

REVIEW OF THE BALANCE OF COMPETENCES: DEFRA AND DECC

Submission from:

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ADVANTAGES AND DISADVANTAGES

1. What evidence is there that EU competence in the area of environment and/or climate change has:

- (i) benefited the UK/your sector?
- (ii) disadvantaged the UK/your sector

The peer reviewed academic literature has examined the impact of EU membership on the UK as well as many other Member States, across a wide variety of policy sectors. This literature suggests that the EU has very significantly affected (or 'Europeanised') many fundamental aspects of UK environmental policy. Today, almost all 'national' environmental policy is made by, or in close association with, the EU (Jordan 2002). The EU's influence vastly exceeds that of the other supranational organizations such as the UN and the Organization for Economic Co-operation and Development (OECD). ***The EU has had many significant and long lasting effects on UK practice.*** For example, it has:

- ***significantly raised (and subsequently maintained) environmental standards across many areas,*** but especially those relating to water, air quality, waste and wildlife protection;

- ***led to more scientific monitoring and hence public information.*** Through the mechanism of Directives dealing, for example, with public access to information, environmental impact assessment and bathing water, the EU has helped to produce and disseminate much more detailed information on the changing state of environmental quality to pressure groups and the public. Legislation on EIA and SEA has provided the public and interest groups with new opportunities to become involved in decision making.
- ***even more fundamentally, changed the way in which environmental policy is thought about.*** Prior to EU membership, the British tended to view 'environmental policy' in slightly narrower terms than other northern European states. They focused on problems that bulked large in a relatively crowded island state that shares no land borders with others states (e.g. heritage and landscape protection, land use planning and nature conservation). These issues tended to be addressed in an incremental, ad hoc and piecemeal fashion, consistent with the UK's common law traditions. By contrast, in continental countries, environmental policy has generally been viewed much more in terms of reducing the pollution of shared resources such as estuaries and rivers, via common and fixed emission standards.
- ***affected the practices of governing in Whitehall.*** Through its engagement with EU policy-making, the environment ministry DEFRA (formerly DoE) has altered its *internal management*, its *tactics* and, most radical of all, its very *identity and political interests* (Jordan 2003). Over time it has 'learnt' new and more *European* tactics, established new alliances with organisations outside the UK and, most profoundly of all, adopted a new (i.e. more environmental and more European) 'departmental view' (Jordan 2003). These were inherited by DECC when it was established in 2008.
- ***Led to greater centralization within the UK.*** Matters which used to be routinely left to the discretion of local officials have had to be centralized in order to ensure that the UK meets its EU reporting and compliance obligations (Haigh 1986).

EU membership has also significantly affected the way in which the UK interacts with the rest of the world. It has:

- ***greatly enhanced the UK's ability to exert international leadership on broad issues such as climate change.*** Being part of an alliance of 28 Member States gives the UK greater policy leverage in international discussions in the UN and the OECD. On broad issues such as climate change and sustainable development, EU membership has allowed the UK to shape the terms of international debate (Rayner and Jordan 2011). *It has also allowed the UK to export more specific policy ideas more effectively to other countries.* Mitigation instruments such as the ETS were to some extent piloted in UK, and adaptation is an area where UK is seen as relatively advanced;
- ***provided the UK with a means to influence environmental practices in other Member States,*** such as in relation to the protection of wild birds and habitats, integrated pollution control and environmental management systems. The EU is a system of multi-level governance which is continually being affected by and in turn is affecting all states. Indeed, alongside policy areas such enlargement, defence, foreign policy and the single market, the environment is probably one of *the* EU policy areas in which the UK's influence has been greatest. In fact, states that used to lead EU policy making are now to be heard complaining that EU policy has become too Anglicized (Wurzel 2002)!
- ***Provided an opportunity to induce aspiring and non-member states to join international environmental protection activities.*** Recent research shows that the EU uses the 'carrot' of EU membership to induce such states to enter into international environmental activities (Schultz and Tosun 2013), such as those under the aegis of the UN. In other words, EU membership provides an opportunity for environmentally ambitious states to build alliances across and within different levels of governance.
- Through these activities, ***spurred huge amounts of financial investment*** (e.g. in the water and waste sectors) ***and in technological innovation*** (especially in the renewables sector where EU targets for 2020 have proven to be extremely challenging).

Some organisations have unquestionably benefitted from the EU's involvement:

- ***Environmental pressure groups:*** Europeanization has greatly empowered them, offering a higher authority to whom they can (and very often do) appeal (Lowe and Ward 1998: 295). By working together at a European scale through the organisations of the EU, they have been able to exert influence right across Europe.

- **National environmental ministries:** the Europeanization of policy making has greatly strengthened the hand of DEFRA within Whitehall, even though DEFRA did not consciously set out to achieve this outcome. The Environment Council of Ministers provides environment ministries with a means to adopting legislation, free of some of the constraints imposed by the need to adhere to collective responsibility in national cabinets.
- **Larger, well organized businesses:** who make and sell products across Europe, and have the means to mobilize in Brussels. The EU allows them to create a more level playing field both internally within Europe but also in the EU's trading relationships with existing and emerging trade powers.

Others have been less positively affected or seen their influence reduced, chiefly:

- **UK Parliamentarians:** as decision making power has inexorably shifted to EU level, MPs have struggled to exercise effective oversight, and now it is the European Parliament that keeps the EU's executive in check. Today, the European Parliament's environment committee is vastly more influential than its opposite numbers at the national level (Burns 2012). Indeed it is more influential than they have ever been in the past.
- **Local level officials such as pollution control professionals:** these used to enjoy huge professional discretion working together with industry in relatively closed professional policy communities; Europeanization has greatly circumscribed their professional discretion and hence their influence.
- **Smaller and less well-resourced businesses:** have struggled to keep abreast of policy making developments in Brussels. It is no coincidence that these are often the first and only businesses to complain about 'red tape' and 'gold plating'.

There is some discussion in the academic literature of how much policy change over the last 40 years can realistically be ascribed to EU membership (Bache and Jordan 2006). After all, the counterfactual (i.e. what would have happened if voters had opted to leave the EU in 1975) cannot be known. However, three sources of evidence suggest that the total EU effect has been significant. First of all, so many of the changes noted above are to be found in other

comparable member states, that the EU's influence is very likely to have been a significant one, albeit amongst several others drivers (Jordan and Liefferink 2004). Second, comparative policy analysis work suggests that any domestic change that would have occurred in the UK independently of the EU's influence, would almost certainly have adopted a very different form i.e. far fewer rigid timetables, binding targets and explicit standards (Jordan 2006). Third, areas where there have been infringement proceedings against the UK for non-compliance with EU rules (in areas such as water and air quality for example) provide further insight into what a 'non-EU' world might have looked like.

Finally, ***there is the important matter of whether the changes described above were or were not expected at the time of membership in 1972-3.*** Again, extensive comparative research suggests that for almost all Member States (and not just the weakly co-ordinated, countries that 'take' their lead from the EU), Europeanization has been an unpredictable and, at times, hugely disruptive process. In the UK, the EU was certainly not expected to have any significant effect on domestic policy. In 1972, there was still a widespread view that membership would offer Britain an opportunity to share its long experience of dealing with environmental problems with other member states, but British policy would not be systematically Europeanized by the EU (Jordan 2006).

WHERE SHOULD DECISIONS BE MADE?

2. Considering specific examples, how might the national interest be better served if decisions:
 - (i) Currently made at EU level were instead made at national, regional or international level? (What measures, if any, would be needed in the absence of EU legislation?)
 - (ii) Currently made at another level were instead made at EU level?

In the first two decades of EU environmental policy, decisions about 'which level should do what' were taken in a rather ad hoc and incremental manner (Jordan 2000). Some proposals for legislation were not based on a sound legal basis in the founding Treaties (Jordan and Adelle 2012), prompting concerns about 'creeping competences'. In the early 1990s after the Danish 'no' vote, the EU seized upon the federal principle of subsidiarity to justify the prevailing

balance of competences. This principle states that decisions should be taken at the lowest level commensurate with effective action (see Golub 1996; Jordan and Jeppesen 2000; Benson and Jordan 2010). In theory, in any multi-level (i.e. quasi federal) system of governance, subsidiarity dictates that trans-national issues should be addressed at a higher level, to integrate ‘spillovers’ (i.e. physical, economic and psychological effects that cross borders) (Stewart 1992)), whereas ‘local’ issues should be dealt with locally.

In practice, the EU has struggled to arrive at a common operational definition of subsidiarity.

The principle is open to too many competing interpretations (Benson and Jordan 2014). Be that as it may, several significant areas of EU activity, such as noise, do not have a clear international / cross border dimension. But the vast majority of environmental issues do have trade or trade-related dimensions that require some harmonisation within the context of the single market, e.g. chemicals, GMOs, pollution control, wastewater treatment, product regulation.

The inability of the EU to agree ‘what level should do what’ is of course also one major reason why it has proven difficult to ‘repatriate’ existing items of legislation to the national level; just as it is difficult to agree on what the EU should do, it is difficult to agree on what it should not do. This is why previous attempts to repatriate (e.g. in the area of water policy in the early 1990s) have conspicuously failed (Jordan 2000). Related to that, there is no institutional mechanism to speedily ‘repatriate’ legislation to the national level. And in any case, even if one were created, it is by no means guaranteed that sufficient agreement would be forthcoming on precisely what to repatriate. ***At present, the wholesale ‘repatriation’ of large areas of EU environmental policy therefore seems most unlikely.*** In the meantime, agreement is more likely to be forged on so-called ‘no go’ areas where the EU should not trespass in the future (the Dutch government’s 2013 Subsidiarity View provides an example of this). Similarly more flexible framework type legislation that reflects differences in national context might offer another means to achieve greater ‘unity in diversity’ commensurate with the subsidiarity principle. Indeed the EU is already moving in this direction through measures such as the Water Framework and Marine Strategy Framework Directives. Both these measures allow for regional scale objectives setting for environmental quality, agreed between member states and the European Commission. Policies evolving via the Open Method of Coordination (such as the EU

Adaptation Strategy) offer a similar route to achieving the same thing. However, a significant price might yet be paid in terms of less effective implementation (see below). Finally, greater use of 'sunset' and 'revision' clauses could be incorporated in Commission proposals so that modifications can be made to deal with unforeseen effects.

INTERNAL MARKET AND ECONOMIC GROWTH

3. To what extent do you consider EU environmental standards necessary for the proper functioning of the internal market?

The EU has generally argued that differential national environmental standards constitute barriers to trade, inhibit innovation/resource efficiency and facilitate a 'race to the bottom' in environmental standards (Benson and Jordan 2008). High standards can, the Commission in particular has regularly claimed, create new market opportunities for environmental goods and services, both within the EU and globally; a claim which is consistent with a wider philosophy known as ecological modernisation (Weale et al. 2000: 75-80). This philosophy holds that high environmental standards are a precondition for sustainable economic growth and thus a vital prerequisite for the efficient functioning of the internal market.

In practice, internal market issues have always been an overriding concern in the negotiation of new EU environmental rules. Indeed, environmental policy only really developed at EU level as an offshoot of the single market programme (Weale et al. 2000). Before the single market programme EU environmental amounted to little more than a collection of 'incidental measures' (Jordan and Adelle 2012). The case for EU action has traditionally been stronger in relation to product as opposed to process standards. Only in a small number of cases are environmental rules adopted that distort the functioning of the internal market (Weale et al. 2000). They are very much the exception, not the rule. However, it should be noted that even the UK (under parties of both left and right) has pushed for EU action in relation to process standards such as integrated pollution control, environmental management standards and climate change/energy.

4. To what extent does EU legislation on the environment and climate change provide the right balance between protecting the environment and the wider UK economic interest?

This is a deeply normative question. *In general, environmentalists in the EU have justified EU intervention in terms of ‘ecological modernist’ ideas i.e. that the relationship between environmental protection and economic growth is positive rather than zero sum.* The academic literature indicates, however, that *those developing EU rules have not routinely presented clear evidence that EU action genuinely ‘adds value’ to national action, or that economic and environmental issues have been transparently weighed* (Jordan and Schout 2006). For example, in the past cost benefit analyses of new EU rules were not produced, either by the Commission or by the Member States (Pearce 2000). Consequently, implementation costs and other costs at both EU and national level were not known at the adoption stage. However, the situation began to change in the 2000s with the advent of a system of impact assessment at EU level (Adelle et al. 2012), and the wider deployment of regulatory impact assessment in many member states including the UK (Hertin et al. 2009). With this information, it is easier to assess what evidence has or has not been used to inform policy judgements. Systematic ex post policy evaluation work (i.e. assessments of how policy functions in practice) is, however, only just taking off at EU level under the rubric of ‘Smart Regulation’. Its absence in the past has greatly reduced the opportunities to learn lessons about what really works in regulatory policy making (Mickwitz 2012).

CURRENT LEGISLATION

5. Considering specific examples, how far do you consider EU legislation relating to environment and climate change to be:

a. Focused on outcomes (results)?

Most EU environmental rules are very deliberately and directly focused on outcomes. The vast majority of EU policies are implemented via Directives, which specify the goals to be achieved not the precise means of achieving them. For this reason, Directives are often held to be more consistent with the subsidiarity principle (see above), but they do suffer from a

significant disadvantage in that they are also heavily implicated in the EU's significant implementation problems (Jordan and Tosun 2012). One way to address these problems (and thus unburden the EU's bureaucracy) would be to make greater use of Regulations (which are directly effective and hence more prescriptive), but many member states (the UK included) have consistently argued against such a move, on the grounds that it could violate the principle of subsidiarity (see below).

b. Based on assessment of risk and scientific evidence?

Very often, *those developing new environmental rules at national and EU level have not routinely presented clear evidence that new policy 'adds value', or that economic and environmental issues have been transparently weighed* (Jordan and Schout 2006). Some member states (including the UK) and the EU have, however, become much better at basing new policies on a transparent assessment of risks, costs and benefits. *At EU level, impact assessment and the other mechanisms of 'Better Regulation' (such as annual work programmes, road maps and thematic strategies) have made the EU policy process much more open, transparent and predictable, underpinned by minimum standards of consultation* (Tanesescu 2012). In EU environmental policy, other devices have been employed to marshal evidence in a more systematic and rigorous and consistent manner (e.g. the European Climate Change Programme, the Thematic Strategies implementing the Sixth Environmental Action Programme etc.). In this regard, EU policy making is now no different to (and may even be superior to some) national policy systems.

DOING THINGS DIFFERENTLY

6. How could the EU's current competence for the environment be used more effectively?

There are some strategic issues on which the EU could focus its energies to improve levels of environmental performance in pursuit of sustainable development:

- **Improve policy implementation:** this is proving to be a difficult nut to crack (Jordan and Tosun 2012), not least because several proposed solutions involve vesting the EU with

greater power (e.g. a centralised inspectorate; greater use of Regulations etc.). Yet, uneven implementation is bad for the environment, undermines fair competition and has a significant social costs (in terms of exposure to air and water pollution) (DG Environment 2011).

- ***Integrate an environmental dimension into all policy areas:*** better integration is enshrined in the Treaties but has proven difficult to achieve in practice (Jordan and Lenschow 2008), not least because it requires organisations at EU level (the Commission, the Parliament, the Council) to cooperate with one another (Jordan and Schout 2006), as well as with the member states.
- ***Use funding streams to lever greater environmental benefits*** at national and national/sub-national levels: more environmentally effective use of cohesion/structural and CAP funding, particularly in relation to water policy (Benson et al. 2012). Better climate policy ‘mainstreaming’ can encourage measures facilitating adaptation to climate change and discourage those which are ‘mal-adaptive’ or lead to ‘lock-in’ to carbon-intensive forms of infrastructure (Hjerp et al 2012; Rayner and Jordan 2012).
- ***Use the full toolbox of instruments:*** despite much discussion of the merits of ‘new’ instruments such as taxation and voluntary agreements and many complaints about regulation, the EU essentially remains a ‘regulatory state’ i.e. regulation constitutes its primary mechanism or mode of governing. This situation has partly arisen because of the many legal, political and practical barriers to using the ‘new’ instruments in practice (Jordan, Benson, Wurzel and Zito 2012). It is also because when they have been used – e.g. the emissions trading system and the voluntary agreement on car emissions – the new instruments have not performed as well as expected.
- ***Learn from the past:*** undertake more ex post evaluation exercises (see above), drawing on the varied experiences of the Commission and the Member States. An evaluation focused network modelled on IMPEL (see below), would be a good place to coordinate this effort.

7. How far do you think the UK might benefit from the EU taking:

- a. More action on the environment/climate change?
- b. Less action on the environment/climate change?

This question can only really be answered on a case by case basis, bearing in mind what we know about how the EU has impacted the UK in the past. ***Further action on climate change action would certainly accord with the UK's long-term leadership ambitions and underpin the national targets established in the Climate Change Act.*** It will provide the necessary certainty for investments in the low carbon economy. ***Promoting ambitious action globally in the short-term on mitigation should also be transparently assessed against the potentially significant costs of having to respond to the increasingly evident impacts of climate change in the future ('adaptation').***

8. Are there any alternative approaches the UK could take to the way it implements EU Directives on the environment or climate change?

- ***The EU and hence the UK could employ more of the 'new' instruments, but these are not panaceas and, crucially, also suffer from implementation problems of their own (see above).***
- ***If the EU is to remain mostly regulatory in nature, more thought could be given to how to build stronger links between national inspectorates.*** The experience of the implementation network of national inspectorates (IMPEL) has been extremely valuable for the UK in this regard and the approach could even be extended to other policy areas where future EU action seems necessary but is contested.
- ***The UK could employ more innovative implementation mechanisms within the context of existing EU Directives.*** One current example is recently introduced UK policy on promoting collaborative catchment level management of water resources in support of regional scale river basin planning – an approach that could provide valuable lessons for other EU states (Benson et al. 2012).

9 A. What advantages or disadvantages might there be in the EU having a greater or lesser role in negotiating and entering into agreements internationally or with third countries?

B. How important is it for the UK to be part of "Team EU" at the UNFCCC?

The EU is an extremely important actor in global environmental policy. It is a party to all the major multilateral environmental agreements. Indeed without the EU, the Kyoto Protocol would almost certainly have expired and international climate policy would have become even more gridlocked than it is now. There are of course some tensions between who should have negotiating rights (the Commission or the Council?) in areas of shared competence, but in general UK policy appreciate that there are obvious advantages of allowing the EU to speak with one voice internationally. In fact, recent research demonstrates ***how the EU uses the ‘carrot’ of membership to induce third states to enter into international environmental agreements*** (Schultz and Tosun 2013).

FUTURE CHALLENGES AND OPPORTUNITIES

10. A. What future challenges or opportunities might we face on environmental protection and climate change?
 - B Going forward what do you see as the right balance between actions taken at international, EU, UK and industry level to address these challenges and opportunities?
 - C. What would be the costs and benefits to the UK of addressing these future challenges at an EU level?

Aside from the immediate challenge of austerity, the challenges arising in an increasingly resource-constrained world are likely to be considerable. The international nature of such problems – potentially including migration, resource scarcity and climate change – means that governance will need to operate across multiple scales and actors. In many respects, ***the EU provides a handy model for how governance across borders could be organised in other regions.*** For the UK, EU membership involves pooling sovereignty. That is to say, it means trading some national autonomy for enhanced influence on a global scale. In an increasingly interconnected world, this is an important capacity to have.

In order to make the most of EU membership, the UK should devote more energy to working inside the institutions of the EU to further its national interests. In the past, the UK has tended to be more interested in issues of ‘policy’ and less concerned with shaping the EU ‘institutions’.

In future, when the EU could conceivably comprise 30+ states, shaping both to reflect UK interests is going to be an even more of an important challenge, where necessary cultivating links with other member states on issues of common interest.

ANYTHING ELSE?

11. Are there any general points you wish to make which are not captured in any of the questions above?

Firstly, ***compared to other policy areas, the environment has been relatively deeply affected by the EU.*** The vast majority of policies are now decided in or with the EU (RCEP 1998). The sunk costs associated with UK membership are therefore relatively high, and the extent of uncertainty created by discussions of withdrawal from the EU therefore correspondingly greater c.f. less Europeanised sectors.

Second, despite what is commonly assumed, ***all Member States have been affected by the EU, even the most environmentally progressive or 'leader' states*** such as Germany, Sweden, Norway and the Netherlands (Jordan and Liefferink 2004). The UK is not the only state to have been impacted by the EU, whilst the rest have remained unaffected. The most disruptive environmental policies have actually been mainly procedural in nature, for example the directives on environmental information, EIA and EMAS. Although these have been fairly comfortably accepted in countries such as the UK, they misfitted with everyday practices in states such as Sweden, Germany and Austria (Jordan and Liefferink 2004), causing social and political debate.

Third, ***the overall EU effect has been uneven across states and policy areas. Despite what is commonly assumed in the UK, differentiated harmonisation is the norm, not total harmonisation.*** While some core aspects of national policy have become much more similar through their interaction with EU policy and there are basic minimum requirements, there has been no long-term convergence towards a single, standard 'EU-inspired' model of policy. Thus on closer inspection the 28 member states continue to process environmental policy in

noticeably different ways, leading to different approaches and standards in some sub-areas. Comparative analysis indicates that compared to the overall trend, homogeneity is greater for obligatory policies than for non-obligatory ones (i.e. Regulations vs. Directives), and stronger for trade-related policies than for non-trade related ones. (Holzinger et al. 2013).

Fourth, ***some elements of national policy have been more deeply affected than others***. The impact of the EU has been particularly evident in relation to domestic legal structures (Macrory 1987; 1991), which have become more formalized and much more specific in terms of the overall objectives to be achieved. It is considerably harder to identify a clear 'EU effect' on national administrative and bureaucratic structures. The most obvious changes include the creation of a permanent representation (UKRep) in Brussels, the creation of some new regulatory agencies and the establishment of a EU coordinating unit in DEFRA. The really big 'machinery of government' changes - e.g. the creation of new ministries such as DEFRA or the merging of existing ones to create DECC - have mostly been triggered by domestic and then mainly 'non-environmental' political demands. Given these continuing differences in national policy and structure, it is hardly unsurprising to discover that EU membership has not lead to a convergence in levels of environmental quality (Neumayer 2001).

Fifth, Eurobarometer polls demonstrate that ***public support across the EU for centralising environmental powers is relatively strong, compared to other policies issues*** (Jordan and Adelle 2012). However, the overwhelmingly positive influence that EU membership has had on the UK environment often goes unreported in the mainstream media. ***Therefore it is not at all clear whether the public really understands the impact of the EU and thus the risks and opportunities associated with it possibly leaving the EU.***

Sixth, ***no state has ever left the EU before. Therefore the uncertainties created by even raising the possibility are potentially very substantial.*** Given what it is at stake, it is therefore important that different scenarios are clearly identified and transparently evaluated. One is possibly moving from EU to EEA membership, in which case Norway offers a valuable example

(Hovden 2004). The existing literature indicates that as an EEA member, Norway has less capacity to use the EU to exert international leadership. It also has to abide by the *acquis communautaire*, with less scope for shaping it in its own image. Another option might be to leave the EU entirely. On the face of it, this would seem to provide an opportunity to dismantle EU inspired rules (or at least ensure non-implementation was not penalised), but the UK would probably still have to maintain some environmental rules to secure access to the single market; rules that it would then have little or no ability to influence.

References

Adelle, C., A.J. Jordan, and J. Turnpenny (2012) Policy making. In: Jordan, A.J. and C. Adelle (ed.) (2012) *Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics (3e)*. Routledge: London.

Bache, I. and A.J. Jordan (eds.) (2006) *The Europeanization of British Politics*. Palgrave: Basingstoke.

Benson, D. and A. Jordan (2008) Understanding Task Allocation in the European Union: exploring the value of federal theory. *Journal of European Public Policy* 15, 1, 1-20.

Benson, D. and A.J. Jordan (2010) 'European Union environmental policy after the Lisbon Treaty: plus ça change, plus c'est la même chose?' *Environmental Politics* 19, 3, 468-474.

Benson, D., and A.J. Jordan (2014) Subsidiarity as a 'scaling device' in environmental governance: the case of the European Union. In J. Meadowcroft and I. Weibust (eds.): *Multilevel Environmental Governance: Managing Water and Climate Change in Europe and North Americas*, Cheltenham: Edward Elgar. *In press*.

Benson, D., A.J. Jordan, and D. Huitema (2012) Involving the public in catchment management: An analysis of the scope for learning lessons from abroad. *Environmental Policy and Governance*, 22, 42-54.

Burns, C. (2012) The European Parliament. In: Jordan, A.J. and C. Adelle (ed.) (2012) *Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics (3e)*. Routledge: London.

DG Environment, (2011) *The costs of not implementing the environmental acquis*. COWI/ECOFYS/Cambridge Econometrics. DG Environment, Brussels.

Golub, J. (1996) British sovereignty and the development of EC environmental policy. *Environmental Politics*, 5, 4, 700-28.

Haigh, N. (1986) 'Devolved responsibility and centralization', *Public Administration*, 64: 197-207.

Hertin, J., J. Turnpenny, M. Jordan, A. Nilsson, B. Nykvist, and D. Russel (2009). Rationalising the policy mess? The role of ex ante policy assessment and the utilization of knowledge in the policy process, *Environment and Planning A*, 41, 5, 1185-1200.

Hjerp, P., Volkery, A., Lückge, H., Medhurst, J., Hart, K., Medarova-Bergstrom, K., Tröltzsch, J., McGuinn, J., Skinner, I., Desbarats, J., Slater, C., Bartel, A., Frelid-Larsen, A., and ten Brink, P., (2012). *Methodologies for Climate Proofing Investments and Measures under Cohesion and Regional Policy and the Common Agricultural Policy*. Report for DG Climate, August 2012.

Holzinger, C. et al (2013) Is there convergence of national environmental policy? In: H. Jorgens, et al. *Understanding Environmental Convergence*. Cambridge University Press, Cambridge.

Hovden, E. (2004) Norway: top down Europeanisation by fax. In: Jordan, A. and D. Liefferink (eds.) (2004) *Environmental Policy in Europe: The Europeanization of National Environmental Policy*. Routledge: London.

Jordan, A.J. (2000) The Politics of Multilevel Environmental Governance: Subsidiarity and Environmental Policy in the European Union. *Environment and Planning A*, 32, 7, 1307-1324.

Jordan, A.J. (2002) *The Europeanization of British Environmental Policy: A Departmental Perspective*. Palgrave: Basingstoke.

Jordan, A.J. (2003) The Europeanisation of national government and policy: a departmental perspective. *British Journal of Political Science*, 33, 2, 261-282.

Jordan, A.J. (2006) Environmental Policy. In: Bache, I. and A.J. Jordan (eds.) (2006) *The Europeanization of British Politics*. Palgrave: Basingstoke, pp.231-247.

Jordan, A.J. and C. Adelle (ed.) (2012) *Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics (3e)*. Routledge: London.

Jordan, A.J., D. Benson, R.K. Wurzel and A.R. Zito (2012) Governing With Multiple Policy Instruments? In: Jordan, A.J. and C. Adelle (ed.) *Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics (3e)*. Routledge: London, pp 309-325.

Jordan, A.J. and T. Jeppesen (2000) EU Environmental Policy: Adapting to the Principle of Subsidiarity? *European Environment*, 10, 2, 64-74.

Jordan, A.J. and A. Lenschow (eds.) (2008) *Innovation in Environmental Policy? Integrating the Environment for Sustainability*. Edward Elgar: Cheltenham.

- Jordan, A. and D. Liefferink (eds.) (2004) *Environmental Policy in Europe: The Europeanization of National Environmental Policy*. Routledge: London.
- Jordan, A. and A. Schout, (2006) *The Coordination of the European Union: Exploring the Capacities for Networked Governance*. Oxford University Press: Oxford.
- Jordan, A.J. and J. Tosun (2012) Policy Implementation. In: Jordan, A.J. and C. Adelle (ed.) *Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics (3e)*. Routledge: London, pp 247-266.
- Lowe, P. and S. Ward (eds.) (1998) *British Environmental Policy and Europe*, London: Routledge.
- Macrory, R. (1987) 'The United Kingdom', in G. Enyedi, J. Gijswijt and B. Rhode (eds.) *Environmental Policies in East and West*, London: Taylor and Graham.
- Macrory, R. (1991) 'Environmental law: shifting discretions and the new formalism', in O. Lomas (ed.) *Frontiers of Environmental Law*, London: Chancery Law.
- Mickwitz, P. (2012) Policy evaluation. In: Jordan, A.J. and C. Adelle (ed.) *Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics (3e)*. Routledge: London.
- Neumayer, E. (2001) Improvement without convergence. *Journal of Common Market Studies*, 39, 5, 927-37.
- Pearce, D.W. (2000) Does European environmental policy pass a cost benefit test? *World Economics*, 5, 3, 115-37.
- Rayner, T. and A. Jordan (2011). The United Kingdom: a paradoxical leader, in R. Wurzel and S. Connelly (eds). *The European Union as a Leader in International Climate Change Politics*. London: Routledge.
- Rayner, T. and A. Jordan (2012) Governing Climate Change: The Challenge of Mitigating and Adapting in a Warming World. In: P. Dauvergne (ed.) *The International Handbook of Global Environmental Politics (2e)*. Edward Elgar: Cheltenham, pp. 222-234.
- RCEP (Royal Commission on Environmental Pollution) (1998) *Setting environmental standards: twenty first report*. RCEP, London.
- Schultz, K. and J. Tosun (2013) External dimensions of European environmental policy: an analysis of environmental treaty ratification by third countries. *European Journal of Political Science*, 52, 581-607.
- Stewart, R.B. (1992) Environmental law in the United States and the European Community, *University of Chicago Legal Forum* 41–80.

Tanesescu, I. (2012) Involving the public? In: Jordan, A.J. and C. Adelle (ed.) (2012) *Environmental Policy in the European Union: Contexts, Actors and Policy Dynamics (3e)*. Routledge: London.

Weale, A., G. Pridham, M. Cini, D. Konstadakopulos, M. Porter and B. Flynn (2000) *Environmental Governance in Europe: An Ever Closer Ecological Union?*, Oxford: Oxford University Press.

Wurzel, R. (2002) *Environmental Policy Making in Britain, Germany and the European Union*, Manchester: Manchester University Press.