

carbon

NOVEMBER 2009

action

UPDATE EXTRA

Hello and welcome

Welcome to the fifth issue of Carbon Action Update Extra, our monthly e-update. We hope you will find this both useful and informative and it will encourage you to continue making a visible difference, take action on climate change and save money.

This e-update is a way to share best practice and help to encourage the NHS to take positive action to reduce carbon emissions.

Thank you for taking the time to read it.

NHS sets example for carbon reduction

The Saving Carbon, Improving Health strategy has the aim of helping the NHS become a leading sustainable, low-carbon organisation and offers the opportunity to influence the nation's emission-reducing behaviour.

Discussing the strategy in *Public Service Review: Health* (issue 21, p65, Autumn 2009), Dr David Pencheon, Director of the NHS Sustainable Development Unit says; "For the NHS, carbon reduction is a win-win situation. Recognition of the fact that climate change is the predominant health issue of the 21st Century

should go hand-in-hand with its core business operation: to prevent poor health and save lives.

"When you consider the iconic status of the NHS and its size and influence on society, it is in an extremely powerful position to help the public lead a low-carbon lifestyle." Says Dr Pencheon.

The Saving Carbon, Improving Health strategy evolved from an overriding understanding by the NHS that it could not ignore the financial, legal and health implications around sustainability.

In September 2009, the NHS Sustainable Development Unit also launched Fit for the Future, which sets out four scenarios for the healthcare system in England in 2030.

NHS Chief Executive David Nicholson says; "Faced with the real environmental challenge of climate change, the NHS is determined to provide the best healthcare in a sustainable way which reduces our carbon footprint. Fit for the Future, sent to every NHS organisation, will help us to turn our commitment to delivering sustainable healthcare into real action.

"Most presume the biggest contributor to the NHS carbon footprint is energy, but in reality energy constitutes 20% of the overall costs; travel and transport 20%, and procurement makes up the remaining 60%.

Dr Pencheon is in agreement; "We recommend that procurement teams focus on this, not only because it is sustainable but because it makes good business sense. We already know that the NHS hospitals that take sustainability seriously tend to be the best performing hospitals."

"NHS procurement teams can influence the entire supply chain by putting pressure on suppliers to be 'open' about their own supply chain and how sustainable it is."

Saving Carbon, Improving Health is designed to help the NHS achieve a reduction in carbon to meet requirements of the Climate Change Act. The successful implementation of this strategy would enable the NHS to help change attitudes and behaviours around carbon reduction for the better.

Effective waste management brings NHS carbon savings

Kerrie Warburton, Resource Futures

In the past, the focus on waste management within the NHS has tended to revolve around questions such as "Are we legally compliant?", "Has the contractor missed a collection?" and "How much does it cost?" But now, NHS waste managers are starting to ask themselves if improving the management of their waste can produce not only financial savings, but also some serious carbon savings. More often than not, the answer will be "Yes, it can".

why should I? how can I?

Published by the Carbon Reduction Steering Group - NHS Yorkshire and Humber

If you have any ideas, comments or suggestions on editorial content for future editions, please email:

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The NHS produces an average of 250,000 tonnes of waste a year at a cost of some £40+ million. Work funded by Yorkshire Forward involving six NHS Trusts across the region has shown that reducing, reusing and recycling offers both financial and carbon benefits. This work, undertaken on behalf of CO₂Sense Yorkshire, by the Leeds based environmental consultancy, Resource Futures, involved a review of the Trusts' current waste management practices.

With landfill tax increasing year on year and society's growing environmental awareness, it is rapidly becoming more cost effective to recycle paper, cardboard, glass, plastic and even food. Furthermore, diverting these materials away from landfill translates into carbon savings. Some types of waste even have an intrinsic value. Aluminium foil trays for example, used in many hospitals for patient meals, could be recycled by an aluminium smelter who may be willing to pay up to £500 per tonne for the metal. One acute Trust was shown that diverting aluminium foil, food, paper towels, garden maintenance waste, glass, cans and plastic bottles away from landfill has the potential to deliver savings in excess of £22,000 per year, as well as saving 585 tonnes of carbon.

Generic guidance for all NHS Trusts across Yorkshire and Humber will soon be available from CO₂Sense Yorkshire, but for now, some top tips include:

1. Get in the know

Understand what waste your Trust produces, how much there is and where it is going. Start recording it, then you can plan for the future.

2. Make friends

Maintain a good relationship with your contractors. Get them involved in how waste is managed onsite.

3. Sort it out

Start segregating your waste streams. Do not assume it is easier and cheaper to send it all away with one contractor. Reduce, reuse and recycle for a low carbon future!

Universities 'should cut carbon'

The amount of funding universities in England receive could be linked to their reductions in carbon emissions from 2011, under new proposals.

Institutions could be asked to try to halve their carbon emissions by 2020, if the plans go ahead. The Higher Education Funding Council for England (Hefce) is consulting on a proposal to make firm targets to reduce carbon emissions.

The Climate Change Act 2008 set legally-binding greenhouse gas emission targets in the UK — a reduction of at least 34% by 2020 and of 80% by 2050.

In order to work towards achieving this target, every university would be required to have a carbon management plan and its performance against this would be assessed. The key recommendations are that the sector commits to reducing emissions directly produced by the institution itself of at least 34% by 2020 and 80% by 2050.

Universities UK chief executive, Diana Warwick, said it supported the proposals; "The pursuit of sustainable development is one of the biggest challenges facing the world today," she said. "Universities, as educators, have been playing a vital role in moving this agenda forward and seeking a reduction in carbon emissions is key to this."

Richard Rugg, head of public sector at the Carbon Trust, said he thought the proposed targets were a positive move. "Hefce's consultation is valuable because it will encourage universities and colleges to focus on the practical details of how they are going to cut their carbon. Expecting higher education to sign-up to the same commitment as the UK is only reasonable," he said.

The proposals contained in this consultation would bring the higher education sector in line with the UK more generally.

Carbon Reduction Commitment

In April 2010 over 5000 large businesses and organisations, both private and public, will sign-up to the new Carbon Reduction Commitment (recently renamed the CRC Energy Efficiency Scheme). It is the UK's first mandatory carbon trading scheme and aims to reduce the level of carbon emissions currently produced by the larger 'low energy-intensive' organisations by approximately 1.2 million tonnes of CO₂ per year by 2020. As a Climate Change Bill commitment, the scheme is aiming for a 60% reduction in CO₂ emissions by 2050.

Benefits of the CRC Scheme:

Financial

The carbon reduction commitment sets out a clear risk to organisations that fail to reduce carbon emissions. The financial implications could result in penalties of thousands, or even millions, of pounds for large organisations. However, there is the opportunity for the best performing organisations to receive similarly large bonus payments as reward for their efforts.

Brand and Marketing

With the carbon reduction commitment league tables being published each year, the media will have full access to the performance information of all organisations within the scheme. Therefore, the best performing organisations will benefit from recognition of their achievements.

Corporate Social Responsibility

Organisations that make significant savings in the first few years will find it more and more difficult to achieve such high-level percentage savings on their carbon emissions. This could be considered a negative aspect of the carbon reduction commitment scheme, as there will be less incentive for organisations to continue their commitment to reduce CO₂. However, having reduced their carbon emissions, these organisations will enjoy long-term financial benefits from reduced energy costs.

Top Tips For Reducing Your Carbon Footprint: Heating

Most people rely on gas and electricity to heat their home and to provide hot water. This energy consumption produces around one sixth of the UK's carbon dioxide output. For every kilowatt hour of electricity consumed at home, on average 0.537kg of carbon dioxide is emitted at a power station. Burning 1 kWh of gas emits 0.206kg of carbon dioxide. Calculate household emissions using your gas and electricity meters and allowing 0.537kg CO₂/ kWh for electricity and 0.206kg CO₂/kWh for gas.

Heating tips:

1. Programme gas-guzzling boilers and heaters

Programme boiler and heater timers so they heat the home only when needed. Many can be programmed for different times on different days of the week to match your lifestyle.

CO₂ impact

Saving one hour of boiler burning time per day for half a year can save 600kg of carbon dioxide per year.

A 1-hour per day reduction in heating for half the year for two electric storage heaters rated at 3kW, will save 550kg of carbon dioxide per year.

2. Manage your thermostat

In addition to a timer, the central heating boiler is usually controlled by thermostats that sense the temperature in the water leaving the boiler and the air temperature in the home. Choose a water temperature setting suitable for your boiler. The air temperature or room thermostat should be set as low as is comfortable.

CO₂ impact

Turning down the room thermostat by 1°C could save 350kg per year.

3. Insulate hot water cylinders

All hot water cylinders should be insulated by a factory applied foam outer layer or jacket. Make sure your hot water cylinder has a jacket at

least 75mm (3inches) thick. Ensure hot water pipe work around the cylinder is also insulated with special purpose pipe wrap. Check the water temperature thermostat is set to 60°C or less.

CO₂ impact

Fitting an insulating jacket to your hot water cylinder can save 160kg of carbon dioxide per year.

4. Replace an old central heating boiler with a condensing boiler

Condensing boilers are much more efficient than boilers installed before the late 1990s and by law most new or replacement boilers must now be a condensing boiler.

CO₂ impact

Boilers over 10 years old may be only 55% efficient yet the latest condensing boilers with a SEDBUK (Seasonal Efficiency of Domestic Boilers in the UK) 'A' rating are 90% efficient. To provide the same heat output a condensing boiler will burn only two thirds of the gas used by an old boiler.

5. Generate renewable energy

A wood burning stove is one solution, some can even heat hot water too. More ambitious systems use woodchip boilers for central heating and hot water or ground source heat pumps for underfloor heating. Solar panels to provide domestic hot water are becoming an increasingly popular choice of renewable energy for many households.

CO₂ impact

By definition, a renewable heating or hot water system either emits no carbon dioxide or the source of energy, such as wood, is sustainable which means the emitted carbon dioxide is part of a natural cycle of tree growth, which absorbs carbon dioxide.

NEXT MONTH'S TOP TIPS TO REDUCE YOUR CARBON FOOTPRINT: FOOD

Events

Upcoming events

Low Carbon — Best Practice Exchange

'A forum for executives involved in reducing carbon emissions to share ideas and develop plans for carbon reduction initiatives.'

3rd December 2009
Harrogate International Centre

For further information please visit:
www.carbon-innovation.com/harrogate

Countryside Recreation Network: Children's Health and the Outdoors

A year on from the CRN conference 'Growing-up Outdoors', this seminar will explore further steps towards encouraging children to be active in the natural environment

3rd December 2009
Said Business School, Oxford

For further information please visit:
www.countrysiderecreation.org.uk

CO₂ Reduction in the NHS Estate

'Practical steps towards planning and implementing an effective NHS carbon reduction strategy'

10th December 2009
Savoy Palace, London

For further information please visit:
www.greenerhealthcare.org/events

Webinar on Reducing Food Waste in the NHS

This webinar looks at how NHS Trusts can reduce food wastage without compromising the sustainability and healthiness of food provision.

10th December 2009: 14:00 - 15:00

To register please visit:
www.2degreesnetwork.com/how-we-work/networks/greener-healthcare

Next update: December 2009