the local authorities to publish an adequate statement of compliance.

North of the border, in *McGinty v Scottish Ministers*,⁷² Lords Clarke, Brodie and Kingarth refused to reduce part of the National Planning Framework for Scotland 2. Alongside a finding that the reclaimer had not demonstrated any proper basis for taking such a serious step (paragraph 59), the court held that any arguable breach of the SEA Directive by reason of a failure in the consultation process was at best technical, rather than material (paragraph 54). As a result, and citing *Walton*, the court indicated that it would have exercised its discretion not to grant a remedy (paragraph 55–58).

^{62 [2013]} EWHC 12 (Admin) Beatson J (11 January 2013).

Seaport Investments Ltd, Re Application for Judicial Review (2007] NIQB 62.
 See also, in relation to the assessment of alternatives, R (Chalfont St Peter Parish Council) v Chiltern District Council [2013] EWHC 1877 (Admin) and Ashdown Forest Economic Development LLP v SSCLG [2014] EWHC 406 (Admin).

^{65 [2014]} EWHC 223 (Admin) Patterson J (7 February 2014).

^{66 [2014]} EWHC 758 (Admin) Sales J (18 March 2014).

⁶⁷ See also, along similar lines, *Performance Retail Ltd Partnership v Eastbourne BC* [2014] EWHC 102 (Admin), in which Mr CMG Ockelton refused to accept that an SA/SEA was vitiated by the lack of assessment of a minor modification recommended by an Inspector at Examination in Public.

⁶⁸ Walton v Scottish Ministers [2012] UKSC 44, [2013] PTSR 51 at paras 115–139 and 155.

⁶⁹ Lord Carnwath's extensive obiter remarks that the principles relevant to discretion on remedy arising in domestic law (where procedural challenges fail because the breach did not cause substantial prejudice) are equally applicable to challenges brought under European legislation.

⁷⁰ They have also been felt in the learning, and it is clear that practitioners held widely divergent views as to the propriety of *Walton*: cf McCracken and Edwards 'Standing and discretion in environmental challenges: Walton, a curate's egg' [2014] JPL 304 and Lieven 'Untangling the Golden Thread' [2013] JPL OP149–160.

^{71 [2013]} EWHC 2834 (Admin).

^{72 [2013]} CSIH 78 (5).

Appropriate assessment (AA): birds, bats and habitats

The regulatory context to these challenges is set principally by two European directives (the Birds Directive and the Habitats Directive), transposed into English/Welsh law by the Conservation of Habitats and Species Regulations 2010 and into Scots law by the 1994 Regulations in their amended form.

There have been at least seven fully argued challenges raising Habitats Directive issues in the last year in England and Wales, of which only one was successful. In reverse chronological order they were the following.

- Forest of Dean Friends of the Earth v Forest of Dean DC^{73} The case challenged the grant of two outline planning permissions for development of two sites for employment uses near special areas of conservation (SACs) (home to lesser horseshoe bats). Future plans included a spine road to link the sites and deliver additional development. The permission hearing on this took seven hours, and finished at seven pm. The issue was whether it was unlawful to permit before the proposals because potential adverse impacts could not be ruled out and whether such a decision could be taken before details of the route of the spine road had been established. The claim was dismissed (as was the earlier challenge as to the adequacy of the assessment; see *R* (*Champion*) v North Norfolk DC^{74} below). The court relied upon the opinion of the Attorney General in Commission v UK75 and that adverse effects must be assessed at every relevant stage to the extent possible on the basis of the precision of the proposal, and in any event the spine road was not an inevitable part of the proposal under consideration. Burnett I's approach is consistent with the Inner House in the Cairngorms⁷⁶ case.
- Bagshaw v Wyre Borough Council⁷⁷ This case is discussed further below. The remaining cases included:
- Ashdown Forest Economic Development LLP v SSCLG⁷⁸ Challenge to adoption of core Strategy; Ashdown Forest an SPA; Plan setting framework for accommodating growth while avoiding the adverse effects which would be caused by a significant growth in visitor numbers; SEA issues given greater focus, but the Habitats Directive arguments - that the council was wrong in its screening decision not to proceed to an appropriate assessment stage - dismissed in a single paragraph (105). No assistance provided as to proper approach required in other cases on screening.
- No Adastral New Town v Suffolk Coastal DC^{79} Challenge to adoption of core strategy; major allocation close to the Deben Estuary SPA; challenge to stage

at which the AA was undertaken (not early enough) and the uncertainty of the mitigation relied upon (alternative green space); similar approach taken to that in Cairngorms⁸⁰ and claim dismissed. Held: (i) reiterated that a decision-maker 'should give' the views of statutory consultees such as Natural England, great weight; (ii) noted whilst good practice to carry out an AA as early as possible that was not an absolute requirement; and (iii) mitigation measures can be taken into account in the assessment provided sufficiently certain.

Smyth v SSCLG⁸¹

Residential development in the countryside near an SPA and Ramsar site (supporting wintering populations of avocet and grebe), also a SAC (dunes and associated vegetation); challenge to grant of planning permission on appeal; proposed SANGS (suitable accessible natural green space) in accordance with agreed Joint Interim Approach supported by Natural England; court applied Hart⁸² and approached the inspector's judgment on a Wednesbury basis; inspector entitled to give the views of NE considerable weight. Claim dismissed.

R (Champion) v North Norfolk DC^{83}

Judicial review of planning permission; issue: impact on SAC, a river, by pollution caused by the development; overturned the High Court which had quashed permission on the basis it was irrational to decide against the need for an AA and to impose a water quality monitoring condition. Underlined importance of distinguishing between the EIA and AA regimes.⁸⁴

- Cairngorms Campaign⁸⁵ (and see also above).
- Forest of Dean Friends of the Earth v Forest of Dean DC⁸⁶ Adoption of core strategy and Area Action Plan; issue: impact on SACs - habitats of the lesser horseshoe bat; at issue the timing and adequacy of the AA; Natural England closely involved and Local Planning Authority entitled to give their views considerable weight. Late publication of AA for consultation but claim dismissed. Permission to appeal refused by Court of Appeal (24 March 2014).
- Feeney v SoS Transport⁸⁷

Statutory challenge following inquiry into proposed development of a railway; effect on the Oxford Meadows SAC (lowland hay meadow habitat) caused by air pollution; court applied Gillespie⁸⁸ to conditions requiring further survey work and monitoring; these recommended by Natural England. Claim dismissed. Court also considered application of Habitats Directive

83 Note 73 (Richards LJ, Lewison LJ and Coleridge J in agreement).

86 [2014] Env LR 3 Edwards-Stuart J (June 2013). 87 [2013] Env LR 34 Ouseley J (May 2013).

^{73 [2014]} EWHC 1353 (Admin) Burnett J (1 May 2014).

^{74 [2013]} EWCA Civ 1657.

^{75 [2005]} ECR I-9017.

⁷⁶ Note 47

^{77 [2014]} EWHC 508 (Admin) Stewart J (February 2014).

^{78 [2014]} EWHC 406 (Admin) Sales J (February 2).

⁷⁹ Note 65.

⁸⁰ Note 47, in which the judge accepted that the correct approach had been taken.

^{81 [2013]} EWHC 3844 (Admin) Patterson J (9 December 2013).

⁸² Hart DC v SSCLG (2008) 2 P&CR 16.

⁸⁴ See further below p 133. Permission for a further appeal to the Supreme Court was granted on 30 July 2014. 85 Note 47.

⁸⁸ Gillespie v First Secretary of State [2003] Env LR 30.

at successive stages of plan, see further Cairngorms Campaign⁸⁹ and latest Forest of Dean⁹⁰ cases above.

Of this list, perhaps the most interesting recurrent issue concerns the policies adopted within a development plan that are designed to address the impact on protected habitats and which the growth provided for by the plan could cause. The views of Natural England are, in each instance, given great weight by the court and it is unlikely that an authority would be criticised for doing likewise (recognising, of course, that it is the authority's responsibility to weigh all relevant advice in their decisions).

Also interesting is the role played in an assessment by possible future proposals. As Burnett | said in the Forest of Dean Friends of the Earth:⁹

The exercise identified by the Court of Justice is relatively straightforward when a competent authority is faced with a concrete proposal in isolation or even a concrete proposal in combination with other fully worked out plans or projects. But the reality of the planning system is that there are many plans which might come into play for the purposes of regulation 61 which have not been worked through at a high level of specificity. In Commission v United Kingdom [2005] ECR I-9017 the Advocate General proposed a solution. In paragraph 43 of her opinion she noted that the observations of the Court of Justice relating to scientific certainty were concerned with measures 'whose implementation was certain'. In considering the relationship between concrete proposals and plans the detail of which was yet to be determined, she said this:

49. The United Kingdom is admittedly right in raising the objection that an assessment of the implications of the preceding plans cannot take account of all the effects of a measure. Many details are regularly not settled until the time of the final permission. It would also hardly be proper to require a greater level of detail in preceding plans or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure.

The case concerned the transposition on the Habitats Directive into domestic law in the United Kingdom and Gibraltar and wide-ranging complaints by the Commission that domestic law was deficient in doing so. It was unnecessary for the Court to comment upon paragraph 49 of the Advocate General's opinion, although there is no sign of disagreement. An approach of the sort suggested by the Advocate General is clearly necessary to avoid sclerosis of the system. It represents an authoritative statement of the law from which the claimants have not sought to dissentand which has been accepted in this jurisdiction: Feeney v Oxford City Council [2011] EWHC

It is, however, worth looking in a little more detail at the one successful challenge, Bagshaw v Wyre Borough Council.⁹² This was an application for judicial review of the grant of planning permission for residential development. The principal ecological survey and report supporting the development had been prepared in support of a previous application, which involved the removal of a roadside hedgerow and a mature ash tree. In her response to consultation, the county ecologist had recommended that further information be provided to demonstrate that mitigation for the loss of the hedgerow could be delivered (she advised that the loss 'could result in detrimental impacts on bats'). She advised, further, that 'ideally' the proposals would retain 'a significant length' of hedgerow and create a new hedgerow.

The application for planning permission was different to that previously considered – a shorter length of hedgerow was identified for removal (although the remainder was to be reduced in height) and a new hedgerow was provided. It seems that the alterations to the proposal were assumed to meet the 'ideal' scenario mentioned in the county ecologist's earlier response. This, it would seem, led the planning officer to advise members that no objections had been raised by the county ecologist.

However, there had been no additional information provided as to the effect on bats, and as a result Mr Justice Stewart found that the planning authority had been materially misled by the report. Further, he did not accept 'that what went before the planning committee was, in ecological terms, "the retention of a significant length of the roadside hedge'' ' (paragraph 32). Ultimately, he found that the council had not established 'the extent to which [any bats] may be affected by the proposed development' (paragraph 33(i)).

Thus, the case turned on established principles of public law as to the role of the report to the planning committee, which was held to be materially misleading." The legal and policy context to the determination of applications where a potential impact on bats is concerned makes it necessary for decision-makers to obtain sufficient information to ascertain what the potential impacts are and which may require mitigation. Planning officers should be wary of assuming that a change in the proposals that appears to be beneficial will ensure that disturbance of a protected species is avoided.

The Inner House in Scotland has dismissed two challenges to approvals under the Habitats/Birds Directives recently in the Cairngorms⁹⁴ case referred to above and in the recent judicial review claim challenging consent for construction of a wind farm in Sustainable Shetland v

⁽Admin) 2699 and R (Buckingham County Council) v Secretary of State for Transport [2013] EWHC 481 (Admin).

⁹² Note 77.

⁹³ This was so, despite the fact that the county ecologist's final response suggested that her earlier response advised that sufficient information had been submitted [para 28 of the judgment]. In fact that earlier response expressed satisfaction as to the information submitted in relation to amphibians only. 94 Note 47.

⁸⁹ Note 47.

⁹⁰ Note 73.

⁹¹ ibid at para 16.

*Scottish Ministers.*⁹⁵ In the latter case the Court took a restrictive view of the onus on the decision-maker in overturning the Lord Ordinary. It is understood that an appeal to the Supreme Court may be pending.

Environmental impact assessment: no longer coming up trumps?

The Environmental Impact Assessment Directive 85/337 (EIA Directive) was originally transposed into the law of England and Wales by the Town and Country Planning (Environmental Impact Assessment) Regulations 1988 and into the law of Scotland by the Environmental Impact Assessment (Scotland) Regulations 1999. A considerable body of EIA case law now exists, although the same trends identified above in relation to SEA and AA decisions are identifiable in recent EIA case law.⁹⁶

Screening decisions

A clearly discernible trend has emerged over the past year in this area: most challenges to EIA screening decisions now fail. Of the 11 fully argued challenges to screening decisions in England and Wales in the last 12 months or so, only two were successful at first instance, and one of those was overturned on appeal. The authors are not aware of any challenges to screening decisions in Scotland.

The successful challenge was made in R (Mouring) v West Berkshire,⁹⁷ which was a rather extreme case: the council failed entirely to consider whether the erection of warehouse premises together with ancillary offices and staff car parking at a site within an area of outstanding natural beauty (AONB) fell within the EIA Regulations. The council had not carried out a screening opinion nor had any EIA issues been raised with the committee. Furthermore, the council's planning officer had recommended refusal of planning permission partly on the basis of the size of the building, which 'would result in an urbanising effect on the locality which would demonstrably harm the visual quality and intrinsic character and beauty of that part of the AONB'. In those circumstances, it is perhaps unsurprising that Collins | quashed the grant of permission on the basis that the development fell prima facie within Schedule 2 of the EIA Directive and a screening exercise should thus have been carried out (paragraphs 17-23).

The challenge that was successful at first instance but was overturned on appeal was R (*Champion*) v North Norfolk DC^{98} (also mentioned above in relation to AA). This concerned a grant of planning permission for the erection of two silos and the construction of a lorry park on a maltings site, which had been in operation for a number of years. The site was near the river Wensum, a designated SAC, and there was evidence of hydrological connectivity between the site and the river. Two screening exercises had been undertaken and the local authority had concluded that neither EIA nor AA was required. Although the nature of the challenge at first instance changed over time, the aspect that convinced James Dingemans QC to quash the permission was the imposition of two conditions for the protection and monitoring of water quality, and remediation if necessary.⁹⁹ The judge held that, if the planning committee felt these conditions were necessary, then it could not simultaneously accept that it was not likely that there would be a significant effect on the river. He exercised his discretion to quash the permission.

The Court of Appeal overturned that decision, finding that there was no inconsistency between the two positions adopted by the local authority. They were sequential and separate aspects of the committee's decision-making process and reasoning (paragraphs 43-49). The concerns expressed by various bodies, including Natural England and the Environment Agency, ensured that the question of mitigation measures had been properly addressed. The committee had been put in a position where it could properly make the requisite assessment as to the likely effect of the development on the SSSI and the SAC, and the judge had been correct to find that the decision not to have an EIA or AA was 'a rational and reasonable conclusion available to the committee' on the material before it (paragraphs 51-59). On 30 July 2014, the Supreme Court granted permission for a further appeal. This should mean that detailed and authoritative consideration is given to the question whether/when it is lawful to have regard to mitigation measures in decisions of this sort.

The following cases are those in which the screening decision challenges failed.

• R (Gilbert) v SSCLG¹⁰⁰

This case concerned a screening assessment of a vehicle proving and testing site, which the claimant alleged created a noise nuisance. The court held that the Secretary of State had asked the right questions and equipped himself with the relevant information. The precautionary principle had to be applied in the light of the stage of the proposal at which the screening assessment was made and in the instant case there had been a two-year trial of noise controls. The decision-maker had considered the evidence and had found that a significant impact was unlikely. Concerns about the enforceability of a noise cap did not affect the underlying noise measurements and the reports had been fair and accurate. It was also clear from the Secretary of State's decision letter and from the screening checklist that consideration had been given to the cumulative effects of noise emissions and traffic congestion.

 R (CBRE Lionbrook (General Partners) Ltd) v Rugby BC¹⁰¹ This case concerned the redevelopment of a retail park on the outskirts of Rugby. A negative screening opinion

^{95 [2014]} CSIH 60.

⁹⁶ One case to buck the trend is the recent decision of the Inner House in *Highland Council v Scottish Ministers* [2014] CSIH 74, in which a decision to permit an incinerator at Invergordon was quashed (the second time that such an approval had been quashed). The reporter had failed to limit the permission to that which had been assessed by the EIA.

^{97 [2014]} EWHC 203 (Admin).

⁹⁸ Note 73.

^{99 [2013]} EWHC 1065 (Admin).

^{100 [2014]} EWHC 1952 (Admin) Supperstone J (9 April 2014).

^{101 [2014]} EWHC 646 (Admin) Lindblom J (14 March 2014).

had been issued in 2011, but the local authority decided that it was not required to issue a further screening opinion for a revised proposal submitted in 2012. The court held that the screening process undertaken by the local authority fully complied with the requirements of the regulations. Regulation 7 allowed the authority to judge whether any changes to a proposal were such as to cast doubt on the continuing validity of the screening opinion for the proposal in its previous form. If the result of a further screening process for a revised proposal would inevitably be the same, the authority was able to conclude that its original screening opinion was competent for the proposed development in its modified form. In the instant case, a planning officer had considered the differences between the original and the revised proposal and had concluded that a further screening process would have been superfluous (paragraphs 42-51).

R (Plant) v Pembrokeshire County Council¹⁰²

The case concerned a grant of planning permission for the erection of two medium-scale wind turbines on land at an organic dairy farm in Pembrokeshire. The site was near several ancient monuments: the Castell Meherin scheduled monument is 100 m away; the Parc-y-Gerrig standing stone at 150 m; the Newhouse group of Bronze Age barrows at 600 m; and the Blaengwaith-Noah camp at 800 m. The objectors included the council's own archaeological advisers, the Dyfed Archaeological Trust. A number of screening opinions were issued, each deciding that EIA was not necessary. The court held that the council did properly take into account the historic and archaeological landscape effects and that there were no material inconsistencies in the screening opinions.

• R (Trevone) v Cornwall Council¹⁰³

This case concerned planning permission for 15 houses within an area of outstanding natural beauty in Cornwall. Even though the planning officer had accepted that the duration of landscape impact and loss of agricultural land impact was likely to be permanent, and the possibility of reversibility of such factors was low, the court held that this did not prevent the council from determining that the development was unlikely to have significant effects on the environment. The judge commented that, just as an impact can be temporary and reversible but nevertheless significant, an impact can be permanent and irreversible and yet not be significant, and held there had not been *Wednesbury* unreasonableness (paragraph 47).

• R (Oldfield) v SSCLG¹⁰⁴

This case concerned redevelopment of a piece of land which was adjacent to another site that was also the subject of development proposals. The court held that the projects had not been unlawfully split and that the cumulative effects of the developments had properly been taken into account (paragraphs 24–29, 30–58). • Smyth v SSCLG¹⁰⁵

Concerning a grant of planning permission for the construction of 65 dwellings on undeveloped agricultural land close to a special protection area for birds the judge held that a negative screening opinion was not unlawful when a later decision had been made that AA was required, given the differences in the two processes. See further p 131.

Mackman v SSCLG¹⁰⁶

At issue in this case was an outline planning permission for a housing development. The site had been negatively screened a number of times. The court held that failure to refer expressly to a particular factor in the evaluation of environmental effects did not necessarily mean that it was not taken into account, and that, although the planning officer's reasons had been brief, they were adequate in a case that was not complex or borderline (paragraphs 61–79).

• Aston v SSCLG¹⁰⁷

This was a case relating to the development of 14 houses on a reserve housing site in an area of outstanding natural beauty. Although the Secretary of State acknowledged that the screening opinion was not 'a flawless treatise on the application of the EIA Regulations', the judge held that it was not *Wednesbury* unreasonable (paragraphs 22–30). He stated: 'There are, now, a plethora of cases which demonstrate the difficulties which claimants face in seeking to persuade this court that a decision which is dependent upon the exercise of planning judgment should be quashed. Essentially, such a decision may be quashed on classic *Wednesbury* grounds but the threshold is a high one' (paragraph 29).

• R (Save Britain's Heritage) v SSCLG¹⁰⁸

This case concerned the demolition of a Victorian chapel in an area earmarked for redevelopment. A number of criticisms of the negative screening opinion were rejected, including that there had been impermissible 'salami slicing' by excluding the chapel from a larger redevelopment scheme (paragraphs 312, 347–50, 355, 360, 422, 442).

R (Holder) v Gedling Borough Council¹⁰⁹

Finally, this case concerned a grant of planning permission to erect a single wind turbine on green belt land. The local authority had adopted a screening opinion that, since the proposed development was for a single turbine, an EIA was not required. The court held that it should not impose too high a burden on planning authorities in relation to a procedure intended to identify the relatively small number of cases in which an EIA was required. The screening opinion, read as a whole, showed that the relevant factors had been considered

107 [2013] EWHC 1936 (Admin) Wyn Williams J (10 July 2013).

^{102 [2014]} EWHC 1040 (Admin) Hickinbottom J (4 March 2014).

^{103 [2013]} EWHC 4091 (Admin) Birtles J (20 December 2013).

^{104 [2013]} EWHC 4269 (Admin) Moses LJ (12 December 2013).

¹⁰⁵ Note 81.

^{106 [2013]} EWHC 3396 (QB) Lang J (7 November 2013).

^{108 [2013]} EWHC 2268 (Admin), [2014] Env LR 9 Stadlen J (25 July 2013).

^{109 [2013]} EWHC 1611 (Admin) Parker, J (12 June 2013).

when rejecting the need for an EIA and the requisite information provided (paragraphs 67–68, 75).¹¹⁰

Discretion as to remedy

As with SEA, the discretion not to quash a planning permission despite a failure to comply with the EIA Regulations is becoming increasingly important, and so 'technical' challenges to EIA decisions are no longer likely to succeed. A good example is R (*Gibson*) v Harrow DC,¹¹¹ in which Sales J held that it was not appropriate to grant relief as a result of the local authority's failure to place a screening opinion on the register, no detriment having been suffered by the claimant.

Enforcement of time limits and EIA

One case deserves particular mention, namely R (Evans) v Basingstoke and Deane BC,¹¹² which considered whether immunity from enforcement conferred by section 171B and/or section 191 of the Town and Country Planning Act 1990 was compatible with the EIA Directive. Lord Justice Sullivan (with whom Lord Justices Aikens and Patten agreed) held that a time limit on taking enforcement action against EIA development was not in principle incompatible with a Member State's obligation to ensure compliance with the EIA Directive. The case concerned a watercress farm on which the proportion of the produce sorted, washed and packed which was imported from other sites increased, such that there was a material change of use of the site from agricultural to 'mixed agricultural/industrial use with the industrial element predominant'. The change of use was immune from enforcement, having occurred more than 10 years earlier.

The Court of Appeal cited the CJEU's decision in *Commission of the European Communities v United Kingdom*,¹¹³ in which Advocate General Colomer's opinion referring to the relevant UK legislation on time limits had not been accepted. Although the action was dismissed as inadmissible because the Commission had failed to complain about that aspect of the UK's two-part legal mechanism, the Court of Appeal reasoned that if 'the very existence of a system of time limits for taking enforcement action was incompatible with the EIA Directive, ... the court would surely have said so' (paragraph 13). Furthermore, given that the judgment in *Commission v United Kingdom* was promulgated in 2006, the Commission would likely have renewed its application had it thought that the time limits were incompatible with the directive (paragraph 15).

The Court of Appeal held that, given that the time limits were not in principle incompatible, the precise nature of the time limits was a matter falling 'within the principle of procedural autonomy of the Member States provided that the time limits imposed by the Member States comply with the principles of equivalence and effectiveness' (paragraph 26).

Energy cases

We are aware of three challenges to energy-related development consent order (DCO) decisions taken under the Planning Act 2008. Challenges to DCO decisions are made under section 118 of the 2008 Act by way of a claim for judicial review, which must be made within six weeks of the decision or its reasons.

The first case discussed here is the successful challenge: *R* (*Halite Energy Group*) v SoS Energy and Climate Change.¹¹⁴ This concerned an application for a DCO to provide an underground gas storage facility within naturally occurring salt deposits (halite) in the Wyre Peninsular, Lancashire. The plans had been promoted twice previously on larger sites. Notably, the proposal would also have to comply with the Control of Major Accident Hazards Regulations 1999 (COMAH) following the grant of a DCO for which the competent authorities are the Health and Safety Executive and the Environment Agency.

The examining authority found that the geological analysis underpinning the DCO application (for up to 19 caverns for the underground storage of up to 900 million cubic metres of natural gas) 'falls short of that required by NPS EN-4 to prove beyond reasonable doubt that the halite is geologically suitable for the caverns proposed' (paragraph 53). The examining authority proposed that the deficiency be addressed by including requirements on the DCO (these operate in the same way as conditions on the grant of planning permission). The Secretary of State disagreed and refused the DCO.

Patterson J divided the developer's grounds into three (paragraph 36):

- procedural unfairness
- the meaning of paragraph 2.8.9 of NPS EN-4
- irrationality.

In each case the claim was upheld.¹¹⁵

Of particular interest, in that it will be relevant to other inquisitorial procedures, is Patterson J's finding that there was a breach of natural justice. The judge applied the familiar case (which concerned a public inquiry) of *Castleford Homes v SoSE*,¹¹⁶ in order to pose the question whether the claimant got 'a fair crack of the whip'. This required a detailed examination of the facts: she went through the examination process in detail. There was no issue-specific hearing (ISH) on geology and the applicant had provided a detailed statement of common ground with Lancashire County Council on the subject. However, there was an ISH hearing on the relationship between the DCO and the COMAH process, which it was the claimant's case was the context in which more detailed geological data would support the proposal (paragraph 62).

¹¹⁰ The decision was overturned on appeal on non-EIA grounds; see [2014] EWCA Civ 599.

III [2013] EWHC 3449 (Admin).

^{112 [2013]} EWCA Civ 1635, [2014] 1 WLR 2034.

^{||3} Case C-98/04) [2006] ECR |-4003.

^{114 [2014]} EWHC 17 (Admin), Patterson J (January 2014)

¹¹⁵ Although DECC sought permission to appeal and lodged an appeal, this has been withdrawn and the process of redetermination has commenced. In particular, a letter has been written requesting the further geological data required by the assessor.

^{116 [2001]} EWHC 77.
The heart of the claimant's complaint is found at paragraphs 71–75 of the judgment, and the response to it at paragraphs 76–78, as a result of which Patterson J held:

I agree with the general submissions made by the defendant, namely, that the examination process is to be looked at as a whole and not with the benefit of hindsight. The still relatively new examination process is both inquisitorial, iterative and learning. The purpose of the examination process is to enable the ExA to be able to compile a fully informed report with a recommendation to the Secretary of State on the NSIP before it.

Nevertheless, she continued:

80. In the case of LB Croydon v Secretary of State for the Environment [1999] EWHC Admin 748 Keene J held [43]:

I return to a submission about need for the inspector to have adopted an inquisitorial role. No one suggests that an inspector is required to search for material not put before him. What the *Dyason* case establishes is that, when there is an informal hearing which, as a matter of procedure, normally excludes crossexamination, the inspector has to play an enhanced role in order to resolve conflicts of evidence. In addition, such an inspector must not arrive at a finding adverse to a party without having put the point to the party in question or his witness, and that is what happened in the *Dyason* case.

81. Although that was dealing with an informal hearing the enhanced role which the inspector has to play in an informal hearing is not dissimilar to the role of the ExA carrying out an examination under the 2008 Act. As a rule there is no cross-examination at the hearings or on the written documents submitted in response to the Panel's questions. The onus is, therefore, on the ExA to ensure that material matters of concern, which may or may not, have been raised by others who have made representations on the planning application are raised with all parties in a fair and transparent way. In particular, where matters raised or of concern relate to the principal controversial issues, there is a duty upon the ExA to provide all parties with the opportunity to comment upon them before reaching their final conclusions.

82. The questions which Ouseley J set out in *Castleford Homes* on the sort of issues which could be used to guide a conclusion as to whether the manner in which a particular issue was dealt with at an inquiry involved a breach of natural justice and was unfair, are just as apposite to a process of examination by an ExA as they are to parties at an inquiry. The fundamental issue here is whether there was a fair process in the particular circumstances of this examination? If there was not, the supplemental question is, what are the consequences?

Ultimately the judge held that there was nothing to alert the claimant to the challenge to the SOCG, which appeared in the examining authority's report (paragraph 95), the approach to the standard of proof on geological data lacked a fair and transparent process, and the flaws in the examining authority's reasoning tainted the decision of the Secretary of State.

Turning now to the challenges which did not succeed, the first case to be discussed is FCC Environmental v SoS

Energy and Climate Change,¹¹⁷ which was a challenge by a competitor business to the grant of a DCO for the provision of an energy from waste facility at a disused claypit in Bedfordshire. The two grounds were an alleged lack of reasons, including the compulsory acquisition of restrictive covenants benefiting the claimant, and the adequacy of environmental statement (it was said to be out of date). Mitting J gave the grounds of challenge short shrift and dismissed the claim. Of some interest for future cases where CPOs may be sought together with the DCO, is the effect of section 104(3) of the Planning Act 2008 on the policy test for confirmation of CPOs. As Mitting J held at paragraph 18:

For my part I find it difficult to conceive of circumstances in which the Panel in applying statutory guidance, as it must, which established an urgent need for development, could legitimately conclude that there was not a compelling case as a necessary element of the scheme, justifying compulsory acquisition of rights in land. To that extent, the established distinction between tests for the grant of planning consent and the grant of a power of compulsory acquisition (see *Trusthouse Forte Hotels Ltd v Secretary of State for the Environment* (1986) 53 P&CR 293 at page 299, paragraph 2 and page 300, paragraph 6) has been modified by statute.

Finally, as far as DCO challenges are concerned, is the case of R (An Taisce, the National Trust for Ireland) v Secretary of State for Energy and Climate Change.^{118,119} This case concerned the potential for transboundary environmental effects and the regime for their assessment that was introduced following the Espoo Convention of 1991, particularly as it appears there has only been one transboundary EIA case considered by the CJEU and that was on a site which straddled the boundary between countries. However, it was a 'rolled up' hearing including both the application for permission for judicial review and full argument, at the end of which Patterson | concluded that she would not have granted permission for judicial review. The long judgment and careful treatment the judge accorded the arguments made should not blind its readers to the robust terms in which the claim was dismissed.

The challenge was to the grant of consent for the Hinckley Point C nuclear plant. It was said that the screening decision under which it was determined there need be no consultation with the people of Ireland was flawed. It raised the question of how likely a transboundary effect must be for consultation to be necessary. The claimant borrowed from the Habitats Directive jurisprudence and argued for a similar approach: significant effects were said to be likely if they could not be excluded. Patterson J distinguished the approach required by the Habitats Directive (paragraph 121), saw no reason for a different approach to likelihood where

^{117 [2014]} EWHC 947 (Admin) Mitting J (January 2014).

^{118 [2013]} EWHC 4161 (Admin) Patterson J (December 2013).

¹¹⁹ The Court of Appeal has since handed down its decision refusing the appeal and refusing to refer any matters to the CJEU: [2014] EWCA Civ 1111.

the potential for transboundary effects was being considered, and adopted the same test as is applied at the screening opinion stage to the question whether significant effects are likely.

The second issue concerned the screening decision as to transboundary effects themselves. Patterson J set out clearly how the licensing of nuclear installations and the regime for development consent work in parallel. The claimant argued that no reliance could be placed on subsequent regulatory decisions. As to this, Patterson J said at paragraph 181:

At the time of the Secretary of State's consideration of whether to grant development consent there was no evidence to suggest that the risk of an accident was more than a bare and remote possibility. In the instant case the regulatory regime is in existence precisely to oversee the safety of nuclear sites. There is nothing in the Directive and Article 7, in particular, to require the regulatory regime to be disregarded. NPS EN-6 refers to reliance being placed in the DCO process on the licensing and permitting regulatory regime for nuclear power stations, to avoid unnecessary duplication and delay and to ensure that planning and regulatory processes are focused in the most appropriate areas. It would be contrary to the accepted principle in Gateshead¹²⁰ not to have regard to that regime, and in my judgment it would also be entirely contrary to common sense.

Other 'hot' cases south of the border include *East Northamptonshire v SSCLG*,¹²¹ in which the local planning authority successfully challenged the grant of planning permission for a wind farm on appeal, for treating less than substantial harm to the setting of a heritage asset as a less than substantial objection to the development. This is, rightly, treated as a heritage case rather than an energy case, but it has had considerable influence in the assessment of wind and solar farm proposals that frequently affect the setting of listed buildings.

As for the application of policy on renewable energy developments, there have been some interesting renewable energy cases. Three of these may help to illustrate some common themes.

On 16 October 2013, the SoS refused permission for a 24 MW solar farm proposed on 46 hectares of agricultural land in Waveney, Suffolk against the recommendation of his appointed inspector, on account of its harmful impact on the character and appearance of the countryside. He agreed that this harm would be 'limited' but also agreed that it would be greater than the 'very limited' harm which would be caused by a smaller permitted scheme in part of the site. He found the limited harm identified outweighed the benefit of the renewable energy provided by the proposal. A decision is awaited following the developer's statutory appeal to the High Court.

On 22 May 2014, the SoS refused permission for a 25 MW solar farm proposed on 50 hectares of agricultural land in Suffolk Coastal District in accordance with the recommendation of his appointed inspector. The main issues were the impact on the setting of three listed buildings, and the impact on landscape and visual amenity which the proposal would cause. Particularly notable for future cases was: (a) the significant weight given to the 'less than substantial' harm to the setting of one of the three listed buildings; and (b) that the reversibility of the development should not be 'an influential factor' in the determination of the appeal.

On 2 June 2014, an inspector dismissed an appeal for a 10 MW solar farm in Babergh for landscape impact reasons and reflecting the sequential approach required by the Planning Practice Guidance (paragraph ID 5–013) where agricultural land is proposed to be used. The first factor for consideration is '... focusing large scale solar farms on previously developed and non-agricultural land, provided it is not of high environmental value'. The first part of the second factor to consider is 'where a proposal involves greenfield land, whether ... the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land'.

These decisions suggest that a hard line is being taken on the policy requirements of the recently published PPG, and on questions of impact. This may reflect the objective of ministers that the solar industry will make use of rooftop sites and other brownfield land.

In Scotland there have been two important first instance energy cases on section 36 of the Electricity Act 1989: Sustainable Shetland v Scottish Ministers,¹²² now overturned on appeal, and Trump International Golf Club Scotland Ltd v Scottish Ministers,¹²³ appeal pending. The main issue in Sustainable Shetland, at least in the eyes of the first instance court, was whether an applicant for construction and operation of a wind farm needs to be a licence holder or a person authorised by an exemption before a consent could be granted. Lady Clark of Carlton said yes (sending shock waves through the industry); Lord Doherty then said no and declined to follow Lady Clark. Scottish ministers appealed Lady Clark's decision. Trump tried to join in, whilst awaiting Lord Doherty's opinion, as did others including the RSPB on the underlying Birds Directive point. Their attempts were rejected by the Inner House,¹²⁴ taking what some consider a very restrictive approach to a public law issue. It determined that Trump would not be directly affected by the outcome of the appeal in Sustainable Shetland, although on Trump's appeal the Inner House might well suggest otherwise! It considered the RSPB's submissions would not be of benefit to it.

The appeal in *Sustainable Shetland* was allowed, the Inner House in effect adopting Lord Doherty's reasoning. The *amicus curia* appointed to argue the licence point was also persuaded by Lord Doherty's reasoning and no party sought to sustain Lady Clark's position before the Inner House – the petitioner apparently only having reluctantly taken it below at the judge's suggestion. Trump has,

¹²⁰ Gateshead MBC v SOSE [1995] Env LR 37.

^{121 (2014)} I P&CR 22.

^{122 2013} SLT 1173.

^{123 [2014]} CSOH 22.

^{124 [2013]} CSIH 116.

however, duly appealed, with four days being set down in January 2015 for consideration by the Inner House. His appeal raises the licence issue but also predetermination and a point on conditions.

Other interesting developments

Finally, there are some other 'hot' cases deserving mention but, as with the best architectonics, which do not fit neatly within any categorisation.

The Supreme Court has this year given an important decision considering the relevance of a grant of planning permission as to whether activities on land constitute a nuisance: *Lawrence v Coventry (t/a RDC Promotions)*.¹²⁵ The case concerned the operation of a stadium, on agricultural land, which had permission for use for motor sports (including speedway racing and stock-car racing), and an adjacent permitted moto-cross track. The permissions placed limits on the frequency and times of activities, but not on the permissible level of noise. Across open fields, about 560 metres from the stadium and about 860 metres from the track, stood the nearest residential property – a 1950s bungalow surrounded by agricultural land. The claimants bought the bungalow in 2006, whereupon began a long-running tussle about noise nuisance.

Although it has long been accepted that a planning permission cannot be considered to be a 'licence to commit nuisance',¹²⁶ several decisions had recognised that the planning system, through the operation of development plans and through decisions made under those plans (particularly large or strategic grants of permission), could 'alter the character of a neighbourhood'.¹²⁷ The Supreme Court found this to be unsatisfactory.

In the leading judgment, Lord Neuberger pointed out that the way in which the case law had developed meant that a grant of planning permission for a large area effectively defeated a nuisance claim, with the paradoxical result that 'the greater the likely disagreeable impact of a change of use permitted by the planning authorities, the harder it would be for a claimant to establish a claim in nuisance' (paragraph 88). Rather, Lord Neuberger held that a planning authority should not be able to deprive a property owner of a right to object to what would otherwise be a nuisance, without providing her with compensation, especially 'when there is no provision in the planning legislation which suggests such a possibility' (paragraph 90).

Lord Neuberger concluded at paragraph 96:

... the mere fact that the activity which is said to give rise to the nuisance has the benefit of a planning permission is normally of no assistance to the defendant in a claim brought by a neighbour who contends that the activity causes a nuisance to her land in the form of noise or other loss of amenity. However, Lord Neuberger immediately qualified this conclusion by accepting that there would be 'occasions when the terms of a planning permission could be of some relevance in a nuisance case' (paragraph 96). He gave, as an example, that the 'starting point' for analysis could be the fact of the planning authority's view that noisy activity is acceptable after a particular time, or if it is limited to a certain decibel level.

Three of the other justices agreed with Lord Neuberger (paragraphs 154, 165 and 169). Lord Carnwath, however, found the question much more difficult, and dissented, holding that 'strategic' planning permissions could exceptionally lead to a fundamental change in the pattern of uses, against which the acceptability of a defendant's activity should be assessed (paragraph 223).

Lord Sumption agreed that the existence of planning permission for a given use is 'of very limited relevance to the question whether that use constitutes a private nuisance', and could at best provide evidence of reasonableness of a particular use (paragraph 156). However, he emphasised that the discretion as to remedy once a statutory nuisance has been established would 'save the law from anomaly and incoherence', as it allowed for financial compensation rather than an injunction which would operate effectively in the same way as a refusal of planning permission (paragraph 157). There then followed an exegesis on the use of injunctions in nuisance cases, and a strong indication that it may need to be reviewed, with a less than coy hint by Lord Sumption that his view was that, as a matter of principle, an injunction 'should not be granted in a case where a use of land to which objection is taken requires and has received planning permission' (paragraph 161). Neither Lord Neuberger (paragraph 127) nor Lord Mance (paragraph 168) was attracted by this, although both accepted that the public interest recognised in a grant of planning permission could properly influence whether an injunction should be granted. Lord Carnwath was similarly careful, and emphasised the obiter nature of the discussion of remedy (paragraphs 238–39), but accepted the relevance of the existence of a planning permission to the grant of a remedy. Lord Clarke endorsed Lord Neuberger's position (paragraph 170).

The result is that the existence of a planning permission, even for major development, is no defence to a claim in nuisance, although the terms of the permission may have evidential value, particularly in relation to evaluating the reasonableness of use. There is already an indication that courts are willing to adopt a more flexible approach when considering whether to award damages in place of an injunction; see, in the realm of employment law, *Prophet Plc* v *Huggett*.¹²⁸

As an interesting aside, the judgments of Lord Neuberger and Lord Carnwath contain entertainingly opposed views as to whether the reasons given by a planning officer in a report recommending planning permission be granted can reliably be taken to be the actual reasons that the planning authority had in mind when granting permission (see paragraphs 98 and 219).

^{125 [2014]} UKSC 13; [2014] 2 WLR 433, also known as Lawrence v Fen Tigers Ltd.

¹²⁶ Gillingham Borough Council v Medway (Chatham) Dock Co Ltd [1993] QB 343 at 359.

¹²⁷ ibid. See also Wheeler v JJ Saunders Ltd [1996] Ch 19 and Watson v Croft Promosport Ltd [2009] 3 All ER 249.

^{128 [2014]} EWHC 615 (Ch).

'Hot' cases concludes with a short discussion of two important cases concerning access to environmental information.

In Fish Legal v Information Commissioner and United Utilities Water plc,¹²⁹ the CJEU has given general guidance on how the definition of 'public authority' is to be applied for the purposes of the EU Directive on public access to environmental information (Directive 2003/4/EC), and hence under the Environmental Information Regulations 2004 (EIR 2004) and the Environmental Information (Scotland) Regulations 2004. This is a decision that has significant implications for privatised utility providers and for companies operating in other regulated industries (such as transport), as the definition adopted by the CJEU of 'public authorities' is very wide and these types of companies are likely to fall within its ambit.

The case arose as a result of requests for information from various water companies, made by an individual and by Fish Legal (the legal arm of the Angling Trust). The information, which concerned discharges, clean-up operations, emergency overflow and sewerage capacity, was clearly environmental information, but the requests were refused as the companies considered they were not public authorities under regulation 2(2) of the EIR 2004. Both the Information Commissioner and the first-tier tribunal agreed. The upper tribunal requested a preliminary ruling from the CJEU.

The Grand Chamber of the CJEU held that only entities empowered to perform public administrative functions by national law are capable of being 'public authorities', but that the question of whether any functions are 'public administrative functions' must be examined in the light of European Union law, as it should be standardised across Member States. The court identified the following criteria for making this determination:

- Whether the entities (which can be private companies) are vested with special powers beyond private law powers.
- 2. Whether the entities do not determine 'in a genuinely autonomous manner' the way in which they perform their functions in the environmental field (regulation is a relevant but not sufficient condition the question is whether they have 'genuine autonomy' to determine their day-to-day management).

It will be an interesting challenge for the upper tribunal and others to determine what is meant by companies being vested with 'special powers'.

The CJEU also reiterated its disdain for any form of 'hybrid' public authorities, but held that a commercial service provider which is a public authority is only required to provide requesters with environmental information that relates to the provision of the relevant service.

Some have suggested that the CJEU's determination in *Fish Legal* may have implications beyond information law – in particular, in relation to the extent of activities which could be regarded as public functions capable of being

challenged by way of judicial review. Time will tell, but the user-unfriendly nature of the 'special powers' discussion is unlikely to make *Fish Legal* an obvious port of call for advocates.

Finally, London Borough of Southwark v Information Commissioner and Lend Lease (Elephant and Castle) Ltd¹³⁰ concerned a request by a resident of Southwark for the viability assessment which supported the planning application made by Lend Lease for the redevelopment of a very large estate in south London. The scope of the project was significant, with Lend Lease funding and delivering the infrastructure and energy requirements of the development, 'essentially building an entire town centre at its own risk' (paragraph 32).

The viability assessment demonstrated that it was not viable to provide 35 per cent affordable housing as part of the development, as required by the council's local planning policies, and the developer proposed to provide 25 per cent affordable housing. In fact, the viability assessment showed that even 25 per cent of affordable housing was not viable on the site, let alone the 35 per cent, but the developer remained committed to providing 25 per cent and planning permission was granted on this basis. The viability assessment was submitted to the council on a confidential basis because it included commercially sensitive information, both from the point of view of the developer and of the council. Lend Lease contended that the assessment contained a 'treasure trove of competitively sensitive information', including Lend Lease's financial model, applicable to the majority of its large developments. By the time of the appeal, the council had of its own volition disclosed large parts of the viability assessment in response to the request, and only the key confidential information remained withheld, including the financial model.

In his decision under appeal, the Information Commissioner had undertaken a detailed analysis of the public interest and ordered that the entire viability assessment be disclosed, including the financial model. He also adopted a robust position before the Information Tribunal, canvassing the European law background and emphasising that the aims of Directive 2003/04 and the Aarhus Convention in ensuring effective public participation in environmental decision-making should not routinely be overridden by claims of commercial confidentiality, particularly where large amounts of public money are at stake.

The First Tier Tribunal General Regulatory Chamber (Information Rights) partly allowed the appeal. The decision made a number of key findings:

 Although it was primarily an economic analysis, the viability assessment was 'environmental information' for the purposes of the EIR 2004 such that the EIR regime applied, rather than the Freedom of Information Act 2000. This was significant, because the absolute exemption in relation to disclosure of confidential information contained in the 2000 Act does not apply in the EIR regime, where all exemptions are qualified and thus require consideration of the balance of the public

¹²⁹ Case C-279/12, [2014] QB 521, [2014] 2 CMLR 36.

¹³⁰ EA/2013/0162 (9 May 2014).

interest in maintaining the exception or disclosing the information.

- The information engaged a number of exceptions to the general right to environmental information in Regulation 12(5) EIR 2004, including reg 12(5)(c) (intellectual property rights), reg 12(5)(e) (commercial information) and reg 12(5)(f) (interests of the volunteer of the information), although it did not engage the exception in reg 12(5)(d) (confidentiality of proceedings).
- 3. The commercial interests of the developer were such as to engage its ECHR rights under Article I, Protocol I and possibly Article 8, although it was doubted whether a properly conducted balancing exercise under reg 12 EIR would result in a decision contrary to the Human Rights Act 1998 and there was no breach in this case.

The key issues in the public interest balance were:

- the project must not be allowed to fail or be put in jeopardy
- the importance of public participation in decisionmaking
- the avoidance of harm to the developer's commercial interests.

In a terse single paragraph, the tribunal accepted that the financial model developed by Lend Lease was a trade secret and held that the harm to Lend Lease's commercial interests by its disclosure was not outweighed by the benefits of disclosure. The tribunal came to the same conclusion about information concerning sales and rentals, which would be the subject of commercial negotiation between Lend Lease and other businesses. Other information was held to be less commercially sensitive and required to be disclosed.

Unfortunately, the tribunal did not engage with any of the arguments on the European law elements of the case, and so the principled basis of the decision is rather obscure.

At least one other redevelopment scheme – the redevelopment of Earl's Court – has been directly affected by this decision, as the Royal Borough of Kensington and Chelsea has withdrawn an appeal against a decision by the Information Commissioner that it make available parts of a confidential viability report (which had been produced alongside a pared-down public version). This decision is of interest north of the border, given that the Environmental Information (Scotland) Regulations 2004 are very similar to the regulations applicable in England and Wales. It is also noteworthy because it shows the reach of 'environmental information' and the diversity of what is now encapsulated within environmental litigation. It is predicted that this trend will persist. As the force ebbs from some environmental challenges, so environmental litigation will flow into new areas, and the environmental law landscape will continue to expand.

Appendix

Civil Procedure Rules (England and Wales)

Extract from CPR Practice Direction 45 Limit on costs recoverable from a party in an Aarhus Convention claim: Rule 45.43

- 5.1 Where a claimant is ordered to pay costs, the amount specified for the purpose of rule 45.43(1) is
 - (a) £5,000 where the claimant is claiming only as an individual and not as, or on behalf of, a business or other legal person;
 - (b) in all other cases, £10,000.
- 5.2 Where a defendant is ordered to pay costs, the amount specified for the purpose of rule 45.43(1) is £35,000.

Court of Session Rules (Scotland)

Extract from RCS Chapter 58A

Terms of protective expenses orders

- 58A.4- (1) Subject to paragraph (2), a protective expenses order must contain provision limiting the applicant's liability in expenses to the respondent to the sum of \pounds 5,000.
- (2) The court may, on cause shown by the applicant, lower the sum mentioned in paragraph (1).
- (3) Subject to paragraph (4), a protective expenses order must also contain provision limiting the respondent's liability in expenses to the applicant to the sum of £30,000.
- (4) The court may, on cause shown by the applicant, raise the sum mentioned in paragraph (3).

Working party presentations

UKELA has a wide and varied range of working parties, comprised of UKELA members, which meet regularly to discuss issues including the practice and impacts of environmental law, and recent developments and proposals for reform in relation to environmental law, policy and practice. They actively contribute to the development of their area of interest, and have an impressive record of contributing working papers and responses to government in relation to the development and reform of environmental law.

At the 2014 conference six different working party sessions were held with short presentations from several speakers at each session; two of those speakers have kindly contributed their articles to this conference issue.

See the UKELA website http://www.ukela.org/rte.asp?id=17.

Climate Change and Energy Working Party

An introduction to Contracts for Difference (CfDs)

Fiona Ross

Pinsent Masons LLP, London

On 14 October the UK Government's Contracts for Difference (CfD) regime will finally go live, providing a new mechanism of support for renewable and low carbon electricity generation. The CfD regime has been developed under the electricity market reform (EMR) programme, with the aim of supporting investment in renewable and low carbon generation, whilst reducing the cost to energy consumers. It will run concurrently with the renewables obligation (RO) until I April 2017, when it will replace the RO altogether in England, Scotland and Wales. CfDs are not expected to be introduced in Northern Ireland until at least 2016.

What is a contract for difference?

Under the CfD regime generators must enter into a 'contract for difference' with the government owned Low Carbon Contracts Company (LCCC) in order to earn support. The CfD will provide support for a maximum of 15 years, and will guarantee a flat rate for a project's power throughout the period of support through a 'strike price' set in the CfD. Generators eligible for support will receive the difference between the 'reference price' and the 'strike price' set out in their CfD. The reference price represents the wholesale price, taken to be the season-ahead price for baseload technologies and the hourly day-ahead price for intermittent technologies, calculated according to formulas set out in the CfD.

The strike prices for difference technologies were originally intended to be set in advance by the government, and to this end DECC published a table of proposed strike prices in December 2013. However, in January 2014 the government announced that, in light of new European Commission guidelines on state aid, it would instead set strike prices for certain technologies through an auction process. Established technologies will therefore essentially compete for CfDs in a downward auction based on sealed bids containing the strike price put forward by generators for their projects. Less established technologies are not expected to have to compete in an auction process to begin with.

Strike prices are expected usually to exceed the reference price, in which case the generator will receive a 'difference payment' over and above the reference price up to the value of the strike price. However, if the reference price exceeds the strike price, the generator will have to pay back the difference. This means that generators should earn a single guaranteed price for their power, regardless of the wholesale price. This is intended to remove the wholesale price risk that generators are currently exposed to under the RO.

It is important to note that under the CfD it is only the difference between the strike price and the reference price that generators earn. This means that it is still also necessary to have a route to market for their power either through trading on the wholesale market or entering into a power purchase agreement (PPA).

How to enter into a CfD

Applications for CfDs may only be made during an allocation round, and the first one opened on 16 October 2014 and closed on 30 October 2014. Those wishing to participate in an allocation round must submit an application to the EMR delivery body – National Grid.

In order to be eligible for support, projects must:

- use an eligible technology with an installed capacity greater than 5 MW
- have been granted planning permission or development consent
- have had a grid connection offer accepted
- have an approved supply chain in place (for projects of 300 MW or more only).

The generator must also be validly incorporated as a business entity, and the project must not have been in receipt of any other government support.

Based on the eligibility criteria it will be possible to apply for a CfD at an earlier stage in the lifecycle of a project than is currently possible under the RO, under which an application for accreditation can only be made a maximum of two months before commissioning the plant. Once the window for submitting applications has closed, National Grid will undertake eligibility checks to ensure that all applicants are eligible, and will then undertake a valuation of all applications using a formula set out in the allocation framework. This will enable it to determine which budget pots are exceeded (if any), and therefore which budget groups (if any) must participate in an auction to set strike prices.

In the first allocation round there are three budget groups:

Budget group	Technologies included	Process
Established technologies	Onshore wind, solar PV, energy from waste with CHP, hydro <50 MW, landfill gas, sewage gas	Expected to have to compete in an auction process to set strike prices, and the budget for this group has been priced accordingly
Less established technologies	Offshore wind, wave, tidal stream, advanced conversion technologies, anaerobic digestion, dedicated biomass with CHP, geothermal, Scottish Islands Onshore Wind	Expected not to have to compete in an auction process in the first alloca- tion round, and the budget for this group has been priced accordingly
Biomass conversion technologies	Biomass conversion	No budget has been allocated to this group in the first allocation round

There will be a minimum allocation of 10 MW for wave and tidal stream technologies, to help ensure that projects using these technologies are able to proceed despite being unable to compete in the mainstream market.

If a budget pot is exceeded for a particular budget group, National Grid will issue a notice of auction in relation to that group, inviting sealed bids from applicants, and will apply the allocation framework to allocate CfDs to generators. If a budget pot is not exceeded no auction will be necessary, and all applicants will be allocated a CfD at the strike price set out in the budget notice (in this round the same as the strike prices published in December 2013).

Where an auction is required, applicants will submit a sealed bid containing the price per megawatt that they will be prepared to accept for the project. This bid can be no higher than the strike prices published in the budget notice for the relevant technology in the relevant delivery year for the project. National Grid will then rank the projects according to the price of the bid, with projects offering the lowest bids being allocated CfDs first, followed by the next cheapest projects in the budget group, and so on, until the entire budget allocated to that budget group for each delivery year has been used up. Projects that are successful under the auction will be allocated a CfD at the strike price of the most expensive bid for a project delivering in that year – this is called the clearing price. Clearing prices may be different across different delivery years.

If a developer is successful in being allocated a CfD, National Grid will direct the LCCC to offer them a CfD,

which the developer must sign before the deadline specified in the offer. The CfD consists of the CfD terms and conditions, which are a standard set of contract conditions consistent across all CfDs, and the CfD agreement, which contains relevant project specific information, including the strike price. The CfD is therefore effectively a standard agreement, and there is very little scope to amend its terms.

What happens once the CfD is signed?

Once the CfD has been entered into there are various milestones that the developer must meet between signing and the project being commissioned, otherwise the CfD may be terminated. This is intended to ensure that the scheme supports viable live projects and that budget is not tied up with speculative projects.

First of all the initial conditions precedent must be satisfied within 10 business days of the date of the CfD agreement, including delivering a legal opinion that the generator is duly formed and has the power to enter into and perform the CfD. The next key milestone is the significant financial commitment milestone one year after signing of the CfD. At this point developers must demonstrate that there is a significant financial commitment to complete the project by:

- showing that they have spent 10 per cent or more of the estimated total project pre-commissioning costs for the relevant technology, as specified by DECC in the CfD standard terms notice; or
- showing that they can provide evidence of progress towards timely commissioning – the evidence required differs for each technology and is set out in the CfD agreement. This could involve providing supporting information in the form of entry into an EPC contract or equipment supply agreement.

At this stage the developer must also provide supporting information that it has the necessary property rights for the site in the form of a leasehold or freehold interest (including having exercised any options or agreements for lease), and has identified all necessary consents and planning permissions to undertake the project and has a credible strategy in place to obtain them. If the developer does not meet this milestone the CfD will be terminated.

The next milestone is the target commissioning window. In their application for a CfD, developers will have specified the start date for their target commissioning window, which is the period of time within which the developer must commission the project. The target commissioning window is one year for all projects except landfill gas (six months) and solar PV (three months). Developers cannot receive any payments under the CfD until the first day of the target commissioning window, even if they commission the project and start generating before this point. They will be free to sell their power in the normal way but will not receive payments under the CfD until the first day of the window at the earliest.

If a project fails to start generating before the expiry of the target commissioning window the payment term will

start on the last day of the window, notwithstanding that the project is not commissioned and so cannot generate any difference payments. This means that the 15 year period of support begins to be eroded from the last day of the window, reducing the period of support that the generator actually benefits from. If it has failed to commission within the target commissioning window, the developer must still construct and commission the project by the longstop date, or else its CfD will be terminated. The longstop date is one year from the end of the target commissioning window for all projects except landfill gas (six months) and offshore wind (24 months).

There are very limited circumstances in which it is possible to extend the target commissioning window or the longstop date, namely where the delay is caused by transmission network operators, offshore transmission owners or distribution network operators carrying out system reinforcement or connection works and is no fault of the developer or its professional team, or where the delay is caused by force majeure.

Finally, there are certain further conditions precedent, which essentially amount to a requirement to deliver various pieces of project specific documentation to the LCCC between the signing of the CfD and the longstop date. These must be accompanied by a director's certificate certifying that the information in the notice is true and accurate and not misleading, and the developer must keep the LCCC appraised as to progress in discharging these conditions. Assuming all of the milestones described above are met and the various conditions precedent are fulfilled within the required timescales, the start date under the CfD can be triggered and payments can begin to be made in line with generation.

Interaction with the RO

The RO and the CfD regime will run concurrently between October 2014 and 31 March 2017, when the RO will close to new generation. The RO will continue to provide support to accredited facilities until 2037, and facilities will receive the level of support applicable at closure of the scheme in 2017 for the remainder of their 20 year period of support. During the period when the two schemes run concurrently developers will have a one-off choice between accrediting new projects under the RO or entering into a CfD. It is not possible to run simultaneous applications under both schemes. Once an application has been made under one scheme it will not be possible to switch to an application under the other scheme unless the application is rejected.

In terms of additional capacity, those adding 5 MW or more capacity to existing plants accredited under the RO will have a choice as to whether they accredit that capacity under the RO or apply for a CfD in respect of it. If they decide to apply for a CfD they will not be able to accredit any further capacity at that plant under the RO. The plant will become a 'dual scheme' plant, and will provide data returns and will earn support under both

schemes. Those adding under 5 MW of capacity to existing plants accredited under the RO will not be eligible for a CfD, but can be registered under the RO until 31 March 2017. After 31 March 2017 no further capacity – additional or new generation – can accredit under the RO.

What does the CfD regime mean for developers and generators?

The implementation of the CfD regime represents a fundamental shift in the provision of government support for renewable electricity generation. The move towards an auction process means that there is no forward visibility for investors of the price they can expect to achieve for their power. The strike prices published in the budget notice represent a theoretical maximum, but are likely to be driven down through the auction process. This means that developers and their funders will need to determine the lowest price they will be prepared to accept for their project prior to submitting a sealed bid. In practice, the price that developers will ultimately bid is likely to depend on a number of factors, including how competitive the auction for a particular budget group is expected to be.

The use of auctions to determine the strike price and allocate CfDs also introduces the risk that some developers may not be allocated a CfD at all, and may find themselves without support for their project following a particularly competitive allocation round. It would be open to developers to apply again in a subsequent allocation round, although current indications are that these will only be held annually, which could result in a delay in securing support. In any event, there is no guarantee that the project would be successful in being allocated a CfD in a subsequent allocation round.

The introduction of the competitive auction process therefore introduces a risk that does not currently exist under the RO, which simply requires generators to meet the eligibility criteria and make a valid application for accreditation. Many developers are therefore likely to accelerate projects where possible to accredit under the RO before it closes, rather than take the risk of competing for a CfD.

Even assuming that a developer is successful in being allocated a CfD, the milestones that must be met thereafter and the conditions precedent that must be discharged, mean that there is little scope for delay in delivering a project. The risk of the CfD being terminated before payments have even begun puts significant pressure on developers to deliver projects within the timescales envisaged under the CfD.

The first allocation round and subsequent delivery of the first CfD projects will be the litmus test of the new regime, and it is quite possible that there will be creases to be ironed out. However, regardless of the challenges that it may pose, developers with projects likely to deliver later than 31 March 2017 will need to be ready to participate in the CfD regime – if not in the current round then likely in the next.

Environmental Litigation Working Party

The Scots law of nuisance – a brief overview

Francis McManus

Honorary Professor of Law, University of Stirling; Emeritus Professor of Law, Edinburgh Napier University

Nuisance was not a concept that was explicitly recognised in Scots law before the 18th century. Nuisance, a separate head of action, became part of Scots law by a process of osmosis, which commenced in earnest during the 18th century. Traditionally, matters that related to nuisance were dealt with by the Dean of Guild Courts (that is, local courts) in burghs such as Edinburgh, under their common law powers or, alternatively, by Burgh courts in the exercise of their public police powers. During the 19th century some Scottish judges believed that the rule in Rylands v *Fletcher*¹ was simply a branch of the law of nuisance, which was also applicable in Scots law. Courts decided nuisance cases on the basis of Rylands v Fletcher rather than in terms of the law of nuisance. This tendency declined with the passage of time, although it was still apparent well into the 20th century. After the Second World War confusion still surrounded the applicability of the rule to Scots law and academic opinion was against its existence.

However, the rule was dealt a heavy blow in the leading case of RHM Bakeries v Strathclyde Regional Council,² which concerned damage that was caused to the pursuer's bakery by an escape of sewage from the defender's sewer. The House of Lords held (albeit obiter) that the rule in Rylands v Fletcher³ had never had any application in the law of Scotland. However, notwithstanding the RHM Bakeries decision, the rule in Rylands v Fletcher was invoked in McQueen v The Glasgow Garden Festival.⁴ In that case, a spectator at a fireworks display was injured when she was struck by part of a metal tube that fragmented when a rocket, which was being launched from the tube, exploded. Indeed, this was a classic escape situation in respect of which the rule in Rylands v Fletcher had been successfully invoked south of the Border. The Lord Ordinary rejected the contention that the rule in Rylands v Fletcher was applicable in Scots law.

Unfortunately, there is a paucity of cases on the law of nuisance as far as the modern law of Scotland is concerned. This is a legacy of Scotland being a small jurisdiction. The most oft-cited case is the Outer House (ie first instance) case of Watt v Jamieson.⁵ The facts of that case could not have been simpler. The proprietor of an upper floor flat in the New Town brought an action against the proprietor of a lower flat. The pursuer claimed that effluvium from a water heater that was situated in the lower flat was causing damage to the upper flat. Lord President Cooper, one of the most eminent Scottish judges of the 20th century

(who was, for some reason, sitting in the Outer House) in giving judgment (which, in sharp contrast to the judgment at first instance of Coulson J in Barr v Biffa Waste Services Ltd,⁶ runs to only two pages!) in favour of the pursuer stated:

The critical question is whether what [the pursuer] is exposed to was plus quam tolerabile, when due weight has been given to all surrounding circumstances of the offensive conduct and its effects. If that is satisfied, I do not consider that our law accepts as a defence that the nature of the user complained of was usual, familiar and normal.

His Lordship went on to state that any type of use of the defender's property which subjects adjoining proprietors to substantial annoyance, or causes material damage to their property is prima facie not a reasonable use.

The next Inner House case on nuisance was Lord Advocate v The Reo Stakis Organisation Ltd.⁷ This case concerned liability for damage that had been caused to the pursuer's premises by pile driving, which had taken place during construction works that had been commissioned by the defender. The Lord President was of the view that, as far as Scots law was concerned, the modern law of nuisance was derived from the civil law maxim sic utere tuo ut alienum non laedas (use your property so that you do not harm your neighbour), subject to one qualification, namely that the only injury which a neighbouring occupier may complain of under the law of nuisance is one which is, in all the circumstances of the case, plus quam tolerabile (more than can reasonably be endured).

However, the concept of plus tolerabile (or reasonableness) is amorphous indeed, and in practical terms could be regarded as nothing more than a meaningless shibboleth. For example, would the negative impact that is posed by wind farms rank as an unreasonable use of property?

A major difference between the Scots law of nuisance and English law is that in Scots law, in order to succeed in a nuisance action, the pursuer must aver and also prove culpa (or fault) on the part of the defender. The leading case here is RHM Bakeries Ltd v Strathclyde Regional Council.⁸ In that case, the bakery premises (which belonged to the pursuer) were flooded as a result of the collapse of a sewer, which was under the control of the defender local authority. Food and packing materials that were stored in the bakery were damaged. The pursuer raised an action in nuisance against the local authority on the grounds, inter alia, of nuisance. The House of Lords held that in order to succeed the pursuer had to prove that the defender was culpable. The former could not and, therefore, failed in its action. Unfortunately, the House of Lords refrained from discussing both the nature and the scope of the concept of culpa in relation to the law of nuisance. Indeed, the RHM Bakeries case poignantly illustrates the traditional discomfort that the Scottish judiciary has experienced in dealing with culpa in terms of the law of nuisance.

^[1868] UKHL I.

¹⁹⁸⁵ SC (HL) 17. 2

³ Note I. 1985 SLT 211. 4

⁵ 1954 SC 56.

^[2011] EWHC 1003 (TCC). 6

¹⁹⁸¹ SC 104

⁸ 1985 SLT 214.

However, the Inner House had a chance to examine the concept of culpa in Kennedy v Glenbelle.⁹ In short, this case concerned liability for damage that had been caused to the pursuer's flat by construction work, which the defender had commissioned to be carried out in the basement of his premises. The Inner House allowed proof before answer. By way of summary, the Inner House was of the opinion that the concept of *culpa* was wider than that of negligence and included both reckless and deliberate conduct on the part of the defender.

Before leaving the subject of *culpa*, several authors take the view that, in sharp contrast to the case where the pursuer sues the defender to recover damages, there is no need to do so where one simply raises an action for interdict. There is very weak authority in the form of an Outer House decision, namely Logan v Wang (UK) Ltd¹⁰ to that effect. However, it is the view of this author that it is, indeed, necessary both to aver and also to prove *culpa* in an action for interdict, given that the grant of interdict must be prefaced on the existence of either a wrong or a threatened wrong.

By definition, a nuisance is a wrong. It automatically comes into existence, therefore, through the culpable conduct of the defender. It therefore follows, if any given state of affairs can be classified as a nuisance (and therefore, falls to be interdicted), that the state of affairs must be imbued with the stamp of *culpa* at the very outset of its existence. It is illogical to talk, on the one hand, of an adverse state of affairs which ranks as a nuisance in law and, on the other hand, the culpable conduct of the defender which either created the state of affairs or allowed it to remain in existence, as if they were separate components. These components of the relevant nuisance are inextricably intermeshed.

For example, if the occupier of a factory (A) allows oil smut from a chimney on his premises to harm foliage on my property which adjoins A's factory, the received view would be that if I simply wish to obtain damages from A I would be required to prove *culpa* on the part of A. However, if I applied for an interdict to prohibit the continuation of the effluvium, I would, in effect, simply be required to prove the mere existence of the state of affairs which has caused the harm. However, the effluvium only causes me harm because it has been allowed to come into existence by the conduct of A. Furthermore, the courts take into account the culpable conduct of the defender in ascertaining if any given state of affairs ranks as a nuisance, as in eg Christie v Davey¹¹ (a noise nuisance case). The conduct of the defender is, therefore, relevant irrespective of the remedy which is sought.

Another possible difference between the Scots and English law of nuisance is that there is growing authority south of the Border to the effect that in a nuisance action the courts, at least in certain circumstances, are prepared

to take the social utility of the activity which is giving rise to the nuisance at the remedy stage of the proceedings as opposed to the substantive stage, that is to say, when the court is deciding whether the adverse state of affairs complained of ranks as a nuisance.

This approach was taken in the noise nuisance cases of Dennis v MOD¹² and, more recently, of course, by the Supreme Court in Coventry v Lawrence.¹³ However, as far as Scots law is concerned, in the military aircraft noise case of King v Advocate General for Scotland,¹⁴ Lord Pentland (in the Outer House) expressed the view that he was uncertain whether Dennis represented the law of Scotland. However, it is the view of the author that the approach that was taken by Buckley J in Dennis and the Supreme Court in Lawrence does not represent the law of Scotland.

With the above exceptions, English authority is normally followed by the Scottish courts in nuisance actions. For example, cases such as Hunter v Canary Wharf¹⁵ (interference with television signals) and Baxter v Camden LBC^{16} (liability of owners of flats which were poorly insulated against the transmission of sound) would be followed by the Scottish courts.

As far as the English decisions concerning the effect of planning permission and the law of nuisance is concerned I am, of course, referring to cases such as Gillingham BC v Medway (Chatham) Dock Co Ltd,¹⁷ Wheeler v Saunders Ltd,¹⁸ Watson v Croft PromoSports¹⁹ and Coventry v Lawrence,²⁰ the Scottish courts have never had to decide this issue. This author has not come across a nuisance case decided after the modern planning regime came into existence in 1947 in which it has been argued before a Scottish court that the grant of planning permission can notionally change the character of land. I suggest that the Scottish courts would set no store by relevant planning permission in a nuisance action.

Speaking generally, one can discern a tendency north of the Border to develop private law with a decreasing emphasis on public law. This is evidenced in the recent Inner House case of MacDonald v Aberdeenshire Council,²¹ which concerned the potential delictual liability of a roads authority.

Finally, as far as statutory nuisance actions decided under the Environmental Protection Act 1990 are concerned, eg noise cases decided under section 79(1)(g), English authority is, in effect, automatically followed by the Scottish courts.

18 [1994] EWCA Civ 32.

^{9 1996} SC 95.

^{10 1991} SLT 580.

^{|| [1893] |} Ch 316.

^{12 [2003]} EWHC 793 (QB) (Buckley J) April 16 2003, Env LR 34.

^{13 [2014]} UKSC 46, on appeal from [2012] EWCA Civ 26.

^{14 [2009]} CSOH 169. 15 [1997] UKHL 14.

^{16 [1999] 3} WLR 939. 17 [1993] QB 343.

^{19 [2009]} EWCA Civ 15. 20 Note 13

^{21 [2013]} CSIH 83. See also (2014) 164 SPEL 89.



PUBLISHERS OF BIO-SCIENCE LAW REVIEW CONTEMPORARY ISSUES IN LAW ENVIRONMENTAL LAW & MANAGEMENT ENVIRONMENTAL LIABILITY INFORMATION TECHNOLOGY LAW REPORTS THE JOURNAL OF INTERNATIONAL MARITIME LAW THE JOURNAL OF WATER LAW UTILITIES LAW REVIEW

WWW.LAWTEXT.COM e-mail: ltp@lawtext.com

Tel: +44 (0) 1993 706183 Fax: +44 (0) 1993 709410

ISSN 1067 6058