

Kier and the carbon reduction commitment

When it comes to exploration, Sir John Franklin is perhaps not a household name, unless you are from Spilsby, Lincolnshire, his place of birth. However, he was one of a number of seafarers who have tried, unsuccessfully, over the last 500 years, to find the Northwest Passage, one of the most fabled sea routes in the world – a short cut from Europe to Asia through the Canadian Arctic. Historically, the route has been virtually impassable due to the year-round presence of thick sea ice. However, recently, satellite images showed that the ice had retreated sufficiently to make the route navigable in the summer months. Climate models had projected the passage would eventually open as warming temperatures melted the Arctic sea ice – but nobody had predicted it would happen this soon.

While it is known that Earth's climate does change naturally over time, it is generally accepted by most scientists that recent human activity has significantly accelerated this change. Since the beginning of the industrial revolution, the burning of fossil fuels and deforestation has increased the amount of carbon dioxide and other greenhouse gases, such as sulphur



dioxide and nitrogen dioxide, in the atmosphere. The increase in these gases acts like a blanket around Earth, trapping in heat and causing a rise in temperature over time.

It is this rise in temperature that is causing the sea ice to melt and may, if left unchecked, lead to changes in rainfall patterns, a rise in sea level, and a wide range of impacts on plants, wildlife, and humans. The majority of the world's leading climate scientists believe that only by making substantial and binding cuts in current carbon emissions can these potentially catastrophic events be avoided.

The United Kingdom is taking the lead in setting challenging reductions in its carbon emissions.

The Climate Change Bill, which received royal assent in November 2008, commits the UK to a legally binding target of achieving at least an 80 per cent cut in greenhouse gas emissions by 2050, and a reduction in greenhouse gas emissions of at least 34 per cent by 2020. Both these targets are against a 1990 baseline.



SIR JOHN FRANKLIN



At Kier Eastern's Open Academy project in Norwich, the last person leaving the site can turn off the electricity supply to the offices and temporary site electrics via a single switch, ensuring that only key electrical equipment is left on overnight or at weekends.



Kier Group Energy Saving Campaign

Lighting and Power

Do you want polar bears to only exist in zoos?

Are you powering up at night & on the weekends?

Fit a 7 day 24-hour timer

Switch off... Daylight is free!

Lights are on but nobody's home!

Are you leaving your desk?

... Set your computer to standby mode

Water heaters are more energy efficient than kettles



The Carbon Reduction Commitment (CRC): Energy Efficiency Scheme is part of the government's strategy to meet this target. Its aim is to reduce CO₂ emissions through greater energy efficiency, rather than by offsetting or using renewable energy.

It is targeted at large non energy-intensive organisations, including supermarket and hotel chains, small to

medium-size industrial companies and public sector bodies, such as health and educational authorities, as well as construction companies like ourselves.

It is a mandatory Carbon Trading Scheme, which is effective from 1 April 2010.

As a participant in the scheme, we will have to measure and report on our

energy use and demonstrate continuous improvement in reducing our carbon emissions.

Companies will be ranked annually, according to their success in reducing emissions, in a publicly available league table.

From April 2011 we will have to buy carbon credits, at a price of £12/tCO₂,

sufficient to cover our anticipated greenhouse gas emissions in the following year.

Revenue raised will be returned to participants in direct proportion to their position in the table. In the early years of the scheme our ranking will also be determined partly by whether we have obtained the Carbon Trust Standard, or equivalent, and the number of automatic meter reading (AMR) systems we have installed.

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Kier Group Energy Saving Campaign

Heating and Cooling

			Chilly?.. Wear a fleece?	
			Do you really need that aircon? Too hot?.. Turn down your radiator!	
			Is your radiator obstructed? Fan heaters are energy guzzlers – avoid them!	

“ The best energy saving device in this company is YOU ”

A cross-Group carbon reduction committee, chaired by Kier Support Services director Karim Khan, has been set up to co-ordinate our initial response to the CRC Energy Efficiency Scheme. It will be responsible for registering Kier Group with the scheme, ensuring that we comply with its requirements and overseeing the accurate recording and reporting of our energy use.

The committee will also look for new ways to improve the Group's energy efficiency and to promote current initiatives, in place across the Group, to reduce our energy use.

At the Open Academy project in Norwich, for example, two separate

electricity supplies have been installed on site. One feeds the drying room, security lighting and IT equipment; the other feeds the offices and temporary site electrics. The last person leaving the site can turn off the second supply via a single switch, ensuring that only key electrical equipment is left on overnight or at weekends.



Carbon warriors from Kier Islington prepare to go into battle to act on CO₂.

Kier Support Services' 2009 'Carbon Warriors' KEEP campaign, to raise people's awareness of the importance of switching off, has resulted in a two per cent reduction in energy use across its offices.

In 2008, to meet the demand for energy efficient site accommodation, Kier Plant introduced the 'Green Space' unit into its hire fleet. These eco units use 30 per cent less electricity per year than a standard unit, and make a significant contribution to reducing a project's carbon footprint. Kier Plant is currently looking to identify opportunities to reduce the 7,500 tonnes of carbon that its generator fleet currently produces every year.



Kier Group Energy Saving Campaign

Travel and Transport

		Could you walk, cycle or take the train?		More than two of you going to a meeting?...	
		Correctly inflated tyres reduce fuel consumption			
		Do you need that extra power? Foot off the pedal... Save fuel and be safer			

“ The best energy saving device in this company is YOU ”

The Kier Regional business improvement teams are continuing with their campaign, started in 2008, to reduce energy use within their companies.

Kier Compliance Services (KCS) has put together a series of continuing professional development seminars on CRC and energy management. These seminars are intended not only to raise awareness of the topic and the actions required by Kier, but also of the business opportunities that the scheme presents to the Group and how each business, with KCS, can maximise the benefits from these opportunities.

The CRC presents Kier with an ideal opportunity to work together as one company to reduce our energy use and the resultant carbon emissions. By sharing ideas and initiatives we should be able, over the next three years, to achieve a significant reduction in our



carbon emissions and take our place as one of the best performing companies in our sector.

If you have any queries about the CRC Energy Efficiency Scheme, or have any suggestions about how to reduce our energy use, please contact the committee at crc@kier.co.uk

Report by

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