

Carbon reduction

Do the right thing

In order to advise and encourage others to buy sustainably, it is important that the government acts too. **Mike Scott** looks at national and local initiatives

The government has taken a major step forward in the UK's response to climate change with the passing of the world's first climate change legislation, at the end of last year. Along with the climate bill, the energy and planning bills make it easier and more profitable to develop renewable energy projects at every scale, from giant offshore wind farms to solar panels on the roof of your house.

This makes it all the more important for government bodies to set an example through their partnerships with other public bodies and with the private sector when cutting carbon and running sustainable procurement projects. "There was a perceived gap between what the government was telling other people to do to tackle climate change and what it was doing itself," says Tim Ash-Vie, a public sector sustainability expert at PricewaterhouseCoopers. "The

government makes up 40% of the economy, so it needs to do the right things."

Local government's role in this is vital because it is much bigger than central government, he adds. "If government is going to lead by example, it has to happen at a local level."

Perceived tension

What and how the government buys makes a big difference, both to its ability to deliver sustainable development and to its credibility with those it seeks to influence, points out the Sustainable Procurement Information Network, an information resource. However, Ash-Vie says there is "a perceived tension" between sustainability and value for money, and others agree. "Councils have a best value obligation that means they are obliged to act

without reference to non-commercial matters," comments Michael Dean, a partner at Edinburgh law firm Maclay Murray & Spens. Many people think this precludes taking the environment into account, but this is not the case, he says. EU procurement rules do mean only "relevant criteria" can be taken into account in procurement, but in the past four or five years, environmental criteria have been considered relevant.

There are a number of European regulations that force public bodies to procure in a way that cuts emissions. One of the most high profile is the landfill directive, which sets stringent targets for cutting the amount of waste that goes to landfill, particularly organic waste, because it creates methane, a greenhouse gas 21 times as powerful as CO₂. The government can be fined £150 for every tonne by which it

The mayor of London's green procurement code

The Mayor of London's green procurement code is a free service that helps London-based organisations cut their environmental impact through responsible purchasing.

Delivered by London Remade, the code provides practical advice and support to help embed green purchasing into all aspects of an organisation, including office products, energy, water and transport.

Since the code's launch in 2001, members bodies have spent £379m on green products and diverted 1.3m tonnes of waste from landfill.

In 2006, the purchase of green products resulted in 175,000 tonnes of carbon dioxide savings, the equivalent yearly emissions of over 29,000 households.

Initially, the focus of the code was to create a market for recycled products, ranging from paper to printing cartridges to building materials. This would stimulate a supply chain and bring down the cost of recycled products, according to London Remade chief executive Danny Silverstone.

"We have to be pretty hard-nosed on cost because most buyers are influenced by price," he says.

Over the past 18 months, however, its focus has been broadened and deepened to provide advice on any environmental consideration in procurement. This includes energy efficient products, transportation impacts and sourcing sustainable resources including timber, food and packaging.

While the code's signatories include every London borough, it also includes a number of multinational companies, which expands its scope and the potential scale of the benefits. The 126 current signatories have a total procurement budget of some £10bn and have publicly identified more than £300m of purchasing that addresses environmental issues.

Examples include Islington Council, which has doubled its recycling rate within a year, while Lewisham Council bought £2.74m of green electricity in 2005/06 under its green guide to procurement and all new developments must have a minimum 20% renewable energy element. Southwark Council sources a significant proportion of its energy from a combined heat and power plant while its vehicle fleet includes electric and LPG (liquid petroleum gas) vans, while it also uses 300,000 litres of biodiesel a year.



Council vehicle fleets are on the right track



Coming to a council near you? Icelanders set an example by using geothermal energy

exceeds its targets.

Peter Mills, head of New Earth Solutions, a company that recovers and recycles waste, says the directive, coupled with the recent news that landfill space is due to run out in three years, has led some authorities to "make a dash to buy equipment to cut landfill".

As part of the climate bill, the government is introducing its carbon reduction commitment under which large organisations, including local authorities, hospitals and universities will, from 2010, be given a quota of carbon allowances that will decrease every year.

Local initiatives

Despite the perceived barriers, there is much good work going on across the country. Woking borough council in Surrey has won a global reputation for its sustainability policies, which included setting up its own energy services company, Thamesway Energy, to deliver low carbon electricity to buildings in the town centre using a combined heat and power (CHP)

plant. Locally-delivered CHP delivers vast energy improvements over centrally generated electricity - using more than 90% of the energy generated compared with about 35% for a traditional power station.

The key is not to confine the benefits to council properties - a district heating system in Southampton, based partly on geothermal energy, provides heat not just to the city council but also to local housing schemes, the local hospital, the university and the local BBC studio.

Nor is it just about energy - Brighton and Hove city council has cut emissions by procuring the services of 'The Bike's The Business,' a local worker co-operative that provides cycle courier services across the city. Gateshead council took advantage of the growing biofuels industry in the North East and East Yorkshire by trialling a 20% biodiesel blend in a tenth of their vehicles. The success of the trial means that the biodiesel mix will be used in all council vehicles.

On the buses

Transport for London (TfL) is in a curious position. On the one hand, it plays a key role in reducing emissions by encouraging people to use public transport. On the other, as operator of the tube network, it is the largest single user of electricity in London.

The organisation has a climate change mitigation programme to cut emissions from its operations and to adapt its infrastructure and services to the changing climate. It says its climate change fund, worth £25m over three years, supports a "range of internal projects" to deliver CO₂ savings; and also says it is working to adapt its services to the impact of a changing climate, including flood management plans, a tunnel cooling programme and changing bus specifications.

On the bus network, TfL is investing in diesel-electric hybrid buses, which emit 40% less CO₂. The aim is that all buses entering service after 2012 should be hybrid-powered. The buses run on batteries, which are charged by a 1.9 litre engine, the same size as in a medium-sized car. They are also fitted with a technology called regenerative braking, which uses the energy created by bringing the bus to a halt to recharge the batteries.

After testing zero-emission fuel cell buses for three years, until 2007, TfL is to introduce 10 new buses powered by hydrogen fuel between now and 2010, along with a hydrogen refuelling station.

The greening of the organisation is filtering down to its suppliers, too. Enterprise Mouchel, which won a contract for road maintenance and improvement in south London that began last year, has made a commitment to be carbon neutral by 2010.

TfL will be involved in one of the largest UK green procurement projects to date, the £16bn Crossrail project, which will expand London's public transport capacity by 10%.

In addition to public transport, other forms of London transport are also on the sustainable agenda. Boris Johnson, London's mayor, has the iconic London taxi in his sights - soon after his election he announced £1m funding to trial low carbon technology in London's taxi fleet, such as stop-start technology, where the engine cuts out automatically when the vehicle stops, and starts up again when the accelerator is pressed. London's taxis spend about 40% of their time waiting at taxi ranks, at traffic signals, or waiting to pick up or drop off passengers, so stop-start is expected to reduce fuel consumption and emissions by 10%-15%.

Johnson has said taxi drivers should be particularly pleased, because they are more exposed than most to traffic pollution.