

ALDERSGATE GROUP

GREEN FOUNDATIONS 2009 THE PATH TO A VIBRANT ECONOMY, COMPETITIVE ADVANTAGE AND SUSTAINABLE PROSPERITY

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Foreword

1
Ban Ki-Moon (September 2008)
*Message of the UN Secretary
General on the International
Day for the Preservation of the
Ozone Layer.*

‘Market turmoil, economic downturns and talk of recession have historically spelt tough times for the environment... But the remarkable story of the ozone layer shows such thinking for what it is: mere myth. Decisive multilateral action on environmental threats and challenges can bring wide-ranging health, social and economic benefits.’¹

Ban Ki-Moon, UN Secretary General

In May 2006, the Aldersgate Group published its launch report ‘Green Foundations’, which set out the economic case for high environmental standards. It provided a focal point for those who were concerned by the myopic demands for the reduction of regulatory burdens – on the grounds that the UK economy was being held back – without due regard for the business, societal and economic advantage of good environmental regulation.

Just over two years later, the economic outlook is ominously bleaker, which in turn threatens to undermine the green agenda in place of seemingly more immediate priorities. The global financial turmoil is creating new strains on the world economy, while the race for commodities has created record prices for food and energy in markets made volatile by twin fears; on the one hand, a prolonged recession, and on the other that a return to growth will be unsustainable.



Far from presenting a crisis for environmental policy making, these challenges actually reinforce the urgent need to accelerate the transition to a low-carbon, resource efficient economy and align economic, environmental and societal impacts. It is timely vindication of the Aldersgate Group’s fundamental argument – that high environmental standards are essential for economic competitiveness – while acting as a stark illustration of how de-regulatory pressures can be short-sighted and detrimental to long-term economic stability.

As environment and sustainability issues continue to climb up the political and boardroom agenda, there is a persistent perception that environmental regulation can often place an exorbitant burden on industry, stifling growth and competitiveness. In reality, quite the reverse is true: well-designed and cost effective 'smart' regulation provides the 'green foundations' essential to underpin the growth and jobs in the years to come – while also presenting more immediate business opportunities. Increasingly, eco-innovation is vital to the comparative advantage necessary for wealth and prosperity, while governments are competing at the regulatory level to attract, and even help create, the markets and industries of the future.

It is encouraging how rapidly this agenda has gathered pace in the last two and half years since the formation of the Group and the publication of the first edition of this report. Green Foundations 2009 demonstrates this by drawing on new and compelling evidence, examples from our expanding membership and apposite quotations from business leaders – all demonstrating that future economic prosperity will depend on setting high environmental and sustainability standards. However, there is still much more to be done. In a global market the opportunity for the right environmental regulatory policy to enhance the UK's competitiveness has never been higher, but the risks of inappropriate de-regulation are equally huge.



Peter Young

Chairman, Aldersgate Group

December 2008

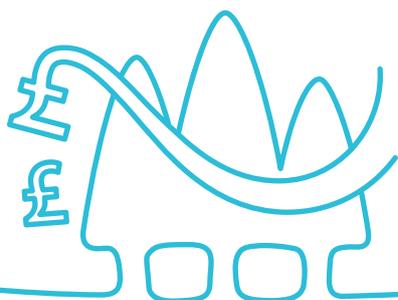
Executive Summary

*'Our economic and social prosperity, today and in the next generation, requires us to reduce progressively our dependence on oil. All the needs of our country, all our goals as an economy point in exactly the same direction - to tackle climate change, to improve energy security, to create jobs and to stimulate business to grow.'*²

Gordon Brown, Prime Minister

*'The choice really isn't between the economy and the environment. The choice is between progress and the past. And it is entirely in our hands.'*³

David Cameron, Leader of the Conservative Party



*'Streamlined spending and targeted tax cuts... can get our economy going again. But I don't want to reignite the old one. I want us to be the first country in the world to move to a new economy. A green economy.'*⁴

Nick Clegg, Leader of the Liberal Democrats

The global financial and economic crisis is creating unprecedented strains on the world economy, leading some to question if we can presently afford to tackle fundamental, long-term challenges such as climate change and resource depletion. Fortunately, this is not the view of our political leaders. Evidently they can see that the problems we face are interlinked and regard the transition to a low carbon economy as an integral part of the economic recovery.

The fallout from the 2008 credit crunch is a unique opportunity to move beyond the rhetoric, and mobilise the same political will that helped to stabilise the banking crisis into addressing some of its underlying causes. This second edition of Green Foundations draws on new evidence and research that substantiates a positive interaction between high quality environmental regulation and economic growth – enabling companies to become more efficient and productive, and creating new opportunities to secure the jobs and wealth of the future.

2
Brown, Gordon (June 2008)
Speech on creating a low carbon economy,
www.number10.gov.uk
Page16141.

3
Cameron, David
(16th June 2008) *Cameron: The choice isn't between economy and environment,*
www.conservativeparty.org.uk.

4
Clegg, Nick (September 2008)
Nick Clegg's speech to the Liberal Democrat Conference,
www.libdems.org.uk.

The Aldersgate Group believes:

1 Our long-term economic success depends on a healthy environment and the sustainable use of natural resources.

The economic fallout from the financial crisis is an opportunity to reconsider the relationship between business and society, and address the inherent problems of unsustainable growth. The natural capital assets that lay the foundations for our economy and society should not be off-balance sheet items similar to the risk exposures and subsequent heavy losses incurred in the banking sector during the 2008 credit crunch. Rapid resource depletion necessitates the adoption of new business models and requires a range of well-designed environmental measures to smooth the path towards a more sustainable economy – the ‘green foundations’ needed to underpin future growth and jobs.

2 At the company level, good environmental performance translates to tangible economic benefits and is a major source of competitive advantage.

In response to the upward trend in energy, water, raw material and waste disposal costs, systematically addressing environmental performance is one of the most cost-effective measures businesses can undertake to reduce expenditure. Achieving high environmental standards across the UK would produce significant cost savings and boost competitiveness – which currently lags far behind major trading partners such as Germany, France and Japan. The role of government in providing a clear policy framework is crucial, particularly in the long-term, where competitive advantage will increasingly depend on resource efficiency, innovation and energy security.

3 Environmental regulation creates new business and employment opportunities in a fiercely competitive global marketplace.

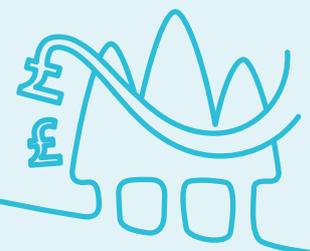
Despite the challenges posed by the credit crunch, there are signs that environmental sectors will rebound faster than most from the global turmoil. The downturn also presents a unique opportunity to use public sector investment to fuel the economy with green jobs and growth. Environmental regulation is a key driver in this lucrative market and the government has a critical role to play in setting out an explicit industrial strategy with planned support for particular technologies and establishing the right policy frameworks that will stimulate business innovation through improving environmental performance.

4 Policy appraisals must accurately assess environmental costs and benefits.

Keystone policy objectives such as increasing resource efficiency and decarbonising the economy will only be achieved if they are adequately reflected in price signals, both in the valuation of policy options and in the market price. The policy appraisal process must allow for the potential of innovation to deliver cheaper solutions and the likelihood of inflated cost estimates emanating from industry. Non-monetarised environmental benefits must not be marginalised, while the government’s approach to estimating the long-term costs associated with carbon emissions needs urgent reform.

5 The better regulation agenda must not lose sight of the need to maximise outcomes in the drive to reduce unnecessary costs.

The current financial crisis has illustrated how light touch regulation that does not adequately address the fundamental long term challenges facing the economy can have devastating economic and social consequences. In the drive to reduce regulatory burdens, there is a risk that the better regulation agenda loses sight of how to most effectively deliver the outcomes it is designed to achieve, and so puts at risk future wealth and prosperity. Increasingly, businesses which take a long-term view of value are demanding more regulation, so that they can address emerging challenges and provide a competitive edge without being undercut in the short-term. The government should aim to deliver high environmental standards providing the maximum stimulus to innovation and the creation of business opportunities, while minimising the administrative burdens of compliance.



Introduction

*'We shouldn't regulate for its own sake, but over-regulation and red tape has been used as a polemical bludgeon. We have probably been over-deferential to that rhetoric.'*⁵

Lord Adair Turner, Chairman of the Financial Services Authority

The 2008 financial crisis illustrates how the unregulated excess of the free market and banking system, governed by a 'light touch' and 'hands off' approach that does not adequately address market failure, can have devastating economic and social consequences. It should serve as a palpable warning, as the inherent risks associated with market failures relating to fundamental long term challenges facing the economy, such as climate change, resource depletion and energy security, are much more severe. Indeed, the fallout from the current economic recession pales in comparison to the looming ecological credit crunch⁶.

Efficient regulation will entail striking the right balance between maximising the benefits of regulation for society as a whole while minimising the costs to business and others of achieving those benefits. Whereas removing unnecessary regulation and reducing the cost of compliance improves the overall productivity of the economy, the vital role that regulation plays in correcting market failures, promoting fairness and protecting the environment needs much stronger recognition.



The 2008 credit crunch also demonstrates how the public debate about regulatory reform is loose and general with little regard for the complex ways in which regulation underpins the economy. Lord Adair Turner, Chairman of the Financial Services Authority, believes that if his organisation had wanted to embark on a fundamental regulatory reform programme in early 2007 that addressed many of the root causes of the crisis, such as higher capital adequacy, disclosure of liquidity information and key issues around remuneration, it would have been "strongly criticised for harming the competitiveness of the City of London, for red tape, and for over-regulation."⁷ Such over-sloganised and over-zealous criticism must be judged in the wider context of overarching policy objectives. As leading Oxford economist Dieter Helm CBE, to the disappointment of the "shriller voices in industrial lobbies", incisively points out, "too little regulation inhibits the development of markets and their efficient operation, undermines competition, and can be an impediment to investment in public goods, networks, and infrastructure"⁸.

5 & 7
Elliot, Larry (17th October 2008) *The Guardian: We'll get tough with the City, says watchdog.*

6
See WWF (October 2008) *Living Planet Report.*

8
Helm, Dieter (2006), *Regulatory Reform, Capture and the Regulatory Burden, Oxford University Press.*

9
HM Government (August 2008) *Regulatory Budgets: A consultation document, p13.*

10
Smith, David (17th February 2008) *The Times: Cost to british business of government red tape leaps by £10bn.*

11
HM Treasury & BERR (March 2008) *Enterprise: Unlocking the UK talent.*

Yet faced with the challenges of the economic downturn, increased competition from the global market place and the elimination and simplification of regulations worldwide⁹, it is precisely these benefits that are being overlooked in the drive to minimise costs. This has led to some industry groups, such as the British Chambers of Commerce, injudiciously arguing that “the success of the government’s drive for better regulation must be judged on the extent to which the UK’s regulatory burden has been reduced”¹⁰. While it is crucial to reduce unwarranted costs, any evaluation of a regulation regime must also include a balanced and proportionate assessment of the potential economic and social benefits, and not be crudely based on rudimentary aggregate estimates of the overall burden.

Such views merely encourage ‘better regulation’ to be interpreted as ‘deregulation’ – regardless of the longer-term costs this can impose on the environment and growth. The government’s own enterprise strategy¹¹, launched alongside the 2008 Budget, portrays regulation as a ‘barrier’ and ‘obstacle’ to growth, citing a number of studies that assume a negative association between regulation and productivity. The Aldersgate Group strongly oppose this perspective – far from undermining the UK economy, proportionate, effective and well-designed environmental regulation generates essential public benefits and is a cornerstone of civilised society.



This second edition of Green Foundations draws on new evidence and research that substantiates a positive causality between high quality environmental regulation and economic growth – enabling companies to become more efficient and productive, and creating new opportunities to seize the jobs and wealth of the future. In doing so, it supports the views of the Network of Heads of European Environment Protection Agencies, which finds that good environmental regulation, management and performance assists competitive advantage by reducing costs, creates markets for environmental goods and services, drives innovation, creates and sustains jobs, improves the health of the workforce and the wider public, and protects the natural resources on which business and society depend¹².

Maintaining these high environmental standards is even more crucial during an economic downturn, as businesses seek to consolidate, re-structure, reduce costs and exit non-core business activities. The upward trend in fuel and energy prices are an incentive to improve energy efficiency and switch to renewable sources of energy, while a government led investment drive in low carbon goods and services could stimulate the economy and employment. The UK also requires a targeted industrial strategy as a comprehensive programme to invest 150 billion dollars to create 5 million new ‘green collar’ jobs set out by Barack Obama threatens to leave the UK trailing further behind in the global race to capitalise on the huge new opportunities for environmental technologies¹³. At the same time, policy makers must not lose sight of critical longer term challenges. Climate change and resource depletion are large scale market failures; addressing them in a proportionate and effective way is therefore the prudent, pro-growth strategy.

12
Network of European
Environment Protection
Agencies (November 2005)
*The Contribution of Good
Environmental Regulation
to Competitiveness.*

13
www.barackobama.com

1 Our long-term economic success depends on a healthy environment and the sustainable use of natural resources

'We need urgently to harness ingenuity, technological innovation and behavioural change in ways that will enable us to make the transition to meeting our economic and social goals within the capacity of the planet. The Earth's natural resources and ecosystems will not support "business as usual" for much longer.'

Neil Carson, Chief Executive, Johnson Matthey Plc.

Over the last few years, financial deregulation has facilitated the formation of almost unlimited credit, resulting in the near total breakdown of economic responsibility. A lack of transparency meant that investors did not understand the assets they were buying, while flawed business models led to excessive and unsustainable debt fuelled growth. The economic fallout from the financial crisis is an opportunity to reconsider the relationship between business and society and address the inherent problems of unsustainable growth. In response, we should not continue to live beyond our means. With the increasing priority given to short-term measures to combat the global economic slump, maintaining high environmental standards will be essential to address fundamental resource constraints and maintain growth and high employment in the future.



The ecological services that are so fundamental to human wellbeing should not be off-balance sheet items similar to the risk exposures and subsequent heavy losses incurred in the banking sector during the 2008 credit crunch. Currently, they are predominantly public goods with no economic value; an underlying cause of their degradation and the loss of biodiversity. Yet ecosystems provide the natural capital assets that lay the foundations for our economy and society, providing the basic inputs to create goods and services and the conditions for a healthy and secure life. Rapid population growth, urbanisation and rising living standards have contributed to unprecedented demands on the world's resources, such as food, oil, clean air and water. This has fuelled the sharp, destabilising rise in world commodity prices, which in turn has fed the financial crisis.

According to WWF, humans are consuming natural resources at an alarming rate – by about 30% more than the Earth's capacity to regenerate itself. If our demands on the planet continue at the same rate, by the mid-2030s we will need the equivalent of two planets to maintain our lifestyles¹⁴. This overshoot is conspicuously unsustainable and necessitates a new framework for business decision-making where ecological limits are of cardinal significance and will be a key success criterion for future business operations – those who do not grasp this face being forced out of the market¹⁵.

14
WWF (October 2008)
Living Planet Report.

15
For more information, see WWF
(2007) *One Planet Business.*

Research commissioned by the environment ministers of the G8+5¹⁶ on the economic significance of biodiversity loss found that mankind is causing almost £40 billion worth of damage to land ecosystems each year, and is directly responsible for crises such as rocketing food prices. A key challenge will be to transform current business models and decision making frameworks that externalise these costs and pass on the debt to future generations.

The loss of services derived from ecosystems is a significant barrier to the achievement of the Millennium Development Goals to reduce poverty, hunger, and disease¹⁷. It also represents a major risk to economic stability. In a world of rising energy costs and increasingly scarce raw materials, our international economic standing will in future depend on maximising resource efficiency just as much as on boosting labour productivity. Increasingly, improved environmental performance will need to go hand in hand with improved economic performance.

Furthermore, a stable climate is of immeasurable value to business and provides the long-standing conditions for economies to flourish. Lord Nicholas Stern's meticulous monetary analysis¹⁸, which he has subsequently claimed underestimated the risks of climate change¹⁹, shows that the economic implications of a 'business as usual' approach are ruinous, and even lower range estimates would lead to a permanent and unparalleled reduction in consumption levels. There are also some very grave energy security implications on continuing to rely on oil and gas to fuel our economy. To prevent the prospect of severe economic shocks in the future, reducing our dependence on commodities that can fluctuate widely in value and are sourced from politically unstable areas of the world should be a national priority.

Far from putting an obstacle in the way of our ability to circumvent the current economic slump and compete on a global market, environmental regulation is essential for our continued economic success. And so what we need is a range of well-designed environmental measures to smooth the path towards a more sustainable economy – the 'green foundations' needed to underpin future growth and jobs.

16
European Commission
(May 2008) *The Economics of
Ecosystems and Biodiversity*.

17
Millennium Ecosystem
Assessment (March 2005)
*Living Beyond Our Means,
Natural Assets and Human
Well Being*.

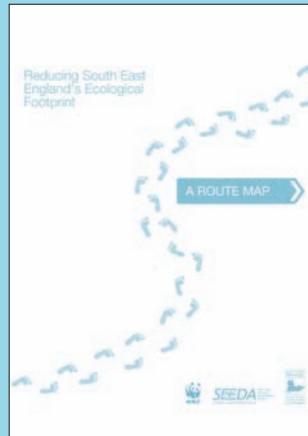
18
Stern, Lord Nicholas (2006)
*The Economics of Climate
Change, The Stern Review*,
Cambridge University
Press, Cambridge.

19
Adam, David (18th April 2008)
*The Guardian: I underestimated
the threat, says Stern*.

Route map to 'One Planet' living²⁰

The South East's 'Ecological Footprint' – which compares human demand on the Earth's ecosystems with the planet's capacity to regenerate it – is rising steadily, putting at risk the region's prosperity, business competitiveness and quality of life. To address this unsustainable consumption of resources, SEEDA, along with the Regional Assembly and WWF, commissioned a route map to identify the means to stabilise the rate of growth in the region's Ecological Footprint by 2016 and then reduce it, with the aim of becoming a 'One Planet Region' by 2050.

The study models the far reaching transformation that would be required in a number of key sectors (including the built environment, transport, energy supply, food, goods and services, waste and water) and provides policy recommendations for the short and long term. One of the greatest barriers to achieving 'One Planet' living is the upfront cost of investment and innovation, as well as the need to adopt new business models, such as the 'Energy Services Company' concept, where investment can be linked to returns on efficiency. The overriding objective is to mobilise government, business and society to meet a challenging 80% reduction in the region's Ecological Footprint and its CO2 emissions by 2050.



20
SEEDA, South East England Regional Assembly, WWF (September 2008) *A Route Map: Reducing the South East's Ecological Footprint and carbon emissions.*

Strategic challenges for future utility provision

One of the industrial sectors most impacted by climate change is the water industry. Besides the challenge of reducing carbon emissions in a relatively energy intensive sector, changes in climate will present significant challenges to the provision of services essential to life and the functioning of our modern day society. Drier summers will put pressure on water supplies for both domestic and industrial use, while changing rainfall patterns, and in particular more extreme weather events, will impact drainage systems and increase the risk of flooding. While these are long term impacts, planning adaptive strategies is already underway across the water sector.

To understand the nature of this impact, United Utilities undertook some research on what utility service provision in 2050 might look like and what it means for their stakeholders, which will inform their strategic planning. It focuses on two small rural communities and examines the provision of water, wastewater, electricity and waste services to those communities. It concludes that the implementation of a series of measures could reduce the emissions per head for that service provision by 25%, with changes in behaviour by customers resulting in a further 25% reduction. Measures include localised energy generation, smart metering, rainwater harvesting and improved waste management.



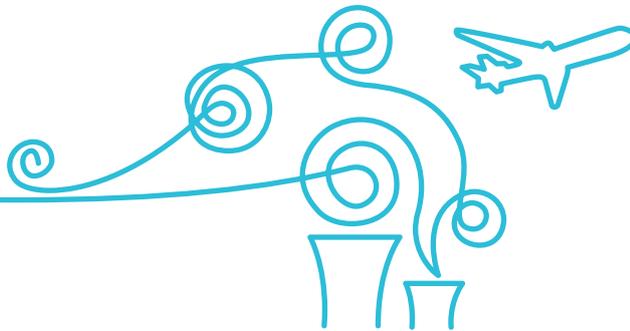
2 At the company level, good environmental performance translates to tangible economic benefits and is a major source of competitive advantage

‘The choice is not “green or grow”. That is a false choice. You can do both - and you must do both. Reducing emissions does not merely fight climate change, it also cuts costs.’²¹

Sir Terry Leahy, Chief Executive, Tesco

In response to the upward trend in energy, water, raw material and waste disposal costs, systematically addressing environmental performance is one of the most cost-effective measures businesses can undertake to reduce expenditure. This is validated by research from the Carbon Trust which shows that energy efficiency is now the number one cost-cutting priority for UK businesses looking to combat the impact of the economic slowdown²². Forward looking companies that have successfully addressed their environmental efficiency are reaping the rewards, while the laggards are often struggling to compete. The role of government in providing a clear policy framework is crucial, particularly in the long-term, where competitive advantage will increasingly depend on resource efficiency and innovation.

Business strategies directed at low resource use can significantly boost productivity, including increased product output, shorter process cycle times, increased reliability in production, improved product quality, improved working environments, and better morale among workers²³. Analysis by Goldman Sachs shows that companies considered sustainability leaders outperformed the overall stock market by 25%²⁴, while research from HSBC²⁵, JP Morgan²⁶ and the Economics Intelligence Unit²⁷ all suggest that share price ‘climbers’ are placing a greater importance on social and environmental goals.



Achieving high environmental standards across the UK would produce significant cost savings and boost competitiveness – which currently lags far behind major trading partners such as Germany, France and Japan²⁸. Research indicates that 30% of the energy businesses buy on average is wasted²⁹, cutting down on waste alone would save UK industry £3 billion and better water efficiency would reduce bills by 30%³⁰. Overall, the Government’s own analysis estimates that the total value of potential resource efficiency savings to UK businesses range between £5.6 billion to £7.4 billion³¹.

Over half of these potential savings relate to energy efficiency, which is a key driver for economic growth and can spur demand for better, cleaner technology in new markets. In essence, addressing high energy input costs can frequently represent a lucrative investment opportunity which is commonly overlooked. While returns on traditional investments average 40-50%, investments in increasing energy efficiency often return 70% or more³². BP’s assertive energy efficiency initiative is a case in point; with a US\$100 million investment, the company has realised US\$400 million in savings, its most profitable project in a decade³³. This is contributing to the farthest-reaching, least-polluting, and fastest growing energy success story of the last fifty years according to the American Council for an Energy-Efficient Economy (ACEEE)³⁴, supporting 1.6 million jobs in the US alone and halving energy consumption per dollar of economic output since 1970³⁵.

21 Leahy, Sir Terry (3rd September 2008) *The Guardian: Tesco chief: ‘We must go green’*.

22 Carbon Trust (July 2008) Press Release: *Credit Crunch Fails to Derail Green Agenda*. www.carbontrust.co.uk/News/presscentre/220708_UK-energy-efficiency-waste.htm.

23 The Climate Group (May 2007) *In the Black: The growth of the low carbon economy*, p4.

24 Goldman Sachs Global Investment Research (June 2007) *GS Sustain*.

25 Jowit, Juliette & Wintour, Patrick (26th June 2008) *The Guardian: Cost of tackling global climate change has doubled, warns Stern*.

26 JP Morgan (September 2008) *European Property Handbook: Survival of the fittest*.

27 Economist Intelligence Unit (February 2008) *Doing Good: Business and the Sustainability Challenge & (November 2008) Corporate Citizenship: Profiting from a sustainable business*.

28 DEFRA and DTI (September 2003) *Changing Patterns: UK Government Framework for Sustainable Consumption and Production*.

29 CBI (November 2007) *Climate Change: Everyone’s Business*, p23.

30 University of Cambridge Programme for Industry (January 2007) *Sustainable Consumption and Production*, Cambridge, p9.

31 Thornton, Grant & Hollins, Oakdene (October 2007) *Quantification of the Business Benefits of Resource Efficiency*.

If replicated globally, realising the full potential of these win-win opportunities that boost economic growth and reduce costs would provide around one quarter of the necessary emission cuts required in a global framework to tackle climate change³⁶. Management consultant firm McKinsey estimates that by only using existing technologies that pay for themselves, projected global energy demand growth by 2020 could be at least halved, while additional annual investments of US\$170 billion for the next thirteen years could generate annual energy savings of \$US 900 billion by 2020³⁷. Plainly, such investments are exceptionally attractive in economic terms, and imperative in environmental terms.

Environmental regulations play a key role in stimulating such resource efficiency investments, fostering improvements in competitiveness that underpin rising levels of prosperity in the long term. With this in mind, environmental regulation should not solely be seen as representing a cost to industry, but should be harnessed to drive resource efficiency and contribute to economic growth. Just as the Climate Change Levy, a tax on the energy use of industry, provided the adequate financial incentive to change energy management policies, so will stringent caps in a reformed EU ETS lead to future benefits from more efficient resource use, increased competitiveness and a stable path to a low carbon economy³⁸.



Even after taking such benefits into account, competitive concerns have been raised by a number of industries in regions facing more stringent environmental regulations than others, with a minority threatening to relocate 'lock, stock and barrel' overseas³⁹. While, in some cases, these costs can be significant, often they are exaggerated and the potential economic benefits ignored. A recent Carbon Trust analysis is the "nail in the coffin for the myth that the EU ETS presents a threat to overall business competitiveness" as it finds that carbon costs remain trivial compared to other influences on international competitiveness for more than 90% of UK manufacturing activities⁴⁰. In truth, when businesses decide on a production location, environmental costs tend to be low relative to considerations of the cost of capital, fiscal regime, wage costs, workforce skills, exchange rate fluctuations, infrastructure and proximity to the market.

In the long-term, as water and other resources increasingly come under stress, resource efficiency and innovation will increasingly become primary benchmarks of a successful economy. Companies that adopt new business models which generate greater value with less resource will be the most successful. Research by the Carbon Trust and McKinsey finds that well positioned and proactive, forward thinking businesses could increase company value by up to 80% by tackling climate change, while as much as 65% of company value was at risk in some sectors⁴¹. At the macro level, an empirical study by financial services firm Allianz and policy think-tank the Lisbon Council finds that there is a positive correlation between energy efficiency and prosperity levels in Europe and countries with innovative environmental technologies register positive development in total factor productivity. It concludes that just as "development of the industrial society during the last century led to a massive increase in labour productivity, so the key to Europe's future economic development now lies in boosting resource and energy productivity"⁴².

32
Lovins, Hunter (2008) *The Business Case for Climate Protection*, p19.

33
Lubber, Mindy S (November 2007) *Companies: a new world of risk and opportunity*.

34
Laitner, John A & Ehrhardt-Martinez, Karen (May 2008) *The Size of the U.S. Energy Efficiency Market: Generating a More Complete Picture*, Washington.

35
A separate study finds that over the past thirty-five years, innovative energy efficiency policies in California have created 1.5 million additional fulltime jobs with a total payroll of over \$45 billion [see Roland-Holst, David (October 2008) *Energy Efficiency, Innovation and Job Creation in California*].

36
The Climate Group (June 2008) *Breaking the Climate Deadlock: A Global Deal for Our Low-Carbon Future*, p6.

37
McKinsey Global Institute (February 2008) *The Case for Investing in Energy Productivity*.

38
Aldersgate Group (November 2007) *Trading for Growth: The role of the EU ETS in cutting emissions and stimulating wealth creation*.

39
See Gow, David (14th January 2008) *The Guardian: EU emission limits could drive industries out of Europe*.

40
Carbon Trust (January 2008) *Press Release: EU ETS to have marginal impact on competitiveness of EU industry*.

41
The Carbon Trust (September 2008) *Climate change – a business revolution?*

42
The Lisbon Council and Allianz SE (March 2008) *European Growth and Jobs Monitor*.

Reducing costs and improving business efficiency by implementing an effective environmental management programme

As a global company providing ICT products and services to customers in more than 170 countries, BT is a major energy user. In the UK alone, the company consumes 0.7% of the country's entire electricity. To address this significant source of expenditure, BT has embarked on an aggressive energy reduction strategy that has both reduced costs and carbon emissions. Through enhanced energy and carbon management in its network and buildings, on-site energy generation and purchasing green energy, BT has cut its UK carbon footprint by 58% compared to 1996 levels and aims to reduce this further to 80% by 2016.

More widely, BT advocates that good environmental management saves money and improves business efficiency. In the 2008 financial year, water use was reduced by 4.5% through efforts to detect leaks, replace pipes and install water-saving devices. Additionally, 46% of total waste was recycled, while 22% less waste went to landfill, helping to reduce landfill costs and, in many cases, getting paid for the materials collected. Since 2004, BT's environmental programmes have helped save £365 million.



The role of Climate Change Agreements in reducing carbon emissions and increasing business efficiency

The Climate Change Levy (CCL) and Climate Change Agreements (CCAs) have played a key role in the UK's Climate Change Programme to encourage business to use energy more efficiently and reduce carbon emissions. The CCL is a tax on the business use of energy which aims to encourage more efficient energy use and reduce emissions of carbon dioxide. Energy intensive business users can receive up to an 80% discount by entering into voluntary CCAs, in return for meeting energy efficiency or carbon saving targets.

There are four wins from the robust implementation of this important regulation:

1. Results from the third target period for CCAs (typically 2006) show 16.4 million tonnes of CO₂ per year were saved compared to sector baselines.
2. CCAs have increased awareness and action on carbon emissions and resource efficiency. This in turn has improved UK business competitiveness and economic resilience, in complete contrast to the fear that an additional regulatory burden would damage company performance.
3. CCAs have also enhanced data management techniques and robust measurement systems including sub-metering and software packages. This has been a drive for many high technology innovative products and high value services, which have underpinned a range of activities in understanding energy usage and targeting energy saving opportunities.
4. CCAs have been an early platform to demonstrate implementation of carbon savings, underpinning the design of the Carbon Reduction Commitment and providing opportunities to export know how. For example, Enviros is the only UK consultancy to have played a major role in all aspects of the design, implementation and operation of UK negotiated CCAs. Since 2000, Enviros has provided support to 14 industry sectors and has also used the same approach for clients in California where energy saving has become essential to work within power generation capacity.



3 Environmental regulation creates new business and employment opportunities in a fiercely competitive global marketplace

‘Tackling climate change is the pro-growth strategy for business. The technological solutions are broadly known. What we now need are projects to build a low CO2 energy system in the UK.’⁴³

James Smith, Chairman of Shell UK

Environmental regulation stimulates innovation and presents new business opportunities, not just in the high-growth environment sector, but other sectors too. In many cases, the creation of these new jobs and new markets are driven entirely by the policy framework set by government.

That is not to say that the green sector is immune from a recession. The international credit and liquidity crisis is curbing the appetite for long-term lending and the combination of high-priced debt and investor nervousness is reducing the supply of renewable energy projects. However, there continue to be encouraging signs. The growth fundamentals for clean energy investment remain robust and government commitments in areas such as renewables is generating guaranteed revenues that will mean the sector will rebound faster than most to the global financial turmoil. Ultimately, the credit crisis is an opportunity to progress in a new direction, stimulating the ‘real economy’ with investment in green jobs and growth. In response to both the recession and Barack Obama’s ambitious clean energy proposals (see page 6), the EU requires a major new action plan to make Europe’s environmental industry an engine for wealth creation, as proposed by the Environmental Industries Commission⁴⁴.



Globally, over the last ten years, there has been prodigious growth in the market for environmental goods and services –generating better returns and creating more jobs per dollar, yen or euro invested than the surrounding economy, according to the Climate Group⁴⁵. The potential for further growth is vast; the CBI calculates that if Governments agree to an international framework to limit carbon emissions, the global market for climate change solutions could be worth a staggering \$1 trillion in the first five years⁴⁶.

Environmental regulation is a key driver in this lucrative market. The EU have led the way internationally by setting challenging environmental regulations for 2020 that European Commission President, Jose Manuel Barroso, sees as “an opportunity that should create thousands of new businesses and millions of jobs in Europe”⁴⁷. The earlier Europe moves, the greater the opportunity

43
UK Corporate Leaders Group on Climate Change (September 2008) *Press Release: UK CLG Letter to UK Party Leaders.*

44
Environmental Industries Commission (November 2008) *A Growth Plan for Europe’s Environmental Industry.*

45
The Climate Group (May 2007) *In the Black: The growth of the low carbon economy, p4.*

46
CBI (November 2007) *Climate Change: Everyone’s Business, p17.*

47
European Commission (23rd January 2008) *Press Release: Boosting growth and jobs by meeting our climate change commitments, Brussels.*

to use its skills and technology to boost innovation and growth through exploiting first mover advantage, progressing an European eco-industry that already accounts for 3.4 million jobs and has an annual turnover over €227 billion⁴⁸.

As green business becomes big business, there is fierce competition between governments to set a pertinent policy framework to attract the investment today that will help create tomorrow's wealth and prosperity, as demand for environmental goods and services swells. Gordon Brown has repeatedly emphasised that job creation from tackling climate change is "the biggest prize of all - the chance to seize an economic future, securing our prosperity as a nation, by reaping the benefits of the global transition to a low carbon clean economy"⁴⁹, while David Cameron has outlined a Blue/ Green Charter for profound changes in the way we live our lives⁵⁰. This political consensus strongly supports the need for an explicit industrial strategy with planned support for particular technologies, but as yet no such strategy has been developed and little of the employment created in the manufacture of renewable energy technology has been in the UK.

One significant step in the right direction was formation of the Commission on Environmental Markets and Economic Performance (CEMEP)⁵¹, which presented a policy framework to drive the investment and enterprise in environmental markets and provide more effective support for the development and commercialisation of environmental innovations. This has led to an emerging strategy for building low carbon economies⁵², but also highlighted the need for unprecedented co-ordination between departments to harness the powerful potential of combining skills, innovation and industry policies with high standards of environmental regulation and fiscal incentives across government. Critical in the current economic climate is the need to develop skills in sustainable public procurement and then to ensure that investment by the public sector creates the high standard outcomes using home grown supply chains to maximise the economic benefits.



The CEMEP recommendations should be fully adopted without delay to make the UK a more attractive investment proposition and place to do business. The potential rewards are vast. In a recent UN report, Roland-Berger Strategy Consultants estimate that the global market for environmental products and services is projected to double from \$1,370 billion per year at present to \$2,740 billion by 2020⁵³, but the UK still lags far behind EU competitors such as France and Germany. The study reaffirms that forward-thinking government policies remain indispensable to driving employment in environmental sectors and particularly identified the importance of providing funding for environmental projects; overall goal- and standard-setting beyond the time horizons typical in the business world; providing infrastructure that private enterprises cannot or will not create; and creating and maintaining a level playing field for all actors.

A good example of a new environment-driven business opportunity is carbon trading, now a high growth commodity market. Point Carbon values the carbon traded on the world market in the first six months of 2008 at £30 billion⁵⁴, almost double the total for the whole of 2007, and analysts predict the market could soon rival the US\$3 trillion oil trade⁵⁵. Thanks in part to the UK creating its own voluntary emissions trading scheme a year before the mandatory EU scheme was introduced, London was an early mover and is now regarded as the hub of the international carbon market. Though the UK scheme was criticised for its emission reduction achievements vis a vis cost, the benefits of establishing the trading infrastructure (including the development of verifiers and auditors) and the 'hands on' experience of trading, were considered to outweigh the weaknesses⁵⁶. The UK must not lose the initiative and further leadership – such as the introduction of mandatory carbon reporting standards – would help entrench its position, and spur the development of expertise in carbon accounting and audit practices.

48 European Commission Communication (23rd January 2008) http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM2008_0001

49 Brown, Gordon (26th June 2008) *Speech on Creating a Low Carbon Economy*, www.number10.gov.uk/Page16141.

50 Cameron, David (16th June 2008) *Cameron: The choice isn't between economy and environment*, www.conservativeparty.org.uk.

51 BERR & Defra (November 2007) *Commission on Environmental Markets and Economic Performance Report*.

52 HM Government (May 2008) *Building Low Carbon Economy: unlocking innovation and skills*.

53 UNEP (September 2008) *Green Jobs: Towards decent work in a sustainable, low carbon world*, p5.

54 Milner, Mark (9th July 2008) *The Guardian: Value of global carbon trading is already nearly double last year's figure at £30 bn, London*.

55 Szabo, Michael & Wills, C (21st April 2008) *Carbon Market Exchanges Ripe for Consolidation*, Reuters.

56 Bowyer, C, Monkhouse, C, Skinner, I & Willis, R (2004) *Business Action on Climate Change: Where next after emissions trading? IEEP and Green Alliance*.

Effective environmental regulation with the right transitional policies can stimulate dynamic, world leading growth industries. The introduction of a feed-in tariff in Germany in 2000, guaranteeing a long term premium for electricity generated from renewable sources and fed into the grid, alongside 27 different supporting measures focusing on skills development, R&D and decentralisation, was instrumental in the progression of its booming renewable sector; Germany now generates 12.5% of its electricity from renewable sources and employs 214,000 people⁵⁷, with another 100,000 jobs expected to come online by 2020⁵⁸. While the UK has about 40% of the EU's wind, it currently has only 10% of the installed capacity of Germany⁵⁹. The UK requires concrete proposals that reflect the government's ambitious renewable energy plans and creates the drivers to develop a manufacturing base and employment within the UK – including the rapid scaling up of tax relief, research and development and demonstration projects.

Overall, environmental policy is a net creator of jobs – there are no examples of environmental policy causing concentrated job losses or regional difficulties⁶⁰. However, the transition to a low carbon economy will necessitate a massive upheaval of current economic structures, with jobs shifting between locations and sectors. The TUC have warned that the UK government must work more closely with employers and unions if it is to implement policies that will transform the UK into a world leader in the green economy, and that planning and support is vital to ensure the transition is just⁶¹.

Government has a unique and critical role in establishing the right policy frameworks with high environmental standards that will stimulate business innovation through improving environmental performance.



UK regulation providing a competitive edge to domestic suppliers

Vehicle Emission Control

Legislation to control harmful pollutants from vehicles is now in place at varying levels all over the world and for most types of vehicles. The tightening of legislation is a key business driver for Johnson Matthey (JM), a speciality chemicals company, and the development of new emission control catalyst technology is a major focus for its R&D investment. Since their introduction in 1974, JM's autocatalyst products have removed around four billion tonnes of pollutants from the atmosphere and JM has supplied 1 in 3 of all the autocatalysts ever made. To take one recent example, new legislation in Europe and elsewhere around the world has required more stringent control of emissions of soot and NOx from diesel vehicles. This has presented new chemistry and engineering challenges for the industry. JM overcame these challenges to develop innovative new products for these markets including the Continuously Regenerating Trap[®] or CRT[®] for heavy duty diesel vehicles and Catalysed Soot Filters or CSFs for light duty diesel applications. These state of the art products allow customers to meet the new legislation limits and provide a cleaner, safer environment.

New Opportunities

In the last financial year, JM's global revenue was £7.5 billion and it is set to strengthen its competitive position by taking advantage of growth opportunities in emerging markets in the sustainability sector. Examples include new catalyst technology which can reduce N₂O emissions from nitric acid plants by over 90% (N₂O is 310 times more harmful in global warming terms than CO₂), fuel cells for zero carbon cars and niche applications and clean energy technologies that use hydrogen obtained from hydrocarbons to generate electricity while also capturing and sequestering the CO₂.



57 Friends of the Earth (January 2008) *Briefing Note: What is a feed-in tariff and why does the UK need one to support renewable electricity?* www.foe.co.uk.

58 The Climate Group (May 2007) *In the Black: The growth of the low carbon economy*, p9.

59 Seager, Ashley (18th February 2008) *The Guardian: Reasons to see red over green energy*.

60 European Commission (2007) *Facts and Figures: The links between EU's economy and environment*, Brussels, p5.

61 TUC (June 2008) *A Greener and Fair Future: For a just transition to a low carbon economy*.

UK regulation providing a competitive edge to domestic suppliers

Since the implementation of the UK Environmental Protection Act in 1990, regulation has been a major driver for the growth of PCME, a worldwide organisation dedicated to the innovation, design, development and manufacture and supply of continuous particulate emission monitors for industrial processes.

In particular, the UK adoption of EU legislation in a timely and thorough manner (such as the EN 14181 standard) has helped to stimulate the development of new instruments and technology which can then be exported around the world. First mover advantage enables UK manufacturers to pass through the learning curve before other member states, which in turn provides an extensive market. UK suppliers also benefit from the reputation of world leading regulatory frameworks, such as the Environment Agency's Monitoring Certification Scheme (Mcerts).

PCME provide instruments monitoring over 20,000 emission sources in over 40 countries, employing 40 people and winning the Queen's Award for Innovation this year. The company benefits from its membership of the Environmental Industries Commission (EIC), the leading association which provides the environmental technology and services industry with a strong and effective voice with Government in the debate about how to ensure that British companies succeed in a rapidly growing worldwide market.



Kirklees Warm Zone boosts the local economy

As part of its "Green Ambition" to be beacon of green living, Kirklees Council has developed and funded a number of initiatives on climate change mitigation and adaptation, including the Kirklees Warm Zone programme.

The scheme is unique as it offers free insulation to all suitable homes across Kirklees regardless of people's ability to pay. It also offers a range of other services, such as benefits and debt advice, a free carbon monoxide detector, free energy saving lightbulbs, fire safety checks and energy efficiency advice, through its network of partner organisations. As of October 2008, almost 90,000 households have been visited, with loft insulation installed in over 13,000 homes and cavity wall insulation in around 7,000 homes – saving an estimated 13,289 tonnes of CO₂ and over £2.8 million on energy bills.

On top of these benefits, the scheme is also creating employment opportunities. Eight full time jobs have been created at Kirklees Energy Services (KES), a social enterprise set up to deliver the Warm Zone programme, and another 58 residents across Kirklees are employed as freelance doorstep assessors, gathering information to help householders identify energy saving measures. KES also recently won the regional Energy Saving Trust contract to supply independent domestic energy efficiency advice to residents in West and South Yorkshire, bringing a further 26 employment opportunities to Kirklees. The pool of technical skills required for the programme is likely to form the basis for further business development given the growing importance of home energy efficiency.



4 Policy appraisals must accurately assess environmental costs and benefits

*'If we are really to make inroads into reducing emissions of carbon dioxide, the key will be to put an increasingly high price on carbon.'*⁶²

Sam Laidlaw, Chief Executive, Centrica.

Policy appraisals – or impact assessments – of the costs and benefits of proposed regulations are a key component of better regulation. They aid decision-makers in the selection of the optimum policy option to meet pre-determined policy objectives, ensuring value for money and effective delivery. It is essential that such appraisals are undertaken but they often focus on a narrow range of economic costs – mainly short-term costs to industry – while downplaying the economic benefits that can be derived from setting high environmental standards. While putting an economic value on environmental impacts is complex, a more balanced and thorough approach to such appraisals would be a major contribution to evidence-based policy-making.

Fundamentally, policy appraisals should reflect the strategic framework set out by government. Keystone policy objectives such as increasing resource efficiency and decarbonising the economy will only be achieved if they are adequately reflected in price signals, both as regards to the market price and the values to be accorded in policy formation. To avoid the potentially severe long term economic impacts of climate change or a resource crunch, high values should be accorded to the natural resources whose use is contributing to these market failures; essentially what Stern did by using a low discount rate for future carbon costs. Policy appraisals on the basis of current or anticipated market prices are not adequate tools for addressing wider, longer term challenges facing our economy and society.

In April 2007, the government reformed its impact assessment procedure to ensure they presented cost and benefit information in a more transparent way and are carried out throughout the policy making cycle. Significant developments are the requirement to indicate value changes in greenhouse gas emissions on the front page summary (which must be signed off by the sponsoring department's chief economist) and the introduction of a new toolkit to guide policy makers for considering how their proposals contribute to the five principles of sustainable development. However, a strong focus on monetisation risks marginalising rigorous qualitative assessments of environmental and non-monetarised impacts.



Although it is too soon to comprehensively evaluate the new process, a number of intrinsic and systematic defects remain. On one side, cost assessments tend to be an overestimate, first and foremost because the innovation potential is rarely assessed. Routinely, impact assessments focus on currently available solutions and static assessments of current costs, as corresponding financial data is easily and readily available. A key recommendation of CEMEP is to reform the process, allowing for the potential of innovation and investment to deliver better, cheaper solutions. It suggests that “finding ways to value the future benefits of innovation, in a way that realistically reflects the financial and risk-reward perspectives of the private sector innovator, would greatly enrich the contribution of policy appraisal to the longer-term health of the economy”⁶³.

62
UK Corporate Leaders Group
on Climate Change (September
2008) *Press Release: UK CLG
Letter to UK Party Leaders.*

63
BERR & Defra (November 2007)
*Commission on Environmental
Markets and Economic
Performance Report, p34.*

Additionally, costs can be based on exaggerated figures from industry and in the past trade organisations have systematically inflated cost estimates to combat new regulations. A pertinent example is the European Commission's impact assessment for EU car efficiency targets for 2012. Originally, the supplementary cost per vehicle was estimated to be an average of €577. The car industry then heavily influenced the secondary analysis, providing much of the new cost data, and the final estimate was over six times the original figure⁶⁴. This profoundly influenced the European Commission's decision to water down its original proposals, which remains a contentious issue.

On the other side, environmental benefits are complex to monetarise and are rarely assessed in a rigorous manner. Well-designed environmental regulations can produce comprehensive economic benefits, such as improving health, amenity and ecosystems. For example, the European Commission estimates that for large combustion plants alone, the IPPC Directive, preventing pollution from stationary installations, will lead to net environmental and health benefits of at least €7-28 billion per year, including the reduction of premature deaths and years of life lost by 13,000 and 125,000 respectively⁶⁵. Such benefits are extremely complex to accurately and objectively evaluate.

The net result is that environmental issues are being undervalued and often overlooked. A study by the Environmental Audit Committee found that policy appraisals often neglected the sustainable development agenda in the pursuit of minimising regulation. It recommends that impact assessments include all relevant environmental impacts, as well as adequately recognise and consider the contribution that would be made by a flourishing environmental industries sector. Fundamentally, a more even-handed approach is required and it is "no longer viable to view environmentally-minded regulation as a straightjacket to industry"⁶⁶.

As well as being more objective, impact assessments must be used early in the policy formation process to be most effective. In practice, they are habitually an exercise in ex post justification, validating pre-determined policy decisions. A recent report by the National Audit Office finds that impact assessments are not an integral part of decision making – informing and facilitating all stages of the policy making process – and the assessment of costs and benefits is the weakest area⁶⁷. While the new process addresses these intrinsic problems, it remains to be seen what effect the reforms will have on policy making.



The Climate Change Bill will present further challenges for policy makers as a prerequisite for a successful carbon budget strategy is a decision making process that includes vigorous analysis of likely emission outcomes. Currently, the government uses a Shadow Price of Carbon (SPC)⁶⁸ in all cost-benefit analysis to determine the positive or negative net benefits of big infrastructure projects and policies (such as the third runway at Heathrow). A low value for the SPC will result in a low estimate for the overall carbon cost to society and the economy in any given analysis. Although currently under review, the SPC is likely to be a severe underestimate as it explicitly excludes a number of social costs that are too complex to monetarise (such as those arising from increased flooding and droughts), and assumes that the world is on a low emissions trajectory (thus helping to justify high-carbon developments that will ensure this trajectory will not be achieved). To address these innate flaws, the SPC must be established by working back from scientific evidence and carbon reduction targets and not from some concoction of political and economic considerations. The Environmental Audit Committee recommends that the government's priority in the assessment of new policies and construction projects should be their effect on carbon budgets, with the monetary value of resulting carbon emissions a secondary concern⁶⁹.

64 See http://ec.europa.eu/enterprise/automotive/projects/report_co2_reduction.pdf.

65 European Commission (December 2007) *Press Release: Questions and Answers on the Commission's proposal for the revision of industrial emissions legislation in the EU*.

66 Environmental Audit Committee (February 2007) *Regulatory Impact Assessments and Policy Appraisal*, p3.

67 National Audit Office (July 2007) *Evaluation of Regulatory Impact Assessments 2006-07*.

68 Currently, £26.50 per tonne of carbon dioxide.

69 For more information, see Environmental Audit Committee (March 2008) *The 2007 Pre-Budget Report and Comprehensive Spending Review: An environmental analysis*.

5 The better regulation agenda must not lose sight of the need to maximise outcomes in the drive to reduce unnecessary costs

*'It is not gold-plating; it is green-plating, and we make no apology for that.'*⁷⁰

Rt Hon Yvette Cooper MP, Chief Secretary to the Treasury

*'I've never believed that we can leave everything to market forces... Unless shortcomings are addressed, the entire system risks falling into disrepute. And if we want to help improve the competitiveness of British business – a central challenge for the twenty-first century – then it is not enough to “roll back the state”.'*⁷¹

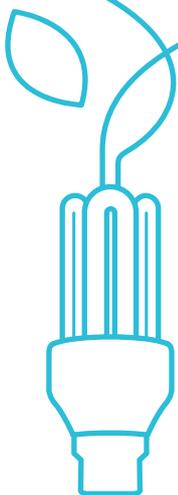
David Cameron, Leader of the Conservative Party

The credit crunch has exemplified the underlying problems of soft-touch regulation that is overly sensitive to the demands of big business and helps fuel unsustainable economic growth. While the UK is consistently recognised as having one of the best regulatory environments in the world⁷², there is a tendency to overly focus on reducing regulatory burdens. In doing so, there is a risk that the better regulation agenda loses sight of how to most effectively deliver the outcomes it is designed to achieve, and so puts at risk future wealth and prosperity.

70
www.publications.parliament.uk/pa/ld200607/ldselect/ldmerit/129/12906.htm

71
Conservative Working Group on Responsible Business, p2, www.conservatives.com/pdf/responsiblebusiness.pdf

72
For example the *World Bank Doing Business Survey 2008* placed the UK second in the EU and sixth in the world for the best business conditions and the *OECD Going for Growth Survey* in 2005 ranked the UK top among the G8 countries for liberal product market regulation.



A case in point is the government initiative on regulatory budgets⁷³ that sets a cap on the cost of new regulations introduced by government departments, with little emphasis of the corresponding societal benefits, despite effective and well-designed regulation playing a vital role in correcting market failures, promoting fairness and protecting the environment. Under this system, regulations essential for the transition to a low carbon, resource efficient economy, with large short-term costs and long-term benefits, risk being marginalised. The government's priority should be to ensure long term value in the economy and increase competitiveness through early innovation, rather than minimising short-run costs and encouraging present industrial processes.

The business community is increasingly recognising this point, and firms with strategies aimed at long-term value are actually demanding more regulation, so that they can address emerging challenges and provide a competitive edge. The headline finding from 2008's Carbon Disclosure Project⁷⁴, a survey of 1550 of the world's major companies, is that global corporations view climate change as a driver for risk and opportunity and have cited clear regulation as key to managing the impacts. For the Global 500 companies, a backdrop of regulatory uncertainty is delaying strategic investment decisions and senior management are calling for greater visibility on climate change related policy in order to better anticipate the impact of regulation driven carbon markets and carbon prices. Similarly, a survey commissioned by Clifford Chance of more than 100 major financial institutions and businesses over a broad geographical and sectoral spread found that 81 per cent called for increased regulation – demanding clarity and coordination in order to remove uncertainty in the markets and exploit potential opportunities⁷⁵. Strong environmental regulation will also benefit SMEs by enabling cost reductions, increasing business potential and providing long-term certainty but further government support is required by adopting a modern, risk-based, proportionate approach and targeted assistance through programmes such as NetRegs⁷⁶.



To maximise the potential economic benefits which companies are so eager to exploit, environmental regulation should combine price and policy certainty with a mixture of policy instruments rather than adopting a 'one size fits all' approach. In a final report to Defra, UK-based consultancy SQW found that the design and implementation of environmental regulation can positively affect competitiveness. It recommends that the 'pollution prevention pays' principle should become a central policy thread running through all approaches to environmental regulation and emphasises the need for clarity, ambition and determination of the regulating bodies to increase pollution prevention requirements and to use a hybrid of instruments to do so⁷⁷. The more uncertain the regulation, the more polarized is the private sector - with some 'over managing' (e.g. paying high prices for carbon) and some sitting back and waiting in the hope that nothing will happen. Either way the cost of uncertainty is likely to be higher than cost of an appropriate level of consistent regulation. This is reiterated in a BERR occasional paper which finds that regulation can have positive impacts on firm productivity through innovation and faster diffusion of technologies; firms may respond to regulatory uncertainty by postponing or abandoning investment decisions; and government should focus on the rate at which new regulations are introduced as well as the total stock of regulations⁷⁸.

73
See HM Government (August 2008) *Regulatory Budgets: A consultation document*.

74
Carbon Disclosure Project (September 2008) *Global 500 Report 2008*.

75
Clifford Chance (November 2007) *Climate Change: A business response to a global issue*.

76
NetRegs is a web-based tool offering UK businesses, and SMEs in particular, guidance on how to comply with environmental legislation and reduce their environmental impacts. It currently attracts over 40,000 unique web visitors per month, generating an estimated £60million per year in savings.

77
SQW (June 2007) *Phase 2: Exploring the relationship between environmental regulation and competitiveness, final report to Defra*.

78
BERR (September 2008) *Occasional Paper 3: Impact of regulation on productivity*.

New kinds of environmental, economic and social challenges require a more sophisticated approach to environmental regulation – one that selects the most appropriate instruments to achieve essential environmental objectives at minimum cost to businesses and public authorities. The traditional ‘stick’ approach of punishments and fines is frequently being supplemented or replaced by offering ‘carrots’ - incentives and rewards – that encourage dialogue and joint problem solving, while employing a range of techniques, such as voluntary agreements, taxation, subsidies and tradable permits. The modern approach is outcome-focused and risk-based, concentrating on the highest hazards and the poorest performing operators, while rewarding those with the best records with less supervision and control. At the EU level, an agreed vision for environmental policy and regulation would be an essential building block in achieving an integrated, coordinated and consistent legal framework which will help to better deliver environmental outcomes⁷⁹.

At the same time, there is no doubt that some regulations are outdated, badly designed or poorly applied. Better Regulation should focus on simplifying regulations into a more manageable and mutually-consistent form, or reducing the burden of paperwork and the time taken dealing with information requests. What must be avoided are crude regulatory reform initiatives that focus on narrowly defined cost burdens, whilst ignoring tangible societal and economic benefits. The Environmental Audit Committee argue that the better regulation venture “too frequently focuses on reducing the regulatory burden at the expense of promoting rigorous analysis and harnessing the potential of well-conceived and effective regulation as a means to successfully implementing good policy”⁸⁰.

A common misguided criticism of the UK framework is that there is excessive ‘gold-plating’ (extending the scope of European legislation), more often than not founded on questionable, rudimentary measures – such as comparing the number of words used in European and domestic legislation. The Davidson Review put to rest such claims by finding that inappropriate over-implementation is not widespread and it is sometimes beneficial to set regulatory standards that went beyond the minimum requirements of European legislation⁸¹. Nevertheless, the government will rarely go beyond these minimum requirements, even if its own analysis finds that there would be an overall societal and economic benefit. For example, in regard to the implementation of the Environmental Liability Directive, the Environment, Food and Rural Affairs Committee⁸² suggests that the ‘minimum implementation’ approach is a pan-Government one, with a political motive of avoiding accusations of gold-plating, and challenges the robustness of Defra’s defence of the environment in response to the predominant ‘business friendly’ approach of BERR⁸³.

Although reducing unnecessary costs to business raises the productivity of the economy, the better regulation agenda must not lose sight of the positive outcomes it sets out to achieve. It should aim to deliver high environmental standards providing the maximum stimulus to innovation and the creation of business opportunities, while minimising the administrative burdens of complying with them.

79
Network of Heads of European Environmental Protection Agencies (April 2008) *Improving the Effectiveness of EU Environmental Regulation – A future vision*.

80
Environmental Audit Committee (February 2007) *Regulatory Impact Assessments and Policy Appraisal*, p13.

81
Lord Davidson (November 2006) *Davidson Review: Implementation of EU legislation*.

82
EFRA Committee (July 2007) *Implementation of the Environmental Liability Directive*.

83
Formerly the Department for Trade and Industry.

The simplification and modernisation of regulations to reduce unnecessary costs

The Environmental Permitting Regulations, introduced in April 2008 by Defra, the Welsh Assembly Government and the Environment Agency, replaced over 40 pieces of legislation and established a single permitting platform. It cut 507 pages of regulations to 130. This delivers more flexibility for industry, a simpler risk-based system for regulators and continued protection of the environment and human health. It will save £70 million over 10 years, with greater savings estimated as more regimes enter into the Environmental Permitting Programme.

Another Environment Agency initiative which illustrates the economic potential of a well-designed regulatory regime is the Waste Protocols Project which aims to turn waste into useful and valuable resources by developing guidance on how to recover waste, remove it from the regulatory regime and cut through red tape. Early indications from the financial impact assessments, which were developed using market predictions from industry, suggest that over the next ten years the first eleven Quality Protocols could see cost savings to business of £407 million and £280 million in increased sales to business. Environmental benefits include 17 million tonnes of waste diverted from landfill and saving 15.5 million tonnes of virgin materials.



Early adoption of European legislation on vehicle emission requirements

As part of its commitment to high environmental standards, Tesco has been investing in large goods vehicles with the highest emission standards for its main distribution fleet well ahead of those currently required by EU legislation.

European Directives require that over time vehicles meet increasingly high emission standards that cover carbon monoxide, particulates, nitrogen oxide and hydrocarbons. The current requirement is for large goods vehicles to reach the Euro IV standard, however, Tesco has been purchasing over 200 Euro V vehicles annually for its main fleet, two years ahead of the Euro V deadline in Sept 2009.

By giving early warning of the increasing environmental standards for large goods vehicles and combining with fiscal measures on vehicle tax, there are also financial benefits associated with staying ahead of environmental minimum standards, despite Euro V vehicles costing more than Euro IV. Due to the lower vehicle taxes payable on the former compared to the latter, the additional cost of purchasing Euro V is paid back within the life of the vehicle.

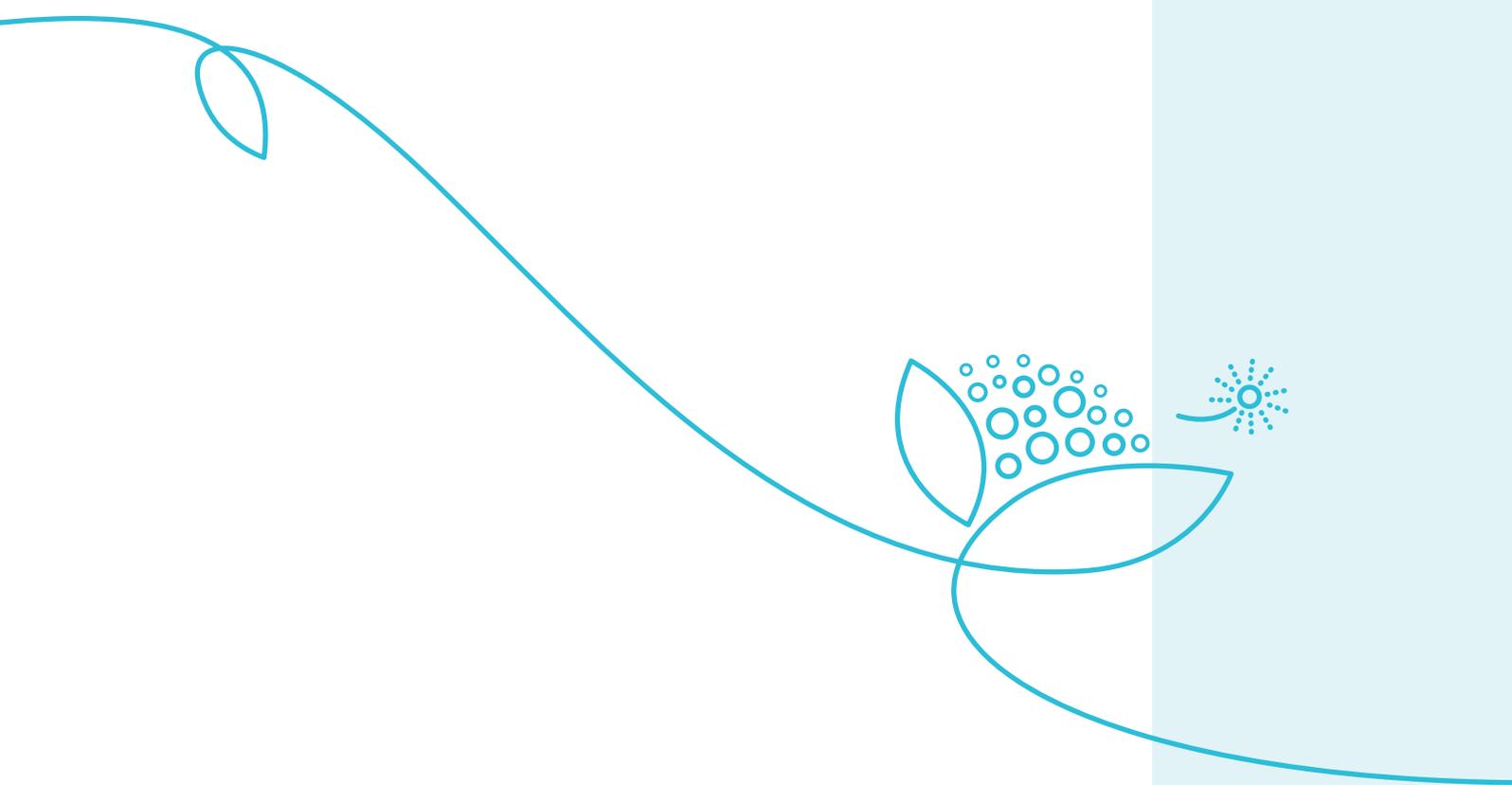


Setting high environmental standards for resource efficiency and cost savings in the construction sector.

The Institution of Civil Engineers' 2008 Demolition Protocol is an example of second tier regulation which provides a pragmatic set of methodologies to achieve resource efficiency in construction, demolition and refurbishment projects. An underpinning principle of the Protocol is that the production of demolition material can be linked to its specification and procurement as a high value material in new builds.

The Protocol describes how demolition and new build design processes are managed to ensure that resource efficiency is achieved. This is done both by minimising waste, and by maximising the displacement of primary materials in the new build, through specifying recovered (recycled/reclaimed) materials where viable (in terms of cost, supply and performance). Managing resources in this way delivers both environmental and cost benefits, as well as demonstrating compliance with regulations such as the Code for Sustainable Homes.

The Protocol was used as part of the Wembley Stadium redevelopment in regard to the Stadium Access Corridor. Adoption of the Protocol in the demolition of Riverside House allowed the early identification of material that could be used in the installation of the new works – with cost and schedule savings. Environmental impacts of the development were substantially reduced through reduced procurement of non-renewable, primary resources and environmental benefits were also realised through reduced vehicle movements, the result of using recycled aggregates won from the site, rather than using imported primary aggregates. This project realised 95% recovery of demolition material and more than 50% of aggregates came from recycled sources.



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Green Alliance	





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