Response from the UK on SCP, Waste and Transport issues

PART I: NATIONAL REPORTING GUIDELINES FOR CSD-18/19 THEMATIC AREAS

THEME-SPECIFIC ISSUES

WASTE MANAGEMENT

- Prevention and minimization and environmentally sound management of hazardous wastes
    - Policy measures for the prevention and minimization of hazardous wastes

Policies include the application of the waste hierarchy in waste management policies such as Waste Strategy for England 2007. The Pollution Prevention and Control (PPC) permitting regime itself includes elements which encourage business to minimise waste, including hazardous waste. Furthermore, hazardous waste that is disposed to landfill is subject to the Landfill Tax, which currently imposes a cost on hazardous waste producers. There will be potential savings where hazardous waste is diverted from landfill. In addition, evidence shows that techniques that lead to waste prevention, lead to costs savings. Work undertaken by the Government supported National Industrial Symbiosis Programme (NISP) in relation to hazardous and problematic waste streams has led to the minimisation of hazardous waste and diversions from landfill

    - Transfer of environmentally sound technologies and know-how on clean technologies and low-waste production

In terms of transfer of technology, the UK supports the work being done under the UNEP Basel Convention by the Basel Convention Regional Centres to deliver training, consultation, dissemination of information, awareness raising, and, technological transfers, on matters relevant to the implementation of the Basel Convention and to the environmentally sound management of hazardous and other wastes in developing countries.

The UK agrees that capacity building in developing countries is important and believes that pilot projects are a good way of helping demonstrate and disseminate technology and techniques to developing countries, and has been able to support these financially.

    - Initiatives to treat, recycle, reuse and dispose of wastes at the source of generation and regulatory mechanisms (Polluter-pays principle)

Industrial production processes account for a considerable share of overall emissions to the environment in Europe (and thus in the UK). The EU has a set of common rules for permitting and controlling industrial installations in the IPPC

Directive on Integrated Pollution Prevention and Control of 1996. In essence, the IPPC directive is about minimising pollution from various industrial sources. Operators of industrial installations, including many waste management installations, are required to obtain a permit containing environmental requirements, from the authorities. These requirements must be based on the principle of the use of best available techniques (BAT). The controls automatically apply the polluter pays principle, which is a fundamental aspect of European waste legislation.

The Government will continue to encourage policies which lead to reductions in hazardous waste arisings. The Government will continue to encourage the full and proper application of the Landfill Directive controls and the requirements of the Hazardous Waste Regulations which are leading to improved management and control of hazardous waste. and this regime and the Environmental Permitting Programme will continue that process.

The Government and the Environment Agency have also issued guidance on the mixing of hazardous waste and on the treatment and landfilling of hazardous waste, in particular to make it clear that mixing hazardous and non-hazardous waste simply in order to dilute hazardous waste is not an acceptable treatment option.

- Procedures for environmental impact assessment, taking into account the cradle-to-grave approach

There are comprehensive controls on EIA laid down in Europe in the EIA Directive which is fully transposed in the UK.

- Recovery, reuse and recycling of hazardous wastes and their transformation into useful material

The European suite of waste legislation which is applied in Member States requires encouragement to be given to the reuse, recycling and recovery of waste including where possible hazardous waste. As well as the policies in the recently revised Waste Framework Directive, there are associated Directives on Hazardous Waste (91/689/EEC), Landfill (1999/31/EC), End of Life Vehicles (2000/53/EC) and on Waste Electrical and Electronic Equipment (2002/96/EC).

As noted above the Landfill Tax helps push waste up the waste hierarchy of management. Work is being undertaken in England on the development of a set of Principles on the management of hazardous waste in England. A new strategy is expected to be launched in late 2009.

- Phase-out of toxic, persistent and bio-accumulative waste

Comprehensive European legislation on chemicals management (REACH) and on the content of waste electrical and electronic equipment (the Restriction of Hazardous

Substances Directive (ROHS)) have been applied in the UK and have lead to reductions in use of damaging chemicals in products.

- Environmentally sound waste disposal and treatment

In addition to the framework legislation on waste, other EU Directives and Regulations also contribute to the environmentally sound management of waste treatment operations, as the Landfill Directive (1999/31/EC) and the Waste Incineration Directive (2000/76/EC) or of specific waste streams, as the Directives on Waste Oils (75/439/EEC as amended), Sewage Sludge (86/278/EEC as amended), Batteries and Accumulators (2006/66/EC), Packaging (94/62/EC as amended), End-of-life Vehicles (2000/53/EC) and Waste Electrical and Electronic Equipment (2002/96/EC and 2002/95/EC).

- Inventories of hazardous waste production, their treatment/disposal, and contaminated sites

Comprehensive data is collected in England and Wales on producers of hazardous waste, arisings and the movements of such waste. This data is collected and published annually by the Environment Agency (see for example: http://www.environment-agency.gov.uk/research/library/data/97801.aspx)

- Establishment of combined treatment/disposal facilities for hazardous wastes in small- and medium-sized industries

The provision of facilities for the treatment and disposal of hazardous waste is led by the private sector. Waste companies in the UK have been able to provide sophisticated systems for the management of hazardous wastes, and to advise smaller and medium sized enterprises on their own management systems.

- Dissemination of scientific and technical information dealing with various health and environmental aspects of hazardous wastes
- Notification systems and registries of exposed populations

The Environment Agency has been able to provide the public in England and Wales with accessible information on the location and operation of waste management facilities (see http://www.environment-agency.gov.uk) and the UK's Direct Gov website provides advice to the general public on the management of hazardous waste that can arise in homes – eg asbestos sheeting or chemicals. (see http://www.direct.gov.uk/en/Environmentandgreenerliving/Wasteandrecycling/DG_10014614) In addition the Defra website provides access to some scientific evidence and information on waste management. (see for example: http://www.defra.gov.uk/environment/waste/index.htm)

- Preventing illegal international traffic in hazardous wastes

There is a comprehensive system of legal and regulatory requirements to help prevent the illegal traffic in hazardous waste to and from the UK. The UK has ratified the Basel Convention through the European Waste Shipments Regulation. The competent authorities in the UK are funded to tackle incidents of illegal waste shipments. Currently the focus is on combating potentially illegal shipments of waste electrical and electronic equipment to developing countries, and the CAs have been recently able to make a number of arrests and to prosecute the people involved.

- Environmentally sound management of solid (non-hazardous) wastes and sewage, in the context of integrated planning and management of land resources
    - Policies aimed at waste prevention and minimization, reuse and recycling
    - Development of environmentally sound disposal facilities, including technology to convert waste into energy, such as, for example, through utilization of landfill methane
    - Financial mechanisms for waste management service development in deprived areas

In terms of wider waste issues, the UK in common with other European Union Member States has addressed the environmentally sound management of waste (ESM) through the various EC Directives and Regulations relating to waste and environmental protection. A key plank of the EC legislation is the proper application of the waste hierarchy to the management of waste with waste prevention at the top and disposal at the bottom. Due protection of the environment and the safeguarding of human health is an underlying objective of this suite of EU legislation.

Comprehensive policies and programmes on waste management are in the Waste Strategy 2007, including on energy from waste. (see: http://www.defra.gov.uk/environment/waste/strategy/index.htm)

- Radioactive wastes and their environmentally sound management (safe storage, transportation and disposal of radioactive waste)

Separate and complete controls apply to the regulation and control of radioactive waste to ensure protection of the environment and human health

THE TEN YEAR FRAMEWORK OF PROGRAMMES ON SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

- Generic issues relating to the inclusion of SCP in national policies:
    - Inclusion of SCP in development planning
    - Inclusion in the poverty alleviation strategies
    - Inclusion in national and local development planning, including infrastructure investment

- **Green public procurement policies, laws and regulations**

Our plans for Transforming Government Procurement were published in January 2007, and followed up by the UK Government Sustainable Procurement Action Plan in March 2007 which set out measures on how that transformation will happen.

In 2007-08, Central Government Departments and their executive agencies spent £54.7 billion on purchasing a range of non-capital goods and services. The environmental impacts of producing, using and disposing of these goods (i.e. across the product life cycle) are substantial, in terms, for example, of consumption of natural resources, and production of 'embedded' carbon. In order to minimise such impacts, and use Government purchasing power to steer the market towards more sustainable products, all central government departments and their executive agencies have, since 2003, had to integrate a series of environmental specifications into their procurement processes. In effect, only goods and services which meet such environmental standards can be supplied to Government Departments.

These standards are detailed within a toolkit known as 'Buy Sustainable – Quick Wins'. They consist of a set of mandatory minimum standards (for central government and their executive agencies) and voluntary best practice specifications for products commonly purchased across central government. The products selected are chosen for their environmental / financial impact, scope for environmental improvement, and political or example-setting function. For example, the product groups include paper, where a minimum recycled content is specified for different paper grades, and furniture, which specifies that all timber used in the manufacturing process must comply with the Government's timber procurement policy.

The minimum, mandatory 'Quick Wins' standards have generally been set at market average level and have been revised periodically to reflect technological advances and subsequent market developments.

In March 2008, the Government created the post of a Chief Sustainability Officer, supported by a Centre of Expertise in Sustainable Procurement (CESP), at the Office of Government Commerce (OGC). The CESP is responsible for leading departments in delivering on government's sustainable procurement commitments. The Sustainable Development Commission, the government's independent watchdog in this field, reports annually on progress, including on sustainable procurement.

The Government is also promoting the use of outcome-based specifications by public sector procurers. In November 2008, the Government launched a competition on the theme of "Innovation for Sustainability" to encourage projects using forward commitment procurement in which public procurers agree in advance to procure goods or services provided in innovative ways, and to build up a community of practitioners able to promote the wider use of this technique throughout the public sector . The shortlisted projected were launched on 7 July 2009.

Instruments for sustainable consumption

- **Awareness-rising programmes/campaigns on SCP, including water conservation, energy efficiency, waste minimization and recycling**

The ACT ON CO_2 public campaign raises awareness and understanding of climate change and wider environmental issues and specifically the actions people can take to reduce their impact on the environment.

The ACT ON CO_2 Calculator is an engaging and simple web-based tool that allows people to calculate their personal or household carbon footprint. Users can compare their footprint to the UK statistical average to see how they compare with other people. The Calculator also provides an Action Plan with a list of personalised recommendations about how to reduce carbon emissions.

Advice on reducing waste and energy use featured in the 'Real Help' campaign to help businesses best weather the economic downturn.

WRAP (see section on Public, parastatal and private institutions involved) launched a consumer-facing 'Love Food Hate Waste' campaign on 1 November 2007 to encourage behavioural change. They are working with the UK grocery sector, food industry, Government and organisations such as the Food Standards Agency, to develop practical solutions and improved communications to make it easier for consumers to get the most from the food they buy, and to waste less of it.

- **Policies and/or infrastructure to support citizens' choices for responsible consumption of products and services, including consumer information tools**

In 2006, the Sustainable Consumption Roundtable – a joint initiative from the UK Sustainable Development Commission and National Consumer Council – published the report *I will if you will: Towards sustainable consumption*, which set out how a significant shift towards more sustainable lifestyles can be achieved. It helped develop a better understanding of what will change consumer behaviour and also lead to new Government research projects in this area.

In the last two years Defra has invested considerably in developing a robust and respected evidence base on sustainable behaviours to inform the development of policy, communications and further research. To date the critical output of Defra's work in this area has been the development of the 'Pro-environmental behaviours framework' report which the Government published in 2008.

The framework summarises our understanding of the evidence about consumer behaviour and the environment, the behaviours that people are willing and able to do and draws conclusions on where there is potential for change across a range of behaviour, and population, groups. It is designed to support policy development and implementation across Government departments and beyond. The framework has been developed with the help and advice of a wide range of experts, Defra delivery

partners, and wider stakeholders.

The framework covers:

- Our broadly social marketing approach and best practice principles for encouraging more environmentally friendly behaviour;
- Identifying a set of behaviour goals for living with less impact on the environment – with 12 headline behaviour goals, covering the main areas of consumption across food and drink, personal travel, homes and household products and travel tourism;
- Insights from the pro-environmental behaviours evidence base including an assessment of what kinds of actions people are already taking and their relative ability and willingness to do more;
- An environmental segmentation model that divides the public into 7 segments, each with a distinct set of attitudes and beliefs towards the environment; and
- An assessment of the implications of this evidence and understanding for policy development and implementation including the design of communications activity and marketing tools.

This, alongside the wider evidence base, means we can better target communications and policy to address the needs and motivations of different population groups.

We continue to build and review our evidence base and the programme of work provides a broad understanding of current behaviours, how to influence behaviour to more pro-environmental actions, the motivations and barriers to change and what will best achieve change at a household level. Research also includes piloting and testing innovative approaches to encourage pro-environmental behaviour.

The framework and this ongoing research into consumption and environmental behaviours is being used to ensure continued integration of behaviour change approaches across Defra's work in policy and communications development. This has been particularly important for public engagement (such as the Act on CO2 campaign) and for developing the third sector strategy, such as the new Greener Living Fund of £6m over 2008-11. This Fund supports projects with third sector delivery partners to extend 'tried and tested' approaches to encourage more sustainable living at a regional or national level. The Fund draws on the framework as projects were asked to target behaviours from the 'headline goals' and to target those segments or other defined population groups (such as within their membership) with the greatest potential for further action.

We are providing financial support for the pilot phase of the 'Reynolds-Cheshire' initiative where business and the third sector are working together to deliver a public engagement campaign to encourage consumers to choose fruit and vegetables that are in season where they are grown and to grow their own.

The Environmental Action Fund (EAF) 2005-08 supported the projects of 34 voluntary groups in England that contribute to the Sustainable Consumption agenda identified in *Securing the Future – the UK Sustainable Development Strategy*35. The 3 year grant round finished in March 08. The 2005-08 EAF budget was £2.2 million per year (£6.7 million over the three years).

- **Curriculum development/formal education programmes**

The 2003 Green Paper, *Every Child Matters* (ECM), aimed to improve the daily experiences of all young people in England, focusing on their well-being, personal development and future prosperity. *However, it* was published before the Government's sustainable development strategy, *Securing the Future* (mentioned below). In June 2007, *Every Child's Future Matters* was published, a report that combines commissioned research with the experience of nine local authorities to demonstrate how attention to the environment provides a powerful way of meeting ECM's aims.

- Sustainable Schools is designed to support schools on their journey to sustainability. It covers a whole range of areas, including food and drink, energy and water, travel and traffic, purchasing and waste, and buildings and grounds. It includes guidance and a training pack for school governors, a bursar's guide to sustainable school operation, resources for teachers and an audit tool to help schools evaluate their impact.

- The Growing Schools programme encourages schools to use outdoor environments – the school grounds and beyond – as a cross-curricular learning resource. It focuses in particular on food, farming and the countryside. It aims to ensure pupils get first-hand experience of the natural world and that outdoor learning activities are integrated into everyday teaching in nursery, primary, secondary and special schools.

- An early awareness of the world is important for helping young children learn about sustainable development. The new single framework for learning, development and care for children under five, the Early Years Foundation Stage (EYFS), starts from September 2008. *Knowledge and Understanding of the World* is one of the six EYFS areas of learning.

- The guide *Schools for the future: Design of sustainable schools* includes ten case studies of school buildings that have been designed with sustainability in mind. The book aims to inspire architects, contractors, building commissioners and school teams involved in new build or refurbishment projects.

- The Global Gateway website is an international gateway to educational partnerships between schools and colleges across the world. It is managed and run for the Department by the British Council.

- A programme is in place to encourage young people to become activists for sustainable development.

- **SCP in national priority areas**
    - **Inclusion of SCP in policies, laws, regulations, and guidelines**
    - **Inclusion of measures and policies to improve the environmental and social impacts of products (e.g. life-cycle analysis, energy-efficiency standards, internalization of environmental and social costs)**
    - **Eco-efficiency/eco-design programmes**

We are working towards an economy where products and services are designed, produced, used and disposed of in ways that minimise carbon emissions, waste and the use of non-renewable resources.

Sustainable Consumption and Production (SCP) is about achieving more with less, finding ways to minimise damage to the natural world and making use of the earth's resources in a sustainable way. This contributes to the wider aim of a more sustainable, low-carbon and resource-efficient economy. Our policies are seeking to achieve the following results:
• encouraging business to produce, market and use more sustainable products and services;
• encouraging consumer demand for sustainable goods and services, and reducing the environmental impacts of household consumption;
• increasing the resource efficiency of business operations and processes;
• leading by example through sustainable public procurement; and
• preventing, reducing and recycling waste, and reducing landfill.

Current consumption, production and waste disposal patterns in the UK are incompatible with sustainable living. They account for a significant proportion of greenhouse gas emissions and are dependent on inputs of non-renewable resource, energy and water. Products and materials are currently landfilled that could be reused, recycled or have energy recovered from them. Current developed country patterns of consumption and production could not be replicated world-wide. Some calculations suggest that this could require three planets' worth of resources[*].

Considering the drag on the UK's economy and costs to business from inefficient resource use, achieving sustainable consumption and production remains critical during the economic downturn. Our approach is to work with the grain of markets but to help those markets work in ways which give full value to environmental impacts. Central to achieving our goals is reducing the environmental impact of our lifestyles, the products that our economy consumes, and the waste we produce, so that we can live within our environmental means without compromising our quality of life.

[*] World Wildlife Fund (WWF), 2004, *Living Planet Report.*

In September 2003 *Changing Patterns, the UK Government framework for sustainable consumption and production* was published. This set out how the UK was taking forward commitments on sustainable consumption and production (SCP) agreed at the World Summit on Sustainable Development (WSSD) in 2002. This:

- Set out the underlying aim of 'decoupling' ie, decoupling economic growth from environmental degradation and unsustainable resource use
- Where policy intervention is needed, efforts will be focused on the most important environmental impacts associated with the use of particular resources, rather than the total level of resource use
- Recognise the need for more work on the challenges of sustainable consumption
- Proposed integrating SCP thinking and objectives in all policy development and implementation

Following on from *Changing Patterns,* SCP was set out as one of four priority areas for UK action, set out in the Sustainable Development Strategy *Securing the Future*[†] published in March 2005. Chapter 3 One Planet Economy sets out our strategy for moving the SCP agenda forward. It is based around a range of activity, including through measures to promote:

- Better products and services, which reduce the environmental impacts from the use of energy, resources, or hazardous substances
- Cleaner, more efficient production processes, which strengthen competitiveness, and
- Shifts in consumption towards goods and services with lower impacts.

We are encouraging best practice on SCP by helping Government and business understand and assess the lifecycle impacts of products and how to market and differentiate those products. A number of relevant initiatives include the publication of a Progress Report on *Sustainable Products and Materials* which outlined the lifecycle environmental impacts of products, development of Product Roadmaps for ten high impact products, PAS 2050 carbon footprinting methodology, updating the Green Claims Code, and agreeing Government-wide assessment methods and labelling for product lifecycle impacts.

In collaboration with the European Commission's Joint Research Centre, we launched the voluntary European Code of Conduct on Data Centres in November 2008. Use of the Code by Data Centres in the UK alone over the next six years could save 4.7MtCO_2, equivalent to taking more than a million cars off the road, and £700m (note that the savings presented here will overlap to some degree with other related polices, and are therefore not entirely additional).

A carbon footprinting methodology (PAS 2050) has been developed to enable businesses to assess the impacts of their products (launched in October 2008). This will provide an agreed method that can be applied across a wide range of products and

[†] http://www.defra.gov.uk/sustainable/government/publications/uk-strategy/index.htm

services, and their supply chains, to enable companies to measure and reduce their GHG-related impacts.

We are currently piloting the development of 'Roadmaps' to improve the environmental performance of ten key products (milk, fish and shellfish, televisions, domestic lighting, commercial electric motors, window systems, plasterboard, WCs, clothing, and passenger cars). Working in collaboration with stakeholders, the roadmap process improves our understanding of the impacts of a particular product, and the ways in which these impacts can be mitigated, and to develop an agreed course of action; Two of the ten product roadmap action plans have been launched setting out the commitments to reducing adverse environmental and social impacts across the supply chain (Dairy Supply Chain Forum's Milk Road Map was launched in May 2008 and the Sustainable Clothing Action Plan was launched at London Fashion Week in February 2009).

We are setting standards through EU regulatory frameworks and industry guidance to ensure that minimum requirements are implemented in product design, production, use and end of life considerations. Relevant work includes the following:

• the sustainability of energy-using products is being raised through EU wide minimum energy performance and energy labelling standards, and engagement with the supply chain and with our international partners. The Eco-design of Energy Using Products Framework Directive (EuP) has been transposed in the UK. This Directive set the overall framework and process by which the European Union will agree minimum eco-design standards for products that are sold in the European single market. Measures agreed to date under the Directive will save just under 7 $MtCO_2$ per annum by 2020. This is predicted to result in average annual savings of over £900m resulting from reduced energy bills, the sale of EU allowances, and changes in other environmental impacts. We have consulted and set out our analysis, targets and illustrative standards for energy using products, looking ahead 10-20 years. This analysis will inform Government policy decisions and will help retailers, manufacturers and service providers in their own investment and planning processes.

• We continue to work with industry to introduce more energy efficient light bulbs, ahead of an EU-wide mandatory phase out of incandescent light bulbs. A voluntary initiative led by retailers, and energy suppliers to phase out the least efficient light bulbs by 2011 has been agreed. This aims to save up to 5 million tonnes of carbon dioxide a year by 2012 from UK electricity, the equivalent of taking 5 million cars off the road;

• We worked with the European Commission to advocate and successfully develop an EU Action Plan for Sustainable Consumption and Production and Sustainable Industrial Policy, which was launched in July 2008 (this includes new proposals to improve the environmental performance of products and their uptake)

Envirowise, one of the delivery bodies mentioned later in the report, launched a new practical online packaging indicator tool for eco-design. The tool is aimed at helping businesses reduce the environmental impact of their packaging designs. This has been piloted by Mars Snackfood, Diageo and other major companies and 800 businesses have registered for the toolkit.

The Commission on Environmental Markets and Economic Performance's report *Building a low carbon economy: unlocking innovation and skills,* published in May 2008, sets out a range of recommendations to drive business investment and innovation in environmental markets.

Government Response to CEMEP – Building a Low Carbon Economy. The Government response to CEMEP report, published in May 2008 outlined how Government is implementing the CEMEP recommendations through a wide range of initiatives and strategies including the Science and Innovation White Paper (Innovation Nation), the Enterprise White Paper (Unlocking the UK's talent) and the Climate Change Bill. The response identified the four key challenges to implementation of CEMEP, namely that Government needed to set a long-term policy framework, that policy must positively support innovation, that the economy and our workforce need the right skills and that the process would involve partnership working.

The Low Carbon Industrial Strategy was published on 15 July 2009. Its core objective is to ensure that British businesses and workers are equipped to maximise the economic opportunities and minimise the costs of the transition to a low carbon economy. Making that transition is an important part of the UK's economic recovery, and will define our next economic decade. Going green is key to getting back to growth.

At the heart of the Strategy are three basic principles for a positive environment for low carbon business:

- A long term strategic approach from government
- A pragmatic recognition that intervention from government may be required in some areas to accelerate and enable the transition to low carbon
- A recognition that government has a responsibility to ensure that British-based companies and people are equipped to compete for the new demand created by government climate change policies.

The strategy

- Identifies a range of low carbon sectors in which the Government believes that the UK has potential for job creation. These sectors include new forms of energy including wave and tidal power; civil nuclear power; offshore wind, low carbon business like green venture capital and low carbon buildings and exciting cutting edge technology like ultra carbon vehicles and renewable chemicals.
- Includes the first investments from the £405 million for low carbon industries and advanced green manufacturing announced at Budget 2009.
- Introduces the concept of Low Carbon Economic Areas, and announces the first of these, located in the South West of England, focusing on the development of marine energy demonstration, servicing and manufacture.
- Sets out how Government will help all businesses benefit from the shift to low carbon by encouraging greater energy saving and smarter resource use

It builds on the earlier vision and brings together the strands of; energy efficiency; energy infrastructure; Low carbon vehicles; and making Britain the best place to locate

and develop low carbon business, into a single strategy for seizing the industrial benefits of the transition to low carbon in Britain in the years ahead.

Building Britain's Future: New Industry, New Jobs (NINJ) identifies key areas where Government action can have most impact investing in growth to speed recovery and building manufacturing and services essential to ensure British people and businesses can compete successfully for the jobs of the future. The aim is to create the best possible conditions in which UK businesses can thrive, removing barriers to success and offering targeted support to unlock new potential in existing and new technologies.

Measures announced in the Budget enable an additional £10.4 billion of low carbon sector and energy investment over three years, securing new jobs and new business, and placing the UK at the forefront of a worldwide low-carbon recovery. The *Investing in a Low Carbon Britain* document makes case for applying Goverment's new activism to low carbon growth focusing on key sectors where the UK may have an advantage to help secure a significant share of the £3 trillion global market for low carbon goods and services.) The money will be used to support energy and resource efficiency in businesses, public buildings and households over the next two years.

- **Public, parastatal and private institutions involved**

Sustainable Consumption and Production is a cross-Government influencing programme led by the Department for Environment, Food and Rural Affairs (Defra). It builds partnerships with key stakeholders to influence and effect changes in the way business operates and how people live their everyday lives. As well as a range of ministries such as the Department for Business, Innovation and Skills and the Department for Transport; public funded bodies such as the Sustainable Development Commission (SDC), the Office of Government Commerce (OGC) and the Environment Agency are members of the project board.

The Sustainable Development Commission is the Government's independent advisory body on sustainable development. Their work is fourfold: Advisory, Capacity Building, Advocacy and Watchdog.

The OGC looks to encourage sustainable practices across government, supporting environmental, social and economic sustainability. Within this it has set itself the goal of supporting the Government objective of becoming one of the EU leaders in sustainable procurement by the end of 2009; and of achieving ambitious forward targets for sustainable operations on the government estate. The Centre of Expertise in Sustainable Procurement (CESP) was established in 2008 along with a Chief Sustainability Officer to provide leadership focusing on environmental sustainability across government. The team works with key stakeholders to share information and experience to drive through the changes needed to meet these commitments. Other parts of the OGC also play a key role, including Estates and Procurement.

Our continuing provision of resource efficiency support for businesses, consumers and the public sector is primarily delivered through our delivery bodies. Delivery bodies

provide cost-effective support to business to reduce waste and harmful emissions across business sectors. The resource efficiency support programmes are publicly funded and delivered by arms length bodies. The work is lead by the Waste and Resources and Action Programme (WRAP). Advice has been provided on a range of issues, including.

- energy efficiency and carbon impacts (Carbon Trust which helps organisations become energy efficient);
- reducing business waste and water (Envirowise);
- support for recycling of wastes (Waste & Resources Action Programme – WRAP); and
- supporting the re-use of spent materials by some becoming a feedstock for others (National Industrial Symbiosis Programme – NISP);

- **Enabling infrastructure and institutions for sustainable lifestyles**

Transport currently makes up 21 per cent of all UK domestic carbon emissions. The strategy entitled *Low carbon transport: a greener future*, published on 15 July 2009 sets out the policies and proposals for reducing transport sector emissions through to 2022. It also frames the debate for the longer-term decarbonisation of transport to give people and businesses more low carbon choices about when, where and how to travel or transport goods.

Key elements in the strategy include:

- A new steering group for the freight and logistics industry to find effective ways of measuring, reporting and reducing emissions across the logistics sector;
- A commitment to work with European partners to develop a robust mechanism for regulating CO2 from new vans, including clear targets for the medium and long-term and a mechanism to encourage the development of the ultra-low carbon van market whilst respecting the diversity of the van market;
- Proposed eligibility criteria for the £2-5,000 consumer incentives for electric and plug-in hybrid cars, expected to apply from 2011. This includes the requirement for the vehicle to have maximum tailpipe emissions of 75g CO2/km. An update has also been published on the infrastructure framework which is supporting this scheme.

This publication builds on ongoing initiatives to reduce carbon emissions from transport and is part of a wider government comprehensive plan for decarbonising the UK and maximising the economic benefits presented by low carbon industries.

- **Promotion of Corporate Social Responsibility in the sector**

The UK Government wants to encourage all UK businesses to recognise the strategic advantage of Corporate Responsibility and take voluntary action to raise their standards of behaviour above minimum legal requirements. And we want to reach out to those companies who remain to be convinced of the value of Corporate Responsibility to their business success.

The *Corporate Responsibility Report*[‡] published earlier in 2009 considers recent developments and progress since the 2004 publication of *Corporate Social Responsibility – A Government Update*. It highlights how Corporate Responsibility continues to broaden and identifies relevant activity across Government departments. We are also currently considering what role, if any, Government should play in encouraging environmentally sustainable investment.

We are currently consulting on guidance on how organisations should measure and report their greenhouse gas emissions; a final version of the guidance will be published by 1 October 2009. The guidance is based on the Greenhouse Gas Protocol and has been drafted with input from a range of stakeholders. It is primarily aimed at large and medium-sized businesses but can be used by all UK organisations that wish to manage their greenhouse gas emissions. There are recommendations in the guidance document on what should be considered the minimum standard for measuring and reporting, and also guidance on current best practice.

- **R&D incentive or support provided**

A clear, reliable, collaborative and open evidence base is important to support the development of policy. The SCP Evidence Base has supported a wide range of policy development and consists of four main research themes:
• Measurement Methods – Delivering improved methodologies and high quality data to enable more accurate measurement of environmental impacts;
• Products and Services – Identifying the most significant environmental impacts in a product's life cycle, so that policy interventions can be targeted effectively;
• Behaviour Change – Building a robust body of evidence on behaviour change to inform the development of an environmental behaviours framework that supports policy making; and
• Business, Environment and Economy – Researching the way environmental innovation links to productivity, and the relationship between regulation, environmental performance and competitiveness.

The Technology Strategy Board has been established to drive innovation. Their role is to stimulate technology-enabled innovation in the areas which offer the greatest scope for boosting UK growth and productivity. They promote, support and invest in technology research, development and commercialisation. They spread knowledge, bringing people together to solve problems or make new advances.

They also advise Government on how to remove barriers to innovation and accelerate the exploitation of new technologies. And we work in areas where there is a clear potential business benefit, helping today's emerging technologies become the growth sectors of tomorrow.

The Technology Strategy Board promotes innovation in many ways. As well as investing in programmes and projects, much of their work is in spreading knowledge,

[‡] http://www.berr.gov.uk/files/file50312.pdf

understanding policy, spotting opportunities and bringing people together to solve problems or make new advances.
To prioritise and guide the work, a number of key technology areas (KTAs) and key application areas have been identified to focus efforts. One of these key application areas is environmental sustainability and within that activities will be developed in four key areas. They are:

- Resource efficiency, waste and pollution management.
- Energy efficiency.
- Water supply, sanitation and use.
- The sustainable food chain.

The Technology Strategy Board currently manages a range of programmes and delivery mechanisms to drive innovation.

- Collaborative research and development
  They invest in projects involving business and researchers working together to deliver successful new technology-based products and services. Over 700 CR&D projects have received investment since 2004, amounting to over £1 billion (about half from ourselves and half from the businesses involved).
- Knowledge Transfer Networks (KTNs)
  A KTN is a national network in a specific field of technology or business application, which brings together people from businesses, universities, research, finance and technology organisations in order to stimulate innovation through knowledge transfer and sharing of ideas.
- Knowledge Transfer Partnerships (KTPs)
  A KTP is the placement of a high calibre, recently-qualified individual into a business to work on innovation projects. Increasing business interaction with the university 'knowledge base,' it provides company-based training for graduates at the same time as delivering real benefits for the business.
- International programmes
  The Technology Strategy Board has a UK coordination role within EUREKA, a pan-European initiative for promoting collaborative business-led R&D. It is also responsible for the FP7 UK National Contact Point service, which provides advice to help UK businesses participate in the Seventh Framework Programme for Research and Technological Development. This is the EU's main instrument for funding research in Europe and will run from 2007 to 2013.

- **Programmes to integrate sustainability in distribution/retailing**

In response to recommendations made in the Food Industry Sustainability Strategy (Defra, May 2006), the food industry has taken the lead in reducing its environmental impact:

- The Food and Drink Federation's Fivefold Ambition sets targets on water, waste, and energy use and on reducing the environmental impact of food transport.
- The BRC's *A Better Retailing Climate* sets five goals for its members to reduce the direct environmental impact of their businesses, manage their climate risks, help customers, staff and suppliers to reduce their environmental impacts and vulnerabilities, engage in the public policy debate and support the Government in

meeting its climate change goals, and to report achievements transparently and consistently.

Retailers and food manufacturers are making good progress in improving their environmental impacts in line with the commitments. Full details of their achievements are at www.fdf.org.uk/environment_progress_report and www.brc.org.uk/policymaster04.asp?id=589&sPolicy=A+BETTER+RETAILING+CLIMATE

In January 2009 the signatories of the Courtauld Commitment [add footnote: The Courtauld Commitment is a voluntary agreement between the grocery industry, WRAP and Defra to work together to make the grocery supply chain more resource and carbon efficient. It was launched in July 2005] agreed to work together to help reduce the amount of food the nation's householders throw away by 155,000 tonnes by 2010, against a 2008 baseline. 12 leading grocery retailers (representing 92 per cent of the UK grocery sector) and twenty leading brands and suppliers are signed up to the Courtauld Commitment. The signatories have all agreed to work with WRAP to:

- design out packaging waste growth by 2008;
- deliver absolute reductions in packaging waste by 2010; and
- identify ways to tackle the problem of food waste.

Each signatory works with WRAP to develop company-specific strategies, targets and implementation plans to deliver the objectives of the agreement.
WRAP uses its budget to support this work by providing technical advice, funding innovation and facilitating industry-wide activity on standards and joint problem solving.

In June, 2008 WRAP announced the achievement of the first Courtauld Commitment objective, the first time that the growth of packaging in any sector had been halted and that we were on-track to deliver the second objective of the agreement. Signatories to the Courtauld Commitment have also been working with WRAP to help deliver reductions in household food waste under the auspices of the Love Food Hate Waste campaign (please see: www.lovefoodhatewaste.com). Since the launch of the campaign in November 2007 we have helped consumers to save £300 million of food from going to waste.

WRAP and Defra are now negotiating the successor to the Courtauld Commitment – a new voluntary agreement that will run from 2010 to the end of 2015.

WRAP has supplied over 1 million home composting bins to householders across England, and they are backing this up with a composting support service. The Courtauld Commitment achieved its first objective of halting the growth in packaging used in the retail supply chain. Without this agreement it is estimated that packaging used would have increased by around 2% per annum.

The Food and Drink Federation (FDF), a trade association, and Envirowise, a publicly funded, at arms length delivery body, launched the Federation House Commitment in January 2008 as a response to the challenges in Defra's Food Industry Sustainability Strategy. The Commitment aims to contribute to an industry-wide 20% reduction in water use (outside of that embedded in products) by 2020 against a 2007 baseline. A total of 36 companies (including 30 FDF members) have signed up to the Commitment with nearly 200 food and drink manufacturing sites across the country working on reducing water usage under the Commitment. Actions under the initiative have so far resulted in a 1.7% reduction of absolute water use (not embedded in products) since 2007, equating to more than 475,000 cubic metres of water saved during 2008.

- **Links with spatial planning and sustainable city policies, including Integrated Waste Management**

Building a Greener Future: policy statement was published in July 2007. This policy statement confirms the government's intention for all new homes to be zero carbon from 2016 with a progressive tightening of the energy efficiency building regulations - by 25 per cent in 2010 and by 44 per cent in 2013 - up to the zero carbon target in 2016.

We recognise that Local Government has a pivotal role to play in helping communities take action on climate change. The Local Government White Paper gives councils new opportunities to drive local action on reducing carbon emissions and adapting to the impacts of climate change. And the post 2008 local government performance framework will include an appropriate focus on climate change.

Our commitment to protecting and enhancing the environment is demonstrated in other areas. For example, we are:

- looking at ways of improving the energy and water efficiency of existing homes;
- looking for opportunities to include exemplars of sustainable development in our housing;
- and making sure that developments include important green spaces which are vital to people's health and wellbeing.

More information can be found at
http://www.communities.gov.uk/planningandbuilding/theenvironment/

Since 1997, the UK has made significant progress in improving the planning system. Through the Planning and Compulsory Purchase Act 2004 sustainable development has been put at the heart of planning. The UK Government's strategy for sustainable development, *Securing The Future*, launched in 2005, explains that sustainable development will be pursued in an integrated way through a sustainable, innovative and productive economy that delivers high levels of employment; and a just society that promotes social inclusion, sustainable communities and personal wellbeing.

This will be done in ways that protect and enhance the physical and natural environment, and use resources and energy as efficiently as possible. This goal is reflected in *Planning Policy Statement 1: Delivering Sustainable Development*2 which sets out the Government's objectives for the planning system.

Planning Policy Statements (PPS)[§] set out national policy framework on key issues, such as the protection of biodiversity and geological conservation, sustainable development in rural areas, waste management, renewable energy, flood risk and housing. The PPS on climate change aims to ensuring our goals in relation to increasing the supply of housing, creating sustainable mixed communities and reducing carbon emissions are integrated as far as possible and fully reflected in local planning decisions.

The Technology Strategy Board described earlier is establishing an Innovation Platform to develop the capability for UK industry to deliver low-impact buildings, in order to improve the environmental performance of buildings to meet tough targets such as those in the *Code for Sustainable Homes* and the 2016 zero carbon target for new homes, and exploit the business opportunities that these present.

Measurement of progress against indicators

Indicator 1: Resource efficiency: Gross Value Added, CO2 emissions, water use, and waste to landfill by the UK manufacturing and service sectors

This indicator assesses the environmental impact of the manufacturing and service sector in England in relation to their output in terms of the Gross Value Added. Gross Value Added in the main sectors targeted by SCP policies rose by 25% between 2000 and 2007. Water use decreased by about 10% over the period, although because of climate variations it is too early to say whether the change is significant. CO_2 emissions fell by 5%, while waste to landfill reduced from 27 mt to 21 mt.

Indicator 2: Consumption: CO2 emissions from fossil fuel and electricity use in the home, and water use and household residual waste

This indicator assesses the environmental impact of households in England. Household consumption expenditure rose by 21 per cent between 2000 and 2007. There was little change in water use (up 3%), but changes in CO_2 emissions from energy (down 5%) and household waste not recycled (down 25%) have both reduced over the period.

Indicator 3: Products: Better products, as measured by progress towards meeting the Energy White Paper target for annual reductions in CO2 emissions from product use

This indicator assesses progress towards the commitments for reductions in carbon dioxide emissions from energy efficient products given in the 2007 Energy White Paper[**]. CO_2 emissions from use of electrical products in the home are projected to

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§ http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/

** http://webarchive.nationalarchives.gov.uk/+/http://www.berr.gov.uk//energy/whitepaper/page39534.html

decrease by 8.9 mt by 2020 as a result of the take-up of new technology, of which about 3.8 mt is accounted for by already approved policies. This is well above the mid-range of the EWP target. However, savings are less than expected because product sales are lower than EWP assumptions.

Indicator 4: Environmental impacts of the UK Public Sector.
This indicator uses data to assess progress in reducing environmental impacts (carbon dioxide emissions, water use and waste arisings) from the Government estate. Total CO_2 emissions from the Government Estate are on track to meet the 2010/11 target. However, if the Ministry of Defence is excluded, emissions from the civil estate are increasing rather than decreasing. The August 2008 Government Delivery Plan suggests that departments are largely on track on most other target areas, providing they meet their published trajectories.

As an Annex to the Guidelines on the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, below is a chart for identification of priority areas related to Sustainable Consumption and Production. Please fill out and return this chart with your national report to the contact person identified above.

Chapter III of the Johannesburg Plan of Implementation identifies a number of sectors and issues as well as policy instruments relevant to sustainable consumption and production patterns. Please indicate in the tables below the areas relating to sustainable consumption and production in which are of current high priority for your government, and those that in your judgment are likely to be priority areas for future work. Please specify other areas if appropriate.
If possible please add a contact name and email for the person responsible for areas of current high priority.

UK RETURN FOR SCP

SECTORS AND ISSUES	Current Government Priority	Expected Future Priority
Solid waste management		
- Waste disposal	✓	✓
- Reuse and recycling	✓	✓
- Waste reduction,	✓	✓
- Others	✓	✓
Transport		
- Clean fuels and vehicles	✓	✓
- Public and alternative transportation	✓	✓
- Urban and regional transportation planning	✓	✓

- Others		
Cleaner production		
- Resource efficiency	✓	✓
- Pollution prevention	✓	✓
- Technology strategies	✓	✓
- Others		
Energy efficiency and renewable energy		
- Industrial energy efficiency	✓	✓
- Household energy efficiency	✓	✓
- Renewable energy markets	✓	✓
- Others		
Housing and construction		
- Energy efficiency	✓	✓
- Building materials	✓	✓
- Construction standards	✓	✓
- Building operations	✓	✓
- Others		
Food and clothing		
- Organic products	✓	✓
Chemical management		
Hazardous waste		

B. POLICY INSTRUMENTS	**Current Government Activities**	**Expected Future Priorities**
General policy instruments		
- Taxes, subsidies	✓	✓
- Preferential tariffs and trade policies	✓	✓
- Economic instruments	✓	✓
- Tax reform	✓	✓
- Consumer protection policies	✓	✓
- Polluter-pays principle	✓	✓
- Integrated product policies	✓	✓
Changing consumer behaviour		
- Education and public information	✓	✓
- Consumer information	✓	✓
- Labeling, eco-labels	✓	✓

- Consumer organizations	✓	✓
- Public procurement policies	✓	✓
- Others		
Changing production patterns		
- Regulation of emissions and effluents	✓	✓
- Charges or incentives for cleaner production	✓	✓
- Product standards (e.g. energy efficiency)	✓	✓
- Cleaner production programmes	✓	✓
(R&D, training, technical assistance)	✓	✓
- Pollutant reporting and registers	✓	✓
- Strategic industrial and technology planning	✓	✓
- Investment incentives	✓	✓
- Voluntary initiatives and codes of conduct	✓	✓
- Corporate social/environmental responsibility	✓	✓
- Improved management accounting	✓	✓
- Investment analysis	✓	✓
- Others		
Analytical tools		
- Life-cycle analysis	✓	✓
- Indicators of sustainability	✓	✓
- Technology impact assessment	✓	✓
- Policy impact assessment	✓	✓
- Impacts of globalization and urbanization	✓	✓
- Impacts of changes in international markets	✓	✓
- Others		

TRANSPORT

- Policies and progress on transport access, including the rural population and poor
- Fuel prices and tax reform
    - Removing subsidies on fuel
    - Encouraging energy efficiency
    - Providing reliable alternatives for the poor
- Regional and global transport system integration encouraging efficient modes
- Urban transport planning and policies
- Vehicle efficiency and emissions policies
- Development of any transport technology research and development (public sector or private)
- Road, rail and marine systems construction standards and changes in the, in anticipation of climate change impacts (sea level rise, and increased frequency and severity of weather events)
- Capacity building needs on transport activity assessment and analysis for integrated planning (e.g., urban transit, congestion relief, non-motorized transit, vehicle efficiency programs development, assessing fiscal incentives, inter-modal freight management systems)

B. POLICY INSTRUMENTS	**Current Government Activities**	**Expected Future Priorities**
General policy instruments		
- Taxes, subsidies	- Announced £230m to provide consumers with subsidies for the purchase of ultra low carbon cars. - Planning the development of a £20m electric vehicle (EV) charging infrastructure framework to help consortia of key cities, regions, private businesses and utility companies create a UK network of electric car cities.	From 2011 providing consumer incentives for the purchase of electric and plug-in-hybrid cars.
- Preferential tariffs and trade policies	- Vehicle Excise Duty banding based on CO2 emissions of cars. - Enhanced Capital Allowance - Lowest rate of Benefit in Kind /company car tax	

- Economic instruments		
- Tax reform		
- Consumer protection policies		
- Polluter-pays principle		
- Integrated product policies	Low Carbon Van Public Procurement Programme provides funding of up to £20m is available to help public sector organisations meet the additional costs of procuring lower carbon technologies.	
Changing consumer behaviour		
- Education and public information	Act on CO2 campaign to educate drivers to reduce their carbon impact.	
- Consumer information	New van data base with fuel consumption information.	
- Labeling, eco-labels	Information for vehicle carbon emissions is available on the Act on CO2 website.	
- Consumer organizations		
- Public procurement policies	Developing guidelines and consulting on Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles	Implementation of Directive 2009/33/EC.
- Others		
Changing production patterns		
- Regulation of emissions and effluents		
- Charges or incentives for cleaner production		
- Product standards (e.g. energy efficiency)		
- Cleaner production programmes		
(R&D, training, technical assistance)	On-going provision for five year activity of Research, Development and Deployment funding through the Technology Strategy Board's Low Carbon Vehicle Innovation Platform	
- Pollutant reporting and registers		
- Strategic industrial and technology planning	Publication of "Low Carbon Transport: A	

	Greener Future" (mid July 09)	
- Investment incentives		
- Voluntary initiatives and codes of conduct		
- Corporate social/environmental responsibility		
- Improved management accounting		
- Investment analysis		
- Others		
Analytical tools		
- Life-cycle analysis		
- Indicators of sustainability		
- Technology impact assessment		
- Policy impact assessment		
- Impacts of globalization and urbanization		
- Impacts of changes in international markets		
- Others		