

April 2014

The green benefits of Britain's EU membership

By Stephen Tindale



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- ★ European rules have made the UK clean up its water and air, and protect valuable species and habitats. Britain has not merely been a recipient of regulation: the UK has made EU policy on chemicals stronger, and EU climate diplomacy better.
- ★ If every member-state could set its own environmental standards for traded goods, this would damage the single market. And national rules on air quality and nature conservation would have less impact than EU rules.
- ★ European environmental policy clearly needs reform. London should focus on achieving this reform, rather than demanding repatriation or threatening to quit the club.
- ★ A Britain outside the EU could in theory follow Norway and set high environmental standards. But in practice it would be much more likely to return to being 'the dirty man of Europe'.

Introduction

Before the UK joined the European Community in 1973, it was often called 'the dirty man of Europe' because of its high levels of air and water pollution. Since then, Britain's environmental performance has improved significantly. This is not solely due to EU membership: Norway demonstrates that it is quite possible to have high standards of environmental protection without being an EU member-state. But green issues are almost always high on the political agenda in Norway. In the UK they are not. British environmental measures tend to be taken in response to major, noticeable crises. For example, a Clean Air Act was passed in 1956 to deal with the infamous London smogs. Most of the environmental progress in Britain since accession has been a result of European rules.

EU membership has not been entirely positive for the UK environment. The common agricultural policy (CAP) and common fisheries policy (CFP) are environmentally destructive as well as economically wasteful. Nevertheless, from a green perspective, UK membership has delivered substantial benefits. Yet in his Bloomberg speech on EU membership in January 2012, UK Prime Minister David Cameron suggested that a greater proportion of environmental rules should be set by national governments rather than European institutions. This may have been politically sensible – given the tide of euroscepticism within his own party and the objection of many Conservatives to environmental regulations – but it was intellectually incoherent. In the same speech, Cameron emphasized the importance of the single market. Setting environmental standards at national level might roll

back the single market, since laxer pollution rules in one country could give its firms a competitive advantage. Regulation at national level could also lead to a 'race to the bottom' as firms lobbied to restore a level playing field. So EU environmental rules are necessary for the single market. They are also consistent with subsidiarity: pollution and wildlife do not respect national frontiers.

This paper will outline the green benefits to the UK from EU membership, and to the rest of Europe from British membership. It will consider whether there are any subsidiarity grounds for repatriating any environment or climate competences to member-states. It will conclude by assessing the environmental consequences of the UK leaving the EU.

Cleaner air

London's 'great smog' in 1952 killed at least 10,000 people. The Conservative government responded four years later by banning the burning of coal in domestic fires, and requiring new power stations to be built away from cities. This greatly improved urban air quality. But the enormous expansion of car ownership over the next half century made it worse again. Successive British governments have done little to tackle the problem.

Since Britain's accession, policies to protect or improve air quality have emanated from Brussels, not London. The EU introduced a number of rules on air quality in the 1980s, and brought these together into an 'air quality framework directive' in 1996. This set out basic principles of how air quality should be assessed and managed by national governments. Four 'daughter' directives set limits for pollutants which damage human health.¹ In 2008 these rules were combined into a new 'air quality directive', which also set new limits for fine particles. In addition to rules on overall air quality, the EU has limits on how much pollution industrial facilities, including power stations, are allowed to emit. The concept of BATNEEC (best available techniques not entailing excessive costs) has been used to regulate air pollution from such sources since 1984.² In 1988 the EU adopted the 'large combustion plants directive' to regulate the emission of sulphur dioxide and nitrogen dioxide. This directive was primarily a response to acid rain, which had led to the large-scale death of trees. But sulphur and nitrogen dioxide also damage human health. The EU has regulated to reduce pollution from vehicles, again to protect human health. Catalytic converters, which reduce carbon monoxide and nitrogen oxide emissions, have been mandatory on petrol vehicles since 1992, and on diesel vehicles since 2008. The sale of leaded petrol was banned in 2005.

As a result of these European measures, air quality in Britain has improved. Emissions of sulphur dioxide

in the UK fell by 89 per cent between 1990 and 2010; emissions of nitrogen oxides by 62 per cent. But the air in most British cities is not clean enough to meet the EU standards or, more importantly, to protect human health. In 2010, 40 out of Britain's 43 air quality zones (all in major cities) exceeded nitrogen dioxide limits. London has the highest levels of nitrogen dioxide of any European capital city. Air pollution causes 29,000 premature deaths in the UK each year.³ Many more people are killed by vehicle pollution than die in road accidents.⁴

Despite the damage to public health, successive British governments have adopted the strategy of arguing for more time to meet EU rules while doing little to improve air quality. Forty of the 43 air quality zones in the UK did not comply with EU rules in 2010. In September 2011, the government published plans for 23 zones to meet the standards by 2015, and a further 16 by 2020. But under these plans, air in London would not meet existing standards until 2025.⁵ And the European Commission has recognised that existing standards are not strict enough: in December 2013 the Commission published sensible proposals to strengthen them, based on the advice of the World Health Organisation. If implemented, the Commission argues that the new standards would save 58,000 premature deaths by 2030, and cut healthcare costs by €40-140 billion a year. These benefits are 12 to 40 times the value of the costs.⁶ Whether or not these proposals are adopted, the UK has considerable work to do to meet European air quality standards. So continued EU membership would mean continued pressure on UK national and local politicians for cleaner air.

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Cleaner water

The EU has had rules on drinking water quality since 1980. This has not had a major impact in the UK because British drinking water has been of high quality since the early 20th century, and remains so. The UK's water challenges are much more about waste water, river quality and bathing water.

1: These include sulphur dioxide, oxides of nitrogen, particulates, lead, benzenecarbon monoxide, ground-level ozone, arsenic, cadmium and mercury amongst other substances.

2: The 1996 'integrated pollution prevention and control directive' extended the BATNEEC approach to water and soil pollution as well as air pollution.

3: DEFRA, 'Protecting and enhancing our urban and natural environment to improve public health and wellbeing', March 2014.

In the mid-19th century, Londoners' sewage flowed untreated down sewers and small rivers into the Thames. The city had recurring plagues of cholera. More than 10,000 Londoners died of cholera in 1853-4. But this was not considered sufficient reason for Victorian laissez-faire politicians to intervene. The

4: Steve Yim and Steven Barrett, 'Public health impacts of combustion emissions in the United Kingdom', Environmental Science and Technology, March 2012.

5: DEFRA, 'Air quality plans for the achievement of EU nitrogen dioxide limit values in the UK', September 2011.

6: European Commission, 'New policy package to clean up Europe's air', December 18th 2013.

politicians only acted after the 1858 'Great Stink', during which the smell of sewage from the Thames rendered the Houses of Parliament (which are next to the river) impossible to work in. As soon as they were able to restart work, MPs and Lords passed legislation in 18 days which provided money for large new sewerage systems and treatment plants for London.

For most of the 20th century, there was little investment in UK sewerage systems. Britain is a relatively small island with many rivers, so most sewage was left to flow untreated into the sea. More rigorous European standards on waste water have therefore had significant effects in the UK.

The EU adopted the 'bathing water directive' in 1976. The Labour government was fresh from a victory in the UK referendum on European membership, but did not want Brussels telling it what to do with sewage. It designated only 27 beaches as bathing waters. Notable resorts such as Brighton and Blackpool were excluded. After a decade of argument and pressure, the Commission began infringement proceedings against the UK in 1986. So the British government, by then Margaret Thatcher's Conservatives, increased the number of designated bathing waters to 397. This was not sufficient progress to meet bathing water standards within the designated timetable:

the Commission won the infraction case in 1993. The Commission was therefore able to require successive British governments and the newly-privatised water industry to invest more heavily in water infrastructure and to designate more beaches. By 2011, there were 597 designated beaches, and only 14 failed to meet the minimum standard.

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In 1991 the EU adopted the 'urban waste water treatment directive' to protect water quality in rivers and seas, whether or not they are used for bathing. Like the 'bathing water directive', this has led to significant investment and improvement in the UK sewerage system (though not yet enough).⁷ UK politicians could have required such improvements without any pressure from Brussels, but the historical evidence does not suggest that they would have done. Successive UK governments sought to use every loophole in the water directives, and allowed the discharge of untreated sewage into the sea until 1998, longer than any other European country.

The natural environment

The water directives have delivered major benefits to wildlife in Britain. In the 1950s, the river Thames was biologically dead, with no fish or mammals, due to sewage in the lower reaches (around London) and agricultural pollution in the upper reaches. Today there are many fish throughout its length, and seals and dolphins swim up to London. As well as the water directives, the EU has two major pieces of legislation to protect the natural environment. The 1979 'wild birds directive' aims to protect all naturally occurring bird species, with extra protection for the rarest species. The 1992 'habitats directive' aims to protect important wildlife habitats such as woods and wetlands. Both directives have been implemented through the establishment of a Europe-wide network of protected sites, called Natura 2000. The UK has established many onshore protected sites, though it has been slow to establish offshore sites.

Chancellor of the Exchequer George Osborne, who is not in favour of regulation and not a euro-enthusiast, commissioned a review in November 2011 of these two directives. In March 2012 the review concluded that "in the large majority of cases the implementation

of the directives is working well, allowing both development of key infrastructure and ensuring that a high level of environmental protection is maintained". The report identified some minor improvements to UK implementation that could be made and included – unusually for a British government publication – examples of how the UK can learn from other member-states to make implementation more efficient. (For example, it commended the Dutch government for defining when the public interest should override nature protection, as the directives allow in some circumstances.) But the report was clear that the directives are worthwhile and made no reference to possible UK withdrawal from them.⁸

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The problem is that these useful EU directives cannot protect birds and habitats from the threats which arise

⁷: In October 2012, the European Court of Justice upheld a Commission infringement action against the UK for breach of the urban waste water treatment directive, because it continues to allow untreated sewage to 'overflow' into rivers during heavy rainstorms, in London and Tyneside.

⁸: DEFRA, 'Report of the habitats and wild birds directives implementation review', March 2012.

from other EU policies. Intensive farming, subsidised by the CAP, has seriously degraded the natural environment. The CAP should be overhauled so that it supports a range of public goods rather than only intensive agriculture. Wildlife and landscapes should be protected through regulation rather than subsidy – this would not increase regulatory burden or administrative costs as farms are inspected under the current CAP system to ensure that they follow wildlife and landscape rules, before they are given full payments.⁹ British governments always argue for CAP reform. Achieving it will not be simple or quick. But the UK has a better chance of winning this argument than it does of securing the repatriation of agricultural policy.

The CFP has also led to serious environmental damage. Overfishing has caused stocks of many fish species to fall to dangerously low levels. Eurosceptics use the CAP and CFP to argue that the natural environment would be better protected if the UK left the EU, often pointing to Norway as proof of this argument.¹⁰ Norway is a member of the European Economic Area (EEA). It does not have to implement the CAP or CFP but, in return for access to the single market, follows EU rules on air pollution, water pollution and climate change. From a purely green perspective, the Norwegian situation is therefore quite appealing.

Yet British environmental policy, if it were a member of the EEA, would not mirror Norway's. Green issues are prominent in Norwegian political and public debate, but not in Britain's. Environmentalism has been a constant theme in Norwegian politics for over

a quarter of a century, despite Norway's large oil and gas sectors. Prime Minister Gro Harlem Brundtland chaired the World Commission on Environment and Development.¹¹ One of her successors, Kjell Magne Bondevik, opposed new gas power stations due to their greenhouse gas emissions. His coalition partners insisted on such stations being built. So in 2000 Bondevik ended his coalition and stood down from the premiership. No British prime minister would consider resigning the premiership over something regarded as second order by British politicians and the media. David Cameron talked frequently about climate change in opposition, but has rarely mentioned it in government. Leader of the opposition Ed Miliband, an active and effective energy and climate change secretary in the previous government, has not made a speech about climate change since he became Labour leader in 2010. Deputy Prime Minister Nick Clegg, leader of the junior coalition partners, the Liberal Democrats, claims that the Conservatives and Labour now use 'green' as a term of abuse, meaning 'unconcerned about energy bills'.¹² A British government free from 'Brussels bureaucrats' would turn the UK into a new Norway only in theory. In practice, exit from the EU would be highly likely to lead to weaker environmental protection.

So far this paper has considered the impacts on the UK of EU membership, and identified significant benefits. The next sections will outline two policy areas in which the UK, as a member-state with a voice in debates, has contributed to greener European approaches: chemicals and climate change.

Safer chemicals

Over a fifth of the world's chemicals are produced in Europe. The EU's chemical industry employs 1.7 million people. This important economic sector has the potential to damage human health and the environment very significantly. The EU has been regulating chemicals since the 1960s, but before 2007 its policies were seriously flawed. Chemicals which had been on the market before relevant legislation was adopted (which for most substances meant 1981) could continue to be sold, without any testing. Over 30,000 chemicals – 90 per cent of those being used in 2007 – had been in use since before 1981. So no one knew what health impacts they might have. The substances were in products such as electronic equipment or paints and cleaners, but also in products for which the public would not expect or accept untested chemicals, such as children's pyjamas. Meanwhile, new chemicals had to be tested to ensure that they were safe for

humans and the environment. This was an obvious barrier to innovation.

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In 1998, the UK held the Council presidency, and began a process of strengthening chemical regulation. A decade of argument and lobbying followed. During another UK presidency, in 2005, Prime Minister Tony Blair brokered a compromise between member-states. In 2007 the EU adopted the 'regulation on evaluation, authorisation and restriction of chemicals'

9: Christopher Haskins, 'A chance of further CAP reform', CER policy brief, February 2011.

10: For example, in the House of Commons, May 12th 2011, Conservative MP Zac Goldsmith cited Norway's 1987 ban on 'fish discards' – fish which exceed a quota and are thrown back dead into the sea.

11: World Commission on Environment and Development, 'Our common future', United Nations, 1987.

12: At a Green Alliance debate, November 7th 2013.

(REACH). REACH is based on a sensible approach to health and environmental protection: 'no data, no market'. Chemicals that have not been properly assessed, or which fail the tests, must be withdrawn from the market. But, in recognition of the fact that it will take time to evaluate 30,000 substances, implementation is in stages between 2007 and 2018. By June 2013, companies had submitted over 9,000 requests for evaluation of chemicals to the body set up to administer REACH, the European Chemicals Agency. The highest proportion is from Germany (31 per cent). The UK has the second highest proportion (12 per cent). At the time of writing, 22 chemicals have been identified as unsafe and will be withdrawn, starting from August 2014. These chemicals are used in products such as electronics, paints, wood preservatives and toys.

REACH was designed not only to protect human health and the environment, but also to promote innovation in the chemicals industry. It created a new

Europe-wide regulatory framework to replace previous national controls, so extending the single market. The Commission published a review of REACH in February 2013. This concluded that the regulation had had a positive impact on research into new substances, though it accepted that Europe is still behind the US and Japan in chemicals innovation, and faces increasing challenges from emerging economies.¹³

REACH is expensive, but the savings will be greater than the costs. A third of all occupational disease is caused by exposure to chemicals. University College London estimates that the savings from REACH, including the gains from reduced staff sickness, will amount to €284 billion over 30 years.¹⁴ BASF, Europe's biggest chemicals company, has dropped its opposition to the law. Its vice president for chemical regulations, Ronald Drews, said in September 2012 that REACH had cost BASF over €500 million, but that "at the end, it is worth the money".¹⁵

Climate negotiations

As well as chemicals policy, the British council presidencies of 1998 and 2005 gave priority to climate and energy policy. The 1998 presidency came immediately after the signing of the Kyoto protocol, so Blair told his ministers to do all that was necessary to get the member-states to address Kyoto's implications and share the EU's agreed commitment to reduce greenhouse gases. By 2005 Blair had become almost evangelical about the need to control climate change (though he was stronger on rhetoric than delivery). Britain also held the G8 presidency that year, and held a G8 summit on climate and development in July. In the Council of Ministers, the UK achieved agreement on the EU position for international climate negotiations: that there should be further reduction targets after Kyoto expired in 2012.

The UK strongly supports the EU promise that its 2020 greenhouse gas reduction target will increase from 20 per cent to 30 per cent if there is an international agreement. London has also pushed a 50 per cent reduction target by 2030, again if there is an international agreement – a suggestion which the Commission has not taken up.¹⁶ It has instead proposed a 40 per cent reduction by 2030. This is unambitious: the Commission itself estimates that under a business as usual scenario EU emissions will have fallen by 32 per cent (from 1990 levels) by 2030.¹⁷ The UK government continues to push for a commitment to more ambitious reductions, along with Denmark and Sweden.

13: European Commission, 'General report on REACH', February 2013.

14: BBC, 'Q&A: Reach chemicals legislation', November 28th 2005.

15: Euractiv, 'REACH chemical law 'worth the money in the end', says BASF', September 3rd 2012.

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British membership therefore contributes to a credible EU position in international climate negotiations. The UK also has good national climate policies. With the 2008 Climate Change Act, Britain became the first country in the world to set itself a legally-binding greenhouse gas reduction target (80 per cent by 2050). The Conservative-Liberal Democrat government set a carbon price floor, to strengthen the European Emissions Trading System, in 2011. The 2013 Energy Act sets an emissions performance standard – the maximum amount of greenhouse gas that a new power station is permitted to emit per unit of electricity generated. This means that there will be no new coal-fired power stations in the UK unless they have carbon capture and storage. Energy and Climate Change Secretary Ed Davey has been active in promoting the concept of 'green growth' in Europe, but he has not publicly called for a Europe-wide emissions performance standard. Nor has London argued for an EU carbon price floor. These are two policy instruments where the rest of the EU should follow Britain's lead.

In contrast, there are two energy policy areas where the UK needs to catch up with the rest of Europe: energy efficiency and renewable energy. The UK does quite

16: European Commission, 'A policy framework for climate and energy in the period from 2020 to 2030', January 22nd 2014.

17: European Commission, 'European energy, transport and greenhouse gas emissions: trends to 2050', December 2013.

well on energy intensity – the amount of energy used per unit of GDP – but this is largely due to the structure of the economy. Services industries use less energy than manufacturing does. The British government accepts this: “When industrial energy intensities are analysed on a more comparable basis the UK is shown generally to be more energy intensive than the EU as a whole. In 2009, the UK was more energy intensive than the EU in cement by 75 per cent, paper by 35 per cent and steel by 12 per cent.”¹⁸ UK residents also use more energy in their homes than do residents of comparable countries. When adjusted for climate (for example, the fact that people in Northern Europe need more energy to keep warm in winter), comparisons of energy use reveal the poor state of the UK’s buildings. The UK consumes ten per cent more energy per dwelling than Germany does. As a result, the UK has millions of people unable to afford to heat their homes, and thousands die each year from hypothermia. Eurosceptics would argue that this is a matter for the London government: EU policies to improve the energy efficiency of homes do not pass the subsidiarity test. But most citizens are more interested in warm homes than they are in constitutional debate. Ambitious and effective policies on energy efficiency might improve the popularity and perceived relevance of the European project, and would put legitimate pressure on the British government.

The UK’s performance on renewable energy is extremely weak. Britain is a wet, windy place, yet the UK gets less of its energy from renewables than any other member-state except Malta and Luxembourg. In 2012, Sweden got 52 per cent of its energy from renewables (most of it hydro), France 13 per cent (again mostly hydro) and Germany 8 per cent (wind, biomass, solar). The UK got 4 per cent. The main obstacle to renewable energy expansion in the UK is the land use planning system, which many local residents use to oppose onshore wind farms. There is nothing Brussels can do to help on this, since land use planning is a member-state competence. The UK government intends to circumvent the obstacle by putting most new wind farms offshore, and Brussels can help with this, by contributing to the cost of a North Sea electricity grid. In December 2012 nine member-states (Germany, UK, France, Denmark, Sweden, the Netherlands, Belgium, Ireland and Luxembourg) plus Norway published a report which estimates that the grid will cost at least €30 billion to construct.¹⁹ Most of this will have to come from national budgets and the private sector, but the Commission can contribute with some of the funds allocated to the expansion of electricity and gas grids in the Connecting Europe facility.²⁰

Repatriation

The UK benefits from EU membership in the areas of air quality, water quality, nature protection, energy efficiency and renewable energy, while the UK contributes to effective European chemicals and climate policies. But this does not necessarily mean that the current balance of competences is the best it could be. Is there a case for repatriating any environmental powers, as Cameron argued in his Bloomberg speech?

Common product standards are necessary for traded goods within a single market. So there is no case for repatriating rules on chemicals, car pollution or the energy efficiency of products. There is a constitutional case for repatriating some water rules from Brussels to some parts of the UK. Tap water in England, Scotland and Wales is not traded. And contamination in these countries’ mains waters would not cross a national frontier (unless Scotland votes for independence in September’s referendum). So the competence to set drinking water standards could be returned from Brussels to London without undermining the single market or infringing the subsidiarity principle. However, drinking water from Northern Ireland

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(part of the UK though not of Britain) is traded with the Republic of Ireland, so Northern Irish drinking water standards would have to continue to be set by Brussels. Repatriating tap water rules would be a pointless exercise, as Britain has always had high standards in any case. Westminster could also set bathing water standards for England, Scotland and Wales, though again not for Northern Ireland, nor for the Channel Islands or Gibraltar, because seawater pollution in these places would spread to the beaches of neighbouring countries. The constitutional and economic drawbacks of repatriating any water competences would outweigh any political advantages.

A single market also requires common rules on pollution from factories and power stations. Otherwise, governments could allow companies in their jurisdiction to undercut competitors in other member-

18: Department of Energy and Climate Change, ‘Energy efficiency statistical summary’, November 2012.

19: North Seas Countries’ Offshore Grid Initiative, ‘Presentation of the results and recommendations’, December 2012.

20: Stephen Tindale, ‘Connecting Europe’s energy systems’, CER policy brief, October 2012.

states by permitting high level of pollution from factories or power stations (which would feed through into cheaper electricity costs). As well as the trade arguments for European environmental action, there are strong geographical arguments. Action is better taken Europe-wide than by single countries, because pollution does not stop at national frontiers.

The British government often argues that European 'red tape' is a burden on business and a barrier to

innovation. Bad regulations can be an unnecessary burden. But good regulations can spur innovation. To take one example, Nissan would not be building electric vehicles in Sunderland if the EU had not set rules on carbon emissions from vehicles. In September 2013 the Commission ranked Sweden and Germany as the most innovative member states.²¹ Both these countries enforce environmental laws strictly. This suggests that some standards are more innovation drivers than 'green red tape'.

Conclusion

EU membership has improved the quality of British air and water. EU directives have led to a network of protected areas in the UK – though some of these protections are designed to limit the intensive agriculture which the EU itself promotes through the CAP. The British presence has strengthened the regulation of chemicals and improved EU climate diplomacy. Overall, British membership has benefitted the environment.

European environmental policy is far from perfect. The CAP should be overhauled. Air quality standards should be strengthened, as the Commission has proposed, and enforced more stringently. Climate policy should combine market mechanisms with regulation. The British government should focus on achieving these reforms, not on debates about repatriation.

Four-fifths of the environmental legislation now in force in the UK derives from EU law. Nothing would stop British politicians modernising this legislation to tighten standards, if Britain left the EU. But, given the track record and the state of British politics, the UK would be more likely to give up the effort to improve the energy efficiency of buildings and the quality of Britain's air. No longer under the eye of the European Commission, Britain could revert to being the dirty man of Europe rather than becoming a new Norway.

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April 2014

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²¹: European Commission press release, 'Commission launches new innovation indicator', September 13th 2013.