

Foreword



Ian Pearson

Minister for Climate Change and the Environment

Since the publication of the 2006 report there have been a number of developments that continue to highlight the important role that the environmental industries must play in helping us to achieve our environmental goals.

Climate change has continued to head the political agenda and a key development during the last year was the publication of the Stern Review, which provides a solid analysis of the complex economic challenges around climate change. It clearly demonstrates that it is the costs of inaction, not action, that are the threat to growth.

The Review also highlights the important role that technology – research, development, demonstration and deployment – has to play as we strive to mitigate and adapt to the changing global climate.

December 2006 saw the launch of the Code for Sustainable Homes, which sets minimum standards for energy and water use. Initially a voluntary code, we propose to progressively incorporate the energy standards into the Building Regulations and have consulted on making a rating against the Code mandatory for all new homes.

The Code puts Government on a path to drive every new home to be 'zero net carbon' by 2016. This is an ambitious target that can only be achieved with the co-operation of business and the utilisation of our ever expanding environmental technologies sector.

Looking at public procurement more generally, the UK Government *Sustainable Procurement Action Plan*, published in March 2007, details the actions to be taken, collectively and individually, by

departments to achieve the Government's goal to be an EU leader in sustainable procurement by 2009. The Action Plan will see public-sector purchasing power harnessed to transform the market for innovative and sustainable solutions, making them more affordable and widely available.

Published alongside the Action Plan was an updated set of mandatory environmental product standards, 'Quick Wins 2007', that will help ensure Departments procure the most sustainable commodities.

The draft Climate Change Bill, published in March, is the first of its kind in any country. The Bill is intended to create a framework that will provide for delivering the changes needed for the UK to move to a low-carbon economy. We aim to introduce the Bill to Parliament in autumn this year and hope to achieve Royal Assent in spring 2008.

It is not just on issues relating to climate change and energy that there has been significant development. Defra has recently published its review of the waste strategy for England. It will help us to keep pushing the management of our waste up the waste hierarchy. Recycling of household waste has nearly quadrupled since 1997 and re-use and recycling of commercial and industrial waste are also increasing.

We also intend to publish a new national water strategy later this year. This strategy will help to ensure that we manage our waters, and the activities that impact them, in a way that helps us both mitigate and adapt to dangerous climate change, and protect and enhance our natural asset base.

The Commission on Environmental Markets and Economic Performance was established late last

year to look at how the UK can best exploit the economic opportunities presented by the transition to the low-carbon, resource-efficient economy.

The Commission is jointly chaired by David Miliband and Alistair Darling, with myself and Malcolm Wicks also sitting as members. Other members have been chosen to represent a diverse range of interests, from public bodies, industry, NGOs, the research community and the unions.

The Commission will make recommendations for actions by Government and business which could stimulate the growth of productivity and employment in the UK's environmental goods and services sectors and other sectors with a significant contribution to environmental outcomes and resource productivity. It is due to report soon.

I have described some, but by no means all, of the developments that will be of most interest to EIC members. I believe that over the last year we have reached the point where environmental concerns are no longer a niche interest, narrowly confined to environmental industries or environmental departments. We are on the threshold of a future where, as David Miliband said when he addressed the EIC's national conference in November 2006, 'Every Industry should be an Environmental Industry'.

Foreword



Mogens Peter Carl Director-General for Environment, Commission of the European Communities

The European environmental industry sector has enjoyed considerable growth in recent years. Today the sector is a prominent force in the European economy. It represents about 2.1 per cent of the European Union's Gross Domestic Product and accounts for some 3.5 million jobs across the Union.

Despite such excellent figures, the capacity for European industry to innovate in an environmentally-friendly manner is often underestimated by society at large. The European Commission recognises the key role the environmental industry plays in Europe's economy and appreciates the sector's vast potential in promoting growth and creating jobs in areas such as sustainable resource use, climate change and energy efficiency.

In 2004, the European Commission launched the Environmental Technology Action Plan (ETAP) as a way of channelling the efforts made by the European Union and Member States towards common goals. The aim of ETAP is to stimulate eco-innovation and encourage the take-up of environmental technologies on a broad scale. The focus of the plan is to foster greater demand for environmental technologies and to create a fertile ground for eco-innovation.

Tackling climate change is high on the European Commission's agenda. In January this year it unveiled a series of proposals to reduce greenhouse-gas emissions, increase the use of renewable energy, and improve energy efficiency. To achieve the ambitious targets set out in these proposals will require innovation on a massive scale across all industries. The proposals made by the Commission include targets for 2020, such as reducing energy consumption by 20 per cent and

increasing the use of renewable energy by 20 per cent. These targets imply the need for a fundamental change in patterns of production and consumption in a short time span.

To bring about this change it will be essential to provide financial support for environmental technologies and eco-innovation, from both private and public sources. By 2013, ETAP will have been instrumental in channelling over €12bn towards eco-innovation projects from such sources as the 6th and 7th Framework Research Programme, the Competitive and Innovation Programme (CIP), and the European Investment Fund (EIF).

The main targets for this support will be risk capital funds that are active in eco-innovation, business support networks that specialise in eco-innovation and projects that lead to the identification and broad dissemination of promising eco-innovative technologies. The focus of these projects will be on technologies whose technical performance and economic feasibility have been validated, but which have not been commercialised because there are still risks.

It will be particularly crucial to mitigate climate change and promote renewable energies, low-CO₂-emission power generation, and greener transport systems. Preference will also be given to projects that focus on developing industrial processes and business practices based on a life-cycle approach.

In order to facilitate the access of environmental technologies to markets, ETAP encourages the procurement of environmental technologies as a way of stimulating demand. But as progress is made in setting up technology platforms and

creating networks of testing centres for environmental technologies, this will also ease market access for these technologies.

Environmental innovation is at the heart of European Commission policies. Our thematic strategies will provide added impetus in the search for sustainable technological solutions in areas such as air pollution, the marine environment, soil, waste prevention and recycling, sustainable use of resources, the urban environment and sustainable use of pesticides.

A number of initiatives have been put forward this year to provide further stimulus for eco-innovation in the European Union. As well as a Green Paper on market-based instruments and another on sustainable production, we have tabled a proposal for eco-design requirements for energy-using products, and another on amending the directive on integrated pollution prevention and control (IPPC). And ETAP is also being reviewed this year. The pace of initiatives will continue in 2008 with the review of the EU Eco-Management and Audit Scheme (EMAS) and a proposal for a directive on construction products.

The European Commission is committed to promoting environmental technologies. But our efforts will fall short without the co-operation of industry and practitioners in the field. I and my staff look forward to continuing to work with the EIC, its members, and in the rest of the sector to continue stimulating the growth of a promising industry.

Foreword



Dr Campbell Gemmell Chief Executive, Scottish Environment Protection Agency

Little, it seems, stands still for long when it comes to our environment. And the pace of change is accelerating at global, European and national levels. Keeping up with these changes can be difficult enough. Staying ahead of the game, and capitalising on the opportunities presented can prove a real challenge. But the opportunities are there, and UK environmental industries are well placed to make the most of existing and evolving environmental regulation, increasing environmental awareness, and vociferous demands for environmental protection and improvement as well as for 'solutions' to the problems we face.

Climate change is a good example of a rapidly changing environmental landscape with significant implications and opportunities at every level, from individual households to global governance.

Climate change has rocketed up the international political agenda over the past year. Al Gore was recently in the UK presenting to senior business figures, and training key decision-makers from the commercial, voluntary and public sectors (myself included) in his highly effective approach to raising awareness and galvanising action. Greenhouse-gas emissions have increasingly come under the spotlight of European regulation, including the Landfill Directive, Pollution Prevention and Control, the EU Emissions Trading Scheme and emissions reporting. Last year in the UK, the Stern Review highlighted the potential costs of climate change for human development, economies and the environment, but also the opportunities for new technologies and innovation presented by the urgent need to reduce emissions and adapt to a changing climate. Scotland, too, has its climate change programme, and within SEPA we are currently formulating our own plan of action, which includes our role as a

regulator, as an authoritative and effective influencer, and as an exemplar of good practice.

Climate change demands urgent action: on emission reduction and clean technologies; on energy efficiency; on large-, small- and micro-scale renewables development including biomass and energy from waste; on adaptation and on culture change. New technologies and other solutions must, however, be capable of practical and commercial application, and 'proof of concept' work with universities and other research establishments is essential to this process.

But we must not allow the inexorable rise of climate change up the political and environmental agendas to overshadow the demands and opportunities presented by other pressing and continuing environmental issues.

The Water Framework Directive has challenged our approaches to water quality and quantity. New regulations and a catchment level focus will mean more changes in how we protect and improve our water resources in the coming years. Further development of the Integrated Pollution Prevention and Control (IPPC) regime is also likely. I would like to see us all take the same risk-based approach to PPC as we have taken to the Water Framework Directive's Controlled Activities Regulations so that effort is concentrated where it is needed.

As PPC regulators move increasingly from licensing towards monitoring, inspection and enforcement, Europe will soon be consulting on proposals for a revised IPPC Directive. The Commission's proposals are likely to include the addition of new activities to the IPPC regime. The Environmental Liabilities Directive, which came into force on 30 April this

year, sets out requirements for the prevention and remediation of environmental damage – to protected species and habitats, to water and to land. The forthcoming regulations will have significant implications for assigning liability and setting remediation standards, which may include returning the site to baseline condition, equivalent offsite measures where this is not possible, and compensatory remediation for the loss of natural resources and services pending recovery.

The environmental barometer is reading 'change'. But change is what environmental industries thrive on. It brings with it challenges, but also extensive opportunities for research and development, new technologies and innovation. I urge you to embrace this climate of change and continue the process of making the UK environmental sector a world leader.

Foreword



Barbara Young Chief Executive, Environment Agency

There is overwhelming scientific agreement that human activities are the main cause of the current global warming. The Environment Agency's view is that climate change is the number one global challenge to the environment.

The recent Intergovernmental Panel on Climate Change Working Group reports Climate Change 2007 present powerful evidence that many natural systems are being affected by climate change, particularly temperature increases. Also, the future impact of climate change will be much greater than previously thought.

We all need to act. There has been a step change in the way the public sees the challenges of climate change. More and more, it's rightly becoming an important part of the way we organise our lives.

At the Environment Agency, we are committed to playing our part in the mission to create a better place for all of us. The environmental and economic consequences of climate change could be huge, as the Stern Report says. We believe that adapting how we live, work and play in the environment is the key to change.

We are working hard with communities around the country to help them cope with the increased risk of flooding and coastal erosion that come with climate change. Mitigation is also important. We are working with industry to help change our energy systems to make them less carbon intensive, increase the sustainable use of biomass and maximise resource efficiency.

Efficient regulation is at the heart of a healthy environment and economy. We have been leading

the way for some years by focusing our regulation where it is needed. We call this our modern regulation agenda. The key principles of modern regulation are well established. They're being proportional, accountable, consistent, transparent, targeted, efficient and effective.

We changed the way we work, based on these principles, as summarised for staff in our publication: *A Guide To Modern Regulation*. They are now part of the day job of our officers around the country.

There is a large legacy of environmental regulations and guidance that have grown in response to specific issues. We are working with government to modernise these and focus them so that regulation is truly effective. For example, our Environmental Permitting Programme should provide a harmonised system of bespoke and standard permits for our customers. It also offers the opportunity to simplify waste regulation, which will lead to economic benefits through more flexibility and reduced costs. We believe this will help stimulate innovation.

We welcome the report by Professor Macrory – *Regulatory Justice: Making Sanctions Effective* – and the proposed introduction of administrative penalties. This is taking us towards a wide range of sanctions that will help us deal with non-compliance in a balanced way. It will fill the gap between giving warnings or cautions and taking court action. The principles in our Enforcement and Prosecution Policy reflect those recommended by Macrory.

We are making a major contribution to Defra's simplification plan: *Maximising Outcomes*,

Minimising Burdens. We have helped to identify and develop ways to reduce the administrative burdens of environmental regulation by about £25M, as part of the government target of reducing the administrative burden on businesses by 25 per cent by 2010.

These changes are creating big opportunities for businesses. There are more trading schemes, which are a useful tool to cap emissions. As we get bolder in setting tougher caps these should drive innovation and bring economic efficiency.

Reducing our carbon footprint requires a major investment in innovative energy systems and making better use of the energy we produce. We look forward to working with the organisations in this guide to provide the innovation to take these environmental and modernising agendas forward.