

# The Tory Reform Group



The Tory Reform Group (TRG) works to promote the values of One Nation Conservatism. That is, a modern, progressive Conservatism that strives for economic efficiency and social justice; a Conservatism that supports equality, diversity and civil liberties.

We believe that the Tory Party is at its best when firmly in the centre ground. We advocate the One Nation values of social justice, political progress and prosperity for all, through open-minded debate.

Formally established in 1975, the TRG brings together members and supporters of the Conservative Party who share this approach to Conservative politics. Our strength lies in the breadth and blend of our membership, which is drawn from all ages and backgrounds. Our members include parliamentarians, councillors, association officers and private individuals from all parts of the UK.

Members of the TRG are part of a respected movement in the tradition of moderate and pragmatic Conservatism. Members can join the debate and help to develop ideas and policies through:

- attending TRG seminars, policy suppers and dinners
- receiving TRG journal Reformer and other publications
- supporting TRG fringe programme events at the Conservative Party Conference
- contributing to the TRG website and blog

**To join visit [www.trg.org.uk](http://www.trg.org.uk)**

## **The TRG is proud to work with the British Wind Energy Association who kindly sponsored this pamphlet.**

BWEA is the trade and professional body for the UK wind and marine renewables industries. Formed in 1978, and with 543 corporate members, BWEA is the leading renewable energy trade association in the UK. It promotes the use of wind, wave and tidal power in and around the UK. As an industry forum, it conducts research, as well as acting as a central information point for government, industry, the media and the public.

# Contents

<b>Foreword</b>	<b>5</b>
Professor Lord Stern of Brentford	
<b>Editor's Preface</b>	<b>6</b>
Victoria Roberts	
<b>1. A Decade to Decarbonise our Economy: the Challenge Ahead</b>	<b>7</b>
Tim Yeo MP	
<b>2. Can We Afford to Fight Climate Change in a Recession?</b>	<b>13</b>
Greg Clark MP	
<b>3. Delivery, Delivery, Delivery: How the UK Can Become a Global Leader in Low Carbon Energy</b>	<b>19</b>
Adam Bruce	
<b>4. Environment: the Conservative Heartland</b>	<b>26</b>
The Rt Hon John Gummer MP	
<b>5. Understanding the Food Chain: Farming, Supermarkets &amp; the Environment</b>	<b>33</b>
Wilfred Emmanuel-Jones	
<b>6. Small is Beautiful: a Green Population Policy for the UK</b>	<b>39</b>
Rosamund McDougall	
<b>7. Making Green Conservatism a Mass Movement</b>	<b>46</b>
David Skelton	
<b>8. The UK &amp; Europe: Partners for Improving the Environment</b>	<b>51</b>
Catherine Bowyer and David Baldock	

# The Authors

## **Tim Yeo MP**

Tim Yeo is the Member of Parliament for South Suffolk and has been Chair of the House of Commons Environmental Audit Select Committee since 2005. He is a former Conservative Environment Minister and Shadow Secretary of State. He is a director of Groupe Eurotunnel SA and of other companies offering low carbon alternatives in the transport, energy and waste industries.

## **Greg Clark MP**

Greg Clark is the Member of Parliament for Tunbridge Wells. He joined the Shadow Cabinet last year as Shadow Secretary of State for Energy and Climate Change, having previously served on the front bench as Shadow Minister for Charities, Social Enterprise and Volunteering. He was Director of Policy for the Conservative Party between 2001-5.

## **Adam Bruce**

Adam Bruce is chairman of BWEA, the UK's renewable energy trade association. He was UK chief executive of the international energy company Airtricity until its acquisition by SSE in 2008. He is currently Global Head of Corporate Affairs at Mainstream Renewable Power.

## **The Rt Hon John Gummer MP**

John Gummer is the Member of Parliament for Suffolk Coastal. He was Margaret Thatcher's Chairman of the Conservative Party and for 16 years a minister, becoming Minister for Agriculture, Fisheries and Food, and then Secretary of State for the Environment. The BBC twice awarded him the title of 'Parliamentarian who did most for the Environment Internationally', while the NGO community called him 'the best Environment Secretary we have ever had'.

Since leaving office he has held the positions of Chairman of the International Commission on Sustainable Consumption, Chairman of the Marine Stewardship Council and Non-Executive Director of Kidde Plc.

In December 2005, David Cameron appointed him Chairman of the Quality of Life Commission. The Quality of Life report, "Blueprint for a Green Economy", was launched in September 2007.

## **Wilfred Emmanuel-Jones**

Wilfred Emmanuel-Jones is the Conservative Prospective Parliamentary Candidate for Chippenham. After a career as a producer for the BBC, in 1999 Wilfred fulfilled a lifelong ambition in purchasing a small farm in Devon. A classic entrepreneur, he has since launched his own range of products under The Black Farmer label. Wilfred is a passionate supporter of British farming and advocates justice for small producers and giving ethnic minorities more opportunity. In 2005, he launched The Black Farmer Rural Scholarship Scheme giving young people from inner-city communities the opportunity to experience life in the rural community.

**Rosamund McDougall**

Rosamund McDougall has campaigned for environmentally sustainable population policies for many years. Having first become aware of the impacts of population growth when working for the *Family Planning Association* in the 1970s, she joined colleagues in setting up the UK's first population pressure group, *Population Stabilisation*. In 2002 she returned to population issues as co-chair of the think tank and campaigning charity the *Optimum Population Trust* and as a frequent speaker and writer. She spent her childhood in Borneo and Wales, and still returns to the Welsh countryside as often as she can. She is married with one child.

**David Skelton**

David Skelton is the Conservative Prospective Parliamentary Candidate for North Durham. He was educated at a comprehensive school in the North East of England and the University of Hull. Since leaving University, David has advised public sector professionals, including in the NHS and the Police, on how to improve their services. As a progressive Conservative, David has written about how the Party must establish a radical, progressive agenda, which widens its appeal to voters outside of Conservative 'heartlands' and broadens its appeal to working class voters.

**David Baldock**

David Baldock is Executive Director of the Institute for European Environmental Policy. Since 1998 David has been responsible for a wide range of studies on European environmental, agricultural and related policies and is an experienced observer of EU affairs. As well as independent work he has led policy research studies for the European Commission, OECD, national governments and NGOs. He has been published widely and regularly gives evidence to parliamentary committees and government agencies. Recent work includes contributions to the EU Budget debate and membership of the European Commission's High Level Group on regulation and the future of the car industry.

**Catherine Bowyer**

Catherine Bowyer is Senior Policy Analyst at the Institute for European Environmental Policy. An Environmental Scientist by training, Catherine has spent the past 8 years analysing and advising on the state of EU policy making and the environment. This has included working closely with policy makers at EU and national level, regulators, NGOs and industry representatives. Catherine specialises in the analysis of climate change, waste and land management policy, both development and implementation.

# Foreword

## **Professor Lord Stern of Brentford**

As humans we can fundamentally change our relationship with the environment around us and the other species on our planet. Our ability to cope with our environment fundamentally controls our well-being and prosperity. Our capacity to conserve or to destroy our environment has profound consequences, not just for us, but all life on the planet.

Managing the risks of climate change and overcoming poverty are the two great challenges we face as a species. If we fail on one, we will fail on the other. Emissions of carbon dioxide and other greenhouse gases, if unchecked could cause the Earth to warm by 5°C or more to temperatures it has not seen for more than 30 million years: sea levels would be much higher, floods and droughts would be more common, and landscapes would be transformed, with some places becoming deserts while others would be inundated. The lives and livelihoods of billions of people across the planet would be disrupted.

We can and should limit the risks we pose to the planet and its climate, and in doing so, we can embark on a new era of sustainable growth and prosperity by seizing the opportunities offered by the low-carbon economy. We can create the most exciting period of growth and transformation in economic history.

The United Nations climate change conference in Copenhagen in December 2009 offers us a crucial opportunity to agree a strong international framework, including strong emissions cuts by rich countries, and appropriate action by developing countries in line with their ambitions for overcoming poverty, and with financial support from the developed world.

Also crucial will be the way in which commitments in Copenhagen are turned into domestic action. The UK is a leader on understanding and tackling climate change, and as the contributions in this pamphlet illustrate, we have much to gain by remaining at the forefront of the transition to a safer, cleaner, quieter, more energy-secure, low-carbon world.

## **Lord Stern**

*Lord Stern of Brentford is an independent cross-bench peer. He is also I.G. Patel Professor of Economics and Government and Chair of the Grantham Research Institute for Climate Change and the Environment at London School of Economics and Political Science.*

# Editor's Preface

In 2005, the TRG published our policy pamphlet, *Being Blue and Green for the Twenty-First Century*. The debate has moved on considerably since then and, although vested interests continue to deny climate change, there can be no doubt that our excessive consumption and our reliance on fossil fuels cannot continue unabated. As we approach the Copenhagen summit, it seemed right that the TRG should turn again to these issues and ask: what next for environment policy?

Copenhagen is a vital opportunity for us globally to take concrete steps towards addressing our use of carbon and its impact upon our planet. It has raised awareness of the issues around climate change and increased the pressure on our political leaders to take action. However, there is a risk of getting so caught up in the hype around the Conference that we overlook policy beyond Copenhagen, particularly if, as seems possible, we do not get a binding resolution this month. Gordon Brown declaring that we have '50 days to save our planet from catastrophe' is an example of this, and typifies environmental policy under Labour, which, in the last decade, has been far better at rhetoric than action.

When David Cameron became Leader of the Conservative Party, he promised tough action on climate change. He recognised that there are great opportunities for Britain to create jobs, increase our competitiveness and protect our planet, whereas the costs of not acting are huge. Under his leadership, we have taken the lead on the environment: Greg Clark has developed policies that will move Britain to a low carbon economy, John Gummer's Quality of Life Commission produced innovative ideas and green considerations are central to our international development policies.

If we are to tackle climate change, the next decade is crucial. This pamphlet identifies some of the challenges that lie ahead. It looks at a wide range of issues, including the opportunities for renewable energy, the need for sustainable farming and the significance of population policy. It offers constructive solutions and seeks to foster debate about how a Conservative government can put Britain on the path to a low carbon future.

**Victoria Roberts**  
Deputy Chairman, TRG.

# A Decade to Decarbonise our Economy: the Challenge Ahead

## Tim Yeo MP

One curious aspect of the banking crisis was how the original trigger – the collapse of the sub-prime mortgage market – was quite widely foreseen. Lending too much of the value of a house to borrowers without incomes, jobs or assets was clearly unsustainable even when viewed through the rose tinted spectacles worn by many bankers and regulators in the summer of 2007. Even if a profit could be extracted in the short term by repackaging these loans the inevitable long term consequence was disastrous losses.

Today there are parallels in the way heads are buried in the sand on the issue of climate change. The increasing concentration of greenhouse gases in the atmosphere will, if unchecked, inevitably lead to dangerous and possibly irreversible climate change. But no country is individually taking sufficiently drastic measures to reverse the rise in GHG emissions and collectively the world's response is feeble.

Ignoring the dangers of sub prime mortgages was wrong and led to huge financial losses. By contrast in relation to climate change there is a chance to be right and to make money. The first countries to decarbonise electricity generation, their transport infrastructure and built environments, will reap a big financial reward. The short term cost of addressing climate change in the form of higher energy and transport prices will be rapidly outweighed by economic gains as the carbon price rises and the need for low carbon goods and services intensifies.

More and more people, especially in business, recognise that the rise in carbon dioxide emissions caused by economic growth in the last century must be reversed. But despite increasing acceptance that cuts in emissions are urgently needed, they have so far only fallen in developed countries during recessions or periods of deindustrialisation, as occurred in Russia at the end of the last century. The lack of action is puzzling now the economics of climate change are becoming as well understood as the science. As Lord Stern and others have shown, addressing climate change now is cheaper and less disruptive than doing so later.

One problem is that since the Kyoto Agreement was negotiated in 1997 the debate has concentrated too much on long-term targets. It's easy for today's politicians and business leaders to commit to cutting emissions by 2050 because they will all be retired or dead by then. But unless substantial progress is made in the next decade it may be too late to avoid global average temperature rises of 4°C or even more.

Such is the inertia in the system that no developed country yet has a credible plan to decarbonise its economy. On all business as usual models GHG emissions continue to rise despite the fact that much of the technology needed to achieve substantial reductions already exists. All that is lacking is political will and leadership.

The solution to climate change has four pillars – decarbonising electricity generation, buildings and transport, and ending deforestation. Achieving these goals doesn't require rocket science but simply the commonsense application of existing technology and information. Because other countries are reacting slowly to this situation there's an opportunity for Britain to lead the world in taking the steps which will bring environmental and economic benefits to all of humanity.

Using the right language is a good start. The threat is not global warming but climate change which is rapidly leading to too much water in some places and too little in others. The survival of the planet is not at stake. It has survived plenty of changes of climate in the past. What is under threat is climate stability, the precondition for economic prosperity which has existed in the last few thousand years. If this is destroyed then one recently arrived and conspicuously successful species, human beings, may find their own survival threatened. Biodiversity is very important and is jeopardised by climate change but one reason for particular concern is that we are one of the species most vulnerable to severe climate change.

Twenty years ago Margaret Thatcher was the first head of government of any major country to address climate change seriously. Throughout the 1990s Britain's greater understanding of the issue gave it an influential role in determining the world's response. In the last decade however, Britain, and notably Tony Blair, have been better at rhetoric than action. We now lag other countries in generating electricity from low-carbon sources, in the standards required of our buildings and in our use of low-carbon transport.

Happily there is still time for these trends to be reversed. The hideous financial legacy which the Cameron government will inherit next year may be the main preoccupation for many people and sorting out the financial mess is certainly necessary. However getting the response to climate change right will be judged by history to be an even more important and worthwhile achievement.

It is essential both to understand the urgency of the task and to believe in the possibility of success. As the Arctic ice melts before our eyes the remaining flat earthers who say that nothing is happening are being silenced. On climate the world is drinking in the last chance saloon. Some people may conclude that it is already too late and therefore not worth trying to avert disaster. On the contrary, however, the challenge can be met and those who respond first will enjoy considerable financial rewards as well.

The most important of the four pillars is to decarbonise electricity generation because a constant supply of electricity is now essential for ordinary business and domestic life and because this also holds the key to cutting emissions from buildings and transport. The Committee on Climate Change, established last year by the Climate Change Act, has rightly argued that carbon emissions from electricity

generation must be cut by 90% by 2030. This is a challenging target and requires higher consumer prices and a more ruthless approach to planning decisions.

First and foremost however cutting emissions from electricity requires that demand be reduced. In this respect higher energy prices help as they make consumers more energy efficient. Most politicians and business leaders pay lip service to the need for greater energy efficiency but too many leave it at that and do not take the simple actions needed to reduce consumption. These include tougher building standards properly enforced and tax incentives for owners, landlords and tenants to invest in energy efficient improvements.

Alongside more energy saving measures there also needs to be a rapid switch to low-carbon sources of electricity generation. Faster development of renewable energy, including onshore and offshore wind, tidal and wave power, biomass and so on, is urgently needed. New nuclear power stations which provide low carbon electricity are also essential.

Getting this done involves swifter planning decisions and a substantial improvement in grid connections and transmission capacity. Equally crucial is the need for more distributed electricity generation. Feed-in tariffs could support the existing incentives in the form of Renewable Obligation Certificates. Although the EU emissions trading system should eventually promote a switch from high to low carbon electricity the loose emissions cap in phases 1 and 2, particularly during the current recession, means there is little prospect of a high carbon price for the next three years at least. This underlines the need for more generous incentives to reward the generators of low-carbon electricity.

Central to the issue of low-carbon electricity is the introduction of carbon capture and storage (CCS) for coal-fired power stations. There is too much wishful thinking about this subject because as yet no economically viable system of CCS has yet been achieved. Belatedly the Government is directing more money at this area and the financial rewards for a technological breakthrough will be enormous. However even if a viable method of CCS is soon developed it will take some time for all the existing coal-fired power stations to be retro-fitted. In the meantime no new coal-fired power stations should be built. In addition a progressively tough emissions performance standard should be set for the amount of carbon emitted per unit of electricity generated.

Apart from CCS the technology for all these measures is available now and considerable advances in the efficiency of various low-carbon sources of electricity will be achieved over the next few years.

Decarbonising buildings, whether residential, commercial, industrial or retail is the second pillar. An immediate and substantial toughening of the standards to which any new building is constructed so that much higher standards of energy efficiency are incorporated from the outset is essential. These standards must be properly enforced, unlike the existing building regulations where enforcement levels are as lax as the speed limit on roads. Building to these standards will be more expensive in the short-term but likely to prove cheaper over the lifetime of most buildings constructed from now on.

The existing building stock is a bigger challenge because retrofitting low-carbon technology and improving the energy efficiency of older buildings is more complex and expensive. Nevertheless most existing buildings will be around for many years so we must start decarbonising them as quickly as possible. Standards should be set for progressive implementation across all types of building. A mandatory framework should be reinforced by financial incentives in the form of discounts on council tax for homes and on business rates for business premises. These discounts could be revenue neutral if premiums were charged on properties where no steps are taken to reduce their carbon footprint. Much of the retrofitting of these existing buildings is labour-intensive and useful at a time of high unemployment.

Greater international cooperation on setting building standards would be helpful. If for example the EU was to agree with China a timetable for the introduction of common building standards it would promote valuable trade opportunities for the relevant industries. It is also likely that these standards would become the benchmark which the rest of the world had to follow. The once in a millennium movement of hundreds of millions of people in China from the countryside into the cities provides unique potential for progress on this front.

The third pillar, transport, requires a wider range of policies to achieve. Rather as decarbonising electricity starts with reducing consumption and decarbonising buildings starts with improving their energy efficiency, so decarbonising transport starts with eliminating unnecessary journeys. A fresh approach to land use planning could ensure that jobs and homes are only created where good public transport links exist. Technology, including video conferencing, which can eliminate journeys, must also be facilitated and incentivised.

To back this up a transport infrastructure which promotes low carbon choices is needed. This may involve a small upfront cost but will yield substantial long run savings. The high speed rail network already established in France and now being rolled out in other countries such as Spain and China offers the chance of extensive modal shift from aircraft to trains for journeys of up to 600 miles. Eurostar's dominance of the London/Paris and London/Brussels routes shows what can be done. Prioritising the construction of new high speed rail in Britain is urgent and part of the cost could be funded through progressively higher taxes on domestic flights. New high speed rail will also release capacity for commuter and other services on existing lines where the present need to keep space for faster trains limits the amount of slower traffic that can be accommodated.

On the roads the switch to low-emission vehicles needs to accelerate. The existing tax and other financial incentives to encourage road users to choose low-emission vehicles must be enormously increased. These should be complemented by the introduction of tighter emission standards for new vehicles on a timetable which recognises the investment cycle of the industries concerned and thus benefits industry by boosting demand for modern kit. If road users start making more lower carbon vehicle choices now then significant emission cuts can be made achieved long before fully electric vehicles are available.

A big contribution can also be made by better driving techniques because emissions

from any car or truck depend heavily on the manner of driving. Now that emissions can be monitored externally in real time, a system of road pricing on major roads and in urban areas based on the actual emissions from each vehicle would help to cut emissions in a way that would cost careful drivers little or nothing and would be seen by all road users as fair.

Finally both shipping and aviation have up to now escaped much of the scrutiny to which the rest of the transport industry has been subject. Bringing aviation within the scope of the EU emissions trading system is a big step in the right direction but until the terms on which this will occur are known it is impossible to judge whether it will be effective at halting the inexorable rise in emissions from flying. Forcing the shipping industry to speed up its shamefully slow response to the climate change challenge is another overdue task for the negotiators at Copenhagen in December.

The fourth pillar is halting, and in due course reversing the rapid destruction of the world's rain forests. In theory this looks the easiest of the four pillars to achieve. No new technology is required and all that has to happen is for people to refrain from doing something they shouldn't be doing anyway. In practice though it may prove to be the hardest because the countries in which the rain forests are being destroyed are mostly poor and local communities derive short term economic gains from the process. In addition many suffer from poor governance and corruption.

To solve this problem it is necessary firstly to remove the environmentally perverse economic incentives which reward people for cutting down rain forests and growing crops for food production or biofuels on the land thereby released. This can be done, as the Environmental Audit Committee pointed out in its Report in June, by curbing demand for commodities which contribute to deforestation. Britain should lead the way in removing all harmful agricultural and biofuel subsidies.

Secondly the illegal timber trade must be outlawed by far more effective measures than are currently in force. In Britain the Government should introduce the legislation it promised three years ago to ban imports of illegal timber and improve its own timber procurement policies. It should also work with the EU to ensure that those who offer illegal timber and timber products on the market face robust sanctions.

Thirdly, and most important, an international funding mechanism must be established to pay developing countries to adopt forest friendly policies. Payments should be linked to the reform of governance in rainforest nations and must be made in a way which ensures that the money reaches the people who live in and around the forests and does not remain in the hands of local bureaucrats or politicians.

While there is broad agreement about the principle of all three approaches there is controversy about the detail, especially in relation to how the funding mechanism will raise its cash and how that money should be distributed. This area should be given high priority at Copenhagen in December and where both the developed and developing worlds will gain from agreement.

Related to the rainforest problem is agriculture, which until very recently has been even more neglected as a source of GHG emissions than shipping. The increase in

global meat consumption is leading directly to a significant rise in methane emissions from cattle. This industry must face the consequences of contributing to the concentration of GHGs in the atmosphere in the same way as others do.

In conclusion the challenge of climate change is bigger and more urgent than was understood even a decade ago. Any delay in addressing it considerably increases the risk that climate change will reach dangerous levels. It also raises the cost of the solutions. While much of the business world and an increasing number of policy makers recognise what has to be done there are powerful vested interests opposed to many of the individual measures needed. Furthermore many consumers are not yet convinced of the need for immediate action, a factor which is making it harder for President Obama to get Congress to accept effective legislation introducing a federal emissions trading system in America.

Britain under a Conservative Government can quickly resume leadership of the international response if David Cameron makes this a priority. In doing so he would also lay the foundations of a more competitive economy. By the 2020s it is very unlikely that any country whose electricity industry, buildings and transport system depend on high carbon emitting processes will prosper. A big responsibility rests on the politicians who guide their nations and the world through the next decade when decisions are made that will determine how pleasant a world we leave behind for the children being born today.

# Can We Afford to Fight Climate Change in a Recession?

**Greg Clark MP**

On the 17 March 2009, Shell announced that it would no longer invest in renewable technologies such as wind, solar and hydro power. The announcement sent shockwaves through the energy world. A giant company that had made a big thing of its green credentials was pulling out. And it wasn't alone, but merely the biggest in a long line of investors heading for the exit.

Of course, the real story is lot more complicated than the headlines suggest, but nevertheless it begs a question: Can we afford to fight climate change in a recession? If major multinationals can't take the heat, then how can governments impose the cost of cutting carbon on ordinary people?

## **No sacrifice**

It's a good question... though one that is sometimes asked in bad faith by those who'd oppose action on climate change at anytime. That might be because they just don't believe the mainstream scientific position on climate change or because it doesn't suit their vested interests. Either way, the recession argument is, for them, just the latest in a series of delaying tactics. However, let's assume good faith and address the question head on.

The first thing to note is its underlying premise – which is that fighting climate change is costly and, therefore, particularly unaffordable in a time of a recession. As a working assumption, it forms part of a larger narrative that portrays environmentalism in purely sacrificial terms. Ironically, this unites the greenest of the greens, who advocate a simpler way of life, with their sworn enemies, who see environmentalism as a matter of rationing and regulation. I want to show you that both extremes are wrong, and that this theme of sacrifice – however you choose to spin it – is fundamentally misconceived.

To do so, I'm going to take a closer look at the apparent costs of climate change policy – and show that far from coalescing into one undifferentiated sacrificial lump, they fall under three very different categories, each of which have their own justification:

\* First of all, there are the negative costs – so called because though they involve cutting carbon, they also save money by cutting energy consumption.

\* The second category is that of investment. Compared to the first category there are no quick savings to be made and the payback periods are longer. However, following the breakeven point, the returns are still sufficient to provide a purely financial justification for action, over and above the environmental benefits.

\* We don't get to the real costs until the third and final category, which might not justify themselves as conventional investments – but which are justified by the contribution they make to reducing greenhouse gas emissions, and thereby minimising our exposure to the unpredictable and potentially extreme risks of climate change.

Now, let's have a look at each of these three cost categories in detail.

### **Negative costs**

First of all, the savings that arise from using less energy.

If I were to tell you that you don't actually pay for any gas and electricity, you might want to wave your energy bills at me – not to mention two fingers. But the consumer product really at stake here isn't fuel, but things like lighting, heating and hot water – which are collectively known as energy services.

Using less energy to produce the same level of energy service isn't a sacrifice for anyone; in fact it's a vital component of productivity – the ultimate source of economic growth. There are many examples of energy productivity improvement in the home – such as better boilers, better insulation and better light bulbs. There will be many more examples in the future from organic LED televisions to simple devices that recover heat from waste hot water.

But here's an example that's on an altogether grander scale: the Empire State Building. This iconic landmark is currently undergoing a refit, the energy efficiency component of which will reduce energy use by almost 40%, generating annual savings of over \$4 million and CO<sub>2</sub> reductions of 100,000 tonnes a year. Yes, there will be an upfront capital outlay – but factor in those savings, not to mention a substantial rise in rental value, and it is clear that this isn't a matter of cost, but of wealth creation.

### **Investment – saving money**

With an estimated payback period of three years, the Empire State project is not about instant savings. Rather, it's an investment – and compared to others available in downtown Manhattan, a very safe one. Even before the credit crunch, 'investment' had become a much-devalued term – not least due to the efforts of New Labour, for whom there is no item of expenditure too profligate not to be called investment.

Energy efficiency, however, really is deserving of the description. As are various other green energy improvements. It is true that some improvements have a quicker payback time than others. However, those that require greater patience often produce savings on a greater scale. For instance, a draft excluder costs next to nothing and therefore produces returns almost instantly, but the amount it will save you is fractional compared to the benefits of more ambitious improvements such as cavity wall insulation.

Obviously, upfront capital costs present an obstacle – one that looms all the larger in a recession. That is why a Conservative Government would introduce a new entitlement for every home to be upgraded with up to £6,500 of approved efficiency improvements, the cost to be repaid over a period of 25 years through the energy savings made to the fuel bill.

Green investments not only generate the long-term benefit of an ongoing stream of saving, but the short-term benefit of upfront capital spending – an immediate and much needed boost the economy and job creation. Furthermore, and unlike the kind of stimulus advocated by Messrs Brown and Darling, the projects funded by green investments create the means by which the upfront costs can be repaid. Far from saddling our children with enormous debts, green investments produce permanent reductions in future energy costs. For a change, this generation could be doing something to reduce the burden on future generations – not only in terms of global warming, but in terms of cold, hard cash too.

### **Investment – economic reconstructions**

In January, David Cameron and I launched the *Low Carbon Economy*, a green paper that set out the policies that a Conservative Government would pursue in order to make the most of these opportunities. Together with further proposals to be brought forward in our forthcoming energy green paper, we are determined to make Britain the world's number one destination for sustainable energy investment.

To those who say that we lack the necessary core competencies and comparative advantages to move in this direction, I say look at Britain's place in the world. Look in particular at the miracle of geography that is the North Sea. Literally and figuratively this is still a sea of energy. Where else in the world do renewable resources coincide, in such abundance, with unusually shallow waters and enormous energy markets – not just on one coast, but two? We possess the world's best offshore wind, wave and tidal resources. Britain could and should be the Saudi Arabia of marine energy. We could and should be creating export markets in the design and manufacture of these cutting edge technologies.

And this isn't just about renewables. Beneath the shallow waters that surround us, within reach of safe harbours, we possess a vast resource of depleted gas fields and saline aquifers, with space to store not only natural gas, but also carbon dioxide – captured through the use of CCS technology. The power stations, refineries and energy intensive industries to which CCS could be applied are waiting on our shores – and those of our neighbours – ready to be connected by pipelines to those conveniently located storage sites. As in the case of renewables, the infrastructure requirements present a challenge, but also the opportunity to build new industries and create new jobs.

In this respect, the living inheritance of the oil and gas industry has vital role to play: above all, the priceless accumulation of marine engineering expertise. With our world-class research institutions; the world's greatest financial centre and membership of the world's richest market – Britain is well positioned to exploit its geographical good fortune.

Why on Earth wouldn't we want to make the most of all of that? How, in the light of the world situation, can we afford not to?

### **Real costs**

The industrial potential of low carbon energy could go a long way to offsetting its costs. This is important, because not every low carbon technology will pay for itself as a conventional financial investment.

This is visibly demonstrated in a piece of research called the McKinsey Cost Curve. This takes the form of a bar chart in which the height of each bar represents the cost per unit of carbon abated by a particular green technology. By assembling those bars in height order, the cost curve is created. On left side of the chart, the bars are inverted, reflecting the fact that the costs are negative; for the most part these represent the cheapest energy efficiency solution with the shortest payback times. As one moves up the cost curve, the costs are still negative, but the payback times are longer – requiring more patient investment. It is only on the right-hand side of the curve that the costs become decidedly positive – exceeding the price of fossil fuel energy to various degrees.

### **But why should we pay any extra cost at all?**

The answer is that we don't know for sure what the extent of climate change might be. In attempting to determine the level of action justified by future risks, economists tend work on the basis of a well-behaved bell curve of future possibilities. Unfortunately, complex phenomena like climate change don't work that way.

Thanks to advances in climate science we have an increasingly good idea of what the most likely outcome is for a particular level of carbon in the atmosphere, which, on current trends, would be bad enough. But there are other more extreme possibilities, that may be remote, but which become less remote and more extreme the longer we go on as we are. Thanks to factors as the release of methane from melting permafrost, there is danger that higher temperatures could trigger a vicious circle of runaway global warming, with truly disastrous consequences.

Unlikely, but significant, these are 'black swan' risks, of the kind made infamous by the credit crunch. They are fundamentally unpredictable and therefore unmanageable. The only way to protect oneself against them is to minimise exposure in the first place. In the case of climate change that means ending our grand experiment with the planet's atmosphere. The net costs of decarbonising the economy should therefore be regarded as an insurance policy – much as any sensible householder would insure against the remote, but real risk, of fire and flood.

The insurance principle doesn't just apply to climate change. As fossil fuel reserves become increasingly concentrated in unstable and unfriendly parts of the world, security of supply is another source of risk. Much of our oil comes through vulnerable bottlenecks like the Suez Canal and the Straits of Hormuz. The same goes for natural gas, European supplies of which were badly disrupted last winter by the seemingly perennial dispute between Russia and Ukraine. As for coal, most people are surprised when I tell them that by far our biggest supplier is Russia.

Low carbon energy is different. Renewable resources are widely distributed and can be found close to home. The potential for energy efficiency improvements can be literally found *in* the home. Rapid progress on other technologies like solar PV and heat pumps will provide consumers with other options to meet their own energy needs.

In contrast to fossil fuels, the cost of low carbon energy is determined by controllable and declining upfront capital costs. There are no fuel costs. Indeed, in the case of energy efficiency there are savings, which automatically go up with fossil fuel prices. Action against climate change therefore provides a hedge against the economic instability engendered by increasingly volatile fossil fuel prices. Those countries that provide themselves with such an anchor will enjoy greater economic stability than those that don't. In fact, the greater the disparity in low carbon progress between the best and rest, the greater the comparative advantage. To be the best will be good for inward investment, good for employment, good for exchange rates and good for prices.

### **Why now?**

I've made my case on the cost of fighting climate change. I've argued that many of the 'costs,' are not costs at all, but either savings or investments. Even where low carbon energy does cost more than fossil fuels, I've made the point that insuring against climate change also insures against energy insecurity. You might accept all of that and still say: "Why act now? Why not wait a year or two until the economy recovers?"

To that I say we've been waiting for twelve years already. Because don't imagine that that this Government used the economic good times to make progress on energy and climate change. If they didn't even fix the roof while the sun was shining, they certainly didn't install any solar panels. In fact, they didn't even insulate the attic. Despite two Energy White Papers, three energy departments and more energy ministers than I can remember, they did nothing. That is how, despite the entirely predictable depletion of North Sea oil and gas, we entered the age of import dependency with just 15 days of gas storage capacity – while the Germans have 99 and the French 120.

We need an energy policy fit for the 21st century, not one forever stuck in 1997. That will require a Conservative Government – and like all new governments that want to make changes, we have to hit the ground running. Wait for two years and we might as well wait forever. It's not an option anyway. With our generating and transmission infrastructure in desperate need of new investment, urgent decisions will have to be made – with long-term consequences. If we want a low carbon economy for the future then we have to make the decision now – recession or no recession.

That's political case for action, but there's a business case too. Tom Nicholas of Harvard Business School was recently quoted in an article for the Spectator: "Although deep downturns are destructive, they can also have an upside. For companies with cash and ideas, history shows that downturns can provide enormous strategic opportunities."

History does indeed provide many examples:

- \* In the Long Depression of 1870s Thomas Edison started up a little company called General Electric.
- \* In the Great depression of the 1930s DuPont developed synthetic rubber and another new material you might have heard of called nylon.
- \* In the oil shock years of the 1970s, Bill Gates and Steve Jobs were busy founding Microsoft and Apple.
- \* And from the wreckage of the dotcom bubble, Google emerged from its status as just another search engine to become the information giant it is today.

I believe that in thirty years time we will look back to the current crisis, not with a shudder, but with admiration for those who founded the great industries of the low carbon economy. I don't think it's any surprise that the future-focused IT industry is investing heavily in clean energy. In fact, job creation in Silicon Valley is now heavily dependent on this new sector. As with all parts of the economy, the downturn will have a disruptive effect, but, make no mistake, the race to develop green technology is already under way. Those companies and countries still up and running when the recovery begins will be well placed to take the prize. Britain, however, is already falling behind. Today British firms have less than a five per cent share of the global market for green goods and services – less than France, Germany *and* the United States.

### **Conclusion**

Let me finish with a true story.

In 1833, a shopkeeper called Marcus Samuel decided to expand his business. He began by importing seashells from the Far East. Over the ensuing decades his sons diversified into other commodities. By the end of the century they made their boldest move yet – into the bulk transportation of crude oil. The name they gave to their new venture is full of irony, because had they stuck to their old business model, the great enterprise we still know today as “Shell” would not exist. I wonder what Marcus Samuel and his sons would have to say to their successors. We can only guess, of course, but if their example tells us anything it is that we must catch hold of the future before it leaves us behind.

# Delivery, Delivery, Delivery: How the UK Can Become a Global Leader in Low Carbon Energy

**Adam Bruce**

*The future must be different to the past, and Conservatives understand that we urgently need to make the move to a low carbon economy...*

Conservative Party green paper on Energy – January 2009

One of the greatest challenges facing the next British government will be the delivery of once in a century infrastructure during a period of very testing economic conditions.

Over the next decade the UK will be beginning the next round of nuclear power stations, developing large amounts of renewable generation, and the ports and harbours needed to build it offshore, expanding the country's underground gas storage, and taking the initial steps towards creating our first ever long-distance high speed rail network.

Much of this work will be fundamental if the country is to move decisively to the low carbon, high growth future that has been the ambition of David Cameron from the earliest days of his leadership of the Conservative party.

Delivery of any one component of this list would be sufficient to meet any government's first term ambitions. Delivery of most of it would be considered a significant challenge; attempting to deliver all of it during a period of unparalleled contraction in the public finances might be considered foolish. It will make delivering the Olympics on time look easy, and it will require the mobilisation of some £350 billion of private capital into low carbon infrastructure alone.

Others have recently sought to set out how a government could and should finance – and deliver – a large amount of this new national infrastructure. What is as important – if not more important – is to examine how a Conservative government might square its commitment to localism with the national imperative to deliver significant amounts of “strategic” low carbon infrastructure.

It is unclear whether the Conservative party is willing or able to consent new energy

plant with the speed and determination that is required to deliver the necessary transformation in this country's generation mix, for fear of overriding its commitment to local accountability. However, coupling public support through "Green" investment, whether by Low Carbon ISAs, Green Bonds or a National Infrastructure Bank, with a clear political commitment to deliver the necessary new infrastructure could combine individual and national effort to maximum effect.

The challenge is not just the delivery of individual plant – whether wind, marine or new nuclear; it is to transform the whole energy sector so that it is fit for purpose for the twenty first century. On the demand side the consumer will move from being a passive recipient in a market dominated by utilities operating in last century's language of base load, peaking plant and increased unit sales, to being an active player in a competitive market where the language is geared to variable and responsive supply and demand, with the focus on efficiency. On the supply side the next Government can create an investment climate that will enable a second North Sea energy revolution, one based on renewables but which repeats the transforming effects of North Sea oil, and which will have a permanent and benign impact on the British economy. The key to unlocking that future is a venture known as Supergrid – which could become the defining feature of Britain's new energy century.

To do this will require bold and ambitious leadership – and a strategic vision for how the UK can, and shall, create and maintain a global leadership position in the low carbon energy sector.

### **Developing a Conservative energy policy**

Between December 2005 and November 2008 Conservative councils in England refused more than three times as many wind farms as they consented. An anecdotal snapshot, perhaps, and one that looks just at one form of electricity generation. It is, however, indicative of the challenge that faces an incoming Conservative administration if it is to deliver both the necessary changes in the country's energy sector, and the "low carbon energy revolution" spoken of by the party leadership.

One solution, advocated by Conservative spokesmen, and practised by wind energy companies across the country, is to engage with local communities to make it easier for them to invest in the development of local renewable generation plant. Marrying best practice in community benefit schemes developed by the onshore wind sector with Conservative policy on ring-fencing local business rates will be critical as we come to develop other forms of local energy generation. It also clearly represents how government and the renewables sector can work together to deliver a common objective.

The opportunity – to create an open and competitive market in the sale and supply of low carbon power – is a prize as great as that of the original privatisation of the country's electricity sector under Mrs. Thatcher. In fact, it is an even greater prize, as it could transform the electricity sector across the EU, bringing huge opportunities for British consumers, companies and the City of London. The offshore wind sector alone could generate 70,000 jobs for the UK, and produce a net benefit to the UK economy of £60 billion by 2020.

The future path for the country's energy market will be across a landscape unrecognisable today. In thirty years' time electric vehicles could provide the majority of the country's journeys.<sup>3</sup> Truly "Smart" meters will empower British consumers to heat, power and light their homes in a manner that fits their lifestyle and not the supply constraints of their current utility. The UK's last fossil fuelled power station will have been built. Local communities will generate their own electricity and gas in decentralised plant. The country will be linked to Norway and to a series of other North Sea states through a series of sub-sea interconnectors, collectively known as "Supergrid". We will be energy secure, and the price of electricity will be, in real terms, less than it is today.

For this future to be delivered the foundations must be laid in the coming decade. The planning for this exercise cannot – no matter how noble the intention – be left to a patchwork of local authorities. It must be a matter for national government, acting through a delivery agency, or agencies. If the 2012 Olympics need a Delivery Agency, then the transformation of our energy infrastructure will require one too. It makes no sense to abolish regional delivery bodies like Yorkshire Forward and One North East, and by extension, agencies like Envirolink Northwest and Renewables East, just as central government calls for a transformation of the country's energy sector.

In Scotland, Scottish Enterprise, formed by Malcolm Rifkind out of the old Scottish Development Agency, acts as a key economic development tool for government, and is an integral part of the current Scottish Administration's renewable energy strategy. There is no argument about its democratic mandate, as it does not seek one. Without some regional development mechanism, the UK government will effectively surrender any ambition for global leadership in the development of low carbon energy.

This is not about the negation of local democracy and accountability, but the creation of a framework that will enable a once off transformation of parts of the UK into centres of global excellence for the low carbon economy.

There is also current uncertainty around the future of national delivery and advisory bodies. The structure set up by Nigel Lawson in 1983 when he abolished the Energy department was for government to set policy, the market to deliver and Ofgem to rectify any market failure. Into that mix has been added the Infrastructure Planning Commission, set up by the current government to determine strategic planning applications, many of which will be in the energy sector.

Conservative spokesmen have indicated that the Infrastructure Planning Commission and Ofgem will be abolished, with their powers rolled into DECC, and that suggests that a Conservative government is contemplating the creation of an Energy Department not dissimilar to the one that Nigel Lawson abolished.

If such a department is in contemplation then it should contain the strategic planning and policy making of the current DECC; the planning and delivery function of the current IPC; the market and policy functions of Ofgem; and most crucially of all – a delivery arm that would act with regional development bodies to ensure that the UK builds a low carbon power sector while exploiting its global lead in marine energy.

The key for this “SuperDECC” to avoid slipping into Bennite central planning mode will be for Ministers to set a clear low carbon policy framework, and then allow the market to deliver. Instead of picking winners from a mix of technologies, the Department should establish an overall framework, such as that set out in the current Renewable Energy Strategy, and then ensure that any incentives “flex” to ensure that capacity gets built to meet the Strategy.

This will allow for competition among technologies and help reduce the cost of transformation, while avoiding Ministers being forced to make judgements about the relative merits of new Nuclear, “clean” coal, or renewables. A clear policy framework will enable the very large amounts of private sector investment needed to deliver this transformation.

This will be a bold move – potentially bolder than anything the current government has done. It could just make the difference in enabling the energy revolution that the country needs. However, it might take the whole of the first term of an incoming administration to deliver it, and as a result the opportunity for the UK to transform its power sector and secure its own energy future could be lost. But boldness becomes a new regime, and this could be the making of a Cameron government.

### **The future lies offshore**

One of the greatest tasks that such a new Department will face will be to deliver the enormous potential of the UK’s new marine energy sector. The development of offshore renewables could be for 21st century Britain an even greater and more enduring story than North Sea oil was for our parents. It has the same plot. The UK has the largest share of the EU’s offshore renewable energy reserves, whether wind, wave or tidal. Their exploitation will lead to the creation of many thousands of new jobs, and the development of new companies and organisations across the supply chain. Just as Aberdeen became a global energy city, so Edinburgh, Newcastle, Hull, or Lowestoft could do the same.

By 2050 EU member states will, most probably, have agreed to deliver 50% of their electricity from renewable sources, up from 35% in 2020. For that to happen, there will have to be very large amounts of wind-fired power stations deployed in the North Sea and the Baltic. To maximise delivery of this resource, and to fully utilise onshore supplies of low carbon generation, such as Norwegian hydro, the UK will need to co-operate with its North Sea neighbours to build a network of sub-sea cable interconnection, similar to the oil and gas pipeline network that was built across Europe between 1970 and 2000, to take North Sea hydrocarbons to markets across the continent.

The UK government’s current thinking is that the country’s national grid should be reinforced and upgraded to enable future renewable energy generation to be transported to load centres in different parts of the country. The government’s Energy Networks Strategy Group (ENSG) concluded that this upgrading would consist of reinforcing some existing transmission lines and the building of new “bootstraps” down the coasts of the UK. All this new transmission would be “point to point” – bringing power direct from the generation source to centres of population. Some of this thinking was reflected in the Conservative party’s own 2009 Energy green paper.

The key issue with the ENSG remit – which has assumed a new relevance in the current economic climate – is that it was limited in scope. “Point to point” connection is not the most cost-effective way of building new transmission, and does not take advantage of any opportunities for electricity trading, which in turn would help to drive down the price of power, and enable the cost of the new transmission to be recovered more swiftly.

The next government will need to commission ENSG 2 as a policy priority. The Group will need a revised brief to develop sufficient connection offshore to connect with our North Sea neighbours, to enable electricity trading at scale, and to accommodate the very large amounts of marine renewables that could come on stream by 2050.

Building “traditional” connections from offshore wind generators is expensive – about £10 billion for connection of the 25 GW of offshore wind planned for 2020, according to National Grid. The UK government currently says this is the most cost effective option. But this is only based on capacity (MW) comparison costs and not energy costs.

If renewable energy production areas are interconnected then their ‘excess’ capacity can be sold and the asset utilisation can be increased from 40% (the capacity factor of an individual offshore wind farm) to up to 100%. Interconnection allows the unused capacity to be used for export and import and firming of the renewable resource. This reduces the cost to the consumer by increasing the revenue to the Transmission Operator.

As a priority, then, the next Government must, through an ENSG 2 process, determine a policy that will enable the UK to exploit fully its marine renewable energy potential, and ensure that the connections to our first deepwater offshore windfarms are compatible with later interconnection.

### **Case study – NorNed**

NorNed is a 360 mile long subsea power cable between Norway and the Netherlands, which interconnects both countries’ electricity grids. It is the longest submarine power cable in the world, and is a joint project between the Norwegian Transmission System Operator Statnett and its Dutch counterpart TenneT. Dutch power plants operate at a limited load during the night, because little electricity is used in the Netherlands during those hours.

NorNed enables power plants in the Netherlands to make better use of their production capacity at night by exporting their electricity to Norway. At night, Norway is self supporting in its electricity production. However, it prefers importing the cheaper electricity produced by the Netherlands. This also allows Norway to save the water in its hydro reservoirs (which are not inexhaustible) for use during the day, so that it can in turn supply electricity to the Netherlands during its expensive daytime peak hours.

Electricity is traded across the interconnection linking the Nordic and Dutch day ahead markets. Commercial operation started on 5 May 2008 with a capacity

auction. The first commercial power transfer took place the next day.

After only two months of operation, the cable had generated revenues of approximately €50 million, enabling the promoters to recover over 10% of the total costs of the cable. In the business case drawn up for NorNed, annual revenues were estimated at €64 million. In addition, electricity prices in the Netherlands have fallen as supply has increased relative to the demand for energy.

NorNed presents a clear strategic choice for the next UK government. Does it opt for the more expensive, but traditional and incremental, model of “point to point” grid enhancement, or does it enable the building of a proper trading grid that will allow the UK to fully utilise its marine energy reserves? That decision will need to be made within the first year of the new government. It is one of a series of choices that could transform our energy sector.

### **Conclusion**

One of the greatest public policy challenges for the next UK government will be to ensure that the country’s power sector is decarbonised in a manner that does not jeopardise security of supply. The UK enjoys significant levels of marine renewable resources which, if fully harnessed, will provide the bulk of the new sources of power that will meet this challenge.

The tragedy of Britain’s last North Sea energy revolution was that we failed to maximise the long-term value of our oil and gas reserves. The difference now is that we enjoy first mover advantage with marine renewables, and that that advantage will be permanent. Once we have developed the resource the value will stay with us, as will the skills and the industrial base.

If we delay, others will exploit our resource for us, and then charge us for the privilege of using it.

To fully utilise this resource the next Government will need immediately to create a strategic function within DECC that can bring together Ofgem, the IPC, and regional agencies to work with the market to deliver the UK’s low carbon future. It must also engage the public more directly in this process through a series of individual Low Carbon investment options. The public will gain collectively from the returns to the Exchequer delivered by the UK’s energy revolution, but the opportunity also exists to create a new national network of small investors in this enterprise, akin to the privatisation process of the 1980s.

We have to abandon our incremental approach to delivery of new energy infrastructure, and replace it with a transformational undertaking that encourages all forms of low carbon generation from local waste to heat schemes to Supergrid: we will need them all.

Supergrid is a transformational undertaking: one that will ensure that we maximise our offshore renewable resources, in a manner similar to the oil and gas pipeline network that grew out of the North Sea from the 1970s. The development of Supergrid will take place alongside the development of the UK’s new offshore renewable industries, and will deliver jobs, investment, and competition – and

ultimately, low priced, sustainable and secure electricity for UK consumers. Supergrid will help protect UK consumers from the impact of inexorably rising fossil fuel prices, and in turn help deliver a low carbon economy driven by the sustainable production of electricity.

The task for the Conservative party is not just to embrace Supergrid as a key part of its energy strategy, but to launch a new energy revolution in the UK that will empower the consumer, decarbonise the country's power sector, and deliver significant and long-term benefits to the British economy.

The future must, indeed, be different to the past.

*With thanks to Bryony Worthington, Joe Corbett, Matthew Spencer, Nick Medic and Robert Longden for their advice and assistance in the preparation of this essay.*

### **References:**

- i. *Helm and ors – Delivering a 21st century infrastructure for Britain – Policy Exchange 2009*
- ii. Report by Greenpeace UK 2009:  
<http://www.lgcplus.com/news/environment/tories-criticised-over-wind-farm-refusals/5004448.article>
- iii. *Top CEOs launch electrification coalition 2009:*  
<http://www.electrificationcoalition.org/news-launch.php>

# Environment: the Conservative Heartland

## Rt Hon John Gummer MP

This is the most exhilarating moment to be alive. Not since the Renaissance has there been so dramatic a change in the way human beings look at each other and at the world at large. At its heart is the rediscovery on a global scale of our dependence on the planet and therefore of our interdependence as human beings. Many smaller and more primitive societies have understood this about their local environment and the tribe of which they are part. Their religions and communal practices reflect that recognition. For Western man those connections are long in the past. Indeed, the story of the last three centuries is of the progressive weakening of our direct connections with the soil, our increasing denial of communality, and our growing determination to insist on individual rights and lifestyles.

That distancing was once a choice open only to the rich. Back in the XVII Century, Louis XIV discerned that. It was his specific intention to reduce the power of his territorial aristocracy by keeping them at Court and encouraging the grandiose playhouses on the Loire. In this way he cut their links with the rest of society and made them less of a political threat. His was only the most cynical example of exploiting what has since proved an ineluctable process. Wealth and opportunity divides its possessors from those who have neither and insulates them from the daily struggle to produce food and keep a roof over the head. What was once restricted to a small minority in the past has now been extended to the majority of the population. In Sir Keith Joseph's ugly but telling phrase-'we have embourgeoisified the people'. The affluence of the West has made choice a reality for almost everyone in rich countries. Global communications have ensured that it has also become the aspiration of people worldwide. That ever-widening choice which increasingly distances from fundamental realities also draws closer in recognition and comprehension those who have it and divides them ever more firmly from those who don't. So, the Indian middle classes have increasingly more in common with those in Northern Europe, whom they now outnumber, than they do with their own landless peasants. In choice of clothes and food and leisure pursuits there is a growing alignment. From Evian to fast food, the expansion of choice puts ever increasing pressure on our resources. Sheer numbers mean that the democracy of choice makes it unsustainable.

We are consuming as if we had one and a half planets and expanding choice at a rate that will demand four. Our concern about climate change can therefore be seen as the crystallisation of a growing understanding that the human race is not sustainable in the way we live now. Globalisation assumes that the poorest will aspire to the modes and manners of the rich. Just as the opening of McDonald's in Moscow was the symbol of freedom and choice in Russia and the ability to buy a Coke marks the

move away from subsistence in Africa, so Western life styles and temperate food are a statement of middle class status in the developing world as a whole. We, in the rich nations, have created an unsustainable way of life which we are now busy selling to anyone who is rich enough to make it worth our while.

The market is enormous. China is becoming a major purchaser of the dairy products, wine, and temperate foods which it never consumed before. Everywhere, when growing wealth offers people the chance to choose, they tend to go for precisely the diet and the consumer goods which we, in the rich countries, have made the symbols of wealth and success. Material expectation has been universalised. It's not just that people are same the world over – because they're not. It's much more that we have found a way of globalising the symbols of success. These are the things that show that we have choice and that we are exercising it. It's the Fendi bag and the Mont Blanc pen at one level and Subway, Coke, and the I-pod at another. Thus, what is already unsustainable even if limited to today's fortunate few becomes totally destructive when adopted by an ever wider constituency.

The mechanism seems unstoppable, driving always towards the unsustainable. We take its effects as given, unquestioned and therefore inevitable. And it is all pervading. We have given to choice a status that makes it an unquestioned good, even if it challenges the ability of our society to survive. A simple analysis of the UK housing crisis will serve as an example. It is statistically true that we have to build five million new homes over the next twenty years, if we are to meet the demand. The only argument is where and at whose cost. We debate green field and brown field; social and open market. We talk of the planning system, the mortgage famine, and the bank of mum and dad. We never ask if the demand itself is reasonable. Yet, it is not a function of population increase. It is not driven primarily by immigration and the birth rate. It is overwhelmingly the result of our chosen lifestyle.

We run our lives without any consideration of sustainability. From youth, through marriage, into old age we live without heed. University students generally leave home, never to return. They follow the curious British pattern of enrolling in a college as far from their own locality as possible. The flats that they share remove an important source of housing from the general market. Where, in the past, they would live with their parents until marriage, they strike out on their own much earlier and boost the housing demand further. At the other end of the scale, increased life-expectancy and better domiciliary care mean more people living in their own homes longer. These are often properties intended to house a family and are now significantly under-occupied.

The western adoption of the nuclear family as a norm means that it is socially acceptable to slough off grandparents and children. We sometimes count the cost in terms of social cohesion but rarely consider the material impact and the sustainability of this way of living. Even more important is the material effect of marriage break-up. It is estimated that 58% of the homes that we need are necessary because of divorce. We are prone to bemoan the social and emotional effects of the instability of marriage. We talk often of the damage done to the children and to their security and development. We rarely talk of the effect on the planet, of the depletion of our resources, or the mounting cost to our environment. Yet, when two people break up

and both demand a home sufficiently large to house the family – that cost is all too real. However, we dare not confront a lifestyle that is now seen as a right. The argument is simply out of bounds.

Now, it is no part my purpose here to provide solutions to these issues. I raise them simply to illustrate how fundamentally unsettling is the concept of sustainability. We are not concerned simply with reducing emissions, producing more with less, or minimising our carbon footprint – vital as all that certainly is. We are actually having to confront the fact that our way of life – even as it affects our most intimate personal relationships – cannot survive if the human race is to survive. If we continue to live unsustainably ourselves and go on converting others to live in the same way, we will be the engines of our own destruction.

For ours is a missionary enterprise. Our interpretation of capitalism demands that we expand the market. Yet the market model that globalisation has extended throughout the world, is fundamentally flawed. At its heart is the price mechanism but the prices charged do not reflect anything like the real cost of the goods and services supplied. Bankruptcy is the inevitable result. However, by divorcing the direct cost to the individual supplier from the general cost of his enterprise to the planet, we have hidden our corporate insolvency. That is the effect of distancing choice from its real effect. When the rich chose out of season vegetables, they could count the cost in gardeners and hothouses. When it's Wal-Mart's supply chain that delivers Christmas strawberries or winter beans, there is no such direct connection. As it is delivered at a price that includes little of the planet's carrying cost, even the bill comes as no reflection of the effect of such a choice. The rich man in his castle may have had the chance to choose a lifestyle very different from the poor man at his gate but he did have some understanding of the material cost involved although, even then, the social cost would probably have eluded him. Today, vast numbers of the relatively rich make choices with no understanding of the price they are exacting because the price they pay bears no relation to reality.

Climate change is therefore only the most frightening example of the unsustainable nature of our system. Even if Nigel Lawson and his ilk were right and the world's scientists wrong, we would still face a global crisis of historic proportions. We have never consumed so much, so wastefully. Nor have we ever before built a system which depends upon the expansion of that wasteful consumption so completely. Even if Climate change were a Marxist myth planted by anti-capitalist campaigners aided and abetted by funding seeking scientists, we would still have to take measures dramatically to reduce the world's dependency on finite resources. We would in truth need to take precisely those actions which we hope will come out of Copenhagen in order to address climate change.

That's because, we are living beyond our means and the pressures of population growth and increasing wealth are pushing us ever closer to disaster. Global warming exacerbates the situation and shortens the timescale but the necessity for action exists quite independently. The world is therefore not engaged on a simple exercise in accounting through which the rich restrict their emissions in order to leave room for the poor to increase theirs. Instead we are recognising the simple truth that humanity is going bust and its lifestyle is no longer sustainable.

That's why the superficial attraction of the fashionable idea of 'contraction and convergence' is misleading. It would be possible, although difficult, through energy efficiency, alternative fuels, and draconian regulation, to lessen our emissions dramatically. That wouldn't address the world's more general resource deficiency. It wouldn't begin to respond to the crisis in world food supply. It wouldn't put the market right. We would go on paying less than cost for our goods and services until bankruptcy overwhelms us all.

So, does that mean that we should reach for our revolvers? Is the future shock simply too much for the system? Should we accept the pessimism of a Lovelock or the invincible ignorance of a Helmer? The fear that we can't win this epic battle produces both high minded stoics and low minded populists. The first, when they see no hope of success, advise appeasement; the second prefer not to know and take refuge in tobacco science in order to wish it all away. We should eschew both. Churchill in 1940 would have answered Lovelock and the meanest intelligence can answer Helmer today. If we set our hand to it, we can defeat defeatism but we have to recognise the dangers and not let our prejudices cocoon us from the facts of life.

We have, first of all, to remember the immensity of the task. That recognition could overwhelm us but it is a necessary risk. Too often the great environmental issues are separated as enthusiasts rush off after the things that most excite them. Pulling the threads together is essential and increasingly possible. There was a time in which the development agencies were suspicious of the environmentalists simply because they were taken up by the immediacy of famine and disease, poverty and injustice. They had begun as aid agencies coming to relieve not to change. As they developed an understanding that there were fundamental issues of justice that needed to be tackled, so they began to understand that the environmentalists were not on some other side. Instead the development agencies became some of the most urgent advocates of the dangers of climate change and environmental degradation. They saw just how vulnerable poor nations like Bangladesh were to the one and how threatening to food supplies was the other.

That linking of poverty, environment, and social justice is crucial to the understanding of our global predicament. Not only does our Western lifestyle take more from the planet than it can bear, it takes it disproportionately and, increasingly, to the detriment of the poor. It isn't simply a matter of injustice but of deprivation. Fish will serve as an example. The rich countries have used radar and GPS to deplete some of the most valuable fishing grounds in the seas. No-one in my childhood would have imagined that the Canadian Grand Banks could ever be exhausted – so rich was their harvest. Today, they are barren. Environmentalists deplore the loss of species; development experts denounce the effect on the poor. The rich have not restricted their fish eating because they have depleted their resources. They have simply looked elsewhere for new areas to exploit. Financial, technical, and political muscle enable them to take fish literally from the mouths of the poor. The 40% of the world's population who are dependent upon fish for protein are increasingly starved as 'their' fish goes to the markets of the developed world. It's not simply that we consume more than our share, we take it from those who have very little. It is Naboth's vineyard on a universal scale.

The fact that fish resources are reducing when fish consumption among the rich is increasing tells a terrible tale. Part of the problem is our obsession with health and our concern about obesity. We are fat because we eat too much and exercise too little. Both damage the environment. Our excessive demand for food contributes to the hunger of others and our dependence upon the motor car increases climate change which hits the poorest hardest. Our solution is not to walk more and eat less. Instead, it is to improve the balance of our diet by taking even more from the poor. At every turn our actions illustrate the interdependence of environment, development, and social justice.

Look at it from the point of view of our own nations. If Copenhagen is to mean anything it must lead to seriously tough actions to reduce emissions. Yet, such actions will simply not be politically possible if the burdens they impose bear disproportionately upon the less well off in our developed society. No matter that they are very much richer than the poor in the South, those who cannot afford to heat their homes now, will not accept a regime that uses an undifferentiated price mechanism to reduce the consumption of energy. Fuel poverty has to be addressed at the same time as we drive energy efficiency. The 'warm homes scheme' is as much part of the battle against climate change as the fuel price escalator. So too, universal water metering is an essential component of any UK programme to stem global warming but it cannot be introduced without mechanisms like rising block tariffs which protect the essential needs of the poorest families.

That judgement which we have come to accept in Europe is being played out on the world stage. At its simplest, poor nations will not join in the battle against climate change unless the rich nations acknowledge the fact that they have grown rich on the very pollution that now threatens the planet. Why should China or India put their hand to this enterprise if it is merely a means of perpetuating social injustice internationally? The gap between the developed and developing world is wide and seemingly unbridgeable. The rich warn of impending global disaster and explain that it needs a global solution. The poor accept the science and understand that they are among the most vulnerable but see the solution as entirely in the hands of those who caused the problem. It is we who have exhausted the carrying capacity of the planet. It is we who have grabbed a disproportionate amount of the world's resources, and it is we who continue to meet our own demands at the expense of the poor. As one Indian put it 'today's global warming was caused by your industrial revolution, so Britain has a particular responsibility to pay for the clean up.'

It is a forceful argument and that recognition must play a part in finding a global solution to our problems. However, we are where we are, and today's scene is much more complex than is portrayed. Fast rising emissions in India and China and throughout the developing world are quoted, particularly by Americans, as crucial to the debate. So great is the increase that it would seem that whatever we do to curb emissions in the West will be counteracted by rising CO<sub>2</sub> in these fast growing economies. No wonder the US Senate has tied its willingness to support climate change measures to reciprocation in the developing world. It all seems like a stand-off while we all spiral to disaster.

The challenge has to be unpicked. First, we have to recognise that those increasing

emissions very often result from the manufacture of goods which are largely sold in the rich countries. So whose emissions are they? Second, the fact that there are now many rich people in poor countries means that they are now part of the historic problem. They have adopted the unsustainable lifestyle that threatens the planet and they will have therefore to be part of the solution. They can't hide under the coat-tails of their poor compatriots. Third, when we have exported our manufacturing to developing nations we have to take responsibility for reducing our domestic emissions to take that into account. In fact we have done the opposite. In the US in a decade of unprecedented exportation of manufacturing jobs, the rise in emissions at home has continued unabated. Fourth, our interdependence demands that we have to provide the poor with the means to grow without exponential increase in emissions. We have to use the technological fruits of our exploitation of the world's resources to a plot a way through so that, by doing ever more with less, we can pursue social justice and development together.

However, overriding all this, is the need to recognise that our lifestyles are unsustainable. We have therefore to address the pricing mechanism if we are to begin to evolve in a way which guarantees our own future and that of succeeding generations. It can't all be done at once but it has to be a progressive and determined progress. Saying we can't do it all at once must not be an excuse for doing nothing at all that is difficult. In that spirit I end by proposing themes that should be adopted forthwith.

First, energy detensification; Smart meters and smart grids, ever tougher rules for appliance efficiency; variable sales taxes to advantage low energy use and penalise the guzzler. The point is that we need a whole panoply of measures and we need them now. We should be doing much on our own and more within the EU. Experience shows that we are much more likely to get others to follow if we start ourselves. 'After you, Claude', is no longer acceptable.

The same intensity of action is needed immediately in other areas. If the first is energy detensification, the second is food reform. We must eradicate food waste; pay the proper price for long and environmentally expensive supply chains; learn again to cook at home; label and price fish and meat properly; increase research into lower carbon husbandry, energy efficient arable production, and reduced water usage. The third is housing. No building on green fields; a real campaign to release brown field sites; reinforcement and clarification of zero carbon eco standards; compulsory energy improvements before every house sale; zero-carbon commercial buildings to be compulsory by 2016 – the same date as for housing. The fourth is transport. Effective taxation to deliver a proper price for unnecessary short-haul flights to Manchester, Paris, Brussels and the like. Money diverted into high speed rail. Reformulation of present air passenger taxes to drive efficiency and hypothecation to high speed rail. Cancellation of airport expansion and funds to be diverted to high speed rail. Reformulation of car taxes to drive fuel efficiency, encourage alternative fuels, and accelerate the switch to electric vehicles.

All this is but a start on the journey and is by no means exhaustive. I list these actions because we need to show that the time for talk is over, that everything we do will now be driven by the appreciation that we are living unsustainably. We need to show

our determination to lead the world to do better. It is a noble aim that, if pursued with vigour and consistency, will put Britain at the heart of a new green industrial revolution. For too long Britain has stood on the side-lines and allowed others to take the strain and reap the rewards. It is not too late to seize the initiative and recover our reputation for leadership and commercial acumen. This nation of shopkeepers could sell the products and services that will develop the sustainable lifestyles that the world needs to survive. We can be as high minded as we like about the analysis of the problem but its solution will depend on the tough and practical implementation of a host of market-based measures. Those measures must be fashioned within very clear parameters laid down by the Government and the EU and forming the basis of negotiation between the world's largest trading entity and the other nations of the earth. If Europe doesn't do it, no-one else will and if Britain doesn't lead Europe in this great enterprise we shall have missed our vocation and the opportunity of several lifetimes.

# Understanding the Food Chain: Farming, Supermarkets & the Environment

## Wilfred Emmanuel-Jones

In September 2009 Duchy Originals, the organic food brand, sold its business to Waitrose. A positive spin was put on this suggesting that it was a good thing for Duchy and Waitrose, but, if the truth be known Duchy had seen its sales decline quite steeply and the recession rang the final death knell for everything the brand stood for. For a decade this brand, with the help of Prince Charles, has been championing the organic cause. But as soon as the recession hit, consumers abandoned the category in their droves. I am sorry to say that this behaviour came as no surprise to me. While consumers like the idea of buying organic when times are good, when money is rather less plentiful it has proved to be only an aspirational lifestyle choice with no personal commitment to what organic production represents on any level – be that the environment or wellbeing. Recent figures suggest that sales of organic food are falling by over 30%.

As I write this many farmers are abandoning organic farming as they cannot achieve prices to cover their costs. This coupled with the fact that some recently published reports claim that organic produce is no better for your health than their regular counterparts, has added to its woes. With the decline of organic farming where does it leave the debate on sustainable farming methods and supporting the environment?

Throughout the decades there have been major advances in making farming more efficient, which has contributed to making our food much cheaper to produce. These efficiencies have usually resulted in making farming more intensive and with this its focus has shifted to paring down variety – be that fruit, vegetables, grain or cattle. When you travel up and down the country you will see a landscape covered with animals that are not indigenous to this country, they are continental breeds of livestock, which are proven to be more efficient to rear and provide more meat for the same investment so that the meat can be sold on more cheaply. The consequence is that many of our traditional breeds like the North Devons, or Ruby Reds (my particular favourite) are rare. Another example is apples. Despite having hundreds of different varieties of apple in this country you will be lucky to find more than five varieties in our supermarkets and those are unlikely to be native to this country.

Farming efficiencies only work when food becomes commoditised. The food industry has done a remarkable job in decimating variety. As far as the consumer is concerned a beefsteak is a steak no matter whether it was reared in the UK or flown in from half way round the world. All that matters to the consumer is the price. The same applies to our fruit and vegetables. If the consumer can't taste the difference, then price is all that matters. This then is the organic movement's Achilles heel.

This being said, something has to be done about how we produce food because our planet is in peril. It is now generally accepted that we need to revise how we do things.

According to the pressure group Sustain:

*"Our food system is a very significant contributor to greenhouse gas emissions.*

*"According to latest figures from the United Nations, animal farming globally causes more greenhouse gas emissions than all of the cars, lorries and planes in the world put together, and the impact is increasing. This is partly due to methane gas from the digestive systems of ruminants (cows and sheep burping).*

*"The United Nations Food and Agriculture Organisation has calculated that, globally, agriculture generates 30% of total man-made emissions of greenhouse gases.*

*"In the EU, over 30% of the greenhouse gases from consumer purchases come from the food and drink sector"*

These rather dramatic headlines are enough to stop the consumer ever eating meat again. There are suggestions from some quarters that the best way to solve this problem is if we all become vegetarians. As a meat lover I can't see that ever happening. It might be worth someone doing the calculations: if human beings only ate vegetables, what would the methane count be then?! In all seriousness, we need to look at how we could stop animals omitting so much methane into the environment. Science has already seized the challenge and is looking at how we can improve animal feeds. There is already a British company that is receiving much attention for coming up with a garlic feed for cattle that is reputed to cut down methane omissions by some 25%. Fascinating stuff because I always thought that garlic had the reverse effect.

The organic movement however has seized on the climate change emergency as an opportunity to push their claim that organic production methods are better for the environment. Again, according to Sustain:

*"Organic production methods are usually less energy-intensive than industrial agriculture. They do not use artificial fertilizer, which takes an enormous amount of energy and water to produce and results in emissions of the powerful greenhouse gas nitrous oxide."*

I don't however believe that the Holy Grail lies in organic production. The rather romantic notion that by going back to a golden era of farming and food production and by eating less meat we will save the planet is pie in the sky.

## **Waste**

The most immediate contribution we can make to help slow climate change is to address the unacceptable amount of waste there is in the food chain. Farmers have to throw away produce because it does not conform to the cosmetic specification issued by the supermarkets. 'Sell by' and 'Best Before' dates have meant that the consumer no longer has confidence in its own judgment as to when food is no longer good, resulting in vast amounts of perfectly edible food being wasted. Add this to the unstoppable trend of 'Buy One Get One Free'; 50% extra free etc (all of which need to be addressed by the supermarkets) and you can see how the problem of waste is exacerbated.

In general terms, this recession could be quite favourable for UK farmers. The declining pound should be good for home grown produce and one gets the sense that our farmers are now, after years of seeing their industry in decline, reaping some benefit. But this is all very short term. In the long term how is this going to help the environment? Our reliance on cheap food means that we are slaves to the supermarkets' business model, which is high volume, low margins and to achieve these they have had to centralise their business.

For example, even though cattle are reared in, say, Cornwall, they are transported hundreds of miles away to be slaughtered, then somewhere else to be prepared, before even getting into the supermarket distribution system. Milk produced in the UK is transported to France to make Camembert and then brought back to the UK to be sold; some British shellfish is shipped halfway round the world to be prepared (as this labour intensive work is cheaper elsewhere) before coming back to the UK for packing and distribution. The story is the same for many products.

## **Local**

What we need to do is focus on localization, regionalization and specialization. At the moment supermarkets are the gatekeepers to the consumer and we need to get to a position where our farmers are getting involved with that relationship. While many independent shops are failing, there is a healthy growth of farm shops and without a doubt traditional, skilled butchers shops are still doing well. Any practitioner of skill tends to do well with their interaction with the consumer.

If we are serious about doing something to slow climate change, we need to look at a number of issues: seasonality; wastage; transport; supermarkets; local and regional sourcing.

## **Transportation**

Transportation is another major issue. At any one time it is estimated that 50% of the lorries driving on the road are empty. You don't need to be a scientist to work out what an unnecessary waste of energy this is and what damage it is doing to the environment. Should we be advocating a national transportation system where different companies book slots to cut out wastage? Such a system would also assist those smaller producers who simply can't compete because the logistics of arranging appropriate distribution are just too onerous.

For decades we have been used to developing countries being our greenhouse. They grow the type of fruit and vegetables we want, even though they won't eat the produce they grow on our behalf. Is it acceptable that airplanes are flying food to our country and on the return journey they are filled with food aid to those very countries?

And of all this food we say we want and need, over 10% of what is bought is not eaten – with a staggering 25% of fruit and vegetables wasted.

### **Supermarkets**

All of this brings me round, of course, to the supermarkets. Now it would be wholly wrong of me to lay the full responsibility of all our environmental problems at their door, as they do have a very real role to play and regardless of anything else have ownership of convenience as is evidenced by their quite extraordinary annual profits. That said I do believe they could do a huge amount more to support British farming and through that to help bridge the gap in understanding between food and farming.

Supermarkets need to get serious about local and regionalization. At the moment they play at it rather than make a real commitment. One aspect of the supermarkets ability to control their costs is by having as few suppliers as possible. This in itself causes problems when it comes to supporting small local suppliers. Why buy one line of cheese from one small producer, when they can buy ten lines from another? By supermarkets not having the infrastructure to support small suppliers in this way, it means that these small suppliers have very few outlets available to them who can give them the volume they need to create a viable business. Instead the supermarkets offer produce at prices that local independent producers and independent shops cannot compete with. This has an adverse effect on our towns as more and more independents disappear and with them their small suppliers. I have always advocated that as part of any new supermarket's planning consent 30% of its fresh produce should be sourced locally. This in itself would support local farmers, producers and significantly shift attitudes towards valuing locally produced food.

Past Governments have refused to tackle the power of the supermarkets and I believe that there are a couple of things that will help to redress the balance. One is to ban supermarkets from selling petrol. Is it acceptable in today's society that supermarkets are allowed to sell petrol at below cost price meaning that independent suppliers find it difficult to compete and we are creating petrol deserts in this country? And somehow it is morally wrong to sell petrol of all things below cost. The other is to ban supermarkets selling alcohol. Only smaller independent outlets should be allowed to sell these products. The abuse of alcohol is fast becoming a scourge in our society. If alcohol continues to be sold in supermarkets it will not engender personal responsibility and selling it at below cost is not going to encourage sensible drinking. I would also be in favour of imposing a car parking charge for all out of town retailers similar to that you would be expected to pay in order to shop in the local town centre. The money collected would then go to help support the local town.

It would be grossly unfair to only discuss the supermarkets when it comes to local and regional supply. Over the last decade food producers and supermarkets have,

quite rightly, been forced to provide accurate information for consumers about ingredients and traceability. The same cannot be said for the enormous sector of the food community that comes under the 'Food Service' banner.

### **Food Service**

Food Service has kept its head down. No labelling, no ingredients declarations, no information on provenance. How, when an ever-increasing proportion of our food consumption is taken out of the home, has this been allowed to happen? Motorway services, NHS, your kids schools, hotels, corporate entertaining – we don't know what's in the food we are served or where it comes from.

The culprit as we all know is mass catering on a miniscule budget. Quality inevitably falls by the wayside and standards that consumers will no longer accept in the retail market are rife.

As a case in point, I recently went to talk to this year's Young City Farmers who were extolling all they had learned about food agriculture. But it was lunch that was the tragedy. The very animals that the Agricultural College rears and vegetables they grow the students aren't able to eat, as the catering budget is too small to afford their own produce. Instead they are forced to buy imported meat as it is cheaper. What does this teach the students? That in an ideal world this is how it should be done, but we can't afford to do that, so here's your 3p sausage? Is it little wonder that attempts to communicate good nutrition in this country is foundering?

We have come a long way in this country in changing our attitude towards food and the consumer is demonstrably demanding more from food producers and the supermarkets, but when it comes to eating out of the home very little has changed. We need clear labelling and we need to support British farming. The farming industry is under massive pressure and if food service did more in terms of using British produce it would throw a much needed and deserved lifeline and, if we get it right, push up the investment in and quality of food eaten out of the home.

Everybody needs to re-look at their business models, whether that is retail or food service. Food service in my view commits the greatest sin, with so much food eaten out of the home providers and suppliers need to be challenged. We should not still be in a position where most of the chicken in the sandwiches we buy is flown in from Thailand.

We do need to have more people in Government who understand the whole food chain and we need it fast. There is no-one championing local British food, if there was I believe food production would move up the agenda and the first action would be to source British produce for the House of Commons canteen.

### **Recommendations**

#### **Carbon Information Labelling**

Featuring carbon information on pack so that the consumer is aware of the cost to the environment of each of the products they have purchased. I would like to see a system where a product is not only measured for value for money, but also value to the environment.

### **Product offers**

Offers encouraging consumers to buy more than they need at any given time should be frowned upon. Value added should be deferred to future purchases, rewarding consumers for buying what they need when they need it.

### **Fridges**

I would like to see a return to smaller fridges. This would encourage supermarkets to sell things in smaller sizes and consumers to buy less, thus cutting down on wastage.

### **Food Service**

This sector of the food chain should come under scrutiny with an aim to give this industry a share of responsibility for delivering better quality locally sourced ingredients.

# Small is Beautiful: a Green Population Policy for the UK

## Rosamund McDougall

Small is still beautiful, and the future of large is looking uglier by the day. Floating through space on our fragile sphere, held in a green gossamer web of life, our vast population multiplies and tears its life-support system under the weight of human flesh. All ecosystems destroyed, Earth may spin on while billions of humans fight over dwindling natural resources...

Yet there is no concerted effort to stabilise and reduce our numbers, either globally or in the UK. Earth's ecological filigree already supports the weight of 6.8 billion people, of whom more than 61 million are packed densely into the United Kingdom, and no nation can support perpetual multiplication of the species that so damages our collective environment. Even in our advanced democracy, paralysis continues to grip population policy. How much easier it is to leave this contentious issue alone: "Nothing to do with me, guv," is still the passive attitude of many in power. The contrast with action on climate change is stark.

With months to go to a general election, political parties in the UK have yet to make their green policies clear – especially on achieving a population size that will be environmentally sustainable in the long term. It seems essential to us, at the politically independent Optimum Population Trust, a green think tank, that by then voters will know where parties stand.

### Majority public backing

The voting public is in little doubt about the need to stabilise and reduce our numbers to reduce environmental impacts, after more than a decade of growth in which cityfuls of energy consumers and climate changers have been added to the UK every year. Official figures released by the ONS in August showed population reaching 61.4 million in mid-2008, up a staggering 408,000 on the year before<sup>1</sup> and swelling at a rate of 0.7% a year: an annual increase of just 1% a year would double our population in 70 years. But the majority questioned in an OPT/YouGov poll<sup>2</sup> published in July clearly favoured a level lower than 60 million, a quarter would prefer our numbers to be somewhere between 40 and 50 million and only eight per cent favoured further growth. The party that comes up with credible stabilisation policies would surely win wide support.

Public understanding of the threats posed by climate change and food and energy shortages is far ahead of political policymaking, and individuals have no difficulty understanding what rising population density means for them: nearly half of those polled agreed that their personal quality of life would be better if their own area had

fewer people, and only five per cent favoured more. OPT maintains, on the basis of current scientific evidence, that in a global context a UK population of 61 million is already at least double its long-term environmentally sustainable level. It has outstripped by a long way our capacity to provide renewable resources and absorb our wastes, including emitting a safe and fair share of the world's greenhouse gas emissions.

A number of factors have led to this dangerous state of affairs. Above all is the deeply flawed, economics-driven, laissez-faire acceptance of perpetual population growth by successive governments, which became an active pro-growth policy a decade or so ago. Built on short-term calculations of tax receipts and dependency ratios, it has ignored all the environmental consequences of constantly rising population. Another brake on policy reform has been the silencing of environmental sustainability debate by disputes about more other aspects of demographic change.

It doesn't have to be this way. Put simply, three demographic factors cause population to rise or fall: births, deaths and migration. A policy to increase the death rate is clearly unthinkable. And because no population can grow indefinitely without leading to a crash, the perceived problems of an ageing population, although challenging, need to be dealt with in other ways. That leaves *births* and *migration* as the main components of a sustainable population strategy.

The uncomfortable truth is that for the last decade excess net inward migration has been the main driver of population growth. Although an increase in births to 791,000 in the year to mid-2008<sup>1</sup>, set against 570,000 deaths, meant that natural increase of 221,000 directly contributed more to the 408,000 increase than net inward migration of 186,000, the fact that 24% of babies born births that year in England and Wales were to mothers born overseas shows the cumulative effect of migration on the number of births.

It took until the end of 2008, when Immigration Minister Phil Woolas, a former Environment Minister, pledged not to allow our numbers to rise above 70 million, for the concept of limits to growth to be back on the political agenda. Mr Woolas was then squashed by home secretary Alan Johnson in July, who told MPs on the Home Affairs Committee "*I do not like awake worrying about a population of 70 million*"<sup>3</sup>. Mr Woolas has reasserted his 70 million cap, but without giving details about how it will be achieved. Meanwhile, population projections published by the ONS in October<sup>4</sup> show it passing 70 million in 2029 and continuing to rise to 86 million in 2083.

### **No clear party policies yet**

For the Conservatives, a report<sup>5</sup> by Shadow Immigration Minister Damien Green and David Davies MP in 2006 led the way in stating that "*It would be more rational to consider it [immigration policy] as part of a wider population policy, and that a principle should be to "consider the environmental impacts of a rising population"*". David Cameron pointed out in a speech<sup>6</sup> in 2007 that it was time for "*grown-up conversation*" and a "*coherent long-term population strategy*". Part of this strategy is implicit in the party's family policies and its pledge to set an annual cap on inward migration – but the level at which this would be set has yet to be spelled out.

Among the Liberal Democrats individual voices have raised the population/

environment issue, but it has no publicly stated policy on population size or growth. Chris Davies, LibDem MEP, is among those who have voiced concern, hosting a fringe debate for OPT at its conference in 2008 at which party members showed a clear interest in taking discussions further. A tougher line on migration has emerged in a LibDem policy briefing, but neither in this nor in the “radical new policies on the natural environment” put forward in its *Natural Heritage* policy consultation, both published in August<sup>7</sup>, is there recognition that civil liberties and environmentalism are incompatible with ever-rising numbers.

The Green Party, right and first about so many green issues, stated in a *Population Policy Pointer* of April 2008 that “a stable or slowly reducing population is also necessary to achieve a sustainable and equitable society”. Though this cites policies on family planning, sex education and women’s social and political rights which all affect family size decisions, the Greens’ migration policies conflict with its population aim: migration has directly accounted for 59% of population increase since 2001 and is officially projected to account for 45% over the next 25 years<sup>4</sup>. The Greens posit a “world order in which devastation is minimised and needs can be met without recourse to migration”, without any proposals to reduce migration flows before this state of affairs is reached. “The interests of both prospective migrants and the recipient area or community must be recognised”, the Greens concede, while stating that “we will progressively reduce UK immigration controls”<sup>8</sup>. There may be pressure within the party to clarify these policies before the election.

Lone voices in parliament from all parties have mentioned the need to stabilise or decrease population numbers, but moving towards a smaller and more sustainable population is not yet a core strand in political policymaking. Traditional predict-and-provide attitudes have yet to be overcome, and population sustainability to be incorporated into a new green economics that measures individual quality of life to the full. A start would be to focus on per capita indicators of quality of life, including environmental costs and benefits, rather than total GDP growth.

Lower population levels could be achieved – simply, peacefully and without coercion on family size – by encouraging voluntary decisions to “stop at two” children and by numerically balancing migration. Coincidentally perhaps, many of the recommendations OPT has made in the last seven years have already appeared, with variations, as government policy, but with little effect so far: the details are listed on our website at [www.optimumpopulation.org/opt.policies.html](http://www.optimumpopulation.org/opt.policies.html) And over the last two years the government has forged ahead with tough measures that might reduce the future rate of increase if properly enforced.

### **Achieving a gradual decrease**

Looking at the contribution of *births* to today’s population momentum, the total fertility rate in England and Wales (the average number of children a woman is expected to have) has climbed from a low of 1.63 in 2001 to 1.97 in 2008<sup>9</sup>, but is unlikely to exceed the ‘replacement rate’ family size of 2.1. (The recently burgeoning proportion of young people, however, will negate sub-replacement family size for some time to come, as there will be more mothers in future to have children.) The government has introduced a raft of policies on sex and reproductive health

education, aimed partly at reducing record rates of unplanned teenage pregnancies, but there's little sign that results are being achieved at local level yet. More could be done to speed up the introduction of "fix-and-forget-about" long acting reversible contraceptives (LARCS), in a Sex and Relationships educational framework that dares to cover issues of parental responsibility as well as the biological facts.

Best of all, more could be done to encourage education about the environmental impacts of having large families – perhaps a voluntary "Stop at Two" campaign like the one launched by OPT in 2006. In the OPT/YouGov poll of July 2009, twice as many of those questioned supported "stopping at two" or fewer as those who did not. Until recently green families have seen large families in terms of sharing eco-friendly nappies rather than in the long-term multiplication effect. If a couple have four children and each of their children have four children each, they soon create their own climate-changing population explosion: each extra inhabitant of the UK is likely to emit 750 tonnes of CO<sup>2</sup> over a lifetime.

Better education about these impacts could be buttressed by reformed tax and benefits policies, although for most couples these are not the main reasons for having an extra child. UK maternity leave, child benefits and tax credits designed to help poor families are rightly among the most generous in the EU, and the current tapering approach to child benefit (weighted in favour of the first child and decreasing for second and subsequent children) could be extended to other forms of financial support, given a long notice period to avoid disadvantaging large families retrospectively. Housing benefit, tax credits and social housing policy could also be gradually steered away from favouring those who choose to have large families to reward parents who show restraint, and perhaps bonuses could be added to maternity benefits for mothers whose first child is not born while still a teenager.

As far as *migration* is concerned, after years of loose legislation the government brought in its new five-tier points-based system in February 2008 to regulate inflows by setting qualifications for different categories of migrant – without changing its view that controls were necessary only to satisfy economic criteria. Efforts to reduce surplus immigration were speeded up as the economic recession took hold, and the Borders, Citizenship and Immigration Act of July 2009 has tightened entry and citizenship requirements further. In the year to December 2008 the net inflow fell to 118,000<sup>1</sup>, due to rising emigration rather than falling immigration.

A policy on emigration is difficult to contemplate: morally no-one should be put under pressure to leave their own country. So the focus surely needs to be on inward flows. In cutting migration quotas for various categories of work, reducing benefit entitlements, aligning citizenship requirements to the points-based system, and setting stricter conditions and probationary qualifying periods of up to eight years for permanent citizenship the government has, however, listened to independent experts and to the advice of the cross-party Balanced Migration group led by MPs Frank Field and Nicholas Soames. The Home Office now states that new citizenship requirements "*will help contribute to future population projections and control*".<sup>10</sup>

What is still lacking is environmental expertise on policy-making bodies such as the Migration Advisory Committee to ensure that balanced migration becomes long-

term practice: MAC may need its remit rewritten so that quotas are not agreed according to labour market criteria alone, but act with the points-based system and further closing of migration loopholes to achieve environmentally sustainable targets. This may be achievable without changes to EU law.

### Defying reality

Perpetual growth in a finite environment defies the laws of mathematics, physics and biology. And growing total GDP by mindlessly adding to population has been one of the gross failures of the old “infinity economics”. It is the summed up quality of life for many individuals that counts.

To cope with unwanted and unnecessary population growth, for example, we are being packed into new homes like sardines. In 2008, a single year, 21% of new dwellings in England were built on previously undeveloped land<sup>11</sup>, after a year in which 9% were built in high flood risk areas and 2% built in the Green Belt – continuing the unsustainable trends of previous decades. Conservative localisation policies are likely to win wide support, yet they put local communities at the mercy of demographic trends they cannot control. In its recent *Policy Green Paper 10: Building Homes and Communities*, it was pointed out that “48% of all new completed dwellings in England in 2007-08 were flats”, in spite of poll evidence<sup>12</sup> that 3% of the public would prefer to live in flats to houses.

Over the last decade our numbers have been allowed to grow in the misguided belief that perpetual growth can solve the perceived problems of an ageing population, without any recognition that young people in education are dependents too. With 2.5 million unemployed, the UK’s economic problem is not a lack of young workers but a lack of jobs. The demographic ageing effect (increasing longevity and a higher proportion of older people) that would result from a gradual decrease of, for example, 0.25% a year, can be tackled in ways that would bring enormous benefits to those already excluded from the labour force. State pension age is being deferred to alleviate pension liabilities, but a green population policy will need imaginative rethinking of lifetime education and training and flexible, inclusive employment policies.

### The mistakes of the past

What went wrong with UK population policy? Thirty-six years have passed since the government-appointed Population Panel<sup>13</sup> put its findings to Parliament in March 1973. “Sooner or later, Britain must face the fact that its population cannot go on increasing indefinitely,” it concluded. “We have found no overwhelming arguments in favour of continuing population growth... Britain would do better in future with a stationary rather than an increasing population... If the Government accepts our conclusion that the time has come for it to adopt an attitude on a population policy for this country then population affairs must become a Ministerial responsibility.”

But an attempt to appoint a population expert to the Central Policy Review Staff was turned down by prime minister Edward Heath and the Panel’s report kicked into the long grass when Labour defeated the Conservatives a year later. UK population, then 54 million, swelled to reach 61.4 million last year, and is now projected by the ONS to reach a staggering 85 million by 2080<sup>4</sup>.

As the new millennium opened, high net inward migration had begun to replace natural increase as the engine of UK population growth. Any meaningful debate about population levels or policy was still suppressed by ignorance – by the supremacy of “cornucopian economics”, with its belief that all problems, including resource depletion, can be solved by technology and free markets – and by those who have obsessively and wrongly turned issues about environmental sustainable population into a shouting match about religion and race. The silencing of rational debate has not been helpful.

### **Signs of change**

Government and opposition parties are, however, less sanguine about population growth than they were at the turn of the century, and more conscious of its devastatingly un-green consequences. Media and political policy formers are better informed, and newly independent Office for National Statistics is free to ensure the accuracy of demographic facts. Speaking to the All-Party Parliamentary Groups on Peak Oil and Climate Change about impacts of population growth on peak oil and climate change this year – and other political audiences over the last seven years – I have found audiences becoming more receptive.

With a green population policy the future could be brighter and more secure. Imagine instead the benefits of gradually decreasing population to perhaps half its present size. In February 2009 OPT published research<sup>14</sup> showing that “stop at two” family size and balanced or “zero net” migration might reduce expected population growth to 77 million in 2050 by 21-23 million, some 6 million people fewer than today. In doing so, it could release for “re-greening” an area larger than Wales, freeing up land for the food and energy resources we will need to produce for ourselves in a post-fossil fuel age. With a gradually decreasing population, there could be less pressure on housing, less climate change and a better quality of life for all.

### **An end to denial**

OPT’s case, backed by a mass of scientific evidence, is that the human race has outgrown the Earth’s capacity to provide, and that we must reverse this growth to survive into the future with an acceptable quality of life. According to footprinting analyses – broad indicators of ecological sustainability – the world is already overshooting its capacity to regenerate by more than 30%<sup>15</sup> – and if every country consumed as voraciously as the crowded UK, the world would need at least another 2.5 planets to provide enough natural resources and absorb all our emissions and wastes.

While healthy land worldwide is being degraded, the number of human climate changers and resource depleters grows by 1.5 million every week. With food costs rising and more than a billion people already going hungry, densely populated states have resorted to buying up arable land in developing countries to secure future supplies. But developing countries have populations of their own to feed, and in some the number of mouths to feed is doubling every two or three decades. Given these colliding trends, anything the UK can do to help enable worldwide access to family planning, with better education and rights for women must be welcome.

In international policy terms, the UK has given more generously to international and local family planning programmes in the poorest regions, and since President Obama came to power in the USA the Bush “global gag” on family planning aid, driven by opposition to abortion, has been lifted. Our government should also push for population policies to be included in the climate change agenda to be agreed at Copenhagen in December, as OPT is doing, and though the UK cannot dictate population policies to other countries it could put its own house in order without delay.

The Optimum Population Trust is not alone in hoping that the next general election will prove a turning point in UK population policy.

*The Optimum Population Trust is the leading environmental charity and think tank in the UK concerned with the impact of population growth on the environment. Its research covers population in relation to climate change and energy and it campaigns for stabilisation and gradual population decrease globally and in the UK. OPT is a registered charity and is financed by its members. Its patrons include Sir David Attenborough OM CH CVO CBE. It is not affiliated to any political party or business interest.*

## REFERENCES

1. ONS figures released 27 August 2009
2. OPT YouGov Poll published 11 July 2009, see [www.optimumpopulation.org](http://www.optimumpopulation.org)
3. Alan Johnson to Home Affairs Committee, 14 July 09
4. *Principal 2008-based population projection*, ONS, 21 October 2009.
5. *Controlling economic migration*, by David Davis and Damian Green, 2006.
6. *The challenges of a growing population*, David Cameron, 26 October 2007.
7. See [www.libdems.org.uk](http://www.libdems.org.uk)
8. *Statement of Migration Policies*, Spring 2009, Green Party Manifesto for a Sustainable Society.
9. *Live births: fertility highest for 35 years*, ONS release 27 August 2009.
10. *Government's new bill shakes up the route to citizenship*, Home Office UK Border Agency, 15 January 2009.
11. *Land Use Change Statistics (England 2008)*, DCLA July 2009.
12. Mori Poll for CABE
13. Cmnd 5258
14. *Stopping at Two: The green gains from smaller families*, OPT 16 February 2009.
15. *Living Planet Report 2008*, WWF & GFN.

# Making Green Conservatism a Mass Movement

**David Skelton**

Environmentalism is a middle class article of faith. To great swathes of the political intelligentsia, environmentalism has taken the role of a secular religion. In too many cases, great swathes of people outside of the cosmopolitan middle classes have not been engaged or involved in the ongoing debate and the emerging political consensus around climate change.

All too often, environmentalism is a top-down political movement. In some cases, it has even drawn on the energies and anti growth ideas of the thankfully long politically redundant aristocracy. This article argues that green Toryism presents a real opportunity to turn environmentalism into a bottom- up movement that will improve people's quality of life and revolutionize the economy. Green Conservatism can democratise the green movement and with it increase Britain's productivity and economic growth.

Too much of the debate and discussion around climate change is forged around a near puritanical bourgeois moralism, rather than a genuine attempt to persuade ordinary working people that environmentalism can also mean continued growth, new industries and an improved quality of life. This requires a shift in the tone of many elements of the 'green lobby'. This shift needs to move from compulsion to incentivisation. From condemnation to imagination. And from shrinkage to renewed economic growth.

## **Acceptance of the climate change agenda by social class**

A number of opinion surveys have shown that acceptance of the climate change agenda differs markedly by social class, with concern tending to be higher amongst wealthier social groups. One of the best recent examples of this phenomena was an Ipsos MORI survey in June 2008. The headline findings of the survey were interesting in themselves, showing a high level of concern about climate change, but also that more people think that "climate change isn't as bad as people say" than do not. The headline data also showed that some 57% do not believe that Government will not take the right steps to tackle climate change and that 59% believe that climate change is being used "as an excuse by the Government to raise taxes." The report's finding about social class was also fascinating, with its findings showing that:

*Those in social class AB, in affluent households, and also those with a university*

*educated/professional qualification background all tend to be more concerned about climate change, back more government intervention and acknowledge a greater need for individual responsibility.<sup>1</sup>*

ComRes research in April 2008 also found that concern about climate change was lowest amongst social class DE.<sup>2</sup> The research does show that the climate change agenda still needs to be 'sold' to many social groups, particularly in economic circumstances that have diminished the priority of climate change, compared to other issues such as unemployment or the economic deficit. In the September Ipsos MORI political monitor, less than 1% of respondents said that climate change would be very important in deciding how they vote, with all of this 1% coming from social classes AB and C1. This 1% for climate change compares to 39% for the economy and 20% for healthcare.

### **An emphasis on incentives**

The Royle Family was one of the BBC's most popular television shows last Christmas. The ever brilliant Caroline Aherne worked a constant comic thread through the episode. That was a variety of characters disbelief that they were being forced to pay 5p per carrier bag for the sake of "the environment." Resentment and lack of engagement with the environmental agenda was the running thread.

A number of Councils have recently jumped on what the Daily Mail might call the "environmental bandwagon." For too many of them their approach has been nannying in the extreme – dictating that residents might be punished for not recycling or not placing the correct item in the correctly coloured bin, with some councils even promising that an army of environmental snoopers would ensure compliance. The letters pages of local newspapers made quite clear that there is real local resentment at the use of compulsion rather than persuasion.

Both of these examples illustrate the concept of environmentalism by compulsion and green as a 'top-down' rather than 'bottom-up' movement. There is little element of choice and nothing in terms of persuasion. Consumers are expected to do something because their council or supermarket chain says that it is good for them. As the Royle Family episode shows, such an approach is more likely to result in resentment than it is to result in acceptance of or an enthusiasm about the green agenda.

Such an approach betrays a misunderstanding of social psychology and a lack of trust in ordinary hard working people. This kind of attitude is both unacceptable and deeply counter-productive. People are far more likely to respond positively to an approach that emphasises trust and accentuates the reasons for positive actions.

Instead of compulsion, the focus of environmentalists must be on persuasion and incentivisation. Governments still need to persuade a large number of people about the virtues of taking action to preserve the environment. They also need to persuade and convince a sometimes sceptical public that actions designed to protect the environment don't just represent another attempt to part the public from their hard earned cash.

Instead of lecturing people about the use of carrier bags and punishing people for

using them, other supermarkets should take a leaf out of Tesco's book by providing incentives for shoppers who re-use bags. Government at both a national and a local level should emphasise the enhancement in quality of life that environmentally friendly actions could bring and use various fiscal and other levers to incentivise environmentally friendly behaviour.

### **An Emphasis On Imaginative Solutions**

For too long, environmentalism, on every part of the political spectrum has been more about criticism about the existing order of things than it has been about the drawing of a compelling green vision for the future.

All too often, when attempts have been made to draw this green vision, the solutions have seemed to hit the poorest the hardest. Take suggestions that short haul flights were, by their nature a bad thing. Most people, quite rightly, protest that such an idea punishes them for enjoying an annual holiday and does not differentiate between hard working people taking an annual holiday abroad and executives flying between London and Edinburgh three or four times a week.

Or note the example of increasing fuel duties as an 'environmental tax'. Because Government and other elements of the elite have not developed a green vision, they have been portrayed as a 'tax grab' wrapped in green clothing. Increasing fuel duties have simultaneously damaged the public impact of future green measures and increased public cynicism about green taxes. Take the Government's increase in Air Passenger Duty. Billed as an environmental measure, the increase has no real effect on emissions and the Transport Minister has now admitted that the rise is predominantly a revenue raising, rather than environmental measure.

This is why it is beholden on politicians, the business community and civic society to develop alternative solutions to climate change. It is a problem that requires imagination and subtlety and cannot be approached with the bludgeoning and counter-productive measures such as 'green tax' hikes. It is an approach that, as Nicolas Sarkozy has shown in France, requires other taxes to be cut if some taxes are increased as an environmental measure – a fiscal offsetting, as it were.

It means using existing and emerging technology to incentivise behavioural changes, such as using smart card technology (already used in loyalty schemes) in air travel. Such technology could be used to introduce some form of 'green air miles allowance', meaning that less frequent flyers going on their annual holiday are not environmentally taxed to the same extent as weekly flyers. The use of green technology to combat climate change can also be considered as a potential solution to climate change, whilst minimising the potential changes in human behaviour that might be required and minimising impact upon the economy.

### **Building A New Green Economy**

There is nothing more perverse than watching people who would regard themselves as of the political 'left' campaigning for the closure of industries they regard as environmentally destructive. Indeed, there is nothing more stomach churning than seeing trust fund products of a public school education effectively campaigning for working class people to lose their jobs.

This is the image of environmentalism that many in working class Britain have. As many have pointed out, too many in the environmental movement effectively want to put an end to economic growth and an end to any search for further productivity or material progress.

It does not have to be this way. It does the “green lobby” a disservice to be seen as economically reactionary. Green Conservatism has in the past and must continue to distance itself from this element of the green agenda.

Instead, we must make the case that being green can mean a positive economic revolution that could enormously benefit those areas that suffered from the disastrous social and economic fallout of deindustrialisation in the 1970s and 1980s. Building a green economy can mark a new industrial revolution for many areas and help revitalise many parts of the country as well as marking Britain as a leader in the green industrial revolution, just as we were trailblazers in the first industrial revolution.

This means taking brave, and often controversial, moves to make the green economy real and ensure it brings significant benefits to ordinary working families. To take just one example, clean coal technology means that we will soon be able to take advantage of the enormous reserves of coal that lie underneath us to help achieve energy independence and a greener economy.

Using clean technology and other green technologies means that, as a country, we can use the legacy skills that remain from old heavy industries and the considerable natural resources that, as a nation, we can still benefit from. This has the triple benefit of bringing economic renewal to areas that have been in decline since the 1960s; enhancing skills and training; and making Britain a greener, more productive economy.

### **The Importance Of Positivity – The Conservatives As The Party Of A Prosperous Green Future**

This paper has illustrated that a Conservative green agenda can also be an agenda with a broad appeal. It can be an agenda that makes Britain a global leader in global technology; harnesses legacy skills; and revitalises British industry.

Labour has had twelve years to create such a solution and have failed. Their conversion to green technology is both late and grudging. Muted rhetoric about green technology has been accompanied by too little in the way of action.

Conservatives can, and must, do better than Labour’s decade of broken promises on the environment. We must turn rhetoric into a reality that puts the UK at the forefront of creating new technologies and developing new industries in a world where climate change poses increasing challenges.

Our challenge is to replace the doom laden narrative that accompanies much of the green agenda, with one that is optimistic and hopeful. We must be clear that green Conservatism presents new opportunities for the UK to become, once again a trailblazer in a green industrial revolution.

Green Toryism also presents us with political opportunities. By becoming the Party that is identified with a green industrial revolution, with the consequent benefits for jobs and livelihoods, we can help develop a political realignment equivalent to that seen in certain parts of the USA since the 1960s. Green Toryism, with its allied potential of the creation of jobs and rising prosperity in areas suffering from economic decline since the 1960s could, when combined with a more radical 'Red Toryism' help turn round Conservative fortunes in areas that have been unfertile territory since the early 1980s. By ensuring that environmentalism is allied with economic growth, optimism and the creation of new industries, green Toryism can be environmentally, economically and politically beneficial.

# The UK & Europe: Partners for Improving the Environment

## Catherine Bowyer and David Baldock

It is oft quoted that approximately 80 per cent of UK environmental legislation originate from laws and policies set out at EU level. This is, however, not to say that the UK does not have influence over the way in which these have developed, or failed to shape its own destiny. European led policy has improved the quality of the environment in the UK, compelling governments of the day to take action and currently providing a focus around which all the devolved administrations can work without having to adopt precisely the same approach. In turn, there have been many occasions when the UK has been important in driving up standards of law making in Europe, and in so doing helping to improve protection of the natural environment across the continent.

Working collaboratively with neighbours gives all European governments additional impetus, experience of policy mechanisms outside their own traditions and the ability to influence global efforts from within a powerful bloc rather than trying to act alone. Implementation of EU environmental laws has empowered local government and actors, not just centralised interventions. In so doing it has promoted robust institutions for environmental protection and enforcement, delivering real change in quality of life as well as natural systems.

The UK's reputation as a country committed to improving environmental protection, with climate change currently in the forefront, and the credibility to influence action by others relies heavily on working closely with our European neighbours. Acting alone the ability of any government to generate innovative solutions to environmental challenges is reduced. Acting in isolation leaves nation states exposed to the power of EU legislation without being able to interfere with it potentially weakening the ability to protect 'England's green and pleasant land'.

### Background

EU environmental law can be dated back almost exactly to the time of the UK's accession to the European Community (later to become the European Union). On 1 January 1973 the UK, overseen by Edward Heath's Conservative government, joined the founding members of the Community in the first wave of enlargement. 1973 also marked a turning point for action on the environment at the European level. During this year the first Environmental Action Programme and Environmental Research

Programme were adopted. In combination these documents spelt out what the Commission would in time propose and funding research at a European level, not least on the environment. The aim was to reduce pollution and nuisances; improve natural and urban environments; deal with environmental pressures caused by the depletion of natural resources; and promote awareness of environmental problems.

Until 1987, European environmental legislation was only justified legally under the “internal market” articles of the then Treaty of Rome. While this did lead to important legislation on, for example, environmentally responsible waste management and the protection of birds, a large measure of uncertainty hung over the role of Europe as the appropriate level of law making and wider cooperation on the environment. This changed with the adoption of the Single European Act. The Act, signed by then Prime Minister Margret Thatcher, was the first major reform of the EU Treaty. New broad objectives on the environment were added meaning it was possible to develop legislation in important areas such as the protection of wildlife habitats and freedom of access to environmental information. Under successive treaty reforms the environment has continued to increase in importance.

### **EU Environmental Laws – Driving Change**

European measures to promote environmental protection have evolved over the past 26 years; with environmental policy widely considered to be one of the success stories of the EU. At its founding in 1957 the EU had no environmental dimension, but today it has some of the most progressive environmental policies in the world. As a result environmental standards in the Member States are on the whole higher than they would have been with purely national measures.

The need for collaboration has been underlined by the increasing transboundary nature of environmental problems. These range from early efforts to combat forest die off caused by the release of sulphur dioxide from coal burning, to reductions of harmful dioxins and chemicals such as PCBs that contaminate water and now, crucially, developing credible solutions to mitigate climate change. Regular, continued and assured collaboration strengthens the ability to address these cross border threats.

EU environmental laws are not only devoted to transboundary pollution of air or water or threats to biodiversity. The benefits of collaborative action stretch far beyond this. Another aim has been to develop common standards which apply to all companies and institutions within the EU. This has been a logical accompaniment to the development of the single market and the greater mobility of people and businesses. In many cases businesses have been concerned to establish a common European standard for producers and acceptable pollution levels, both to create a level playing field and to avoid having to contend with a multiplicity of national standards. There are other spin-offs too. The process of having to implement binding EU law but with some scope for national variations has led to improvements in institutions and infrastructure for the delivery of environmental protection and enforcement of laws in most countries.

As in any group cross-pollination of ideas among Europe’s nations has been an important feature, improving environmental regulation. The UK has been particularly successful in promoting several concepts now central to EU law making.

These include good governance and better regulation with its emphasis on impact assessment before proceeding with legislation. Moreover, risk-based environmental regulation – an approach favoured by the UK for its flexibility – now widely permeates EU environmental law. Risk-based approaches take account of local conditions and threats, managing the problem in a way that should deliver high levels of environmental protection but in a tailored and efficient way. This approach can be seen running through key environmental legislation such as the water framework Directive, measures to protect nature conservation and industrial pollution management. As a consequence, rather than promoting centralised control of environmental protection these EU measures empower local and regional, government and actors to a considerable degree.

### **Case Example – The Water Framework Directive – local delivery of EU requirements**

The Water Framework Directive, adopted in 2000, aims to improve the ecological status of Europe's rivers and other waters. However, rather than imposing centrally agreed standards the emphasis is placed on the development of river basin management plans. Based on European guidance (to ensure parity in terms of approach across the EU) local and regional actors are empowered to develop the management plans for each key river basin – the natural and hydrological unit appropriate to ensure the protection of the entirety of a water course.

In the UK rather than delivery and requirements for water quality being determined by central government, our land area has been split into 20 river basin management districts, reflecting the major river systems. For each of these a goal, referred to as “good ecological status” is independently defined, depending on natural characteristics. The river basins are then managed in order to achieve this. Management approaches to deliver the ecological target will vary depending on the basin. For example in one over-extraction may be a key threat, in another increased water temperature caused by industrial activities and emission of cooling waters, while in a third agricultural run off or eroded soils may be the key challenge.

The water framework Directive allows the UK the flexibility to manage UK waters in a way that is tailored to local needs whilst aiming to ensure that all countries take some appropriate action.

Active engagement and partnership with European allies has helped the UK to promote improved environmental management and better use of policy tools. The collective sharing of experiences on regulatory approaches has led to stronger instruments for environmental protection. There are occasions when European law reflects the preoccupations and priorities of other Member States and this can create tensions. Equally it can work in the other direction and the UK, like other Member States, can be influential in shaping European initiatives.

European laws have delivered tangible improvements to the environment within the UK by encouraging governments of the day take account of previously neglected environmental concerns or acting sooner than otherwise they would have done. Management of biodiversity has improved considerably in the UK and EU regulation has led to investment in urban wastewater treatment, driven the UK to address burgeoning waste problem and most recently forced the government to promote renewable energy far more vigorously than previously.

Environmental challenges need to be addressed over the long term. For example emission reductions to combat climate change will be necessary for at least the next 40 years, and potentially in perpetuity. EU law making offers an opportunity to retain continuity of action, while individual national governments and circumstances might change. In some ways, this offers a legally binding insurance mechanism for citizens, business and future generations.

### **Examples of UK Engagement and Collaborative Working**

– The EU Emissions Trading Scheme represented and remains a world first, the first and only fully functioning international trading scheme for carbon, intended to aid Member States in reducing their greenhouse gas emissions. As with all firsts the EU ETS was not perfect at birth, but the UK in collaboration with the Netherlands and Germany (primarily) has worked to upgrade the quality of the trading market by their regulators. These countries have worked together to develop better approaches to monitoring, reporting and verification, all fundamental to confidence in the market and ultimately the carbon price.

– The Integrated Pollution Prevention and Control Directive, is the core mechanism by which Europe's industry is regulated to ensure operation in an environmentally responsible way. The UK has historically been active in managing industrial pollution, with awareness high given the legacy of our more heavily industrialised past. The IPPC Directive was heavily influenced by thinking in the UK whilst drawing on experience in several countries. The government offered support and expertise to the Commission and other Member States during the Directive's implementation and during the recent review of the IPPC Directive – with the Environment Agency lead expert seconded to the European Commission to aid development.

– Marine protection is a field where the UK is a leader in terms of promoting the development of ideas and new mechanisms for management and scientific endeavour and there is new national legislation in the pipeline. Many of these ideas have now been transferred into EU policy approaches. Marine protection is something that no state achieve or resource alone. Moreover working with EU partners has helped the UK engage on a global scale on this issue giving it a seat at the table for example in international and transatlantic dialogues.

## **The Power of the Market**

The EU has become a large single market, with major consequences for the environment. Environmental degradation is one of the key externalities that market prices frequently fail to account for – hence the emphasis on setting standards and developing environmental regulation. Market based policy instruments, or economic instruments, ranging from trading schemes that apportion a price to Carbon to the setting of product standards, are seen as important tools for delivering more sustainable development. Crucially the opportunity afforded by these key instruments is dramatically limited by acting alone.

On emissions trading for carbon, the UK briefly operated a purely national system prior to the establishment to the EU scheme. This was an important innovation, which established the city of London as a global leader in carbon trading and enabled those designing the EU system to learn about appropriate mechanisms for regulating and supporting the market. By taking a leadership role in Europe the UK helped to shape the EU approach to emission trading, while EU approaches are now being used as the model for developments in the US and internationally. The opportunities in terms of emission reduction, influence and learning available from the UK system alone were, however, limited. By working with European partners the UK approach was improved upon, the benefits were felt across Europe and the UK gained credibility worldwide as being one of the architects of the EU system. In business terms as well, the expansion of the instrument also offered innovators in carbon trading based in London access to much larger markets.

The nature of the European internal market means that product standards offer a powerful tool for promoting more sustainable production and consumption practices within Europe but also globally. The scale of the EU as a trading block enables Europe to pursue global as well as regional objectives, such as promoting the phase out of particular chemicals or environmentally harmful practices from product chains. European regulation, or simply the threat of it, has changed the way in which, inter alia, cars, batteries and electrical goods are produced. Moreover chemicals legislation, most recently exemplified by the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), is changing the way in which companies worldwide use chemicals in products.

## **Conclusions**

Many environmental threats can best be responded to by international cooperation. The reasons for this are varied. Some threats cannot be tackled by an individual nation (transboundary problems such as climate change); the consequences of acting alone may increase the costs to home grown industry and consumers; acting alone may preclude the use of the most effective policy mechanisms; the weight of partners may be needed to change a political mindset, to accept a cost burden or to create a sufficiently large market for new technologies.

Being an active partner in Europe has strengthened environmental protection in the UK. Proactive engagement, where it has occurred, has also helped the UK to further European endeavours and improve European process, contributing to the EU's leadership role on environmental protection. In so doing we have learnt from the

experiences and knowledge of our neighbours and importantly strengthened our role as a credible global actor.

While the body of European environmental law is now extensive, there are major environmental threats that remain to be addressed, requiring either improved environmental regulation or more vigorous implementation of existing legislation. Action on climate change is perhaps the most pressing example, but the global impacts of Europe's resource use and management are also key. There is a need for collective and assertive action to address the global impacts of our lifestyles and consumption. Strong and coordinated EU action will be important not only in shaping Europe's environment but increasingly improving our global footprint.

For the UK to remain at the heart of environmental action and as a global leader on issues ranging from climate mitigation to marine protection, it needs to remain an effective and committed player at the European level. Any future government needs to recognise this and plan accordingly.

*The Institute for European Environmental Policy (IEEP) is an independent and influential centre for the analysis and development of policies affecting the environment in Europe and beyond. The Institute seeks both to raise awareness of European environmental policy and to advance policy-making along sustainable paths.*