



HOUSE OF LORDS SCIENCE AND TECHNOLOGY SELECT COMMITTEE



The members of the Committee (appointed 12 June 2014) are Lord Dixon-Smith, Baroness Hilton of Eggardon, Lord Hennessy of Nympsfield, Lord O'Neill of Clackmannan, Baroness Manningham-Buller, Lord Patel, Lord Peston, Lord Rees of Ludlow, Viscount Ridley, the Earl of Selborne (Chairman), Baroness Sharp of Guildford, Lord Wade of Chorlton, Lord Willis of Knaresborough and Lord Winston.

Lord Krebs' term as Chairman (limited to three sessions) concluded at the end of the 2013-14 session. He has been replaced by the Earl of Selborne.

Resilience of Electricity Infrastructure

In July, the Committee launched an inquiry into the resilience of electricity infrastructure. Responses to the Call for Evidence were invited by late September. The inquiry will focus on the resilience of the UK's electricity infrastructure to peaks in demand and sudden shocks. It is interested both in the short term (to 2020) and in the medium term (to 2030) as electricity generation is decarbonised. Oral evidence will be taken until the end of the year. A report will be made in early 2015.

2025: Priorities for Scientific Research

In July 2014, the Committee conducted an inquiry into the key challenges that the Government's forthcoming *Science and Innovation Strategy* should tackle and the UK's priorities for scientific research. No report was produced but evidence was taken in public. Transcripts were published and brought to the Government's attention.

Behaviour Change

In May and June 2014, the Committee took oral evidence to follow up its 2011 report into behaviour change and assess what progress has been made. This focused on the two case studies that the Committee had investigated in its original inquiry: modal shift in transport and obesity. The Committee wrote to the Minister for Government Policy, Rt Hon Oliver Letwin MP, in July, making a number of observations and posing a series of questions, and received a reply.

International STEM students

In January 2014, the Committee launched a follow up inquiry to its 2012 report on higher education in science, technology, engineering and mathematics (STEM). The inquiry focused on the effect on international STEM students of immigration policy. Forty or so written submissions were received, seven oral evidence sessions were held, and a report published on 11 April 2014. A Government response was received in July.

Waste and the bioeconomy

The Committee launched an inquiry into waste and the bioeconomy in July 2013. The Call for Evidence closed on 27 September. This inquiry collected evidence on the technology to use bio-waste and waste gases to generate high-value products. It aimed to assess the potential for this technology to enable bio-waste and waste gas

to replace current feedstocks, and the contribution this could make to a bioeconomy. Oral evidence sessions were held across autumn 2013 and early 2014. The Committee published its report on 6 March 2014. A Government response was received in early June.

Scientific infrastructure

The Committee launched an inquiry into scientific infrastructure in May 2013. The call for evidence closed on 22 June. Oral evidence was taken across June and July on large and medium-sized scientific infrastructure with a focus on: future needs and strategic planning, funding and governance arrangements, international partnerships and partnerships with industry. The Committee published its report on 21 November 2013. A Government response was received in February 2014 and a debate held on 13 May 2014.

Regenerative medicine

The Committee launched an inquiry into regenerative medicine in June 2012. A group from the Committee visited the California Institute for Regenerative Medicine. Oral evidence was taken from October to March 2013. The Committee reported on 1 July 2013 and a Government response was received on 1 October. A debate was held on 13 March 2014.

Nuclear follow-up

In July 2013, the Committee undertook an evidence session with Professor David Mackay, Chief Scientific Adviser at the Department of Energy & Climate Change, to follow up on its November 2011 report, *Nuclear research and development capabilities*. A further session was held with the Minister for Energy, Rt Hon Michael Fallon MP, on 10 December 2013. In July 2014, the Committee took oral evidence from Dame Sue Ion, Chair, Nuclear Innovation and Research Advisory Board (NIRAB).

FURTHER INFORMATION

The reports, Government responses, written and oral evidence to the Committee's inquiries mentioned above, as well as the Calls for Evidence and other documents can be found on the Committee's website. Further information about the work of the Committee can be obtained from Chris Clarke, Committee Clerk, clarkechr@parliament.uk or 020 7219 4963. The Committee Office email address is hlsience@parliament.uk.



HOUSE OF COMMONS SELECT COMMITTEE ON SCIENCE AND TECHNOLOGY



The Science and Technology Committee is established under Standing Order No 152, and charged with the scrutiny of the expenditure, administration and policy of the Government Office for Science, a semi-autonomous organisation based within the Department for Business, Innovation and Skills.

The current members of the Science and Technology Committee are:

Jim Dowd (Labour, Lewisham West and Penge), David Heath (Liberal Democrat, Somerton and Frome), Stephen Metcalfe (Conservative, South Basildon and East Thurrock), Andrew Miller (Labour, Ellesmere Port and Neston), Stephen Mosley (Conservative, City of Chester), Pamela Nash (Labour, Airdrie and Shotts), Sarah Newton (Conservative, Truro and Falmouth), Graham Stringer (Labour, Blackley and Broughton) and David Tredinnick (Bosworth).

Andrew Miller was elected Chair of the Committee on 9 June 2010. The remaining Members were appointed to the Committee on 12 July 2010. Caroline Dinéage, Gareth Johnson, Sarah Newton and Hywel Williams were appointed to the Committee on 27 February 2012 in the place of Gavin Barwell, Gregg McClymont, Stephen McPartland and David Morris. Jim Dowd was appointed to the Committee on 11 June 2012 in the place of Jonathan Reynolds. David Morris was re-appointed to the Committee on 3 December 2012 in the place of Gareth Johnson. David Tredinnick was appointed to the Committee on 4 February in place of Caroline Dinéage. David Heath was appointed to the Committee on 25 November 2013 in place of Roger Williams. Hywel Williams resigned from the Committee on 23 April 2014. David Morris resigned from the Committee on 5 September 2014.

CURRENT INQUIRIES

All evidence (written and oral) is on the Committee's website.

Climate: public understanding and its policy implications

The Committee held evidence sessions on Wednesday 19 June, Wednesday 26 June, Wednesday 17 July, Monday 9 September, Wednesday 11 September, Wednesday 9 October and Wednesday 6 November 2013.

A Report was published on 2 April 2014. The Government's response was published on 23 June 2014.

Government Horizon Scanning

The Committee held evidence sessions on Wednesday 23 October, Wednesday 27 November and Wednesday 4 December 2013.

A Report was published on 4 May 2014. The Government's response was published on 22 July 2014.

Antimicrobial resistance

The Committee held evidence sessions on Wednesday 18 December 2013, Wednesday 8 January, Wednesday 29 January, Wednesday 26 February and Wednesday 12 March 2014.

A report was published on 7 July 2014. The Committee is waiting for a response from the Government.

Blood, tissue and organ screening

The Committee held evidence sessions on Wednesday 5 February, Wednesday 5 March, Wednesday 26 March, Monday 28 April and Wednesday 30 April 2014.

A report was published on 24 July 2014. The Committee is waiting for a response from the Government.

National health-screening programmes

On Wednesday 7 May 2014 the Committee took evidence from Professor Jane Wardle, Academy of Medical Sciences, Jessica Kirby, Cancer Research UK and Dr Sian Taylor-Phillips, Warwick Medical School.

On Wednesday 11 June 2014 the Committee took evidence from Robert Meadowcroft, Muscular Dystrophy Campaign, Professor Michael Baum, Advocates for Honesty and Transparency in Breast Screening and Steve Hannigan, Children living with inherited metabolic diseases (Climb); Síle Lane, Sense About Science, Dr Margaret McCartney and Dr John Middleton, UK Faculty of Public Health.

On Wednesday 25 June 2014 the Committee took evidence from Dr Hilary Burton, PHG Foundation, Professor Ian Cree, Warwick Medical School representing the Early Cancer Detection Consortium, Professor Ian Jacobs, PROMISE 2016, Owen Sharp, Prostate Cancer UK; Dr Kevin Dunbar, National Chlamydia Screening Programme, Dr Sharon Hillier, Public Health Wales, Dr Anne Mackie, UK National Screening Committee, Jamie Waterall, Public Health England.

On Wednesday 9 July 2014 the Committee took evidence from Jane Ellison MP, Parliamentary Under Secretary of State for Public Health, Department of Health and Professor David Walker, Deputy Chief Medical Officer for England.

A report is being prepared.

Practical science in schools

The Committee discussed the proposals from Ofqual to change the practical assessment of science at A level.

On Monday 12 May 2014 the Committee took evidence from Professor Julia Buckingham, SCORE, Dr Sarah Main, Campaign for Science and Engineering, Professor Ian Haines, UK Deans of Science and Malcolm Trobe, Association of School and College Leaders; Dennis Opposs, Ofqual, Glenys Stacey, Ofqual and Janet Holloway, Ofqual; and Elizabeth Truss MP, Parliamentary Under-Secretary of State for Education and Childcare.

The Committee again discussed the proposals from Ofqual to change the practical assessment of science at A level.

On Wednesday 3 September 2014 the Committee took evidence from Janet Holloway, Ofqual, Dr Steven Evans, OCR, Darren Northcott, National Association of Schoolmasters and Union of Women Teachers, Professor Iain Haines, Deans of Science, Nicole Morgan, Royal Society of Chemistry on behalf of SCORE, Steve Jones, CLEAPPS; Michelle Meadows, Ofqual, Stella Paes, AQA, Max Hyde, National Union of Teachers, Elizabeth Swinbank, York University, Ginny Page, the Gatsby Charitable Foundation, Peter Mayhew-Smith, Association of Colleges, Richard Needham, Association for Science Education; Dennis Opposs, Ofqual,

Kaisra Khan, Voice, Professor Peter Main, Institute of Physics, Hilary Leever, Wellcome Trust, David Britz Colwill, Sixth Form Colleges Association, Helen Thorne, UCAS; Glenys Stacey, Chief Regulator, Ofqual, Liane Adams, WJEC Eduqas, Philip Britton, Headmasters and Headmistresses Conference, Rachel Lambert-Forsyth, Society of Biology, Sir John Holman, CST, Jill Stokoe, Association of Teachers and Lecturers, Sarah Main, CaSE.

Social media data and real-time analytics

On Wednesday 18 June the Committee took evidence from Sureyya Cansoy, techUK, James Petter, EMC, Carl Miller, Centre for the Analysis of Social Media, Demos, Euan Adie, Altmetric.com, Digital Science; Professor John Preston, University of East London, Professor Mick Yates, University of Leeds, Dr Ella McPherson, University of Cambridge.

On Monday 23 June the Committee took evidence from Professor Derek McAuley, University of Nottingham, Professor David De Roure, ESRC, Professor Sir Nigel Shadbolt, Web Science Trust and the Engineering and Physical Sciences Research Council project SOCIAM; Professor Liesbet van Zoonen, Loughborough University, Professor David Robertson, University of Edinburgh representing the UK Computing Research Committee, Dr Mathieu d'Aquin, Open University, Emma Carr, Big Brother Watch.

On Wednesday 2 July the Committee took evidence from Steve Wood, Information Commissioner's Office, Dr Mark Elliot, University of Manchester, Dr Kevin Macnish, University of Leeds; Ed Vaizey, Parliamentary Under Secretary of State for Culture, Communications and Creative Industries, Department for Culture, Media and Sport.

A report is being prepared.

Current and future uses of biometric data and technologies

The closing date for written evidence was Friday 26 September 2014.

Genetically modified foods and application of the precautionary principle in Europe

The Committee's first evidence session is scheduled for Wednesday 15 October 2014.

Mitochondrial donation

The Committee will hold a one-off evidence session to discuss the scientific evidence on mitochondrial donation on Wednesday 22 October 2014.

REPORTS AND GOVERNMENT RESPONSES

The following reports have been published:

Government horizon scanning, HC 703

Ensuring access to working antimicrobials, HC509

After the storm? UK blood safety and the risk of variant Creutzfeldt-Jakob Disease, HC 327

The following Responses have been received from Government:

'Communicating climate science', the Committee's Eighth Report of Session 2013–14

'Government horizon scanning', the Committee's Ninth Report of Session 2013–14

FURTHER INFORMATION

Further information about the Science and Technology Committee can be obtained from the Clerk of the Committee, Stephen McGinness, or from the Senior Committee Assistant, Darren Hackett, on 020 7219 2792/2793 respectively; or by writing to: The Clerk of the Committee, Science and Technology Committee, House of Commons, 7 Millbank, London SW1P 3JA. Enquiries can also be e-mailed to scitechcom@parliament.uk. Anyone wishing to be included on the Committee's mailing list should contact the staff of the Committee. Anyone wishing to submit evidence to the Committee is strongly recommended to obtain a copy of the guidance note first. Guidance on the submission of evidence can be found at www.parliament.uk/commons/selcom/witguide.htm. The Committee has a website, www.parliament.uk/science, where recent publications, terms of reference for inquiries and press notices are available.



PARLIAMENTARY OFFICE OF SCIENCE AND TECHNOLOGY (POST)



RECENT POST PUBLICATIONS

Ancient Woodlands

June 2014 POSTnote 465

Ancient woodlands are irreplaceable features of our landscapes that can be high in biodiversity or cultural value. This summarises the challenges of conserving the biodiversity and cultural heritage of these sites to provide social and economic benefits, while still meeting the development needs of society.

Reducing Emissions from Deforestation

August 2014 POSTnote 466

The UNFCCC REDD+ scheme aims to promote sustainable forest management in developing countries to reduce carbon dioxide emissions. Developed countries are expected to provide approximately \$20bn per year from 2020. This summarises the extent to which REDD+ could contribute to meeting international targets, challenges to its implementation and technologies for tracking its performance.

Childhood Allergies

July 2014 POSTnote 467

In the UK, 40-50% of children have at least one diagnosed allergy. The increased prevalence of allergies affects children's quality of life and puts pressure on health services. This discusses the causes and extent of allergic disease in childhood, examines the links between allergy, genetics and the environment, and summarises current research.

Big Data Overview

July 2014 POSTnote 468

'Big data' are data on a scale, or of a complexity, that makes it challenging to use. This examines definitions of big data, how it is managed, used and regulated, and the consequent public concerns. It sets the scene for a series of briefings exploring how data are increasingly used.

Big Data and Business

July 2014 POSTnote 469

Easier access to computing power and new analysis methods are enabling the use of big data by businesses, changing the way they operate and communicate with their customers. This examines the applications of big data by UK companies, highlighting the opportunities offered. It also considers the challenges that businesses and regulators face.

Big Data, Crime and Security

July 2014 POSTnote 470

Recent advances in analysing large and complex data offer opportunities and challenges for police and security agencies. This examines the use of such data in three key areas: crime prevention, crime detection and national security. It also covers regulatory issues and public perception about privacy, civil liberties and social benefits.

Smart Metering of Energy and Water

July 2014 POSTnote 471

Smart meters record energy and water usage and improve how this is relayed to consumer and suppliers. The Government plans to roll-out smart meters for electricity and gas to all households in Great Britain by the end of 2020. This examines the potential benefits and risks associated with smart metering of both water and energy.

Big and Open Data in Transport

July 2014 POSTnote 472

New ways to collect, manage and analyse vast quantities of data present opportunities to provide a more efficient transport system. This note examines factors affecting the growth of big data in transport and applications, focusing on road and public transport. It explores challenges to opening up, collecting, disseminating and using big data, and to sharing data whilst protecting users' privacy.

Biobanks

July 2014 POSTnote 473

Biobanks are repositories of biological samples, physical measurements. They correlate behavioural data for research, clinical practice or public health monitoring. Most biobanks are established to investigate the common determinants of mortality and morbidity. This updates POSTnote 180 and summarises biobank activity in the UK and the legal, ethical and practical issues.

Big Data and Public Health

July 2014 POSTnote 474

Patient health records and other large scale medical and administrative datasets are increasingly being considered as a valuable tool for the study and improvement of health. This examines the sources of data, their current and potential uses for health improvement, and the legal and practical issues raised by data use for public health or research purposes.

Alternative Currencies

August 2014

POSTnote 475

Alternative currencies are types of money or exchange that can be used instead of and alongside national currency. A number are used in the UK today. This outlines the different types and aims of these currencies. It also sets out how they are being used, and highlights regulatory and policy challenges regarding consumer protection, financial crime, taxation and benefits.

Environmental Citizen Science

August 2014

POSTnote 476

Environmental citizen science traditionally involves the public submitting sightings of wildlife to NGOs or record centres. Emerging technologies have recently broadened its use to all kinds of environmental data. This POSTnote summarises different types of citizen science projects, policy-relevant applications and the benefits and challenges of volunteer collected data.

Phosphate Resources

August 2014

POSTnote 477

World food security is dependent on phosphate fertilisers manufactured from finite deposits of phosphate ore. The majority of reserves are restricted to a limited number of countries, raising geopolitical risks. This POSTnote describes the uses of phosphate and summarises ways in which dependence on mineral reserves could be reduced.

CURRENT WORK

Biological Sciences – Minimum Age of Responsibility, GM Crops, Parity of Esteem between Physical and Mental Health

Environment and Energy – Short Lived Climate Pollutants, Biodiversity Auditing, Energy Storage, Floodplain Management, Reducing Greenhouse Gas Emissions from Agricultural Crops, GM Insects.

Physical sciences and IT – Unmanned Aerial Vehicles, Science Practicals in Schools, Broadband Internet Access, Innovation and the Future of the UK Economy.

Social Sciences – Palliative and end of life care.

CONFERENCES AND SEMINARS

Big Data Research Exhibition

On July 15th, POST hosted an interactive exhibition showcasing the latest developments in UK big data research. The term 'big data' typically describes large or complex datasets that cannot readily be stored and analysed using conventional computers and databases. This reception was produced in collaboration with Research Councils UK (RCUK) and included presentations from Adam Afriyie MP, Chair of POST; Francis Maude MP, Minister for the Cabinet Office; and Prof Rick Rylance, Chair of Research Councils UK. Following the talks, attendees explored exhibits on major UK big data projects and spoke to leading researchers about their work.

Science and Technology in Parliament

On 6th October, POST hosted a seminar on Science and Technology in Parliament. This event provided students from Science Communication Masters courses with an overview of the ways in which science and technology are used and communicated in Parliament. There were presentations from Chris Tyler, Director, POST; Sarah Hartwell-Naguib, Head of science and environment section, House of Commons Library; Christopher Clarke, Clerk of the House of Lords Science and Technology Committee and Stephen

McGinness, Clerk of the House of Commons Science and Technology Committee, who all then joined a panel discussion.

STAFF, FELLOWS AND INTERNS AT POST

Fellows

Adriana De Palma, Natural History Museum, Biotechnology and Biological Sciences Research Council

Dr Anusha Panjwani, Pirbright Institute and Harvard University

Dr Chris Millard, Queen Mary, University of London, Wellcome Trust

Clare Wenham, University of Aberystwyth, Nuffield Council on Bioethics

Daniel Rathbone, Imperial College London, Engineering and Physical Sciences Research Council

Elizabeth Duxbury, University of East Anglia, Biotechnology and Biological Sciences Research Council

Helen Brewer, Rothamstead Research Centre, Biotechnology and Biological Sciences Research Council

Ian Keyte, University of Birmingham, Royal Society of Chemistry

Kimberley Pyle, University of Cardiff, Natural Environment Research Council

Lucy Anderson, University of Leeds, Biotechnology and Biological Sciences Research Council

Maria Thorpe, University of Manchester, Engineering and Physical Sciences Research Council

Mark Richardson, University of Reading, Natural Environment Research Council

Oscar Branson, University of Cambridge, Natural Environment Research Council

Paul Gilbert, University of Sussex, Economic and Social Research Council

Rachel Stocker, University of Durham, British Psychological Society

Rosalind Davies, University of Birmingham, Engineering and Physical Sciences Research Council

Rosanna Greenop, University of Southampton, Natural Environment Research Council

Stephen Hanley, University of Leeds, Economic and Social Research Council

Tom Ashfold, University of Oxford, Economic and Social Research Council

Interns

Dr Laura Childs, Imperial College Science Communication MSc

INTERNATIONAL ACTIVITIES

On September 10th-12th Dr Aaron Goater attended a PACITA conference in Prague to discuss 'Communication and Impact Strategies' with colleagues from the European Parliamentary Technology Assessment network.

Dr Chris Tyler, Director of POST, spoke at the inaugural international 'Science Advice in Governments' conference in Auckland. Organised by Sir Peter Gluckman, Chief Scientific Adviser to the Prime Minister of New Zealand, the conference brought together science advisers from over 60 countries. Dr Tyler highlighted the importance of legislatures in modern democracies, and argued that for science advice in governments to be most effective, attention must also be given to the need for quality scientific advice in parliaments.

Side meetings included focus on capacity building for scientific advice. In these meetings, Dr Tyler presented POST's work in African Parliaments, its UK Parliamentary Fellowship Programme, and training and induction programmes for parliamentary staff and new MPs.



HOUSE OF COMMONS LIBRARY SCIENCE AND ENVIRONMENT SECTION



Scientists and other staff in the Science and Environment Section provide confidential, bespoke briefing to Members and their offices on a daily basis. They also provide support to Commons Select Committees, and produce longer notes and research papers which can be accessed on line at <http://www.parliament.uk/topics/topical-issues.htm>

Summaries of recently updated briefings are opposite.

For further information contact:
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RECENT PUBLICATIONS

Assisted Suicide

SN04857

Under the Suicide Act 1961 it is an offence for one person to assist encourage or assist the suicide (or attempted suicide) of another. Suicide or attempted suicide are not in themselves criminal offences.

There have been several legal cases regarding the offence of assisted suicide, particularly in the context of disabled or terminally ill people who are unable to end their lives without assistance from family or friends. A recent Supreme Court judgement took the view that Parliament was the appropriate forum for considering changes to the law on this particular issue.

The House of Lords is considering the Assisted Dying Bill, a Private Member's Bill introduced by Lord Falconer of Thoroton. The Bill aims to enable competent adults who are terminally ill to request assistance with ending their life. There was consensus among those who spoke in the Second Reading debate – whether for or against the Bill – that Parliament needed properly to address the issue following the Supreme Court's judgment in Nicklinson and that the Bill should proceed to Committee for detailed consideration. The Bill was given its Second Reading without division. The Government has indicated that it considers this issue to be a matter of individual conscience.

Household Safety (Carbon Monoxide Detectors) Bill

SN06975

On 12 June 2014 Andrew Bingham secured fourteenth place in the Private Members' Bill ballot. He presented the *Household Safety (Carbon Monoxide Detectors) Bill* on 2 July; the debate on Second Reading was adjourned on 12 September.

The Bill would introduce a requirement that a functioning carbon monoxide detector must be installed in all newly built and all rented residential properties. This note provides information on the Bill's provisions and summarises the content of the Bill.

Infrastructure Bill: Planning Provisions

SN06909

The Queen's Speech on 4 June 2014 announced

that an Infrastructure Bill would be introduced in the 2014-15 Parliamentary session. The Infrastructure Bill, HL Bill 2, was first introduced in the House of Lords. The committee stage started on 3 July and will continue on 14 October. This note explains the planning provisions in the Bill.

The Bill covers many areas, including: proposals to turn the Highways Agency into a Government-owned company; giving communities the right to buy a stake in a local renewable electricity scheme; and increasing the powers of the Land Registry. A number of planning reforms will increase efficiency in the planning system by:

- making changes to the procedures in the Planning Act 2008 for handling minor changes to existing development consent orders (DCOs) for nationally significant infrastructure projects (NSIPs). It would also simplify the processes for making significant changes;
- allowing the examining authority, (a panel of planning inspectors who consider DCO applications), to be appointed earlier on in the process, immediately after an application has been accepted;
- allowing the examining authority panel to comprise only two inspectors; and
- allowing certain types of planning conditions to be regarded as discharged if a local planning authority has not notified the applicant of their decision within a set time period.

This note focuses only on the planning-related provisions in the Bill. These provisions make amendments to the Planning Act 2008 and the Town and Country Planning Act 1990. The territorial extent has the same extent as the legislation to which it relates.

Common Agricultural Policy Reforms 2014-2020: Implementation Decisions in the UK

SN06929

Common Agricultural Policy reforms for 2014-2020 are now being implemented across the European Union. There is a considerable amount of flexibility for each Member State to implement the reforms in the way that best suits their own farming systems. The UK Government secured agreement that the devolved administrations should also have this flexibility. This means that a variety of implementation decisions have now been made or are being consulted upon across the UK.

This note was expedited for Estimates Day (7 July 2014) and currently concentrates on English decisions but provides comparisons with the devolved administrations. The paper will be further developed to provide a broader UK overview and further stakeholder comment on Library Research Paper 13/64 CAP implementation 2014-2020 in the UK and in Ireland (November 2013).

Carbon capture and storage

SN05086

This note has been updated following the publication of the Energy and Climate Change Committee's report on carbon capture and storage (CCS). CCS is a potential way of 'decarbonising' electricity generation, through capturing and storing the carbon dioxide (CO₂) produced. As a form of 'low-carbon' generation under the current Energy Bill, CCS would allow the continued burning of fossil fuels. However, the 'emissions performance standard' introduced by the Bill also allows unabated gas to 2045; some feel this is not set low enough to incentivise CCS.

CCS generation is not yet proven on a large scale, and nor is storage long-term, despite a series of UK Government and EU initiatives aimed at incentivising its development. In March 2013 Peterhead (Aberdeenshire) and the White Rose Project (Yorkshire) were named as the two preferred bidders in the latest UK CCS Commercialisation Programme Competition.

Badger Culling: Controlled Shooting Pilots

SN06837

This note has been updated to reflect the Government's publication of the Expert Panel's report and its response and future strategy (3 April 2014). The Secretary of State announced that the current two culls would be continued with amendments to improve effectiveness in the proportion of badgers killed, and the time taken for shot badgers to die. Further proposed culls would not be initiated until the methodology to improve this was in place. In July 2014 the Badger Trust was given leave for Judicial Review of the decision to continue the two pilots without independent monitoring.

ACTIVITIES

Since July the Section has produced debate packs, containing briefing and supporting press and parliamentary material, for debates on: CAP reform implementation; Public consent for local plans; Energy prices; Mitochondrial replacement techniques; Sale of puppies & kittens; Carbon tax and energy-intensive industries; Food fraud; and Research funding for and awareness of pancreatic cancer.

In September the Section welcomed Wendy Carr, a fellow from the Parliamentary Office of Science and Technology (POST), to begin a three month placement. Wendy is undertaking a PhD in pharmaceutical plant cleaning at Newcastle University. She will be researching Food Waste, as well as helping to answer Member enquiries.

The Section has continued its outreach to the academic world. Professor Tadj Oreszczyn, Director UCL Energy Institute and Professor of Energy and Environment, came to Parliament to give an overview of UCL Energy Institute's research programme and important results to date to specialists in the Library and also from Committees and POST.

Assistant Library Clerk, David Hirst, attended the POST and Research Councils UK (RCUK) interactive exhibition about the latest developments in UK Big Data research and met researchers using Met Office supercomputers to investigate meteorological phenomena (including extreme weather such as hurricanes) and historians who are data-mining archival texts.

Enquiry Executive, Jim Camp, attended a 'State of UK Nature' conference in September. Sir David Attenborough highlighted the decline of 60% native species in the UK. There were policy announcements from the Deputy Prime Minister which included a commitment to the full opening of the coastal path by 2020.

Team members posted blogs on the Library's 'Second Reading' blog, including on fracking and rural broadband. Library Clerk Oliver Bennett, currently on secondment in Burma, posted a blog about his experience advising on the establishment of a Burmese Parliamentary Research Service.



Listed opposite (grouped by subject area) is a selection of Debates on matters of scientific interest which took place in the House of Commons, House of Lords or Westminster Hall between 26th June and 12th September 2014.

A full digest of debates and PQs on scientific issues during the 2013/14 and to date in the 2014/15 sessions of Parliament can be found at <http://www.scienceinparliament.org.uk/publications/uk-digests/>

SELECTED DEBATES

AGRICULTURE AND FOOD

Agriculture and Food Industry	24.7.14	HoL 1340	Lord Plumb
Food Fraud	8.9.14	HoC 698	Roger Williams

HEALTH

Assisted Dying Bill - Second Reading	18.7.14	HoL 775	Lord Falconer of Thoroton
Clinical Technology Appraisals (NICE)	1.9.14	HoC 137	Eric Ollerenshaw
Global Health (Research and Development)	8.7.14	HoC 33WH	Andrew George
Medical Innovation Bill - Second Reading	27.6.14	HoL 1449	Lord Saatchi
Mitochondrial Replacement (Public Safety)	1.9.14	HoC 93	Fiona Bruce

TELECOMMUNICATIONS

Superfast Broadband (Urban Areas)	9.9.14	HoC 265WH	Mark Field
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EDUCATION AND SKILLS

Adult Learning	3.9.14	HoC 111WH	Meg Hillier
Apprenticeships	26.6.14	HoL GC176	Lord Cormack
Skills and Training Facilities	1.7.14	HoC 183WH	Stephen McPartland
Technical and Vocational Education	9.7.14	HoC 356	Tristram Hunt
Ofsted (14 to 17-year-olds)	16.7.14	HoC 257WH	Graham Allen
Schools: Careers Guidance	23.7.14	HoL GC478	Baroness Sharp of Guildford