

# You are what you sell

Product roadmapping: driving sustainability



Sustainable  
Development Commission

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**Drafting team** Poppy Maltby, Sue Dibb, Eva Bellamy and Alan Knight.

## Credits

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# Foreword



## If your products could talk...

What if the products we buy could talk about their journeys to the shelf? Imagine a private detective browsing your shopping bags, or the shelves of your local supermarket. Would you be embarrassed or happy with what they found out? No doubt if the product spoke of environmental destruction and human rights violations – you would shuffle with discomfort. Alternatively, if the story were one of environmental protection and better lives, you would be proud.

At the moment, very few of us actually know what our products' stories might be. When interviewed, a garden bench may boast of high quality forest management, certified by the Forest Stewardship Council and of being displayed by a retailer who actively sources responsibly harvested wood. Alternatively, the story could be the older and far sadder story of rainforest destruction and the exploitation of forest people.

**Products have an enormous and still largely untapped potential to help address pressing environmental and social challenges.**

A brass door knob might describe a journey from a pile of European scrap, re-cast in a small Indian village where workers labour in sweltering conditions pouring hot molten brass into moulds. Next stop, the polishing units, where fine brass

soot settles, caking skin, clothes and lungs. A boat, a juggernaut and a shelf, and several years until replaced by a new, trendier design...

All products, from ice cream to carpets, have a story to tell that starts from the natural environment: a mine, forest, field or sea. Most have had some level of production and manufacture, from cottage industries to massive factories. The story could continue for years of use in a home and possibly for centuries in a landfill site. It is not unreasonable to describe your home, office and the aisles of your local supermarket, as a museum of environmental and social problems. But the reverse is also true. Products have an enormous and still largely untapped potential to help address pressing environmental and social challenges.

This primer outlines the opportunities for business and government in taking a products-focused approach and explains why products are becoming crucial to policy thinking around sustainability. It introduces practical tools, including Product Roadmapping for Sustainability, that can help transform what we buy into inspiring stories about the practicality and promise of sustainable development.

I believe that in the future, product stories will be central to corporate responsibility.

**Alan Knight**  
Commissioner  
Sustainable Development Commission

# Why products?



Despite the fact that a significant proportion of the world uses almost none of its resources, globally we are already 'living beyond our means' to the tune of around 20%. As consumers, much of our impact on the planet is through the purchase and use of products. Products are therefore key to reconciling the twin objectives of sustainable development, 'a strong, healthy and just society' and 'living within environmental limits'.<sup>1</sup> Recognising this, the EU and UK governments will be initiating new product policy in 2008. Therefore, businesses taking a products-approach to sustainability can anticipate the future and shape policy, as well as building brand value and minimising supply chain risks.

## → European Union – a products-approach

Accelerating the shift towards Sustainable Consumption and Production (SCP) was made a key commitment at the World Summit on Sustainable Development in Johannesburg in 2002. The European Commission<sup>2</sup> is working to identify and stimulate action on the sustainability of products. Work on the Environmental IMPROvement of PROducts (IMPRO) is expected to be completed in 2007 and is focusing on high impact areas of cars, meat products and buildings. The policy implications of these are expected in Action Plans covering SCP and industrial policy in Spring 2008.<sup>3</sup>

But understanding what sustainability means in practice can be challenging. Put simply, it's about reducing the negative social and environmental impacts of the products we consume, and how business and governments can work together to achieve that shift.

This document aims to inspire and encourage action from businesses and governments around the potential of products to contribute to sustainable development. It highlights the opportunities for business to capture new markets through addressing sustainability along supply chains. And advocates an approach – Product Roadmapping for Sustainability – to facilitate collaboration between government and business to achieve strong and swift improvements in the sustainability of products. It examines the role for government and provides a toolbox of product policy interventions available to both governments and businesses. Finally, it provides useful web-links for further advice and information.

Products and services can contribute to sustainable development by helping to address the three vital sustainability challenges: tackling climate change, addressing natural resource depletion and alleviating poverty – illustrated in the triangle above.

Products connect the interests of society with the businesses that produce and sell them. As concerns about issues such as climate change and poverty increase within society, many businesses are recognising the opportunities that arise through ensuring that products and services have no 'embarrassing' stories to tell. In addition, a product-approach to sustainability can:

### → A growing world...

The world population increased by around three and a half billion between 1950 and 2000. The rising demand for resources in that period has meant, '**Humans have changed ecosystems faster and more extensively than in any period in human history... The result has been a substantial and largely irreversible loss in the diversity of life on Earth.**'<sup>5</sup>

If all six billion people on our planet lived a European lifestyle today, we would need over two and a half planets' worth of resources to support us.<sup>6</sup> Global population is expected to increase by a further three billion people, reaching nine billion by 2050.<sup>7</sup> It is crucial that patterns of consumption and production over the next 50 years do not follow the same path as the previous 50 if we are to avoid further irreversible damage to the planet and its ability to support human wellbeing.

→ **Break-down complex issues into easily digestible chunks.** It is far easier, and potentially more effective, to influence how products are made, used and disposed of, than to tackle how forests and oceans are managed in their entirety.

**How countries manage their forestry resources is their decision. But the wood I choose to buy or stock is my decision.**

→ **Bring together the interests of businesses from along the supply chain** to identify innovative solutions such as reducing waste and carbon or improving labour conditions. For example, a supply-chain analysis of their crisps identified how Walkers could save 9,200 tonnes of CO<sub>2</sub> and £1.2 million a year simply by changing how they bought potatoes.<sup>4</sup>

→ **Help highlight and resolve conflicting priorities.** The lifecycle of some products may reveal tensions between sustainability objectives, such as poor communities relying on air-freight to export their produce. A products approach can help find solutions that are fully sustainable.

# What are the opportunities for businesses?

There are clearly ethical reasons for minimising the negative impacts of products and services, but pursuing a products-approach to sustainability also makes good business sense. The World Business Council for Sustainable Development states that firms can be...

**‘more competitive, more resilient to shocks, nimbler in a fast-changing world, more unified in purpose, more likely to attract and hold customers and the best employees, and more at ease with regulators, banks, insurers, and financial markets.’<sup>8</sup>**

The UK Treasury sponsored Stern report estimated that climate change mitigation could create markets for low-carbon products worth at least \$500bn per year by 2050.<sup>9</sup> And Shell estimates the UK ‘green’ market could reach £30bn within the next decade.<sup>10</sup> Successful businesses will be those that mitigate the risks of future resource and policy constraints on their supply chains, and grab the opportunities that sustainability presents.

## → Forestry Stewardship Council

In the early 1990s, UK retailer B&Q faced some difficult questions over their sourcing of wood. In response to these criticisms, B&Q partnered with WWF to further the development of a wood certification scheme – the Forestry Stewardship Council<sup>16</sup> (FSC) – to certify that wood products had been harvested and grown in responsibly managed forests.

In particular businesses can:

### → save money

Being resource efficient can benefit both the bottom-line and the environment. US retailer Wal-Mart, worked with their Kid Connection toy supplier to reduce packaging on 255 products. As a result, they now need 497 fewer containers to ship the products, saving \$2.4 million a year in shipping costs as well as 3,800 trees and 1,000 barrels of oil.<sup>11</sup>

### → improve brand & reputation

Poor management and exploitation isn’t just unethical, it also acts against long-term profitability. A commitment to more sustainable products and services can improve the brand value and loyalty of both customers and employees. A recent survey showed that half of graduates rate the environmental credentials of potential employers as an important consideration.<sup>12</sup>

### → manage resource risk

Currently, around one tonne of rubbish is produced from around 20 tonnes of raw materials.<sup>13</sup> The recent rise in demand from the rapidly expanding Asian economies, has sent raw material prices soaring. Many of the world’s natural resources, such as fisheries and fresh water, are also in decline and over-exploited.<sup>14</sup> If these trends continue, resource-light sustainable products will be the only ones offering continued potential for growth.

### → grow and access new markets

Designing in sustainability can inspire innovation and open up new and profitable markets. Design determines up to 80% of products’ in-use impacts<sup>15</sup> and sustainability features are increasingly valued by customers. Aeronautical giants, Boeing and Airbus have recently been fighting it out over the ‘green’ credentials of the next generation of aircraft. The Boeing 787 Dreamliner launched in July 2007 claims to use 20% less fuel than comparable jets, in competition with the Airbus 380 Superjumbo, whose size boasts higher per passenger efficiency.



### → The green consumer?

Research shows that businesses cannot rely on the 'green' consumer to drive markets.<sup>17</sup> Consumers may act as a market stimulus, but most people simply expect the products they buy to be environmentally and socially responsible, in the same way they expect products to be safe. Actions by government and businesses have been the critical feature in promoting 'greener' products. Rather than relying on the consumer, the easiest and most effective approach is to make sustainable products the 'norm'.



# Practical steps towards sustainable products

This document aims to help identify practical steps and decisions that business and governments can take now to improve sustainability of products and services.

The SDC's **twelve point checklist** on the page opposite, provides a 'sustainability' health check for businesses looking to develop new products or assess existing ones.

Also detailed below is **Choice-editing**, a process through which business can enable their customers to make more sustainable choices.

The next two sections advocate **Product Roadmaps for Sustainability** as a method by which business, government and other stakeholders can work collaboratively to address complex issues where unilateral action is not enough to achieve change.

## → Choice-editing

Every business already edits down the products they make and stock using criteria such as brand and price. Choice-editing for sustainability<sup>18</sup> is about eliminating the option to buy inferior quality products, or components with a poor social or environmental record. The result provides customers with a better choice of products and takes the hard work out of 'green' shopping. Choice-editing happens through:

- **Manufacturers and service-providers deciding which products and services to offer, and with what specification;** For example, McDonalds Restaurants committed to using only free-range eggs in 2004. The restaurant has since pledged to source only Rainforest Alliance certified coffee and recently organic milk.<sup>19</sup>
- **Retailers when they decide what to put on their shelves;** B&Q Timber Policy ensures that all their wood and paper products come either from proven well managed forests or recycled materials.<sup>20</sup>
- **Governments through setting product standards.** UK legislation in 2005 ruled that all new gas boilers fitted in England and Wales must be high efficiency condensing boilers. Boilers account for up to 60% of household CO<sub>2</sub> emissions and condensing boilers could save householders up to £240 off their average yearly bill.



# SDC twelve point checklist



## 1. Product need

Can the customer need that the product provides be designed or delivered in a more sustainable way?



## 2. Raw materials

Are raw materials and components limited by their short, medium or long-term availability or by public policy restrictions?



## 3. Material extraction

Does the location and method of raw material extraction minimise the negative, and maximise the positive, environmental and social impacts?



## 4. Manufacture

Is manufacture of the product resource efficient? Does it damage valuable natural or human environments? Does every manufacturer in the supply chain understand and manage their environmental impacts and liabilities effectively?



## 5. People

Is the quality of life of all the people touched by the supply chain protected and improved? Is the product accessible to the widest range of customers based on their needs?



## 6. Packaging

Is the product sold and transported using the minimum required amount of packaging, which can be disposed of in an environmentally appropriate way?



## 7. Transport

Is the energy used in transport minimised? If energy used to transport the product is significant, have alternative distribution methods and closer sourcing been considered?



## 8. Information

Is the product sold and marketed with appropriate and useful product information?



## 9. Energy in use

Do energy-using products use less energy and/or are they more energy efficient than previous models, or are they powered using renewable energy?



## 10. In use

During normal handling and use, can the customer use the product without damaging the environment and their own or anyone else's health?



## 11. Disposal

Is the product designed for easy reuse and recycling of materials and components? Can the end user dispose of the product easily in an environmentally appropriate way?



## 12. Disclosure

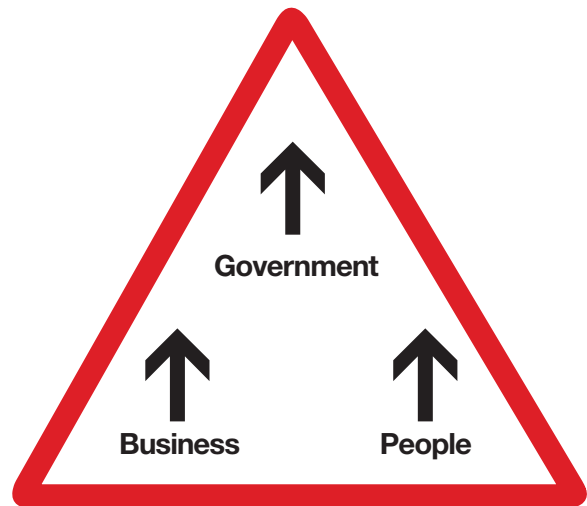
Has all product information and claims been verified by experts? Is information, including assessments and processes, publicly available, except where commercially sensitive?

# Product roadmapping for sustainability

A roadmap is a tool that helps us visualise how to get from A to B. Similarly, a Product Roadmap for Sustainability can help us visualise how we want products to evolve, and identify how to support progress towards that goal.

Product Roadmapping for Sustainability is a method for facilitating collaboration between government, business and other stakeholders to improve products and markets above what individual actors can achieve. The outcome of a roadmap may involve a series of timely and coordinated interventions, implemented by different stakeholders, that together deliver significant sustainability improvements.

By providing certainty about future regulations, policies and market expectations, roadmaps can encourage businesses to invest and innovate to provide the products and services of the future.



A roadmap involves three main concepts:

## → Shared ownership and responsibility

Many products have complex global supply chains and infrastructure issues, making it difficult for companies to address problems individually. In these cases, neither business nor government can go it alone. A roadmap approach provides the opportunity for stakeholders to work together to achieve change.

## → Planned interventions over time

Most 'greener' products were mainstreamed through a series of ad-hoc interventions by government and leading businesses. The positive outcome was essentially a result of trial and error. A Product Roadmap for Sustainability is a way of planning interventions over a challenging timescale to achieve stronger and swifter improvements in products.

## → Continuous improvement

Products are constantly evolving to meet changing lifestyles, markets or resources. A product roadmap provides the focus and direction for innovation so businesses can deliver continuous improvements in the sustainability of products and services.

## → Clothing roadmap for sustainability

The UK Government is developing a clothing roadmap,<sup>21</sup> collating evidence and charting interventions to deliver a more sustainable clothing industry. Textiles are an important industry for many developing economies and sales of clothing in the UK has increased 60% in the last ten years. However, labour conditions in textile factories can be questionable<sup>i</sup> and growing cotton also has big impacts on the environment and human health. Cotton is responsible for 16% of global insecticide use<sup>22</sup> and irrigating cotton is partly responsible for the drying up of the Aral Sea.

<sup>i</sup> A recent report *No Medal For The Olympics* ([www.ituc-csi.org/IMG/pdf/playfair\\_2008.pdf](http://www.ituc-csi.org/IMG/pdf/playfair_2008.pdf)) found that merchandise for Beijing 2008 was being produced by children and adults working 15 hours a day seven days a week for half the Chinese legal minimum wage. The findings prompted Beijing organisers to consider switching suppliers, but critics pointed out that the net result would be to make the exploited labourers unemployed.

## Role of government

Governments have a vital and varied responsibility to lead, encourage, enable, exemplify and engage people around the production and consumption of more sustainable products.<sup>23</sup> They have the capacity to legislate, provide fiscal incentives and support research and innovation. The public sector as a whole also has an important role in exemplifying 'green' consumption. The UK Government has recently committed to using more of its £150 billion yearly spending to support the market for more sustainable products and services.<sup>24</sup>

On a strategic level however, the key contribution from governments is leadership – to set out clearly and credibly their public policy objectives and how they intend to achieve them. In the case of product roadmaps, this means setting the priorities and direction of travel, and building consensus around the scale and speed of product transformation required.

### → Government has a role as convenor where:

- Emerging consumer trends are working against the mitigation of climate change or other policy objectives. Such as car use or increasing demand for air-travel
- New products will 'lock in' consumers to high-impact lifestyles such as high-standby power use on digital set top boxes or home air-conditioning.
- A sector has numerous small players that has difficulty in tackling issues through an industry agreement or body. For example, construction, catering or farming sectors.
- International negotiation is required, e.g., where domestic standards would impact on EU or World Trade Organisation agreements and/or where significant product impacts occur abroad.

### → One Watt Initiative

At the Gleneagles G8 Summit in 2006, the UK led an agreement to promote the International Energy Agency's (IEA) One Watt Initiative<sup>27,28</sup> and is also pressing for action at an EU level. The one Watt initiative was launched by the IEA with the aim of reducing standby requirements for appliances to below one Watt by 2010. Leaving electronic appliances on standby is calculated to be responsible for around 1% of global carbon dioxide emissions and between 5-10% of electricity use in homes. In Europe, it is estimated that each home contains an average of 20 devices left on standby.

### The UK Government and product roadmapping<sup>25</sup>

Following the recommendation of the Sustainable Consumption Roundtable, the Department of Environment, Food and Rural Affairs (Defra) is working with stakeholders to convene ten product roadmaps from the high-impact areas of transport, home and food. The ten include milk, fish, toilets, passenger cars, TVs, lighting, motors, window systems, plaster board and clothing.

Defra has also established a Sustainable Products and Materials Division<sup>26</sup> to collate, with industry, a comprehensive evidence base on products, markets and behaviours. This evidence base from the ten roadmaps, along with other research, is intended to support industry and catalyse action around reducing the impact of products, services and materials consumed and used in the UK. A progress report on delivery will be published in Spring 2008.

## Six stages of a roadmap for sustainability

### Evidence

#### Understanding the impacts

Knowing your product story is fundamental to a roadmap. Lifecycle assessments are the accepted means to do this, though full assessments can be prohibitively complex and expensive. A pragmatic approach to gathering the evidence base can achieve a balance between accuracy and practicality. Evidence may include context such as expected future demand, evolving technology and an appreciation of new and existing regulations or initiatives at a UK, EU or international level. The SDCs 12 point sustainability checklist on page 9 offers a starting point for an assessment. The last section of this document also provides web-links with further information on determining the product impact.

1



### Who

#### Getting the right people together

Any business, government or organisation can convene a roadmap. The main role of a convenor is to get the right stakeholders together, particularly those that have the capacity to take action. Stakeholders are likely to include businesses from along the product lifecycle, such as those suggested in the checklist on page nine: raw materials, manufacture, packaging, transport, retail, in use & disposal. Stakeholders would also include government, academia and other interest groups. Given the visionary nature of roadmaps, the convenor may actively seek to work with progressive organisations in order to build an ambitious agenda for change.

2



### Tools

#### What is going to get us there?

A critical stage of the roadmap is to agree what tools to use and at which point they are best applied along the product lifecycle. Chosen interventions are likely to be a balance between feasibility and magnitude of the probable results. Would it require changing the manufacturing process? Or changing the behaviour of millions of people?

The following section provides a roadmap 'toolbox' of product policy interventions for both government and business.<sup>29</sup> The toolbox recognises that different stakeholders can effect change in different ways. For example, legislation can swiftly raise minimum standards, whereas industry is often best placed to develop new technologies. However, each intervention needs to be coordinated to reinforce each other's effect.

5



### Deadlines

#### What are the key milestones?

Fundamental to roadmaps is an agreed, feasible timescale and a clearly specified level of transformation that allows each party to adjust their activities to deliver the results. Roadmaps need to respond to businesses' need for confidence about the future to facilitate decisions now about investing in and designing more sustainable products and services. Though timescales need to take account of product development cycles, deadlines can also be demanding; what is achievable in several years' time is likely to far outstrip best practice today. We recommend that the timetable include an on-going process of assessment and review.

6





The SDC advocates six key stages for putting together a roadmap for sustainability. However, we recognise there is no 'one size fits all' solution, and the stages need not be addressed in any strict order. Every product and service has a different story. For some products, the most significant impacts may be in their sourcing or production. For others, such as boilers or ice-cream makers, they may have long life-spans in the home, and their impact depends on how (and if) you use them.

**The key objective of a roadmap is to build a critical mass of enthusiasm and commitment from stakeholders around the evidence, the need to act and the policies or interventions required to achieve the desired outcome.** Thus the success of a roadmap will be determined by the process of building it.

## Vision

### Where do we want to get to?

A further challenge is to achieve consensus about the goal – point B – on a roadmap. This will help make explicit what level of transformation is required. The vision may be framed as a quantifiable target, such as the UK Government goal of a 60% reduction in CO<sub>2</sub> by 2050 or the 80% suggested by Stern. For each roadmap the vision will depend upon how detailed or ambitious it is possible to be regarding future goals. Some may choose a broad commitment minimising negative impacts of the existing product. Others might visualise what could fulfil the product purpose in a world where people live within environmental limits and resources are equitably distributed.

4



## Problem

### Agreeing the priority issues

Agreeing the nature of the problem, and the scope that a roadmap can address, is another important stage. Reaching consensus around the key issues sounds like a basic undertaking, but the scope and nature of the problem can be hard to pin down. Evidence may expose key issues for business and priority areas for action, but equally may reveal tensions between sustainability objectives that need to be resolved. Reviewing the product information and pinning the problem down to one issue, or set of issues, is a key task for convened stakeholders.

3



mobility that  
behavioural change. A road  
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practical steps that can be taken to deliver the

# Roadmap toolbox: product policy interventions

## A roadmap process is likely to include a series of interventions along an agreed timescale to deliver significant sustainability improvements.

This section outlines a toolbox of product policy interventions that can be initiated by government, business or, in many cases, by both.

### → Voluntary standards

Any business, government or concerned organisation can formulate standards or codes for product sustainability. These standards are then used on a voluntary basis to determine what products and components businesses buy and sell. In many cases these standards have been developed by industry in collaboration with NGOs. Examples include the Marine Stewardship Council<sup>31</sup> founded by Unilever & WWF and Ethical Trading Initiative.<sup>32</sup>

### → Minimum standards

Where there is no clear market driver, mandatory minimum standards can be a crucial government intervention to initiate industry-wide change. The constraints of competitive markets can disadvantage companies choosing to operate at higher standards. This is particularly the case where sustainability issues may not chime with their customers or may add to costs. Minimum standards work to remove poor products from the market ensure that 'laggard' companies do not gain advantage.<sup>33</sup>

### → Dynamic standards

Dynamic standards can work to drive continuous sustainability improvements in products that are constantly evolving over time. Examples include vehicle technology and home entertainment. Standards can be voluntary, such as best-practice benchmarking, or regulatory, such as the 'top runner' example below. Their success however relies on industry being able to respond effectively. As a result, businesses require early warning of the standards they are expected to achieve.<sup>ii</sup>

### → Japanese 'top-runner' targets

Manufacturers of household energy-using products in Japan are required to meet product standards equivalent to the most efficient model in each category. This 'top runner' approach involves early announcements that set minimum efficiency standards, backed up by fines for any manufacturers or importers who do not conform.<sup>35</sup> The process has driven a virtuous cycle of rapid innovation and choice editing which has improved energy efficiency of new appliances and products by as much as 78%.

### → Energy-saving lightbulbs

In February 2007, Australia became the first nation to announce that it would phase-out standard bulbs by 2010 in favour of energy-saving CFLs. It is estimated that this could cut greenhouse gases by as much as 800,000 tonnes a year.<sup>34</sup> A voluntary initiative to remove the most inefficient lightbulbs by 2011 was announced by the UK government in September 2007. Starting early in 2008, the phase-out is being led by major retailers and energy suppliers. The EU is also working towards a phase out starting in 2010.

### → Choice-editing

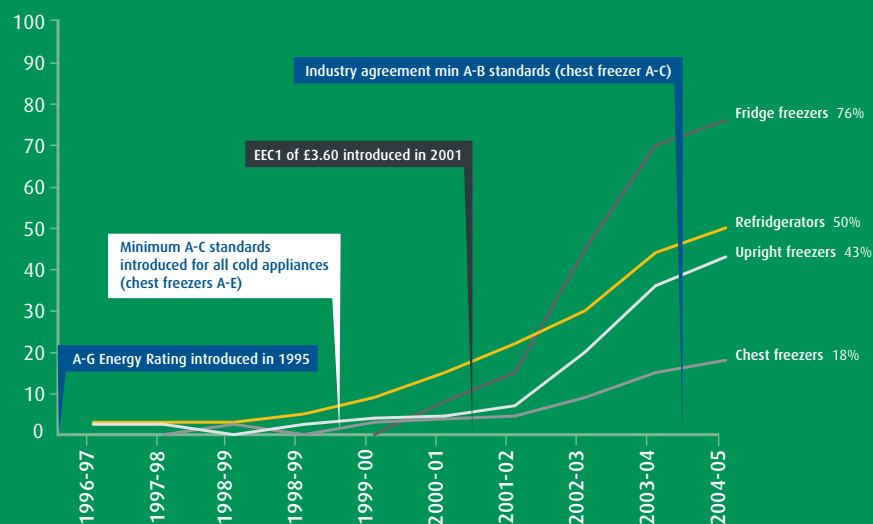
Both business and government have a role in helping to make the sustainable option the default choice for customers. Most people simply expect the products they buy to be sustainable. Choice-editing for sustainability helps business and government meet these expectations by eliminating the option to buy inferior quality products, or components, with a poor environmental or social record.

### → Procurement

Selecting what to buy, sell, and who to buy it from, is an important tool for both businesses and government. Bulk purchasing power can help drive down the cost of new technology and mainstream more sustainable products and services. Forward procurement is also a powerful tool to encourage innovation. It involves specifying standards above those currently achievable to set a clear direction of travel and support new investment.

### → Example: A-rated white goods

The EU A-G energy efficiency ratings for white goods had little impact until 2000. But the market rose significantly following a combination of retailer pressure, voluntary removal of the lowest ratings, and the Energy Efficiency Commitment (EEC) initiated by the UK Government. The EEC required energy suppliers to encourage energy efficiency in homes and resulted in agreements between retailers and energy suppliers, moving the price of A-rated products into an average consumer price range.



- ii Some existing standards can fall into the trap of being too narrow or inflexible. For example, because A to G fridge ratings cover energy efficiency and not energy use, two 'A' rated fridges can consume different amounts of electricity. Furthermore, new A+ and A++ ratings have been introduced because the standards were not updated as technology improved. The most effective standards therefore are those that balance simplicity and breadth, and provide business certainty whilst also able to adjust as products evolve.

## Roadmap toolbox: product policy interventions

### → Innovation

A step-change in technology will be needed to reverse the trend for many products still becoming shorter-lived and more energy and resource intensive. Though innovation is primarily a concern for businesses, government has an important supporting role if innovation is to deliver sustainability. Government needs to provide a clear direction for innovation, along with market signals such as a carbon price. Grant funding from government can also help businesses share the high costs of research, development and demonstration.<sup>36</sup>

#### → Wal-Mart LED lighting

Wal-Mart have spent \$17m developing an LED lighting system for refrigerator cabinets achieving significant cost savings and capturing a potentially huge market for energy efficient store lighting.<sup>37</sup>

### → Marketing

A strategic approach to marketing can be an effective tool to communicate messages, raise consciousness and, in some cases, change behaviour. For example, price promotions can help change the perception that 'green' products are exclusive and expensive. Marketing is a tool most often used by business to promote themselves or new products to customers. Marketing techniques have also been used by governments to promote health and other policy objectives.

#### → Social marketing

Social marketing is the use of marketing techniques to influence behaviours in support of a social good.<sup>39</sup> Defra is currently using a social marketing framework to collate evidence on public attitudes and identify pro-environmental behaviour goals across a range of social groups. The evidence base will be used to support policy development across government on pro-environmental behaviours, such as the Act On CO<sub>2</sub> campaign.<sup>40</sup>

### → Industry agreements

Voluntary agreements and initiatives can be a useful tool to initiate change across product markets. In most cases these are business-led agreements, but may require facilitation and support by government. For example government can convene industry players or commit to supportive policies such as fiscal incentives or minimum standards.

#### → Recycled content of newspapers

The UK Government brought together the newspaper industry in the early 1990s to set a series of voluntary targets for recycled content of newspapers. Aided by the introduction of the landfill tax, recycled content rose dramatically from 27% to 75.5% in the 15 years to 2004.<sup>38</sup>

### → Customer information

Customer information is unlikely to achieve significant shifts in markets or behaviour, however labels can be a useful tool for signalling to consumers who are already committed to buying more sustainable products. They can also raise awareness about 'in use' behaviours. For example, getting people to wash clothes at 30°. Customer-facing labels need to be carefully designed, recognising what they can and cannot achieve. It is also important for them to be independently audited to give consumers confidence about 'sustainability' claims.



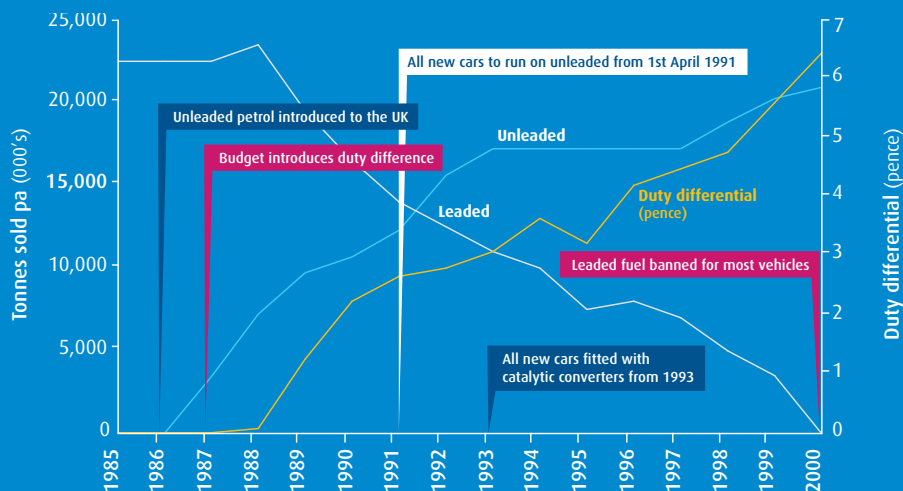


### → Fiscal incentives

Central and local governments have a clear remit to use fiscal incentives and disincentives to give significant cost signals to consumers and businesses about more sustainable choices. Measures can help internalise costs not usually factored into decisions, such longer-term security and health, or where the market price for social or environmental goods is too low. To change behaviour, however, monetary incentives need to be combined with other interventions that enable change, and provide people with a genuine alternative.<sup>41</sup>

### → Example: vehicle fuels

Following years of campaigns about the health impacts of lead in petrol, unleaded petrol was introduced in 1986. A significant duty differential combined with regulation on emissions and catalytic converters transformed the market. Leaded petrol was banned 14 years later. Since the A to G fuel efficiency label was launched in 2004, it has been used for grading car tax and to band charges for car parking. The proportion of diesel cars in the UK fleet has also risen significantly, due in part to their cheaper running costs.<sup>42</sup>



## Further information

This section refers to organisations that provide advice and further information on products. Please note this list is not exhaustive and that the SDC is not responsible for the content of external internet sites.

### Business support organisations

#### Business Link

On-line practical advice for businesses on environment and efficiency. [www.businesslink.gov.uk/bdotg/action/layer?topicId=1079068363&r.s=tl](http://www.businesslink.gov.uk/bdotg/action/layer?topicId=1079068363&r.s=tl)

#### Carbon Trust

Organisation that helps business and the public sector cut carbon emissions in operations and along supply chains. [www.carbontrust.co.uk](http://www.carbontrust.co.uk)

#### Centre for Sustainable Design

CfSD facilitates discussion and research on eco-design and environmental, economic, ethical and social considerations in product and service development, and design. [www.cfsd.org.uk](http://www.cfsd.org.uk)

#### Compass Network

The Compass Network is a global exchange for knowledge and creativity in sustainability communications. [www.compassnetwork.org/pages/home.html](http://www.compassnetwork.org/pages/home.html)

#### Energy Savings Trust

Free, independent energy saving advice on actions and products. [www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)

#### Environment Agency

Advice, guidance and information on current and forthcoming environmental regulations. [www.environment-agency.gov.uk/business/](http://www.environment-agency.gov.uk/business/)

#### Envirowise

Free, independent, confidential advice and support on practical ways to increase profits, minimise waste and reduce environmental impact, including new Easy Money guide for small retailers. [www.envirowise.gov.uk](http://www.envirowise.gov.uk)

#### Ethical Trading Initiative

Working to promote and improve corporate codes of practice which cover supply chain working conditions. [www.ethicaltrade.org](http://www.ethicaltrade.org)

#### Waste Resources Action Programme (WRAP)

Encourages and enables businesses and consumers to be more efficient in their use of materials. [www.wrap.org.uk](http://www.wrap.org.uk)

#### Action Sustainability

A Social Enterprise set up to lead and inspire sustainable procurement. [www.actionsustainability.com](http://www.actionsustainability.com)

### Scotland, Wales and Northern Ireland

#### ARENA Networks

Organisation providing practical support to business and other organisations on environmental management and training related issues.

**Wales** – [www.arenanetwork.org](http://www.arenanetwork.org)

**Northern Ireland** – [www.bitc.org.uk/what\\_we\\_do/where\\_we\\_work/northern\\_ireland/getting\\_involved/in\\_the\\_environment/](http://www.bitc.org.uk/what_we_do/where_we_work/northern_ireland/getting_involved/in_the_environment/)

#### Business Environment Partnership – BEP (Scotland)

Environmental management to SMEs in Scotland. [www.thebep.org.uk](http://www.thebep.org.uk)

#### AGENDA (Scotland)

Champions of Business Social Responsibility [www.agenda-scotland.org](http://www.agenda-scotland.org)

### Product information

#### Biffaward

Programme to improve information about the environmental impact of resource use throughout the UK [www.massbalance.org](http://www.massbalance.org)

**Department of Environment Food and Rural Affairs (Defra)** Sustainable Products and Materials Division. [www.defra.gov.uk/environment/consumerprod/index.htm](http://www.defra.gov.uk/environment/consumerprod/index.htm)

**Department for Economy and Transport, Welsh Assembly Government.** Business support in Wales, offering advice, ideas and funding. <http://new.wales.gov.uk/topics/businessandeconomy/?lang=en>

**Department for Innovation, Universities and Skills (DIUS)** Responsible for research & development support & funding. [www.dius.gov.uk/](http://www.dius.gov.uk/)

#### Department for Business, Enterprise & Regulatory Reform (BERR)

Sustainability Support – [www.dti.gov.uk/innovation/sustainability/index.html](http://www.dti.gov.uk/innovation/sustainability/index.html)  
Low Carbon Buildings Programme – [www.lowcarbonbuildings.org.uk/home/](http://www.lowcarbonbuildings.org.uk/home/)

#### European Commission – Product Policy & LCA

EU Integrated Product Policy Working Group on Product Information looking at the environmental information on products including Life Cycle Assessment. [http://ec.europa.eu/environment/ipp/ipp\\_wg.htm](http://ec.europa.eu/environment/ipp/ipp_wg.htm)  
<http://lca.jrc.ec.europa.eu/>

#### European Roundtable on Sustainable Consumption and Production (ERSCP)

An expert platform to foster the implementation of SCP within local and regional sustainable development initiatives. [www.erscp2007.net/cms/index.php?id=10](http://www.erscp2007.net/cms/index.php?id=10)

#### Foresight Programme

Produces visions of the future to to leaders in government, science and business ensure effective strategies. [www.foresight.gov.uk/index.html](http://www.foresight.gov.uk/index.html)

#### International Organisation for Standardisation (ISO) Environmental Management

ISO 14040:2006 LCA methodology. [www.iso14000-iso14001-environmental-management.com](http://www.iso14000-iso14001-environmental-management.com)

#### International Task Force for Sustainable Products

Aims to promote international co-operation on policy to encourage more environmentally sustainable, energy efficient products. [www.itfsp.org](http://www.itfsp.org)

#### Labour behind the Label

A campaign that supports garment workers' efforts worldwide to improve their working conditions. [www.labourbehindthelabel.org/component/option,com\\_frontpage/Itemid,1/](http://www.labourbehindthelabel.org/component/option,com_frontpage/Itemid,1/)

#### Life Cycle Initiative

Project to establish the best practices for life cycle assessment. [www.uneptie.org/pc/sustain/lca/lca.htm](http://www.uneptie.org/pc/sustain/lca/lca.htm)

#### Market Transformation Programme

UK Government programme that gathers data to inform government product policy. MTP also projects future product impacts under different policy scenarios. [www.mtprog.com](http://www.mtprog.com)

**REACH** (Registration, Evaluation, Authorisation and Restriction of Chemical substances) European Community regulation on the safe use of chemicals. [http://ec.europa.eu/environment/chemicals/reach/reach\\_intro.htm](http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm)

#### **SCP Net**

A network to develop the SCP evidence base created by a partnership of the RDAs, the Regional Assemblies, the Environment Agency and WWF linked to the Ecological Budget UK project. [www.wwflearning.org.uk/scpnet/](http://www.wwflearning.org.uk/scpnet/)

#### **Sustainable Products and Services Guide**

Online guide serving as a practical, dynamic resource for industry to incorporate sustainability into the development of products and/or services. [www.sustainableproductsandserives.com/Guide.htm](http://www.sustainableproductsandserives.com/Guide.htm)

#### **Sustainable Technologies Programme**

Research on the social and economic processes that shape, foster or inhibit more sustainable technologies. [www.sustainabletechnologies.ac.uk](http://www.sustainabletechnologies.ac.uk)

#### **Scottish Enterprise – Intermediary Technology Institutes**

Strengthening innovation and R&D in Scotland. [www.scottish-enterprise.com/sedotcom\\_home/services-to-business/ideas-and-innovation/iti.htm](http://www.scottish-enterprise.com/sedotcom_home/services-to-business/ideas-and-innovation/iti.htm)

#### **WWF's One Planet Business Programme**

Programme to consider transformational ways to meet human demand within ecological limits. [www.wwflearning.org.uk/one-planet-business/](http://www.wwflearning.org.uk/one-planet-business/)

#### **UK Business Taskforce on Sustainable Consumption and Production**

Convened by Defra and DTI with Cambridge Programme for Industry. [www.cpi.cam.ac.uk/scptaskforce/index.htm](http://www.cpi.cam.ac.uk/scptaskforce/index.htm)

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## **Sustainable** Development Commission

The Sustainable Development Commission is the Government's independent watchdog on sustainable development, reporting to the Prime Minister, the First Ministers of Scotland and Wales and the First Minister and Deputy First Minister of Northern Ireland.

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[www.sd-commission.org.uk](http://www.sd-commission.org.uk)

### **England**

(Main office)  
55 Whitehall  
London SW1A 2HH  
020 7270 8498  
[enquiries@sd-commission.org.uk](mailto:enquiries@sd-commission.org.uk)

### **Wales**

c/o Welsh Assembly Government,  
Cathays Park, Cardiff CF10 3NQ  
029 2082 6382  
[Wales@sd-commission.org.uk](mailto:Wales@sd-commission.org.uk)  
[www.sd-commission.org.uk/wales](http://www.sd-commission.org.uk/wales)

### **Scotland**

Osborne House  
1 Osborne Terrace, Haymarket,  
Edinburgh EH12 5HG  
0131 625 1880  
[Scotland@sd-commission.org.uk](mailto:Scotland@sd-commission.org.uk)  
[www.sd-commission.org.uk/scotland](http://www.sd-commission.org.uk/scotland)

### **Northern Ireland**

Room E5 11, OFMDFM  
Castle Buildings, Stormont Estate,  
Belfast BT4 3SR  
028 9052 0196  
[N.Ireland@sd-commission.org.uk](mailto:N.Ireland@sd-commission.org.uk)  
[www.sd-commission.org.uk/northern\\_ireland](http://www.sd-commission.org.uk/northern_ireland)

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