

Review of the Balance of Competences between the United Kingdom and the European Union

Appendix to the
Environment and Climate
Change Report

APPENDIX: Examples of advantages and disadvantages of EU competence relating to environment and climate change

This appendix catalogues some of the evidence Defra and DECC received during the 12 week call for evidence period (20 May-12 August 2013) and supplements the main Environment and Climate Change Report. It covers five areas of EU environment and climate change policy, namely:

[Nature and biodiversity](#)

[Climate change](#)

[Water and marine](#)

[Waste](#)

[Chemicals](#)

These were the five areas for which we received the largest volume of evidence. This appendix sets out the details of what many respondents saw as the advantages and disadvantages of EU competence in the areas of environment and climate change. We felt it important to capture these comments, too numerous for the Report, to ensure they are given consideration alongside the themes and issues raised in the Report. The comments quoted below reflect views from across a wide range of sectors such as businesses, NGOs, and political groups.

It is important to note that while this appendix contains a lot detail from respondents, it is by no means the complete picture. All the evidence submitted to this Report can be found at www.gov.uk/government/consultations/eu-and-uk-action-on-environment-and-climate-change-review.

Nature and biodiversity

Introduction

1. All respondents agree that nature is not restricted by national and/ or political boundaries. For this reason most NGOs believed that a joined up approach across Europe on biodiversity is necessary for effective action in this area, as each country's actions will affect its neighbours. They argued that this results in a collective responsibility for the water, wetlands and ecosystem services shared by countries with land borders. The British Ecological Society pointed out that despite the UK's island status, a joined up approach is still particularly relevant with respect to water and migratory animals such as birds. The Wildfowl and Wetlands Trust said that EU environmental legislation benefits the UK as it provides a safeguard to ensure that Member States cannot adopt short-term thinking and policies that could cause irrevocable harm to either biodiversity and

habitats or the natural support systems that underpin human livelihoods in the long term.

2. In looking at the development of UK-EU environmental policy, Nigel Haigh said the influence between the EU and the UK has been a two way process. The Tyndall Centre for Climate Change Research saw it as less of an even process. It said that in the past the UK had tended to view “environmental policy” in slightly narrower terms than other northern European states. It felt that UK tended to adopt a more ad hoc and piecemeal approach, consistent with the UK’s common law traditions in areas such as heritage and landscape protection, land use planning and nature conservation. It went on to say the EU’s influence in this area vastly exceeds that of other supranational organizations such as the United Nations and the Organization for Economic Co-operation and Development.
3. The majority of environmental legislation in the UK is transposed from EU requirements and, as the Wildfowl and Wetland Trust and others pointed out, there is no way of knowing what legislation on the environment would have been put in place if the UK had instead acted independently. It suggested that domestic politics would not support the minimum standards it considers necessary to protect the UK environment. Indeed Prospect agreed with the assessment that “From an environmental perspective it seems likely that leaving the EU will see a watering down of environment policy. With the notable exception of climate change legislation, in recent times the UK has failed to play a leadership role in the environmental policy field.”¹

Impact of EU competence in the area of nature protection and biodiversity

4. The RSPB believed that the Wild Birds Directive (originally 79/409/EEC, now 2009/147/EC) and the Habitats Directive (92/43/EEC) have been key in improving the efficacy of conservation legislation in many Member States, and offer important additional protection for biodiversity in the UK while also promoting the adoption of UK interests and values by the other Member States.
5. However, the GLA pointed out that many of the provisions of the Wild Birds and Habitats Directives are replicated by earlier national legislation in the UK (for example the Wildlife and Countryside Act 1981). GLA argued that whilst some provisions of these Directives are important in a national context, the provisions have little additional relevance for protected sites in London other than to set the reasons for a site’s protection into a European context. That said, the GLA recognised that the Directives ensure cross-boundary conservation of the habitats and staging posts of migratory birds. In particular the GLA pointed out that trade in endangered species requires cross-boundary co-operation. Enforcement of the Convention on International Trade in Endangered Species of

¹ www.foe.co.uk/resource/briefings/eu_referendum_environment.pdf

Wild Fauna and Flora (CITES) through EU legislation (Regulation 338/97) is seen as particularly important in London because the city is a major international transport and trade hub.

6. Some respondents also pointed out that nature and biodiversity protection requires an integrated approach across several areas of policy. The Liberal Democrat Environment Parliamentary Party Committee pointed out that a target of “Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss”, was set as part of the European Environment Agencies 2010 report: “EU 2010 Biodiversity Baseline”. The report suggests that 25% of marine mammals, 15% of terrestrial mammals, and 12% of birds are threatened with extinction. The Liberal Democrat Environment Parliamentary Party Committee argued that, in order to achieve the target set in 2010, an integrated approach is required throughout the Common Agricultural Policy, the Common Fisheries Policy and the Marine Protected Areas, because the EU (like the UK) should recognise that a balance between the need to produce food and to protect wildlife needs to be met.
7. Continuing threats to habitats were also noted by the Wildfowl and Wetlands Trust. It stated that threats to some UK wildfowl species have increased due to the increased isolation of UK wetlands, and functional damage resulting from, for example, on-going development in the floodplain. It sees this as mostly being driven by domestic planning policy which is a national, not EU, competence, but the Wildfowl and Wetlands Trust believed that this issue needs to be considered in the broader environmental context.
8. The aim of EU legislation on nature and biodiversity is to provide protection for Europe’s rarest and most threatened habitats and species. A scientific review of the impacts of the Wild Birds Directive showed that on average the more land that is designated as an EU protected area, the more likely it is that bird populations will increase.² The World Wide Fund for Nature pointed out that protected areas also play an important role in securing vital ecosystem services benefiting human well-being. This includes providing clean water, regulating climate through carbon storage, flood prevention and recreation. A recent report published by the European Commission estimates that the economic value from the terrestrial Natura 2000 network alone is between €200 and €300 billion per year.³ In the UK, our mountains, moorlands and heathlands (which comprise

² Donald, P.F., Sanderson, F.J., Burfield, I. J., Bierman, S.M., Gregory, R.D., & Waliczy, Z. (2007). International Conservation Policy delivers benefits for birds in Europe. *Science*, 317(5839), 810-813

³ European Union, Estimating the Overall Economic Value of the Benefits provided by the Natura 2000 Network. 2013. ec.europa.eu/environment/nature/natura2000/financing/. See also: European Union, Assessing Socio-economic Benefits of Natura 2000 – a Toolkit for Practitioners. September 2009. ec.europa.eu/environment/nature/natura2000/financing/docs/benefits_toolkit.pdf.

18% of the UK) hold 40% of our soil carbon (5 billion tonnes) and are the source of 70% of our drinking water. ⁴

There are other examples from respondents of what they have seen as an advantage or disadvantage of EU competence for nature protection and biodiversity. Below is a snapshot based on the submissions we received.

Evidence snapshot

Benefits of a network of protection

- The European Birds and Habitats Directives and the Marine Strategy Framework Directive are vital, and through them there is now a network of protected terrestrial sites (Natura sites) across Europe, with plans for a similar coherent network of marine conservation zones around the UK and EU coast. Without the Natura network numbers of migratory waterfowl which are on the UK quarry list would not be as high as they are now. (British Association for Shooting and Conservation)
- Research has shown that the targeted conservation measures associated with birds listed in Annex I of the Birds Directive (79/409/EEC) have resulted in these species faring better than those that are not listed for protection. ⁵ This suggests that EU approaches can be more effective than non-EU actions. (British Ecological Society)
- The Habitats Directive (92/43/EEC) has been important for ensuring species in the UK such as great crested newts and dormice receive adequate protection, particularly in regards to planning infrastructure and developments. Both of these species were already protected under the UK's Wildlife and Countryside Act (1981), but the Directive ensured that their habitats were thought of as a network (rather than individual sites as the UK planning system does) and set out how impacts should be mitigated. (British Ecological Society)
- The introduction of stronger protection for Special Areas of Conservation under the Habitats Directive led to subsequent strengthening of the protection for SSSIs, for example under the Countryside and Rights of Way Act (2000); this provides an example of EU measures setting a precedent that is usefully reflected in subsequent UK laws. (British Ecological Society)
- The adoption of the Habitats Directive marked a significant step change for marine conservation in the UK, and elsewhere in the EU. For the first time,

⁴ UK National Ecosystem Assessment, Technical Report. 2011. Chapter 5: Broad Habitats. uknea.unep-wcmc.org/LinkClick.aspx?fileticket=CZHaB2%2FJKlo%3D&tabid=82.

⁵ Donald, P. F., Sanderson, F. J., Burfield, I. J., Bierman, S. M., Gregory, R. D., & Waliczky, Z. International conservation policy delivers benefits for birds in Europe. 2007. *Science*, 317: 810-813.

countries had to protect biodiversity in their surrounding seas as well as on land and take measures to actively conserve threatened marine species such as the bottlenose dolphin, loggerhead sea turtle or Arctic tern, as well as valuable underwater habitats such as cold water reefs, *Posidonia* beds or underwater sea caves. (The Wildlife Trust)

Economic benefits

- The protection of the diversity of species and habitats found in Europe's Natura 2000 sites create important sites for recreation and tourism by providing natural spaces to relax in or explore. This can create the potential for the development of new economic activity. One recent European Commission study estimated that, if properly resourced and managed, the Natura 2000 Network could provide a Gross Value Added (GVA) of €3.05 billion in the regions in which it is located. The protection of all 300 Natura 2000 sites in Scotland was estimated to have an overall benefit cost ratio of around 7 over a 25-year period.⁶ (The Wildlife Trust)
- As well as environmental benefits, the Birds and Habitats Directives also provide economic benefits for example directly from tourism by providing high quality natural attractions, and indirectly from the provision of ecosystem services. It has been calculated that the tourism value of N2K sites in Europe is worth €9–20 billion per year in 2006 and provides up to 2 million FTE jobs (15% of all FTE jobs in the tourism sector in 2006).⁷ (Wildfowl and Wetlands Trust)

Nature protection legislation could go further

- Despite the Directives' critical contribution to biodiversity protection, species and habitats continue to decline at unprecedented and unacceptable levels. In England, the latest assessment in 2008 showed that 18 out of 42 priority habitats and 120 out of 390 priority habitats were in decline.⁸ It is estimated that England and Wales lost 97% of enclosed semi-natural grasslands between 1930 and 1984 and the Farmland Bird Index – a measure of the state of biodiversity on agricultural lands – declined by 43% between 1970 and 1998.⁹ The UK and the EU clearly needs concerted action (as opposed to any dilution in approach) if the UK is to meet its domestic and international targets on biodiversity protection, including Aichi targets 11 and 12 agreed as part of the Convention on Biological Diversity Strategic Plan at Nagoya in 2010. (WWF)

⁶ European Union, Investing in Nature 2000: for Nature and People. 2011. ec.europa.eu/environment/nature/info/pubs/docs/brochures/investing%20in%20N2000%20brochure.pdf.

⁷ ec.europa.eu/environment/nature/natura2000/financing/docs/Economic%20Benefits%20Factsheet.pdf

⁸ Defra, The Natural Choice – Securing the Value of Nature. 2011. www.official-documents.gov.uk/document/cm80/8082/8082.pdf.

⁹ UK National Ecosystem Assessment (2011) Synthesis Report – see Defra Archive. archive.defra.gov.uk/environment/natural/documents/UKNEA_SynthesisReport.pdf.

- All 27 EU Member States are Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).¹⁰ For many years the UK has been one of the leaders in setting strong EU policy on CITES, and in advocating EU policy internationally. The UK's policy for the conservation of species threatened by international trade has sometimes been limited by the need to reach a common EU policy. (WWF)

Structural funds

- The EU offers substantial funding opportunities for nature conservation (the RSPB has been a beneficiary of a number of EU environmental funding programmes) and important land purchase appeals (the Forsinard Estate in Scotland's Flow Country being a good example). This has enabled the RSPB to deliver its work, while also achieving UK, EU and Global nature conservation policy objectives. (RSPB)

Invasive Non-Native Species

- The UK's biodiversity is significantly impacted by Invasive Non-Native Species (INNS), which displace native species and can also cause economic damage, recently calculated as being at least £1.7 Billion per year across the UK (Williams et al 2010). INNS are recognised as a nationally significant water management issue under the Water Framework Directive (WFD), and are likely to prevent a good proportion of water bodies from attaining good ecological status. Effectively tackling INNS requires a truly global outlook, and therefore by necessity needs coordinated action in order to prevent their spread between countries which are either geographically linked, or linked by trade routes. (Wildfowl and Wetlands Trust)

The role of the European Food Safety Authority (EFSA)

- Only a small proportion of lead gunshot hits target animals with the majority falling into and contaminating the wetlands and terrestrial habitats where it is used. It can then be ingested by waterbirds and terrestrial birds, causing poisoning. In 2007, the European Commission requested the EFSA to produce a scientific opinion on the risks to human health related to the presence of lead in foodstuffs. These types of issues are "One Health" issues. Lead from ammunition contaminates the environment and affects wildlife, domestic animals and humans; holistic solutions are needed to tackle these. It is therefore appropriate that guidance and where necessary regulation should be based upon the best science available and coordinated in an integrated way by competent authorities at a multinational level. The EU has a competent body - EFSA - who can pull

¹⁰ There are now 28 Member States. Croatia, which acceded on 1 July 2013, has been a Party to CITES since 2000.

together evidence from across the Community in an independent way with the cost being spread across EU states, which means better value for UK taxpayers. (Wildfowl and Wetlands Trust)

Benefit to the single market

- The other underlying rationale for EU action in this sphere is that transnational regulation of environmental standards is necessary to ensure a level playing field between operators in different Member States. Otherwise a factory in the UK could be at a competitive disadvantage to a company elsewhere in the EU with laxer standards which do not require expenditure on environmental protection measures. To that extent EU environmental standards are integral to the effective functioning of the single Market. (Law Society)

Habitats legislation and planning

- Any suggestion that EU rules on habitats impose disproportionate costs on business contradicts independent analysis of the economic impacts of EU legislation in the UK.¹¹ The 2012 Government Review of the Habitats and Birds Directives found that in the vast majority of development cases major problems do not arise as a result of objections on Habitats Regulations grounds.¹² Of the 26,500 land use consultations Natural England receives annually, less than 0.5% is objected to on Habitats Regulations grounds and most of these are successfully dealt with at the planning stage. (WWF)

Economic disadvantages

- The Habitats and Birds Directives which provide for the Natura 2000 network of special areas of conservation and establish the rules for the protection of wild birds have in our view introduced some disadvantages for UK businesses. Neither Directive allows for the consideration of socio-economic impacts of site designation nor the costs associated with obtaining development consent in these locations. (Royal Yacht Association)
- The environmental standards applicable to the minerals industry in the UK have evolved in the light of experience and extensive research over many years. EU environmental standards have done nothing to improve the environmental performance of the industry which is already of the highest level. It can be clearly demonstrated that the management and restoration of mineral sites makes a greater contribution to biodiversity gain than any other sector of the development

¹¹ Davidson Review on implementation of EU legislation. Commissioned by Department for Business, Innovation and Skills. 2006. www.bis.gov.uk/files/file44583.pdf.

¹² UK Government Report of the Habitats and Wild Birds Directives Implementation Review. Department for Environment, Food & Rural Affairs. 2012. www.gov.uk/government/uploads/system/uploads/attachment_data/file/69513/pb13724-habitats-review-report.pdf.

business. These gains have been achieved without the stimulus of EU obligations. Far from assisting in the restoration of mineral sites, the EU-driven waste regulation powers of the Environment Agency continue to frustrate the delivery of biodiversity gain. (Mineral Products Association)

The level of environmental legislation

- Environmental protection is best served by national legislation that takes account of national and subnational circumstances. Setting environmental law at the EU level gives rise to particular difficulties due to the inevitable imperfections or uncertainties in the transposition of EU law into national law and regulation. This has been a particular issue with the Habitats Directive, but is a danger more generally when restrictive policies are set at the EU level with the intention of being imported into national legislation. (Renewables UK)
- Overly prescriptive implementation of EU environmental law may limit the ability of companies operating under the laws of individual Member States to deploy renewable energy, such as onshore and offshore wind. This is a missed opportunity to further the aims of EU environmental law as renewable energy can also make a significant contribution to protecting biodiversity, the environment and tackling climate change. An example of this is the requirement to prove that a project would have absolutely no impact upon a Natura 2000 site, designated under the Habitats Directive, Birds Directive or RAMSAR Convention. This may be blocking potential developments that will in reality have no impact upon the integrity of the designation, and could positively contribute to renewable energy generation. Allowing flexibility to appropriately implement EU legislation at a national level may assist in the deployment of renewable energy. This could be achieved by adopting a “proportionate principle” as opposed to “precautionary principle” in the application of EU environmental law. (Renewables UK)
- The high level or even absolute protection afforded to discrete elements of the environment by EU Directives (Habitats, Birds, Water etc.) is difficult to reconcile with the balance-of-interests approach to decision-making by which land use in the UK is regulated through the planning system. For the same reason, such protection is not compatible with the delivery of sustainable development which is based on the collective consideration of social, economic and environmental interests in combination. This process cannot be prejudiced by valuing any one interest over others ahead of a planning decision. No high level protection is provided by the EU for mineral resources and by virtue of that, minerals interests will always be secondary to the protection of certain species, habitats, water resources, etc. This is despite the fact that minerals are universally accepted as being essential to society, options for their exploitation are limited to the places where they occur and they are finite (Mineral Products Association).

Climate change

Introduction

- Between them, EU Member States are responsible for around 10% of world emissions all greenhouse gases expressed as CO₂ equivalents (in 2010). This is lower than the US (14%) and China (23%) but is still a significant proportion. Under the Kyoto Protocol, the 15 countries that were EU members before 2004 committed to reducing their collective emissions to 8% below 1990 levels by the years 2008-2012 via a burden-sharing agreement, which sets out the minimum contribution of each Member State to meeting the overall greenhouse gas emission reduction commitment, and they are well on track to meet this target. Member States that joined the EU since 2004 have their own Kyoto reduction targets for the period 2008-2012 which they are also on course to achieve.

Impact of EU competence in the area of climate change

9. It is difficult to determine what action the UK would have taken in the absence of EU competence for climate change, though as Nigel Haigh and others noted, the UK Government was both an early and key player calling for action both within the EU and internationally on climate change, particularly ahead of the adoption of the UNFCCC in 1992. The IEEP also argued that it was unclear whether the EU would have adopted the “package” of climate measures in 2009 had it not been for the strong support given by both the UK and German governments at the time.
10. However, regardless of any specific action in relation to climate change that the UK might have taken in the absence of EU competence – and respondents pointed to the fact that UK domestic targets are more ambitious than the EU - it was generally agreed that the framework for tackling climate change should be adopted at the international level through the UNFCCC process. However, in the absence of an international agreement and the complexities associated with achieving one, most respondents felt that action should be focussed at the most manageable level and that, at present, acting in the EU represented the most practicable current option.
11. Greenpeace, WWF, Welsh Government and the University of York and others all felt that, by acting together, the EU had played a key leadership role in determining the shape of the international negotiations, and had had more influence than if individual Member States had acted alone. Catherine Bearder MEP, the Tyndall Centre, and Client Earth all argued that EU collective action had been essential to the agreement and subsequent survival of the Kyoto Protocol and strong EU leadership had also achieved the successful outcome in Durban.

12. The SEEG considered that EU action had also ensured that domestic climate policies were not undermined by a “race to the bottom” or competitive pressures from other Member States and had also maximised economic efficiency of action across the EU through the EU ETS. Similarly, the Combined Heat and Power Association, Energy UK and Open Europe amongst others argued that EU competence for climate change was critical to providing a level playing field for UK business within the EU to prevent distortions in the market and maintain competitiveness of UK industry. EDF also noted that EU competence had allowed a pan-EU approach to be taken to addressing carbon leakage for Energy Intensive Industries (EII) rather than a fragmented approach that would impact competition. In that context, a number of respondents, including IEEP, Civitas, the CPI, British Glass and EEF, all noted that the UK Carbon Floor price had been an example of the problems that arise with unilateral action, increasing energy prices with potential negative impacts on UK competitiveness in the EU and beyond by removing the level playing field whilst in their view doing nothing to strengthen ambition under a fixed EU ETS cap.
13. A number of respondents, including Open Europe, argued that the EU approach to climate change had imposed large burdens on the UK economy and individual consumers whilst the absence of similar commitments from global competitors made EU business uncompetitive. In particular, respondents from energy intensive industries, including the British Aggregates Association and the CPI, pointed to the cumulative impacts and cost of climate policy as a cause of plant closures in the EU. On the other hand, the Green Alliance and others concluded that carbon leakage due to climate mitigation policy had been limited and that some industrial sectors had actually seen large windfall profits under the EU ETS. The CER considered that carbon leakage was actually a result of other factors – manufacturing and labour costs - rather than climate policy.
14. The EU ETS is central to current EU legislation on climate change. The Green Alliance and UKELA both argued that carbon-trading was much more efficient over larger areas as individual MS are not big enough to create liquid markets and the EU ETS had been more efficient than the earlier UK-ETS. Sandbag, WWF, the Policy Exchange and others agreed that the EU ETS was also the best means of achieving climate goals at least cost within a single market, reducing price distortion and creating a level playing field for industry as the carbon price was the same in all Member States. Whilst the EU ETS had been successful in delivering emissions reductions, a number of respondents, including Energy UK, Greenpeace, WWF, Renewables UK and Green MEPs noted the need for substantial reform of the system in order to create the genuine scarcity of allowances required to deliver a higher carbon price that would drive fuel-switching and structural change and improve the integrity of the system. Others, such as Open Europe and the Fresh Start Project, suggested that the EU ETS

had been further undermined by the EU's renewables target and a conflicting mix of goals at the EU level and argued for a single emission reduction target in future. Both British Glass and BCC argued that using backloading to "fix" the EU ETS was not appropriate; in their view the system should be allowed to work in line with market conditions without interventions that serve to raise costs for business and increase the chances of carbon leakage.

15. However, Civitas in its report CO2.1,¹³ submitted in evidence, argued that all the EU ETS had delivered was windfall profits through huge over-allocation of allowances and had not led to additional investment. The Taxpayers Alliance felt that the EU ETS had also imposed serious costs on UK consumers.
16. The inclusion of aviation in the EU ETS had raised particular issues. For example, WWF and IEEP argued that such a step forward in international climate policy was only possible at EU level and that no individual European country would have the ability to act alone, and that a similar approach should be taken for the shipping sector. In both cases they felt a proactive EU approach was strongly in the interest of the UK, noting that that inclusion of aviation in the EU ETS is also the basis for the Climate Change Commission (CCC) recommending that international aviation emissions are formally included in the UK Climate Change Act framework.
17. On the other hand Civitas argued that trying to include aviation would create trade wars or result in avoidance of European hubs, and IATA and the British Chamber of Shipping argued that international air transport and shipping were specific areas where action to tackle emissions could only be successfully pursued at the international level, rather than at the EU-level, in order to ensure uniformity of regulation and fair competition. The Fresh Start project suggested that by choosing a unilateralist path, the EU had served only to provoke an enormous backlash from China, Russia, Brazil, India, US, Canada and others.
18. From an economic perspective, Renewables UK, the Tyndall Centre, Green Alliance and others argued that EU climate policy and binding targets had also provided long term policy stability minimising risk and increasing certainty for investors and thus driving down costs of mitigation.
19. Respondents generally agreed that the current balance of competence for climate adaptation was appropriate, with measures for climate adaptation probably best done at the national level as impacts would vary and one size would not fit all.

¹³ www.civitas.org.uk/pdf/CO2-1Emissions.pdf

A range of examples were provided by respondents to illustrate what they see as the advantages or disadvantages of EU competence for climate change. Below is a snapshot based on the balance of submissions received:

The EU and global action on climate change

- As climate change is a global issue ideally greenhouse gas reduction targets should be agreed globally. We noted the current work under the UNFCCC to deliver a global agreement by 2015. But in the absence of a global agreement at this point in time and the uncertainty as to whether one will be achieved in the near future setting greenhouse gas reduction targets at EU level is an appropriate course of action. (FDF)
- A definite benefit would be further standardisation, particularly when working on activities which contribute towards commitments made under the Kyoto Protocol. In terms of carbon dioxide emissions reduction on a smaller scale than EU ETS a standardised approach linked to EU ETS would make much more sense than the simplified CRC Energy Efficiency Scheme reporting. (Redcar and Cleveland)
- The whole concept that “global warming” is caused by increased levels of carbon dioxide is highly questionable and policies should be reviewed by both the UK and the EU with immediate effect. There is a risk that in the real possibility that Anthropogenic Global Warming is proven to be an exaggerated factor or possibly even wrong, a huge amount of unnecessary damage will have been done to the UK economy for no useful purpose.(Wedge)
- Europe represents a sufficiently large group of countries that have historically had fairly similar ambitions in terms of carbon reduction, trade heavily with each other¹⁴ and face with similar challenges along the road to decarbonisation. It therefore makes sense for us to cooperate – not doing so will only increase the cost for individual Member States, not least the UK which has signed up to an ambitious and legally binding GHG target for 2050 (Green Alliance)
- Legislation has the possibility of putting in legally-binding goals on legally-binding timeframes. The EU has the great benefit of having the ECJ and other enforcement mechanisms to ensure compliance.(Independent Climate Change Consultant)
- In terms of mitigation the effort needs to be global. Nonetheless, given the constraints on our capacity to mobilise an effective global agreement there is a strong role for groups of countries to seek an appropriate global response. Since

¹⁴ The single market share of total EU-27 trade in goods was 63.7% in 2010, whereas intra EU-27 trade in services accounted for 56.1% of all exported services. Source: F Faes-Cannito, G Gambini, R Istatkov, *External Trade*, March 2012, Eurostat, European Commission.

there are few such groupings the EU has acquired a critical role in the development of a global regime.(WWF)

- EU competence in climate change policy is appropriate, and should be beneficial to the UK. For a problem such as climate change, where emissions anywhere contribute to the problem everywhere, policies to address the problem should be set on the widest possible geographic basis. At present, the EU appears to be the broadest practicable level at which to set policy (Policy Exchange)
- Greenhouse gases, like other pollutants, do not respect national frontiers. So the UK's national interest would not be better served if climate policy was made at national level. A global climate policy would in theory be better than an EU policy. However, 21 years after the signing of the UN Framework Convention on Climate Change and 16 years after the signing of the Kyoto Protocol, there is no meaningful international agreement. If UNFCCC negotiations proceed as planned (which is not likely) an agreement will only become operational in 2020. This is too late. So the EU should strengthen its climate policies. (CER)
- Competence for climate change should rest with the EU. A key benefit of this has been the development of the EU ETS as the primary mechanism for delivering climate change goals. This has the merit of facilitating a level playing field across Europe and delivering greenhouse gas emissions reductions targets at least cost. The EU ETS is an efficient European policy in that it is a good fit with the internal energy market in that it passes through the cost of carbon consistently across Europe (RWE)
- Negotiating as a bloc had also allowed obligations to be taken as a bloc and then shared out equably with appropriate burden sharing mechanisms (The Law Society).
- Addressing internal conflicts, including burden sharing, within the EU has also provided an example for others to draw on in the context of solving similar issues in the international negotiations. (Green Alliance)
- EU legislation has undoubtedly been useful in addressing climate change, particularly as it encourages a levelling up in policy; it is hard to imagine that the UK would have agreed to the 80% emissions cut enshrined in the Climate Act if comparable commitments had not been made, and policy measures put into play, at European level. (Aviation Environment Federation)
- Strategically, the EU's legislative action and international leadership on climate change – in large measure promoted by the UK – has been essential in encouraging the wider international community to take this crucial issue seriously. Achieving positive steps in this area is proving a challenging task even for the EU; but without the EU's economic weight to reflect and amplify its efforts, the UK

would have had minimal impact either on policy formulation or its implementation once agreed (SEEG)

- Action to mitigate (and adapt to the impacts of) climate change is required at the global, European and national level. Collectively the EU is responsible for 10% of global greenhouse gas emissions and it is currently the only major group of countries committed to tackling climate change. It therefore has a unique role to play in establishing both domestic policy which could have an important impact on global greenhouse gas emissions, in influencing the nature of the global response to this issue through the global climate change negotiations (Greenpeace)
- The EU's leadership can be explained by several factors. First, the EU led by example in setting relatively ambitious targets and introducing what were at the time innovative climate policy instruments, such as the EU ETS. Second, the EU's scale, economic heft and market power allows it to be take unilateral action on emission standards. Finally, the EU's ability to influence policy instruments in other parts of the world.¹⁵ (WWF)
- The EU has a major role to play in influencing the rest of the world. The EU must continue to encourage other countries to adopt environmental and climate change standards. However in most cases this has yet to result in equivalent systems of the same rigor. While more countries are undoubtedly seeking to adopt their own schemes and standards, it is clear they will not develop systems which unduly risk the competitiveness of their domestic industrial sectors. The EU must show real leadership, and demonstrate that we can meet our ambitious emissions targets while our industrial sectors prosper and grow (EEF)
- The climate agenda has been adopted as a means of establishing genuine EU "soft power" in foreign policy. However, given the EU's modest and declining share of global emissions, this is an area where the EU is always likely to have limited leverage in global negotiations – as has been patently demonstrated over the past few years. (Open Europe)
- The UK has successfully used its membership of the EU to amplify its voice at international climate negotiations, and past EU leadership on the international stage has led to other major economies developing a significantly stronger domestic stance to greenhouse gas reduction than expected, even if this has not been matched by formal binding targets. (Green Alliance)
- In the RSPB's view UK's membership of "Team EU" at the UNFCCC is very important. Membership of the EU allows its Member States to punch well above

¹⁵ House of Commons Energy and Climate Change Committee, The EU Emissions Trading System. 2012. Tenth Report of Session 2010-12, Volume I.
www.publications.parliament.uk/pa/cm201012/cmselect/cmenergy/1476/1476.pdf.

the weight that they would have as individual states. The EU has long been a very important, influential party to the UNFCCC, and as a major trading bloc has considerable clout with the biggest players, the USA and China. (RSPB)

EU action, competitiveness and economic opportunity

- Climate change policy has seriously disadvantaged our mineral related high energy user industry - far, far more heavily than other industrialised countries in Europe and North America. In particular our primary aluminium production has been virtually wiped-out by the closure of the two largest of the UK's three smelters in the last two years, and the steel industry output in 2012 was still only 70% of pre-2008 recession levels compared to US (90%), Germany and Italy (86%); and France (81%) (British Aggregates Association)
- The cumulative impact and cost of EU environment and climate change policy has been a key factor in the stark reduction in Energy Intensive Industry (EII) production in the UK. (CPI)
- It makes sense that in areas of shared competence, such as environment and climate change, either the EU or the Member States may take action, but the EU needs to play a greater role in preventing additional Member State action that is detrimental to competitiveness. In the UK, specific climate change related regulation has undermined the competitive position of the ceramics industry with the rest of Europe and beyond. A greater balance is needed between interstate competition and environmental protection, and we believe that the EU should exert its powers more consistently and robustly where Member States have taken action beyond EU requirements, and where this is damaging to competitiveness (BCC)
- Climate change is a global challenge and requires a global response. Climate change legislation must be focused on driving change at a global level, not simply within the EU-28. A robust, global means of pricing carbon would be of significant benefit; however, in isolation, EU climate change policy risks restricting growth in carbon efficient countries, inversely incentivising production in countries with low carbon standards (EEF)
- A proposed 30% reduction in EU greenhouse gas emissions from 1990 levels by 2020, alongside a more progressive targets for renewable energy generation and efficiency, will support London's low carbon goods and services sector by encouraging and boosting innovation and demand for such goods and services; creating new jobs and investment opportunities, stimulating competitiveness and reducing business and household costs.(GLA)

- In 2011/12 the global market for low carbon goods and services was worth £3,442 billion and the UK's share was 3.7% (that is, worth £128 billion).¹⁶ In relation to the EU ETS, the financial markets in London have readily adapted to include this new product range. Many investment banks have a “carbon desk” based in London and the ICE Futures Europe derivatives exchange lists a range of emissions products (UKELA)
- For the renewables sector, EU level carbon reduction and renewable energy targets have been key in creating and maintaining momentum for the industry. EU renewables and low carbon targets make a very positive contribution to the development of policy in this area in the UK, and have benefitted the renewable energy sector in the UK.(Renewables UK)
- The UK benefitted uniquely by the introduction of emissions trading in that it has become the centre of the EU carbon market. The City of London's financial knowhow has meant it was well placed to offer specialised financial services relating to emissions trading. The UK is the largest trader of EU allowances, as well as carbon credits originating from the UN Kyoto Protocol projects. (Sandbag)
- In many areas, new environmental policies will disadvantage some industries, whilst benefiting others. Policies designed to raise the price of carbon – explicitly favouring low carbon over fossil-based businesses– are a case in point. By the same token however, attempts to assuage the concerns of some economic operators can be highly damaging to others: the excess of free allowances given to “energy intensive” industries in the ETS Directive (2003/87/EC, as amended) has damaged the carbon market and inhibited the development of emerging low carbon industries (SEEG)

The EU ETS

- A more effective ETS would need to be accompanied by measures to safeguard some energy-intensive sectors of EU industry. It would not help efforts to control climate change if European policies led to more of the goods consumed by Europeans being manufactured in countries such as China. There is little evidence of much of this so-called carbon leakage so far, even for energy-intensive industries. The reasons why Europe imports so much from China are much more to do with labour and manufacturing costs than with climate or energy policy (CER)
- Exaggerated competitiveness fears have seriously compromised the effectiveness of the EU ETS, and have led to an unnecessary transfer of assets from the government to industry. This can be observed in the excess ETS

¹⁶ www.gov.uk/government/uploads/system/uploads/attachment_data/file/224134/LCEGS-underlying-data.xls.

allowances that were awarded to industry in Phase 2 of the scheme (2008-2012), and also in the excessively wide number of sectors defined as at risk of carbon leakage, and thereby entitled to additional free allowances in Phase 3 (2013-2020). To date, there is little evidence that the EU ETS has harmed UK and EU manufacturing industries. On the contrary, selling spare EU allowances during the recession helped many companies to stay afloat during the financial crisis. (Sandbag)

- EU ETS has had a significant impact on emission reduction and also resulted in a knock-on effect of modest increases in company performance. Carbon abatement behaviour has also changed across the phases of the scheme (although it is recognised that the scheme took some time to “bed in” between the initial and second phases). (Redcar and Cleveland)
- While it is acknowledged that the scheme suffers from issues which the EU is currently taking steps to resolve (principally the surplus of allowances,) it is fair to say that in engaging the financial and business communities on greenhouse gas emission reductions, the scheme has pushed climate change up the corporate agenda and provided a valuable learning experience on the challenges involved in reducing GHG emissions. Entities that are responsible for 45%¹⁷ of the EU’s GHG emissions are now familiar with the idea that they must monitor and reduce their emissions. A national scheme could not have had the same impact. (UK ELA)
- Energy UK is strongly committed to the EU ETS as the best means to achieve the European Council goal of an economy-wide 80-95% reduction in EU greenhouse gas (GHG) emissions by 2050 within an integrated EU Internal Energy Market. We consider the ETS to be the best pan-European instrument to drive investments in carbon reduction because it is technology neutral, because carbon markets are the cost-effective way to drive investment choice in GHG reduction and because the ETS is fully compatible with the Internal Energy Market. However, we do recognise that the ETS requires strengthening if it is to encourage investment in low carbon technologies. (Energy UK)
- The flexibilities provided by the ETS as well as its *least cost* approach has allowed for a neat political compromise which has allowed for the introduction of a pan European carbon price. This has reduced the need for the potentially distorting effects of multiple unilateral policies that might place unnecessary burdens on companies operating across different European countries. (Sandbag)
- The EU ETS actually risks raising global emissions. Companies whose competitive advantage has been undermined by the EU ETS emigrate to countries with slacker emission regulations and then the EU imports their

¹⁷ ec.europa.eu/clima/policies/ets/index_en.htm

products. In the UK this means that from 1990-2005, while production of carbon has fallen by 15 %, carbon *consumption* has actually gone up by around 19 % via imports. (Civitas)

- The EU ETS, though flawed, provides the best basis for identifying the most cost-effective opportunities for reducing greenhouse gas emissions. A larger market covering a greater proportion of global emissions allows the cheapest cuts to be found. Providing the ETS cap is sufficiently stringent, the widest possible geographic base is desirable.¹⁸ (Policy Exchange)
- One disadvantage is that the UK's climate ambition risks becoming anchored to the targets and carbon budgets set for it under burden sharing arrangements in EU legislation. If the EU awards the UK more carbon allowances under the ETS and the Effort Sharing Decision than are prescribed by national carbon budgets set under the Climate Change Act, this represents a serious threat to the environmental integrity of the national budgets. To preserve the environmental integrity of these national budgets the UK must exercise its prerogative to cancel any EU allowances issued to it which exceed the budgets it has set itself under national law. (Sandbag)
- The UK has been a strong supporter of the EU ETS as a carbon pricing policy instrument since its inception and has shaped the instrument significantly to its advantage over time. In fact, the UK was one of the few Member States that supported the Commission in the initiation phase of the EU ETS. The UK's national experience with emissions trading was an important example for the development of the EU ETS. (WWF)

Tackling emissions from international transport

- In the absence of a global deal for aviation emissions through the International Civil Aviation Organisation (ICAO) and a weakened (or not restarted) ETS, the danger is that Government will decide not to include international aviation into the Climate Act in 2016. This would leave the fastest growing source of emissions outside the Act and give headroom to other sectors of the economy to grow their emissions while still staying within the overall 80% reduction target. (WWF)
- As regards climate change, IATA believed that any market-based measure applied to aviation must be global in scope, preserve fair competition, and take account of different types and levels of operator activity. ICAO must continue to play the leading role in efforts to reach an agreement on a single global market-based measure for aviation.(IATA)

¹⁸ Moore, Simon; *If the Cap Fits*; Policy Exchange; 2013
www.policyexchange.org.uk/publications/category/item/if-the-cap-fits-reform-of-european-climate-policy-and-the-eu-emissions-trading-system?category_id=24; pp27-28

- Proposals to curb greenhouse gas emissions from aviation would have little impact or purpose at national level. Initiatives at EU level (for example inclusion in ETS) have greater potential, but for maximum effectiveness and legal certainty require global acceptance (CAA in evidence to the Transport Report)
- While ETS is supported by BATA as a first step to a Global Deal, the UK must not be left in the middle of a trade war between the EU and the Rest of the World over its implementation. UK airlines have always argued for a global approach to tackling the impact of aircraft emissions on climate change and we would therefore welcome any progress on this made at international level through ICAO. (BATA in evidence to the Transport Report)

Adaptation

- The publication of the EU's Adaptation Strategy in 2013 encourages other cities to develop such strategies and indirectly assists policy-making in London by stimulating discussion between cities and sharing policies and best practice.(GLA)
- One area of climate change policy that we believe does not require EU action is climate change adaptation. This is best managed at a Member State level, supplemented by regional arrangements, for example for shared river basins. Climate change impacts will vary significantly across the EU and there is no single approach or set of measures that can fit all Member State circumstances. (EDF)

Water and Marine

Introduction

20. The World Economic Forum's Global Risks 2013¹⁹ report highlights water security as one of the top five risks for business leaders over the next 10 years. Personal human consumption of water has increased dramatically in recent years and competes with agricultural use for irrigation. EU figures estimated in 2007 that at least 11 % of Europe's population and 17% of its territory had been affected by water scarcity; this included areas of the South East of England. The marine environment is affected by many different pressures and its effective management necessarily requires cooperation with neighbouring countries and other policy areas.

¹⁹ www3.weforum.org/docs/WEF_GlobalRisks_Report_2013.pdf

21. Existing regional seas conventions (for the UK, the OSPAR Convention on the North-East Atlantic) have a role in promoting coherent approaches. Clean water is fundamental to human health, so measures to reduce water pollution featured among the earliest environmental proposals. Extensive water legislation has been developed at EU level relating to the quality of freshwater, drinking water and bathing water; pollution control, urban waste water treatment and marine management, as well as the assessment and management of flood risks.

Impact of EU competence in the area of water

22. Dŵr Cymru (Welsh Water) said it is hard to speculate what environmental improvements would have been made in the absence of European standards, but it seems unlikely that they would have been on the same sustained scale if left to national administrations. Respondents such as Dŵr Cymru (Welsh Water) and the UKELA went on to say that EU law related to water has undoubtedly delivered significant improvements, for example in bathing water quality, and further improvement are likely via the Water Framework Directive (2000/60/EC). They considered that these improvements have delivered “knock-on” economic benefit, as cleaner beaches attract more tourists and bring economic benefits, and that the ability to plan ahead with reasonable certainty, for example in deciding where future investment will be needed, is important for business, including the water industry. In their view decisions at an EU level tend to have more longevity than national policies so EU competence can offer welcome stability for business.

23. Water UK made a similar point and stated that it thinks there is no doubt that EU environmental legislation has had a positive effect on the state of the EU’s water bodies in the last twenty years. Rivers are cleaner and precious and irreplaceable landscapes have been protected. However, Water UK went on to point out that constant pressure for further improvements may come with an increasingly burdensome price tag for customers, and increasingly marginal benefits for the environment.

24. Some stakeholders also questioned the benefit of some EU requirements. The Northern Ireland Government said the expansive application and enforcement of EU legislation has also on occasion resulted in inappropriate prioritisation of investment. For example, there is a requirement for secondary waste water treatment to be installed at Ballycastle waste water treatment works to comply with the requirements of the UWWT Directive 91/271/EEC, despite local views that that this investment is not an environmental priority. That said, NILGA pointed out, losing EU competence for the environment would result in significant problems because Northern Ireland shares a 300km land border, including 3 international river basins (North-West International RBD, Shannon International RBD and Neagh-Bann International RBD), with the Republic of Ireland.

There are other examples from respondents on what they have seen as an advantage or disadvantage of EU competence for water. Below is a snapshot based on the submissions received:

Improved water quality

- Article 10 monitoring reports that implementation of the Nitrates Directive (91/676/EEC) is beginning to lead to water quality improvements in Northern Ireland. Surface freshwaters and ground waters in Northern Ireland continue to have nitrate levels well below the 50 mg NO₃/l limit. Phosphorus (P) levels in the majority of river monitoring sites show either stable or decreasing trends. (Department for the Environment Northern Ireland)
- More than £600 million is being invested in water and sewerage services in Northern Ireland over the current budget period (2011-15) and the Executive has invested over £1 billion since devolution. As a result of sustained investment, we now enjoy very high drinking water and waste water quality in Northern Ireland. It is unlikely that all of these improvements would have been taken forward without formal EU drivers such as the Drinking Water Directive, UWWT Directive, Shellfish Waters Directive, Bathing Waters Directive, and Water Framework Directive, *inter alia*. (Department for the Environment Northern Ireland)
- The Bathing Water Directive has resulted in significantly cleaner waters around the UK. The 2012 bathing water quality standards published by the European Environment Agency found that 93.8% of the UK's bathing waters met the minimum European water quality standard, with 58.2% meeting the guideline values. Clean seas are fundamental to a productive tourist industry where this relates to swimming, surfing and beach holidays. There are no readily available statistics of the fall in illnesses derived from this source but in the UK, along with other European countries that UK citizen's use for holidays, there is a noticeable improvement. It is easy to forget that in the 1980s, a 3m band of sewage would line the shallows of beaches such as Benidorm. Research published in June 2010 shows that the seaside tourist industry in England and Wales directly supports some 210,000 jobs, with the value of the associated economic output estimated at £3.6bn (for 2009). (The Wildlife Trusts)
- The positive impact of the UWWTD was clearly illustrated in Liverpool where, prior to 1991 sewage ran into the Mersey untreated making a significant contribution to the Mersey's reputation as one of the most polluted estuaries in the UK. In a move to comply with the Directive a new collector system was built to feed this sewage into a state of the art sewage treatment works at Sandon Dock.²⁰(RSPB)

²⁰www.unitedutilities.com/documents/Sandon_Dock.pdf.

Improved infrastructure

- The Water Framework Directive has provided a positive structure by which concerted and co-ordinated programmes designed to significantly improve overall water quality at the river basin, catchment and system outlet level can be delivered. Without this structured and committed approach by UK devolved administrations, much of the positive work done through coordination across UK CMAs and Member States would not have been achieved. (Department for the Environment Northern Ireland)
- Over the years since 1991, the UK and other Member States have invested heavily in improving sewerage infrastructure. Water quality has improved significantly due to a reduction in untreated discharges and overflows, and improvements to the quality of treated effluent. This has benefited human health and sanitation, and the animals and plants that live in and around water. Others to benefit include recreational users of waters previously adversely affected by sewage discharges, and associated economic sectors such as water sports and tourism.²¹ (UKELA)
- The UWWTD has been pivotal in driving investment in the water industry (£8 billion on UWWTD in England since 1990 according to Defra²²) and underpinning substantial river water quality improvements since 1991 as reported under Government's General Quality Assessment scheme.²³(RSPB)

Increased protection of habitats

- Experience has shown that little marine protection might have taken place without EC Directives. Existing national legislation did not focus on bathing water quality prior to the BW Directives. Equally, protection of the marine environment has taken a lower priority historically than protecting rivers, given the greater dilution that our coastal waters give. However, the UK could now use the good models set in environmental Directives to bring in national legislation. (Northern Ireland)
- During the 80s and 90s domestic policies gradually facilitated an improvement in the chemical status of the waters associated with them, although often the wildlife value remained suppressed. A critical driver for addressing these residual problems and for improving the ecological status of these wetlands was the

²¹ See further www.gov.uk/government/uploads/system/uploads/attachment_data/file/69592/pb13811-waste-water-2012.pdf (see pages 19 and 20); www.gov.uk/government/uploads/system/uploads/attachment_data/file/69592/pb13811-waste-water-2012.pdf.

²² www.gov.uk/government/uploads/system/uploads/attachment_data/file/69592/pb13811-waste-water-2012.pdf.

²³ www.gov.uk/government/uploads/system/uploads/attachment_data/file/141697/rwq-ind-sus-2009-resultsv2.pdf.

Water Framework Directive (WFD). This has moved domestic obligations on from achieving purely chemically based improvements, towards achieving more holistic and ecologically relevant improvements (Wildfowl and Wetlands Trust)

Improved protection at an EU level

- Water law is an area where it makes good sense to have matters decided at EU level, given the number of river basins which cross national frontiers. For a single country to legislate on, say, water quality in a particular body of water may be a fruitless exercise if the main influences on that water body lie outside the country in question. (Liberal Democrat Environment Parliamentary Party Committee)
- Marine litter is clearly a trans-boundary problem of global proportions. The trans-boundary nature of the problem means that isolated action by one country will rarely provide an answer. Indeed, action will also be needed on an international level in order to protect EU waters. However, the EU can provide a common framework within which regional, national or even local plans and actions are implemented (WWF)

Burden and bureaucracy of some EU legislation in the area of water and marine

- Some of the EU legislation adopted in the 1980s and 1990s (notably but by no means exclusively the Nitrates Directive 91/676/EEC or the Urban Waste Water Directive 91/271/EEC) has been overly prescriptive and likely therefore to impose disproportionate economic burdens. Early reviews of such legislation – with a view to aligning it with smart regulation²⁴ and subsidiarity principles and more recent best practice – would be a highly useful step for the EU institutions to take. (SEEG)

Waste

Introduction

25. According to the IEEP, within the UK, EU waste laws have helped to bring about an important switch from dumping waste in landfills, to collecting it for recycling and re-use. IEEP thought that it was extremely unlikely that such a turnaround would have been achieved so quickly without a series of EU initiatives. It is of course impossible to prove the counterfactual, which is how UK policy would have evolved without EU legislation. The NLWA suggested the only basis for determining the counterfactual would be to assume that the UK continued as it was prior to the implementation of the Landfill Directive 1999/31/EC and continually relied on landfill with no incentive to improve household recycling rates. This approach would suggest that UK has benefited from EU competence

²⁴ “Smart Regulation” is the Commissions term for what is more widely known in the UK as “Better Regulation”.

on waste. The Environmental Services Association (ESA) had a similar view and stated there are good grounds for believing that without the impetus of EU waste legislation, successive UK governments would have lacked the political will to take the steps necessary to achieve the significant improvements in resource efficiency and environmental protection which these EU initiatives have prompted.

Impact of EU competence in the area of waste

26. The UK Environmental Law Association pointed out waste is different to other raw materials and commodities, in that, in some cases it may pose a risk to human health and the environment. It therefore thinks trans-boundary shipments of waste need to be regulated at a supra-national level, for example EU level. For other reasons respondents such as NLWA see a benefit in having a supra national EU framework in place for waste, because such a framework means that all Member States have to achieve the same targets and because there is much more certainty of direction for all Member States irrespective of whichever governments are in power; that is, the same agenda on the environment and climate change has to be achieved.
27. Targets found in Directives such as the Landfill Directive have led to changes in municipal waste management performance over the past two decades. According to Eurostat²⁵ data, in 1995 around 83% of municipal waste generated in the UK was landfilled (9 % incinerated, including with energy recovery, and 7% recycled/composted). By 2003 (the year following national transposition of the Landfill Directive), landfilling had fallen to 74% (8 % incinerated and 18% recycled/composted). By 2011 (the most recent year for which data are available), landfilling had dropped dramatically to 49% (12% incinerated and 39 % recycled/composted).
28. The Environment Agency stated that the Landfill Directive has changed for the better the way that waste is managed in the UK, helping to apply consistent high standards of design, construction, operation and aftercare. It noted that, in accordance with the requirements of the Directive, UK landfill sites have stopped accepting certain types of waste since it came into effect in 2002. In addition, the Environment Agency considers that the Landfill Directive has helped tackle the gas emissions from landfills (for climate change mitigation) as well as setting standardised engineering controls across Europe.
29. The UK has introduced its own measures too. For example the UK landfill tax was introduced in 1996 (prior to the Landfill Directive, but after the 1990

²⁵ Eurostat, Municipal waste generation and treatment, by type of treatment method (kg per capita), data code: tsdpc240.

Community Strategy for Waste Management). This began to encourage alternative means of managing waste (which is in line with the requirements of the Landfill Directive and with other EU waste strategy and legislation). The tax has steadily increased from an initial rate of £7 per tonne to £72 per tonne as of 1 April 2013 (from 1 April 2014 this will rise again to £80 per tonne, and will not fall below that rate until at least 2020). The steep and progressive increases in the price of landfill resulting from the landfill tax escalator made alternative methods of waste management economically viable. ESA pointed out these investments also have a “multiplier effect” so that the further investments required meeting the EU 2020 targets for landfill diversion and recycling would have wider economic benefits.

30. According to IEEP, several waste stream Directives have required the creation of producer responsibility schemes, whereby producers of waste are held (financially) responsible for the management of that waste. The introduction of such schemes in the UK has generally happened following the implementation of the relevant Directive, for example the Packaging and Packaging Waste Directive dates from 1994 and the UK producer responsibility scheme commenced in 1997, and similar patterns can be seen for the Waste Electronic and Electrical Equipment Directive (2002 Directive, first UK scheme commenced 2004), the Batteries and Accumulators Directive (2006 Directive, UK scheme commenced 2009) and the End of Life Vehicle Directive (2000 Directive, UK scheme commenced 2005). (IEEP on behalf of WWF, RSPB, WT and FOE).

There are other examples from respondents illustrating what they see as the advantages or disadvantages of EU competence for waste. Below is a snapshot based on the submissions received:

Increased recycling and resource recovery

- The UK has had the fastest recycling rate increase in the last 10 years. This is due to EU influence, via Landfill Directive targets and Waste Framework Directive requirements. (The Resource Association)
- The End of Life Vehicles Directive (ELV) has been highly successful at increasing resource recovery. The Directive has turned the disposal cost of old cars, estimated at £88m per year in 2003 due to landfilling and the cost of collecting abandoned vehicles, into a saving of £29m in 2008, mainly comprised of avoided landfill costs and the additional value of recycle collected from old cars. (Green Alliance)
- The WEEE has been essential to recovering value embedded in products which would otherwise end up in landfill at a cost to society. The WEEE Directive has

meant that 25% of mobile devices are recovered in the UK. By 2020, 80% will be recovered, keeping £13m of raw materials in the economy.²⁶ (Green Alliance)

- The Landfill Directive has resulted in the UK Government setting weight-based recycling and landfill diversion targets in order to fulfil its EU requirements. This approach, although necessary in improving London's transition, does not always support the progress of waste management techniques up the waste hierarchy to achieve the greatest climate change mitigation and economic benefits. For example, weight based targets incentivise local authorities to recycle glass over lighter weight metals or plastics. Recycling the latter materials achieves far greater greenhouse gas savings and typically fetches higher reprocessing price benefits. (Greater London Authority)

Increased employment opportunities

- EU waste legislation has had a major impact on waste management practices in the UK with certain measures such as the Landfill Directive playing a significant role in driving the switch from landfill to recycling and re-use. Thus, employment opportunities created from this shift can to a large part be attributed to the influence of EU waste policy in motivating and driving changes at the national level. For example, take-back elements of the WEEE and ELV Directives, and the extension of the Packaging and Packaging Waste Regulations are expected to have stimulated job creation in remanufacturing and refurbishing of products. (Waste Watch 1999)
- A study by Friends of the Earth (2010) found that meeting the current EU target set in the Waste Framework Directive of 50% for recycling/composting of total municipal waste by 2020, rising to 55% by 2025, could increase total recycling from 10.9 million tonnes (2006) to 17 million tonnes in 2025. This is estimated to create in the UK 18,591 new direct jobs in recycling of municipal waste which would in turn create 9,296 jobs in the supply chain and 4,648 induced jobs in the wider economy (through spending by employees in the sector and in related supply chains) by 2025. The majority of new jobs would be in England (26,800), with nearly 3,000 in Scotland, 1,660 in Wales and 1,150 in Northern Ireland. (FoE).
- If activities such as research and development on new design techniques and improved reuse of materials are also taken into account, up to 50,000 new jobs could be created and annual GDP in the UK could increase by £3 billion. The knock-on impacts of savings in raw materials and energy consumption for businesses outside the recycling sector could add up to £50 billion per year

²⁶ Green Alliance, Why we need landfill bans. 2013. www.green-alliance.org.uk/uploadedFiles/Publications/reports/Why%20we%20need%20landfill%20bans%20WEB.pdf.

(Environmental Services Association, 2013). (IEEP on behalf of WWF, RSPB, WT and FOE)

Greater economic certainty

- EU policy has given UK businesses and local authorities greater certainty that policy is being set on a long term basis, rather than the perceived likelihood of more changes under national government policy. The overarching revised Waste Framework Directive (rWFD) has provided the impetus and certainty needed to develop more sustainable waste management practices, including the treatment of organic waste through anaerobic digestion. (Anaerobic Digestion and Biogas Association)
- The introduction of binding EU recycling and landfill diversion targets has given local authorities the confidence to deliver long term waste collection solutions to ensure that waste is dealt with more effectively, for example through separate food waste collections and mixed green waste collections. (Anaerobic Digestion and Biogas Association)
- The standards set by the EU for the waste management industry are vital for the proper functioning of the single market. An example of this is the Waste Incineration Directive (2000/76/EC) (now incorporated within the Industrial Emissions Directive (2010/75/EU)) and the Landfill Directive (1999/31/EC), which have established common standards for waste incineration plants and landfill sites respectively across the EU. This has prevented Member States adopting lower environmental standards in order to attract waste streams, thereby distorting competition within the single market. In a global economy in which there is global competition for resources, the UK cannot hope to compete against countries such as the US and China for natural resources; the only way in which it can hope to compete is as part of the EU. (UKELA)

Impact on the single market

- One of the main reasons why the UK has been disadvantaged is in the Commission Decision 2011/753/EU where four different methods for the calculation of recycling performance were permitted. This decision has ensured that no level playing field between Member States exists and no true level of recycling performance can be established. It is to be hoped that in future recasts of environmental and waste legislation, the Commission will provide one method of calculation only. (Local Authority Recycling Advisory Committee)
- We generally conclude that having a European Framework in place is positive but improvement is required in the interpretation and implementation in the different Member States. A relevant example is the treatment of metals, glass, ash and aggregate recovered from Incinerator Bottom Ash. These count towards recycling

in certain Member States but not in the UK. This is another example where there is a lack of consistency. (NLWA)

Increased cost to industry

- We consider Directive 2006/21/EC on the management of waste from the extractive industries to be superfluous for the UK. It has imposed additional costs of administration and also has a different regulatory authority now that the Environment Agency is the nominated body. The safety and security of mining wastes was adequately controlled by the Mines and Quarries (Tips) Act developed after the Aberfan disaster in South Wales in the 1960's. It now has a burdensome new Directive which is not entirely appropriate and has occupied much of the EA and Industry's time in reaching agreement on the classifications of mining waste (UK Coal/CoalPro)
- The Waste Framework Directive (2008/98/EC) has disadvantaged the electricity sector through its approach to the definition of waste. Pulverised Fuel Ash (PFA) is the fine ash produced when pulverised coal is burnt in a power plant. It has been safely and successfully used in the construction industry for over 50 years, but is defined and regulated as a waste in the UK under the Waste Framework Directive (2008/98/EC). As a result, sales of PFA have reduced in recent years and primary aggregates are increasingly being used in its place. The environmental outcome is negative: more virgin aggregate has to be quarried, and more PFA is being landfilled. (RWE)

Chemicals

Introduction

31. Some chemicals used by industry and found in commercially available products have been shown to be dangerous to the environment and human health and therefore need to be controlled. Chem Trust pointed out that chemicals policy effectively started in 1973 when the Organisation for Economic Co-operation and Development (OECD) called on its member countries to place restrictions on Polychlorinated biphenyls (PCBs) in response to a number of incidents including poisoned rice oil in Japan and bird deaths in the Irish Sea. This prompted the UK to introduce powers to control the marketing and use of chemicals in the Control of Pollution Act 1974 and the EU to do the same in Directive 76/769 (relating to restrictions on the marketing and use of certain dangerous substances and preparations). Over the years, the marketing of many substances were restricted in the EU under that Directive. In addition the EU Existing Substances Regulation of 1993 (No 793/93) set out a systematic approach to identifying and managing the risks of chemicals. At the same time new substances had to be notified, with a dossier of technical data about hazards and appropriate risks management,

before they could be placed on the market. All of these powers have been subsumed into the REACH Regulation 1907/2006 and this regulatory framework is still developing.

The impact of EU competence on the Chemicals industry

32. The IEEP²⁷ pointed out that instead of relying on purely national risk assessments REACH places responsibility on manufacturers to carry out tests and assessments and on the European Chemicals Agency (ECHA) to evaluate them. It went on to say Member States remain free to carry out their own evaluations, but the burden has been lifted off their shoulders by ECHA which should offer economies of scale. IEEP added that if the UK left the EU it would either have to create a new bureaucracy for this purpose or continue to rely on ECHA while having little or no control over it.

There are other examples from respondents on what they have seen as an advantage or disadvantage of EU competence for chemicals. Below is a snapshot based on the submissions received:

EU wide environmental and human protection

- REACH is expressly structured to achieve a high level of protection for the environment, as well as for human health. This regulatory approach recognises that such substances and products potentially have adverse environmental effects wherever they are used; their control cannot be left to a patchwork of national measures implementing a generally framed outcome driven Directive. The use of European level agencies (particularly ECHA and EFSA) provides a supranational expert regulatory structure whilst retaining ultimate Member State involvement through substance approval and regulation and national enforcement mechanisms. (ClientEarth)
- A recent (2013) example of where external accountability has been important is seen in the ban of Neonicotinoids by the EU. The European Food Safety Authority (EFSA) was able to identify unacceptable levels of risk to honeybees from some uses of these substances, as well as critical data gaps preventing a full risk assessment for other species and uses (report published in January 2013). (NI Environment Link)
- The Freedom Association quotes Akzo Nobel (the largest global paint and Coatings Company and a major producer of specialty chemicals) as saying it “sees REACH not as a threat, but as a business opportunity”. In fact Akzo Nobel state on its website, “the REACH legislation fits well with our Product

²⁷ IEEP, on behalf of WWF, RSPB, WT and FOE.

Stewardship commitment and our support for the Responsible Care® and Coatings Care® initiatives”.²⁸

Benefits to the Single Market

- Any restrictions on marketing and use, or labelling requirements, affect trade and therefore are made at EU level in order to maintain the integrity of the EU single market. If the UK ceased to be a member of the EU it would still be bound by EU standards for products that it exported to the EU. It would also have less say when chemicals are controlled in the future. (Chem Trust)

The need for improved risk assessment

- It is essential that this regulation (in this area) is carried out using sound science and as part of a balanced risk assessment process. The UK Government is sensitive to the role (some) products play in food production, and normally takes a pragmatic approach to their regulation – which we welcome. A recent example of this was when the UK voted against the Commission’s proposal to impose a unilateral ban on “neonicotinoid” plant protection products, and to continue to oppose such a ban without justification and in the absence of a proper risk assessment. In this case the UK National interest would have been better served by the UK approach. The same approach must be taken when considering the regulation of other plant protection products. (AB Sugar)

High costs to business

- REACH has had and continues to have, massive costs for the coatings industry. This disadvantages the UK against non-EU countries and regions, rather than against other EU Members States. Significant resource has had to be put in, by coatings manufacturing companies, to update safety data sheets, monitor changes to chemical classifications and proposed restrictions/authorisations and search for substitutes. There is an ever-changing list of substances that have to be studied to ensure that companies are able to substitute or reduce highlighted chemicals. This involves carrying out performance tests for coatings containing the substances in question, to ensure they are able to protect surfaces against the required criteria both short and long-term. (British Coatings Federation)
- A further example of an unhelpful, prescriptive and overly-bureaucratic approach to environmental protection is the REACH Regulation. Producers of Pulverised Fuel Ash (PFA) in the electricity generation sector have spent up to £0.5 million just to register ash products. (Energy UK)
- REACH is likely to restrict growth and, in some cases, cause business and employment to be lost outside the EU. One case is the authorisation of

²⁸ www.akzonobel.com/uk/sustainability/reach/index.aspx.

chromates. These materials have been used for the pre-treatment and protection of metals for many years. There is no immediate replacement that has the proven track record. They are used substantially in the aerospace industry, which is likely to source components from outside the EU where these materials can still be used. Coated articles can then be imported to the EU, with no restriction (British Coatings Federation)

- Whilst we are supportive of the aims of REACH, there are practical challenges in implementation across industry. The introduction of REACH has increased the risk of supply chain disruption, and has added cost due to the management overheads associated with managing this risk and developing risk mitigation plans (BAE).

Annex 1: Acronyms

Acronym	Name
BAE	BAE Systems (British multinational defence, security and aerospace company)
BATA	British Air Transport Association
BCC	British Ceramics Confederation
CAA	Civil Aviation Authority
CCC	Climate Change Commission
CER	Centre for European Reform
CITES	Convention on International Trade in Endangered Species
CPI	Confederation of Paper Industries
CRC	Carbon Reduction Commitment Energy Efficiency Scheme
DECC	Department for Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
ECC	European Economic Community
ECHA	European Chemicals Agency
ECJ	European Court of Justice
EDF	EDF Energy (Energy supply company)
EEF	The Manufacturers' Organisation
EFSA	European Food Safety Authority
EIIs	Energy Intensive Industries
ELV	The End of Life Vehicles Directive
ESA	Environmental Services Association
ETS	Emissions Trading System
EU	European Union
EU ETS	EU Emissions Trading System
FDF	Food and Drink Federation
FOE	Friends of the Earth
FTE	Full-Time Equivalent
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GLA	Greater London Authority
Green MEPs	Jean Lambert MEP and Keith Taylor MEP
GVA	Gross Value Added
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICE	Intercontinental Exchange
IEEP	Institute for European Environmental Policy
INNS	Invasive Non-Native Species
MEPs	Members of the European Parliament
MS	Member States

N2K	The Natura 2000 network
NGOs	Non-Governmental Organisations
NILGA	The Northern Ireland Local Government Association
NLWA	North London Waste Authority
OECD	Organisation for Economic Co-operation and Development
OSPAR	The Convention for the Protection of the marine Environment of the North-East Atlantic
PCBs	Polychlorinated biphenyls
PFA	Pulverised Fuel Ash
RAMSAR	The Convention on Wetlands of International Importance
RBD	River Basin District
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RSPB	Royal Society for the Protection of Birds
RWE	RWE Group (Energy supply company)
rWFD	revised Waste Framework Directive
SEEG	Senior European Experts Group
SSSIs	Site of Special Scientific Interest
UK	United Kingdom
UK ETS	UK Emissions Trading System
UKELA	United Kingdom Environmental Law Association
UN	United Nation
UNFCCC	United Nations Framework Convention on Climate Change
US	United States of America
USA	United States of America
UWWT	Urban Waste Water Treatment
UWWTD	Urban Waste Water Treatment Directive
Wedge	Wedge Group Galvanizing Ltd
WEEE	Waste Electrical and Electronic Equipment Directive
WFD	Water Framework Directive
WT	The Wildlife Trusts
WWF	World Wildlife Fund