MEP Briefing Notes on EU

Energy and Environment

Introduction - EnvironMentalism

The Commission has had a directorate general dealing with the environment since 1973. Within its increased remit, it today addresses such issues as pollution, the sustainability of consumer material, global warming, and biodiversity, meaning it has taken on a far bigger role than simply adjudging whether a particular leather factory is gaining an undue advantage by dumping waste in the local stream. The Commission estimates that 10-15% of its budget today relates to environmental spending.[1]

One example of the consequences lies in the impact of environmental policy via the CAP. Labour MP Paul Flynn in 2005 provided a snapshot of what this meant in practice when he penned a report for the Council of Europe.[2] The CAP had led to the subsidisation of intensive farming, encouraging greater use of pesticides and herbicides and changes in land management, in turn polluting water courses and impacting upon insect populations. Mr Flynn's study used the example of the massive decline of the Skylark to demonstrate how support for cereal production had led to the reduction of farmland bird population. As such, it provides a case history of how disjointed EU environmental policy had become.

Air and Noise Pollution

Air quality is regulated by a number of EU directives, and by international agreement through UNECE (where the Commission represents national interests). EU case law means that national authorities are legally required to achieve compliance.

At first sight, the concept is laudable. Nobody wants to live in a muggy atmosphere redolent of the era of killer smog. But as that is no longer the case, the danger is now one of thresholds being raised beyond what is reasonable on the basis of cost efficiency.

The UK meets nearly all current EU targets, though at a cost. The main ongoing issue relates to nitrogen dioxide limits alongside roads in urban environments.

If one looks at the latest set of papers that have been produced to provide support for implementing Part IV of the Environment Act 1995, the Policy Guidance needed no fewer than four Policy Guidance documents advising on how to manage cost-effectiveness in turning the EU rules into law, and checking the local authorities were being proportional.[3] The Government's 318-page Technical Guidance is concerned that "monitoring and modelling can prove to be both resource and cost-intensive activities" and commendably endeavours to keep these under control.

There are benefits that arise from cleaner air, largely to do with reducing respiratory problems and thus the burden on the health service. However, this does come at a price. The EU's Clean Air for Europe Strategy was costed at €7.1 billion. It is certainly notable that the policy was delayed owing to opposition from within the College of Commissioners itself, which argued that the approach was economically burdensome.[4]

The Landfill Directive 1999/31/EC

Under the Landfill Directive, EU member states have targets to meet on recycling biodegradable waste. If they don't meet these targets, member states are fined substantially and directly. While the aim of recycling is laudable, the means of aggressive fining and unrealistic targets is rigid, expensive and undemocratic.

The Local Government Association estimates these fines could push up council tax bills by as much as £50, with a total national cost of £1.1bn. In addition, councils started introducing fortnightly bin collections as a way of complying with the targets in the Directive which is why the EU is responsible for rises in illegal dumping and their attendant health and vermin problems. It was EU rules that initially prevented the Government reintroducing weekly bin collections, as promised.

In 2010, DEFRA costed the broader impact of transport policy.[5] The department focused on estimates that provided a range of between £5 billion and £11 billion: as a comparison, the economic costs of excess delays ran at around £11 billion, accidents around £8 billion, and physical inactivity (ie people not walking to work) another £10 billion. These figures rather place the air pollution costs into context, and the £5-11 billion range is in itself a crucial comparison to draw upon when looking at what partial benefits may be gained from a marginal reduction in health cases in return for large capital outlay.

There are EU average limits for Nitrogen Dioxide emissions that are problematic for the British Government. This is because London in particular exceed these set levels. This has already led to Brussels-circuit environmentalists taking the British Government to court, a case now set to be reviewed by the ECJ. A £300 million fine has separately been hanging over London over airborne particle levels since 2011.[6]

The net result appears to mean that either cities will have to price out (or just ban) cars and lorries from their centres, or the UK will have to pay a huge fine, possibly repeatedly. The money would be surrendered to the EU budget, some small portion of which would no doubt incidentally circulate as funding to support environmental lobbyists. It is a triumph of absurdity. This is despite London in May 2013 being classified as "very good" in an air quality index supported by the Commission.[7] It is also despite the Mayor rolling out a gradual, more cost-effective, programme to create an ultra-low emission zone by spending on new buses and shifting congestion taxes away from low emission vehicles – all costly, but more absorbable as aligned to replacement

rather than quick new spend budgets. Even a target of 2020 such as Boris Johnson is looking at involves major expense, for instance for taxi firms who have already just bought into hybrid diesel vehicles and are now expected to go further.

Noise pollution is an area that is being similarly affected. Once again, the principle is a sensible one, that people should be protected from going deaf at work or having their lives ruined by excessive decibels. The problem comes where quality of life starts to be interpreted without due and proportionate reference to the costs incurred. EU involvement is currently guided by the Environmental Noise Directive (2002/49/EC), though this is an enabling law in that it is meant to allow several actions to be progressively implemented. Notably, the Commission issued a unilateral Declaration, rebuffing hardline attempts by the European Parliament to set a deadline for adding more legislation regardless of any need. This indicates that even within Brussels the danger of creating cost burdens was being recognised around 2005. However, with the advent of noise mapping and the ten year review of the 2002 Directive, the Commission is again talking up a fairytale €40 billion social cost from vehicular and rail noise across the EU.[8] Consequently it is possible to envisage new rules coming onto the table in the coming years on aircraft noise, traffic hotspots, and comprehensive monitoring. The audit commendably admitted that "The Directive has several cyclical reporting obligations which, in some cases, create an additional administrative burden without generating the necessary added value for EU action." At the same time, however, it saw there being more that needed researching and planning. It is also possible to predict additional cost burdens arising where changes are called for that run ahead of existing technology, and a greater Brussels input into planning considerations such as Heathrow's Third Runway or Boris Island in which economic needs will come second to environmental ones.

Waste Management

EU rules apply to a wide variety of material, but with very varied levels of common sense.

> **Batteries and accumulators** have been covered by eight items of EU law since 2006. As a German recycling magazine put it, they made battery manufacturers out of car makers and car sellers could be classified as having made the battery, even if no plant existed in that country.[9] Worse, the key directive has been transposed in 27 different ways meaning that universal obligations were created for manufacturers to look after the dead battery without a standard system for doing it. The complex paperwork generated adds considerably to business costs.
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> **End of life vehicles rules** mean that batteries are not the only parts covered (Directive 2000/53/EC). Implementation was delayed in the UK as the rules were so complicated and had such an impact on consumers and businesses. In effect, it made manufacturers liable for those users who littered with their products. As is typical with such

laws, the cost was subsequently added to the product price and passed on to the purchaser of new vehicles.

Biodegradable waste is covered by the Landfill Directive (1999/31/EC) and the associated Landfill Sites Directive. This sets a target for authorities to reduce dumping of biodegradable municipal produce. However, the effect was also to swiftly close 812 of the UK's 2,000 landfills.[10] The rules triggered additional costs arising from treatment changes from 2007, and were associated with further costs arising from the Landfill Tax. Total costs can't be readily quantified, not least as DEFRA acknowledges it has never done the sums; but in 2012 a minister indicated that since 2005, 32 local authority infrastructure projects had been part-financed to shift biodegradable waste from landfill: the cost of these grants had been £4 billion.[11]

Waste Incineration Directive 2000/76/EC created particular difficulties. The Edinburgh position today is succinctly this: "Scottish Government recognises that implementing WID can be challenging for both regulators and industry. It is accepted that compliance with WID may, in some cases, result in new burdens on businesses."[12] It particularly points to the difficulties generated by including in the directive extra burdens and costs for the incineration of tallow - the key component of course of candles. The incineration industry at the time objected to compliance costs estimated at up to £90 million, set at an emission level ten times higher than one set in 1996 that had forced 30 plants to close, and regulating 1/60th of the emissions the steel industry in comparison was generating.[13]

Packaging rules were largely set out in the 1980s and 1990s, with recycling obligations added in 2004. Ironically, this creates more paperwork, thanks to a certification system checking compliance. Doubly ironically, the UK was one of only five EU countries to submit its own paperwork to the Commission by the deadline to demonstrate national compliance.[14] The industry was hit again when the REACH regulations came in (see below).

The **Urban Waste Water Treatment** Directive (91/271/EEC) and Sewage Sludge Directive (86/278/EEC) cover the relevant processes. It is difficult to determine what costs arose to the taxpayer that should be blamed on Brussels since there was considerable gold plating by the Labour government. However, senior managers at Thames Water have since flagged up planned European Commission moves to increase the list of chemicals that would be prioritised for treatment, costing the measures at £30 billion over twenty years, or £100 per customer per year. The Commission itself suggests a bill of £10 to £30, but both figures exclude energy and financing costs and the tariffs arising from extra carbon emissions.[15]

Ship dismantling rules are being set out shortly in EU law. It remains to be seen how they may affect what remains of the UK ship breaker

industry, particularly around Hartlepool. It's certainly likely that debates over such issues as the decommissioning of North Sea platforms would be focused not in the UK but in Brussels. This becomes problematic where, as the Brent Spar incident shows, lobbyists can become hysterical and are later forced to apologise when the owner's maths is proven to be accurate, but the policy damage already done.

Waste oils legislation appears at first site to make perfect sense, if it were just about stopping certain EU member states from dumping used industrial liquids into international rivers. However, it becomes problematic for the UK when you consider that the Commission prefers to see oil burnt in incineration plants with expensive scrubbers, rather than cleaned and used as fuel, which is historically the process in this country and particularly by the cement industry. Worse, the governing directive (last updated as 2008/98/EC) was so badly written it took UK case law to determine what constitutes oils that have been recycled to a point where they are no longer covered by the rules. Indeed, the High Court urged DEFRA to create consolidated guidance. Having done precisely that, in mid 2013 the Commission challenged the UK and threatened to take it to the ECJ. This, farcically, is despite UK courts (which had the option of referring to the ECJ during the court cases) deciding such a move was not necessary; the original uncertainty being largely the Commission's fault; and the UK now having the most stringent rules on what defines recycled oils.

EU rules on reclaiming CFCs from refrigerators infamously created a fridge mountain. As the UK only had one tenth of the recycling capability required to process used appliances, a large backlog swiftly appeared, requiring costly storage or export. The estimated UK cost was put at £40 million, despite warnings from both retailers and the recycling industry.[16]

New mandatory MOT rules have in 2013 added fifteen new elements for car testing – ostensibly a safety issue and a market matter, but one with environmental impact. It is currently unclear what the net result will be on the volume of older cars that are no longer economical to keep on the road, with potentially real consequences for poorer households. Case history suggests from previous EU rules targeting the maintenance of older vehicles is that it encourages them being taken off the road, and potentially increased numbers of dumped cars.

WEEE covers waste electrical and electronic equipment, hence the acronym. Several years old in concept, the latest version is now Directive 2012/18/EU. The principle is one of recycling more material from household appliances and similar tools. In practice, however, the system has generated yet another micro industry in compliance, and expanded red tape. It has been run effectively as a mechanism for subsidising recycling plants. One report from 2012 indicated that businesses were being charged £40-50 million more than the process cost thanks to the increased world value of the metals being retrieved.[17]

Critics of the system again point to these costs being passed onto the initial consumer, while also claiming that it discourages reusing retired electronics in favour of complete destruction. It is certainly significant that the UK dragged its feet for four years in implementing the directive, waiting until the Commission threatened infringement proceedings, on the grounds that it was bad for business.

Missing the Practical Detail in Waste Collection

The end result is repeatedly the application of the law of unintended consequences to a measure proposed with the best of intents. It is best to view this in terms of two consequences -of what the legislation leads to.

The first example covers how waste disposal works in certain isolated communities. Drafters of much of the earlier legislation forgot that not everyone lives in a city. Consequently, special exemptions had to be introduced subsequently to exempt Scottish island communities from costly and utterly inappropriate landfill rules.

In the second example, relating to the Waste Incineration Directive, it has led to councils noticing that thanks to the new EU rules, their previous charges were being tripled for every ton of municipal waste that they were taking to the dump. The mad logic that followed in town halls was that costs would be reduced if less waste was taken away. This resulted in **a shift from weekly to fortnightly bin collections**. Ostensibly, if people knew their bins weren't going to be emptied for two weeks, they wouldn't put so much into them, or they would manage their recyclable waste more by composting and the like. Never mind that in many urban areas there is no garden space for composting, or that plastic and tins don't compost too well. Nor was much consideration given to the public health issues, especially of vermin or of overflowing decomposition in a street. To be fair to the Commission, zealotry from DEFRA under Labour encouraged the move. Case history suggests that DEFRA and DECC, partners in environmentalism, are probably the most committed gold platers across government.

But that is not an end to the matter. The Commission is currently considering further extension of "economic instruments" on waste disposal and landfill. In plain English, this translates as more proposals on landfill bans. This entails waste taxes, extended producer responsibility schemes (meaning through price hikes that the first buyer pays for end disposal), and particularly controversially it also includes work being done on "pay as you throw systems". This latter means electronic chip surveillance of people's bins to monitor personal bin taxes.

The absurdity was compounded even further by Fife Council. Having introduced a three-bin system, the council then banned bin men from going down one road as it had potholes in it. Notwithstanding the detail that postmen were allowed to go down it, the council decided the short journey over some bumps ran the risk of breaching EU rules on Whole Body Vibration– laws designed with miners and pneumatic drillers in mind. Putting

down a bit of tarmac doesn't even seem to have entered into anyone's mind. The end result was that residents were expected to wheel their various containers half a mile to the main road.

While a singular and spectacular reported example, it does demonstrate how EU regulations can coalesce and snowball on enforcement by a precise and enthusiastic Northern European civil service with an additional eye on being sued.[18]

Water and Marine Legislation

Legislation on different aspects of water provide another example of where the EU can make rules with good intent but with extremely variable efficiency and cost, particularly as more focus is being placed on Global Warming issues. Rural communities and farmers are disproportionately carrying the costs.

Groundwater is highly controversial. The Water Framework Directive (2000/60/EC) set out a list of chemicals whose presence should be controlled in surface waters. HMG's (291 page) compliance cost document from 2007 appear to suggest compliance costs of £5.5 billion, including £12 million in admin costs for monitoring the system, against benefits figures of between £1.7 bn and £3.8 bn.[19] The biggest problem has been phosphorous levels, particularly for farmers impacted by the subsequent Nitrates Directive. The UK currently enjoys certain limited derogations – for 150 grassland farmers in Ulster in particular - but there is no guarantee even these will survive. The average annual cost per farm in England has been estimated at €395, half of which is administrative burden; but the highest costs fall on pig and dairy farms that required new slurry storage facilities costing €45,000 - €60,000 for farmers in already troubled industries.[20]

The Floods Directive (2007/60/EC) has generated a Google Earth-style system of mapping across the continent that determines which patch of farmland falls under which particular administrative jurisdiction. This initiative might make more sense but for the fact that the UK does not have a border on the Danube or Rhine that is at risk. Flood mapping proved a very costly task, and in more advanced systems such as the UK it required for instance remapping by flood protection authorities to amend flood venting outfall maps. It does nothing by contrast to address the issue of local authorities providing planning consent to build on flood plains.

The **Drinking Water Directive** (98/83/EC) is to be commended for contributing to visitors to the continent no longer having to rely on bottled water, though de-Evianisation of French sinks by that stage was already largely complete. Within the UK however, the implementation costs were estimated at between £2.3 billion (OFWAT) and £3.1 billion (suppliers) over the ten year implementation period, excluding possible higher running costs.[21]

The **Bathing Water Directive** (2006/7/EC as lately amended) takes EU legislation beyond the commendably simple and effective concept of the blue flag ecolabel. This latter is already 25 years old, commonly understood, inexpensive (indeed run by an NGO) and these days organised as part of a global scheme reaching well beyond the EU. By contrast, a DEFRA-funded paper estimated the bill from the directive would cost England and Wales £2.5bn-£3.9bn over 25 years as opposed to £776 million in benefits.[22]

Habitats

In 2012, the UK Government reviewed its implementation of the Habitats and the Wild Birds directives, provocatively displaying as the cover image a shot of wind turbines sitting off a beach as a symbol of occasionally contradictory EU policies.[23] The example cited of Shell Flat suggests the choice was deliberate:

"In 2003, Cirrus Energy submitted a proposal for a 90 turbine wind farm, five miles off the coast of Blackpool. Although The Crown Estate licensed this application, lack of marine data meant that the developers were unaware that its proposal would impact on a major concentration of around 50,000 scoters. Despite the developer's best efforts to find a solution, it was unable find a way of altering turbine deployment to mitigate the impact on scoters without impacting on other interests, such as interference with radar systems at BAe's Warton Aerodrome and navigation channels. Eventually, five years after the application was first submitted, the project had to be abandoned."

The review highlighted as particular problems burdens placed by the authorisation process. The sort of conflict that arises involves businessmen expanding container terminals worth £114 million, against the interests of 3,000 water birds. The consequence is that the English courts have described it as an "obstacle course" to property developers.[24] The Chancellor himself indicated that the costs were "ridiculous". In part this has been self-inflicted thanks to gold-plating by UK civil servants, though without the original directive the department would have nothing to gild.

An example of emerging and creeping costs relates to ammonia monitoring, and moves to lower the approved levels. Instead of reviewing just sites covered by the Natura 2000 programme, the legislation was also reinterpreted in the UK as having broader application. The NFU costed the additional burden at £2,500 per farm affected in addition to the £3.5 million in application fees.[25]

How broad-reaching these rules are can be seen from the areas now affected by environmental impact assessments. The list includes areas covered by the strategic environmental assessment directive, flooding directive, habitats directive, wild birds directive, waste framework directive, revised waste framework directive, Seveso II directive, public participation directive, renewable energy directive, energy performance of buildings directive, environmental noise directive, draft airport noise regulation, energy efficiency

directive, draft regulation on trans-European energy infrastructure, water framework directive, air quality directive and the draft soil framework directive. Commenting on the state of affairs in 2012, the Secretary of State dealing with much of the paperwork, Eric Pickles MP, observed:

"The European Union does not have competence on land use planning, although it does have competence in relation to the environment but as is evident from that list, increasingly, its regulatory creep is imposing additional and expensive requirements on the planning system. Indeed [...] rulings from the European Court of Justice on the strategic environmental assessment directive have added significant delay and complexity for the UK Parliament to move ahead with the proposed abolition of the last Government's regional spatial strategies."[26]

This latter was a reference to the Government's decision to abolish Regional Strategies outside of London. EU requirements for Strategic Environmental Assessments had been a fellow traveler in John Prescott's drive towards regional government thanks to Directive 2001/42/EC. Regional strategies are embedded in EU law, meaning that the Coalition Government's localism agenda in areas of for example house building is having to be introduced by being squeezed into the existing EU system, which prefers regional and cross-border regional federalism to council democracy.[27] Astonishingly however, Mr Pickles went on to add:

"The European Commission has announced that it is seeking to amend the environmental impact assessment directive. The explanatory memorandum outlines that the proposals could result in a significant increase in regulation, add additional cost and delay to the planning system, and undermine existing permitted development rights. In addition, the proposal appears inconsistent with the conclusion of the October European Council that it is particularly important to reduce the overall regulatory burden at EU and national levels, with a specific focus on small and medium firms and micro-enterprises. This view was unanimous among all EU Heads of Government, who also agreed with the Commission's commitment to exempt micro-enterprises from EU legislation."

Concluding boldly for a minister:

"Draft European Union legislation often receives little parliamentary or public scrutiny. I would encourage hon. Members to examine carefully this latest proposed increase in EU regulation."

REACH

EC 1907/2006 covers the Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH). Its intention was to set out a list of EU-recognised chemicals, and by extension - through their absence - defining which ones were not. But the action triggered exactly the same types

of problems that emerged when creating other lists, such as the list of approved homeopathic medicines: testing them cost money, which larger companies can afford to pay (and pass on to the consumer), but less widely-used chemicals find the cost spread too thinly to make the paperwork financially worthwhile. Correspondingly, materials where there are no existing safety doubts are *de facto* banned from use, despite palpable benefits.

REACH triggered testing requirements on no fewer than 30,000 chemicals. The cost of this has been literally inestimable, with the range of figures absurdly running from $500 million to $150 billion.[28] A recent European Council General Report on REACH (2013/49) noted that no fewer than 24,675 dossiers on 4,300 substances had been submitted for the first deadline, suggesting a high cost-small uptake result. Shockingly, it declares “As expected, five years after the entry into force of REACH, it is still too early to quantify the benefits,” and admits (without making any correlation) that in the ten years since REACH was first introduced the EU share of chemicals sales had slipped from 30% to 21%. In 2012, the Commission engagingly approached SMEs to list what the most burdensome regulations were for them, plaintively asking contributors just to list their Top Ten.[29] The REACH regulations easily topped the list.

Showing Willing

The example of EMAS helps explain how this system of EU eco-rules has developed. The Eco-Management and Audit Scheme has existed since 1995, and was amended by Regulation (EC) No 1221/2009. It provides a formal mechanism for monitoring how ‘green’ an institution is. Several years after running a pilot, the Commission decided to sign up its own offices, and this example helps explain the underpinning mentality. Measures included in this scheme (at public expense) have been the introduction of 300 “service bicycles”, and associated facilities such as bicycle racks, changing rooms and showers. The Commission proudly notes that in 2008 the Commission received the 2008 "Bike parking prize ("prix du parking d'or") from the City of Brussels as a result. A little-known additional fact is that the Commission has subsidised two bus routes in Brussels since 1997, reimburses business travel by metro and tram for members there, and has provided free bus travel passes to staff in Luxembourg since 2008.[30] But as any glance at building regulations reveals, the minimum standards associated with Commission buildings through EMAS and broader environmental, social and ergonomic policies comes at a big cost, as the buildings budgets consistently demonstrate (particularly the huge areas of overspend).

Not all participants are EU institutions. Helpfully, some studies have been undertaken looking at why decision-makers chose to adopt EMAS.[31] The response varies depending on whether the office was public sector or private sector. Businesses tend more towards doing it for image. Civil servants do it more for its own sake as an environmental measure, and in relation to giving junior staff a role. Both do it for compliance reasons because they are forced to by the law, and for a bewildering array of other motivations. A number were already compliant, or were spending money in order to be more visibly but

otherwise pointlessly doubly compliant. Particularly revealing was the review of why members – overwhelmingly private sector ones – subsequently left the scheme. Over a quarter did so because they could see no benefits at all, other than perhaps that their clients (seemingly largely through public procurement contracts) themselves required some paperwork proof of compliance amongst their customers. This comes at a cost though, with EMAS compliance estimated at an average €48,000 for the first year and €26,000 subsequently. Feedback from participants repeatedly highlights the administrative difficulties and the costs that mean SMEs are heavily reliant on subsidies to accept to follow this route.

A problem is, however, that there is a lot of EU taxpayer-funded money in circulation being swilled around. Environmentalism provides potential tick box access to state finances and a milch cow industry that will seemingly endure for as long as the UK is in the EU. Brussels has agreed that at least 20% of the EU's next seven year budget - €960 billion – will be dedicated to areas of environmental spending. That means around £100 billion of British taxpayers' money will be spent to 2020 on areas of such interest. This creates the concern that money is being spent on form and feel-good factors rather than genuinely costed end result.

Energy Yang to the Environment Yin

The EU's green energy strategy has been set up with the goal of reducing carbon emissions by 20% by 2020. The Commission, however, has the aspiration of pushing this closer to 30%. Over the long term, the suggestion is a strategic target of 70%.[32] In the meantime, the share of energy coming from renewable was also targeted at 20%.

Much of the initial success in reducing carbon emissions proved to be unhealthy. The 2008 financial crisis led to an estimated 14% reduction compared to 1990 levels. This cut, however, is dependent on large levels of enduring unemployment and economic stagnation and even the Commission recognises this is an accidental blip.

At a most fundamental level however, the very nature of the policy has come under serious challenge. With the EU in mind, there are key questions that do arise on the mainstream consensus on man-made global warming.

In the first instance, to what extent is the science accurate? Questions have been raised about the huge variations in estimated impact. They have also been raised on occasion about the methodology, such as the siting of temperature monitors in encroaching urban hot spots and airports, and the analysis (the infamous tweaked 'hockey stick' graph, or the University of East Anglia "Climategate" emails).

Secondly, if you accept some global warming is indeed taking place, is it correct that humanity is contributing significantly? It is possible that you might accept that CO_2 emissions have had an impact on the environment but is the science specifically certain as to its full cause? Particularly, what share of

global warming might be attributed to solar variation? Is the world in a period of natural temperature transition, such as moving to or from the late Roman Empire shift, the Mediaeval Warm Period, or the Little Ice Age?

Next, is the action proportionate? On the assumption that there are changes occurring, that can be modified, are the measures being undertaken of a suitable scale given the modifiable result? Is money better spent cost-effectively on alternative strategies? Is money indeed better spent on palliative projects rather than trying to stem an impossible tide?

Finally, is the reaction continentally commensurate? Is what is being done at great cost and damage to business actually having an end effect, or simply allowing emerging industrial nations an economic advantage, particularly the energy-hungry Indians and Chinese? Even from a purely cost-benefit view is the financial damage of global warming actually greater than the sums set aside by EU countries to counter it?

It is possible to accept the reality of climate change as an instrument that has always existed on this planet; for instance, sea levels have varied extraordinarily over the geological timescale. Moreover, it is human nature to regret the fact that the familiar landscape is not static. It would however be a mistake to conflate a natural process of change – if that is what is happening – with a need for unilateral action, by part of humanity, to hubristically attempt to govern it. That, however, is seemingly precisely what is being done at EU level.

Critically however, it has in large part been pushed by British civil servants. Merely withdrawing from the EU will not change this mindset and so of itself would not be a stand-alone solution. Peter Lilley's audit of the Stern Review sets out a valuable example of how the UK approach has gone wrong.[33] That includes an estimated bill of £17,000 per household, to affect a national emissions sum whose *total* is less than the *growth* of China's in just one year. China as a consequence meanwhile appears set to produce half the world's carbon emissions by 2030, making a mockery of unilateralism elsewhere.

Critical to any return to rationality in this policy once restored to national control would be a return to balanced unsensationalised debate, especially amongst the practitioners. Scandinavian researchers at SINTEF for instance were able to define four myths prevalent in the Climate debate: the concept of a lost Eden, the idea of a looming apocalypse, a hubris in anticipating a man-made response, and the moral obligation to act.[34] Yet when faced with the literally concrete proposals of building a 'Boris Island' airport in the Thames estuary, there is no mention from Whitehall of anything as fundamental as how high above current sea level it's supposed to be built.

Enviro-scepticLord Ridley'sTen Tests"To Persuade Me That Current Climate PolicyMakes Sense" (abridged)[35]

1. Can it be proven that the urban heat island effect has been fully purged from the surface temperature record? Satellites are showing less warming than the surface thermometers, and

there is evidence that local warming of growing cities, and poor siting of thermometers, is still contaminating the global record.

2. Even so the temperature trend remains modest: not much more than 0.1 C per decade since 1979. So what evidence exists that water vapour will amplify CO_2's effect threefold in the future but has not done so yet? This is what the models assume despite evidence that clouds formed from water vapour are more likely to moderate than amplify any warming.

3. Is there any better evidence that sulphate aerosols and ocean heat uptake can explain the gap between model predictions and actual observations over the last 34 years?

4. Can Arctic sea ice reduction in fact be plausibly explained by black carbon (soot), not carbon dioxide? Soot from dirty diesel engines and coal-fired power stations is now reckoned to be a far greater factor in climate change than before; it is a short-lived pollutant, easily dealt with by local rather than global action.

5. Since the Met Office admits that the failure of the models to predict the temperature standstill of the last 16 years is evidence that natural factors can match man-made ones, what about proportionality?.

6. Given that we know that the warming so far has increased global vegetation cover, increased precipitation, lengthened growing seasons, cause minimal ecological change and had no impact on extreme weather events, how can we know that future warming will be fast enough and large enough to do net harm rather than net good?

7. What evidence is there that ecosystems and people will fail to adapt, given advances over the twentieth century for instance against malaria?

8. Why pay bills now when future generations will be wealthier?

9. What proof is there that dashing to renewables like wood or corn ethanol can cut emissions rather than make them worse? What about the emissions cuts that have emerged from shale gas as a positive alternative?

10. Finally, one might make the argument that even a very small probability of a very large and dangerous change in the climate justifies drastic action. But in response, a very small probability of a very large and dangerous effect from the adoption of large-scale renewable energy, reduced economic growth through carbon taxes or geo-engineering also justifies extreme caution. "Pascal's wager cuts both ways."

Carbon Trading

A post-Marxist solution offered by civil servants in the West has been carbon trading. On the face of it, this mechanism of statist intervention provides a way for governments to set a ceiling and for the market to correct any imbalances by allowing for trading of permits. In practice however, the rules the EU set up proved to be ludicrous. Initially, a number of notional producers received permit rights that they were able to sell for windfall sums when the market rate amongst real producers raised prices. Increasingly it became clear that in practice, the trading scheme (EU ETS) meant the UK was buying up currently vacant slots from the third world in order to keep currently occupied slots going, or in other words for instance it meant that £60 million was paid over to foreign governments for carbon permits just to keep the UK civil service's lights on.[36] The system was quickly spotted as scammable by ingenious

entrepreneurs with an eye for loopholes. Additional costs were passed on to consumers, though profits generated by windfalls were not.

Then, as the 2008 economic crisis bit, prices collapsed by 80%. Backloading of permits to delay sales until there was a market for them is not allowed under the system, leading to a projected surplus of 2 billion permits by 2020.[37] MEPs refused to vote to increase the prices, meaning the price will likely hover at around €3 a tonne for several years; but an economically illiterate Department of Energy and Climate Change (DECC) has separately introduced a Carbon Price Floor of £16 per tonne, rising to £30 per tonne in 2020. This puts the UK at a competitive economic disadvantage, albeit one where UK civil servants and ministers are, incredibly, the ones to blame. It does demonstrate that in environmental terms, the UK is leading the Eurolemmings and here at least leaving the EU is not by itself the solution. But breaking from the pack may bring a greater recognition via the Treasury that Germany's 18% extra costs on household electricity bills, and the 19% extra to electricity prices that large UK manufacturers pay, are economically stupid and help explain the UK's shrinking heavy industry base.[38] The longer term emissions cut for its part is so high it effectively requires the closure of UK industry. Some future minister might spot this if he is not part of a herd.

Alternative Power

The EU is a contributing force behind the rush for wind turbines. These are costly, visibly intrusive, noisy, avian-killing, and so unreliable owing to weather variability that they typically require some measure of back up amongst more traditional forms of energy supply (such as fossil fuel plants) thus negating any decommissioning savings. If anything, offshore turbines are worse, costing twice as much despite bringing some small potential ecological advantages for fisheries development. As a former economic adviser to the World Bank has pointed out, uncertainty costs become more difficult to absorb if the share of power that wind generates starts to exceed 10% of the whole because of loss of inherent slack – a threshold that looks to be passed in 2015. 20% seems to be the top rate, but this is ignored by planners. In time new technologies for storing generated electricity may become cheaper, but for now the most cost efficient would be using natural gas.[39]

As it turns out, firing up gas turbines from cold to take over during lulls in the wind is not terribly efficient in terms of carbon emissions either. So overall the actual end costs of meeting current emissions targets by 2020 are considerably higher than supporters claim, possibly as high as £120 billion. This contrasts with £13 billion for the equivalent cost in gas-fired plants.

A wind turbine might generate power worth £150,000 per year, but in doing so it attracts subsidies worth £250,000. The estimated subsidy for wind farms has been calculated to run to £130 billion by 2030 in the UK.[40] This perhaps explains why it has in certain quarters – including in Brussels – such vocal trade supporters.

An alternative recently added to the equation has been shifting power stations to wood burning. There is a certain appeal to this in terms of guaranteeing long term energy supply, as replenishable stocks are transhipped from North America - an echo of the UK's ancient strategic reliance on shipping timbers and spars from that continent. The instant green appeal is that the fuel is notionally carbon neutral; in practice, however, trees have to mature fully for them to absorb the carbon put out when they burn, meaning carbon offset will only start to count in a century despite the policy makers seeking a swift fix.

The policy of using such sources is less strategically logical, however, if put in the context of significant domestic energy supplies that already exist in the UK subsoil. It makes even less sense once one considers the subsidies involved to encourage energy companies to buck the market. One result has incidentally been a surge in wood prices, impacting other related industries by raising pulp and paper prices. British furniture makers are already warning that energy subsidies will raise raw material prices so high it will drive them out of business.[41] The lessons learnt from using rape seed oil as a fuel and the impact that had on agricultural prices were again missed by civil servants who are trying to manage a market without understanding how it works.

Shale Gas and Oil

The United States has led the way in exploiting shale gas as an alternative fuel supply, reducing their reliance on Middle Eastern energy sources, cutting costs, and keeping business competitive. It has proven to be a greater revolutionary jump than tar sands (which does have ecological costs), and perhaps may yet be mirrored by Japanese-led exploitation of frozen seabed methane hydrates. But as semi-traditional fossil fuels, these approaches are frowned upon within EU circles.

A key point to note is that fossil fuel reserves remain significant. Recent estimates suggest proven conventional oil reserves are about 1.35 trillion barrels; global proven reserves of conventional gas are estimated at 6,600 trillion cubic feet; and over 861 billion tons of proven coal reserves sited worldwide.[42] In plain English, the push to find replacements is not as pressing as was feared from the 1970s onwards, in the context of oil shocks and peak oil. This means that, from a purely economical vantage point, without being complacent there is more time to find alternative energy sources and for cost-efficient technology to develop than was previously feared.

Shale gas is cheap, comparatively very clean (these things are relative), does not need to be transhipped from another continent to the UK, and increasingly appears to be abundant and accessible. Critically as far as the carbon agenda is concerned, it is far more efficient and cost-effective than renewables in cutting carbon emissions. Shale gas correspondingly provides a critically useful stop-gap pending the development of genuinely cost-effective, minimal subsidy, solar and nuclear technologies over the next decades.[43]

The EU itself recognises that “High energy prices and costs hamper European competitiveness,” as a May 2013 ministerial meeting admitted.[44] It agrees that its activity is generating “carbon leakage” – not the loss of gas to the atmosphere, but the movement of companies to other countries outside the EU where energy burdens are less oppressive. However, EU states have utterly divergent views on energy options, particularly those that have fewer or different natural resources, less spent on specific types of plant, and different levels of reliance on piped-in supplies from third parties. These conflicting vested interests are reflected in the Commission’s hostility to emerging alternatives to the agreed existing default, relying upon renewable energy at the current technological level and expense. There is a double irony here, as the US shift to new energies has impacted upon its own traditional supplies, meaning that Europe is also missing out on lower coal prices as suppliers look to find alternative markets for cheap fuel no longer needed domestically.

The EU Large Combustion Plant Directive 2001/80/EC

As part of EU-driven environment policy, the EU has compelled all member states to heavily regulate combustion plants, with dire consequences for European energy supplies. The Large Combustion Plant Directive requires all

combustion with a thermal input equal to or more than 50MW to either have to fit expensive filters or close.

Even if the claimed aims are welcome, the actual effects for the UK are dangerous, with the UK estimated to lose a third of its national energy use by 2020, meaning Britain will either have to spend more importing fuel from unstable regions of the world or risk overdependence on renewable energy that, as the Renewables Directive shows, is too intermittent in supply and doesn't provide value for money. In short, the lights could go out in Britain.

EU Environment Directives: Renewables Directive 2009/28/EC & Bio Fuel Directive 2003/30/EC

The EU Renewables Directive sets down an EU-wide target for 20% of energy to come from renewable sources by 202060. The UK target is to reach 15% as part of the EU-wide goal. Through leaked UK Government (dti) documents, the government estimated the 15% goal would cost between £5bn and £11bn per year, which is the equivalent of between £330 and £730 per family in the UK. Were the UK to reach 20% of renewable energy, the cost could rise to £22bn a year. The latest preference for a 30% target is uncosted at present.

Open Europe estimated that to reach this 15% goal, between two and three wind turbines will have to be built in the UK every day until 2020, despite the fact that wind power only works between 20% and 40% of the time ('operational capacity'), and some turbines work for less than 10%.

Cambridge University Electricity Policy Research Group has found that UK households will each end up paying some £90 per year for the cost of wind turbines and other kinds of renewable energy. These costs are part of the Government plan to reach its renewable energy targets.

It is thought that the UK's National Grid will also need to be rebuilt to cope with wind power surges and the varied output from renewables, adding yet further to people's energy costs. This is all part of a £100bn environmental plan. Such is the scale of decision-making and massive financial liabilities included here that it is essential for British citizens to decide on these directly through the Westminster Parliament and not have them foisted upon us from the undemocratic EU.

The Bio Fuel Directive set a target for bio fuels to make up 5.75% of transport fuel by the end of 2010, despite biofuels proving to actually harm the environment. In 2008, the UK parliamentary Environmental Audit Committee called for a moratorium on agricultural produce used for fuel (agrofuels) owing to concerns over food price inflation and current methods of fuel-crop production that require considerable amounts of fossil fuel to produce bio fuel. A 2009 Times report found that bio fuel targets had cost British-based oil companies £100 million in refinery modernisation.

Open Europe estimated that the directive and consequently rising biofuel demand will increase annual food prices per family by between £200 and £260 a year which will hit struggling families hard.

Driving Directives

It is in this context that directives such as the EU Large Combustion Plants Directive have to be set. Larger generators have to fulfil emissions targets by 2015 or close. But in the UK's case, it was deemed uneconomical for around one eighth of coal and oil plant capacity to reach those targets. Yet coal currently supplies about 28% of the nation's energy. The impact from this planned draw down has further been exacerbated by current low coal prices that have been encouraging use of this fuel, meaning that the energy production allocated to these plants before they were meant to close got used up far more quickly than was planned. In turn, according to Ofgem, this is reducing spare resilience from 14% of production to 4%, meaning there is a riskily small amount of reserve capacity in the system. The process has meanwhile meant power prices for consumers will rise by an estimated 20.3% by 2015, and environmental levies will go up by 18.6%.[45] Users then face price uncertainty in future years.

Astonishingly, a number of lunatic MPs from across political parties, but especially the Liberal Democrats, have been agitating for a near-carbon free power sector not even by the impossible date of 2030 but by 2016. Notably, many support their argument by cross-referencing measures taken at EU level. A past example of this has been support for EU policy on biofuels, which a study by the European Academies Science Advisory Council found "appear to provide little or none of the greenhouse gas reductions required in the Directive whilst putting food, agriculture and natural ecosystems at risk."[46] EASEC's report continued, "There are risks that the 2020 target of 10% biofuel provides a driver for carbon-inefficient and environmentally damaging biofuel production." On top of this, energy production by biofuels was found to be insufficient for purpose, and prevented essential food crops to be grown if the shift actually took place.

Another example of intentions surpassing cheap technology relates to capture and store, the notion of pumping carbon underground. Possibly the most expensive waste disposal process devised by man, the EU's Joint Research Centre estimates that power plants incorporating the system would cost 60-100% more. The Commission observes:

"The implementation of the envisaged demonstration projects in Europe has proven more difficult than initially foreseen. A series of factors are responsible for this situation, but mainly the lack of a long term business case and the cost of the CCS technology. At current carbon prices which are very low, and without any other legal constraint or incentive, there is no rationale for economic operators to invest in CCS. Some projects (those that envisage onshore storage) have faced strong public opposition. While sufficient storage capacity probably exists in Europe, not all capacity is accessible or located close to CO_2 emitters. Some Member States have decided to ban or restrict

CO_2 storage from their national territories. In addition, an adequate transport infrastructure is necessary to efficiently connect CO_2 sources to sinks."[47]

As such, it provides a classic example of how EU policy is trumped by economic realities. In this instance, at least billions in taxpayer funds have not yet been poured into it, and crippling costs added (to be passed onto the consumer).

Good intentions meanwhile do not even get rewarded under environmental and energy rules in Brussels. Attempts by the Chancellor to reduce VAT rates on energy-saving materials and installation have paradoxically led to the Commission taking the UK to court. The Treasury had hoped to stimulate draught stripping, insulation, solar panels, wind and water turbines, ground and air source heat pumps, micro combined heat and power units, and wood-fuelled boilers instead of by subsidy by cutting tax rates.[48] But under the terms of the VAT Directive there is no leeway for member states to provide what the Commission interprets as potential tax competition or unfair subsidy, demanding of the VAT list that it be "strictly applied, with no room for manoeuvre or interpretation." Clearly, outside the EU, UK VAT decisions would no longer be controlled by the Commission, and the Government could support energy saving measures based on reason rather than imaginary interpretations of market distortion.

Strategic Risk

There is also a strategic, existential threat that arises from EU energy policy. In the first instance, this is because of the development of a Single Energy Market is pushing the formation of an Energy Community. This means turning a market for supply competition into the heating bill equivalent of the Common Fisheries Policy.

An Energy Community treaty exists for instance between Austria, Bulgaria, Greece, Hungary, Italy, Romania and Slovenia – operating under the auspices of the EU - and the non-EU Balkans states. The head office is based at Vienna, but the European Commission plays a central role. The objective is to extend this market, and the rules of the EU, to the Ukraine, Moldova, and Turkey, thus introducing the acquis into energy matters and energy security beyond the EU's borders.

It forms but one aspect of the EU Energy Security and Coordination Action Plan, currently in draft form. This intends to build up a single trans-EU energy network, under EU control; expand liquefied gas imports; and critically from a UK perspective, "develop interconnections between the electric networks of the North-West of Europe so as to optimise wind energy in the North Sea."[49]

There is a problem. In so doing, there is a major risk of the EU becoming collectively energy dependent on politically sensitive regions and states. Increased reliance on Russian pipelines has already become apparent. The ramifications of the developing southern gas corridor for the supply of gas from Caspian region and Middle Eastern sources, and the linking Europe with

the Southern Mediterranean through electricity and gas interconnections (including a trans-Saharan pipeline) generate a number of complex geo-political problems and potential political commitments that EU planners are already imagining a communal EU strategic role in order to protect.

Tellingly, Regulation 994/2010 (building upon Directive 2004/67/EEC) establishes a mechanism to secure a communal EU gas supply during an energy crisis. This was ostensibly a Single Market act in order to protect consumers during peak demands or bad weather, but in reality was updated specifically on the back of the 2009 Russia-Ukraine gas dispute that halted trans-shipment to the rest of Europe. The message is that in a single energy market, a nation state has to consider the commodity as not being a national preserve.

From a UK perspective this creates particular difficulties. On several occasions, the Commission has attempted to extend its influence into the North Sea and onto British and Dutch oil and gas rigs. These have been batted off repeatedly in the past, including during the draft EU Constitution where offshore energy was to become a specific EU Competence to accompany the fish that swam around the drillers. But despite these setbacks for the integrationists, very recently Health and Safety measures have introduced the Commission footprint offshore. Measures are now being introduced on technical standards via a directive. The principle of Brussels oversight has been secured.

For as long as the UK is part of the EU, the Commission will continue to eye UK offshore resources as an area for legislation, possible taxation, and appropriation for the common good in the event of an energy crisis.

Conclusion

Questioning the EU's ecological direction is a legitimate activity. Following on from the period of the noted 'carbon-scepticism' of President Vaclav Klaus, Czech Prime Minister Petr Necas in May 2013 criticised the heavy subsidies being paid to renewables and pointed out the way the market was now skewed to prevent investment in traditional power plants, creating a long term threat to energy supply. In parallel, critics have also pointed to the peculiar danger of surplus peak Baltic wind power flooding the Czech grid and risking a crash.[50] Mr Necas has called for the common EU approach to be ditched so that countries can sort out their own optimal mix of energy sources, which they can't within the current EU confines and shackled targets.

A persistent driving element behind environmental costs is that of the Precautionary Principle. This was established in a Communication in 2000. In essence, this means shifting from a balance of evidence towards a presumption of possibilities, from proving a risk to just fearing one. If something might be the case, and the results would be damaging but the science is uncertain, then the EU thinking is that it is better to be safe and take precautions. This is notwithstanding actual costs that might arise from this guesswork, since cost-risk analysis is not factored in. In fact this actually

makes national compliance even more difficult to achieve when directives are used, requiring states to legislate in their own terms without providing for clear scientific context on balancing risk in the end legal text, allowing for considerable legal challenge.

One controversial example involved the debate over whether to ban phthalates from plastic toys on the basis that babies chewing inordinate amounts of them might conceivably consume a carcinogenic quantity. The chemicals were clearly dangerous if eaten but the science on whether any would leech out was very uncertain, and indeed an EU risk assessment had cleared them, yet MEPs in 2005 supported a ban on six types of phthalates. The suspicion arises given phthalate content in imported Asian toys, particularly from Taiwan, that there may have been a protectionist tinge to this.[51]

Another example of the Precautionary Principle trumping the available science relates to the 1998 EU Drinking Water Directive.[52] This directive added a new threshold for boron quantities despite the science again being uncertain. Since the legislation was passed however, it has been discovered that a large portion of boron presence is actually naturally occurring rather than anthropogenic, especially for Cyprus and Italy. But the authorised levels also cut the existing UK legal limits by half.

Again there is the example of pesticide and bees. Neocotinoids are extremely widely used pesticides, and sales reach billions of pounds annually. There is some scientific evidence to suggest they may be behind the decline in bee populations. There is also some scientific evidence to indicate that they are not. The European Food Safety Agency decided the pesticides were a possible risk, the Commission then pushed for a ban using the Precautionary Principle, the ecology lobby said something must be done for the bees, and the result was a two year test ban. Nine EU member states, including the UK, voted against on the basis that important field trials were ongoing, and a precipitous ban would damage both farming and the chemicals industry without any definite advantage. Four other countries abstained. The results for farmers and businesses, and indeed for bees, are highly uncertain.

Costs don't need the Precautionary Principle to emerge. EU environment policy is littered with taxpayer bear traps. In 2011, the Chancellor George Osborne went on the record to state:

"I am worried about the combined impact of the green policies adopted not just in Britain, but also by the European Union, on some of our heavy, energy-intensive industries.

"We are not going to save the planet by shutting down our steel mills, aluminium smelters and paper manufacturers. All we will be doing is exporting valuable jobs out of Britain."
He continued,
"If we burden [businesses] with endless social and environmental goals – however worthy in their own right – then not only will we not achieve those

goals, but the businesses will fail, jobs will be lost, and our country will be poorer."

To counter these additional costs at least in part, he announced a £250 million package to provide a modicum of relief from the climate change levy and electricity market changes.[53]

But such figures supply but a partial insight into the damage that unreasonable environmental and energy policy is generating, driven equally by Whitehall and by Brussels. Energy prices, excluding taxes, were roughly on a par between the EU, USA and Japan in 2005. In 2013, they were 20% higher in the EU than Japan, and 37% higher than in the USA.[54]

A policy revolution is needed. Brussels will hinder it, but even outside of the EU, the country will still need a determined Treasury and Ministers to drive it through.

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