

**Phlorum
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Kyoto and your business

Dr Paul Beckett, Director of environmental consultancy Phlorum, looks at the environmental legislation that affects businesses in the construction sector and how companies can cut their carbon emissions in line with the Kyoto Protocol

From continuous warnings and scientific reports to the latest pitched political battles between Gordon Brown and David Cameron, climate change is a subject that has come to the fore in recent months. One of the key benchmarks of the environmental debate has been the Kyoto Protocol, an international agreement made by more than 160 countries to reduce the emission of greenhouse gases. Whilst the Kyoto Protocol set baseline targets for each country the Government went beyond this agreement to set a voluntary target for a 20% reduction in CO₂ emissions by 2010.

For the Government to meet these targets, businesses and consumers alike are going to have to work together in order to cut emissions and the construction industry is certainly no exception to this. Leading the way at the Thames Gateway Forum in November 2006, the Mayor of London, Ken Livingstone, announced steps towards a new housing strategy for the capital. He emphasised the importance of building new

homes that are sustainable and energy efficient. Livingstone urged Forum delegates to embrace the content of his reports by joining forces in creating sustainable developments and stated that: "We have reached a turning point for housing in London that will impact on the lives of many future generations of Londoners." This consensus has been adopted by developers across the country who realise that if they don't start planning for the future now then the outlook is bleak for businesses and the environment alike. The demand for sustainable development has increased significantly over the last few years due to a growing awareness of serious environmental issues such as global warming. When combined with public interest and consumer demand, there is an increasing pressure on businesses in the construction sector to provide more energy efficient and sustainable developments.

What is the legislation?

Gordon Brown's latest budget provides relief from stamp duty for new zero carbon homes with a purchase price of up to £500,000 which will come into effect from 1st October 2007. These measures will inevitably create demand, leading to an increase in the development of eco-friendly property and construction companies who will need to develop the capacity to produce these developments if they are going to meet this growing consumer pressure.

The budget also increased the landfill tax rate and this too will impact on the working practices of the construction industry. The standard rate increased from £21 per tonne to £24 per tonne from 1st April 2007 and will increase to £32 per tonne from 1st April 2008. As a result of this increase there will be a significant rise in the cost of the disposal of material from construction and demolition sites encouraging more onsite treatment of waste. Additionally there are current proposals that all building projects worth more than £250,000 will have to draw up site waste management plans as part of a clampdown by the Department for Environment, Food and Rural Affairs (DEFRA); the aim of which is to reduce the 100 million tonnes of construction waste that is dumped in the UK every year. With the enforcement dates for these legislative changes fast approaching, construction companies will not only need to understand their responsibility under the new laws but also establish processes for the effective disposal of waste from their sites. Developers should also already be thinking about planning for the legislation that comes into force from June 2007 under The Housing Act 2004. This states that all homes being sold must have Home Information Packs (HIPs), which will include information designed to improve the home-buying process, such as a home condition report and Energy Performance Certificate. This report will be similar to the current certificates used in the sale of all 'white goods' such as fridges, freezers and washing machines. The hope is that energy



Gordon Brown's latest budget does a lot in the landfill tax rate which will impact on the working practices of the construction industry



efficient homes will become more attractive to buyers and encourage homeowners to make environmentally-friendly adaptations to their properties. This can only be good news for those construction and development companies that are leading the way in sustainable development as their new projects will become increasingly desirable to consumers.

What schemes are in place to help construction companies become more sustainable?

There are many sources of information available to aid sustainable developers, such as the Considerate Constructor Scheme, which provides a procedure for monitoring sites. This includes a scoring system based on consideration, environment, cleanliness, neighbourliness, respect, safety, responsibility and accountability. Some local authorities and Government Authorities have their own Considerate Constructors Scheme which may differ slightly to one another depending on the area.

Another scheme is the National Code of Sustainable Homes (CSH), which is designed to give a star-rated system to evaluate the environmental performance of buildings. At this stage the full technical guidance on how to comply with the CSH has not been published but it is anticipated that it will become available in spring 2007. The CSH will look at energy, water, pollution, materials, transport, ecology and land use as well as health and well-being. The CSH will also provide valuable information to homebuyers and offer builders and developers a tool with which they can set themselves apart from their competitors in terms of sustainability.

How can construction companies turn over a green leaf?

As climate change continues to dominate the public arena, construction companies should be taking steps to cut their carbon emissions and become more sustainable in order to stay ahead of the game. This doesn't have to include a radical change at every level of the company but can be achieved by making gradual changes such as changing suppliers or amending general working practices. Larger projects that want to reduce their environmental impact need to ensure that competent and robust Environmental Impact Assessments (EIAs) are submitted with all planning applications. Positive steps to reducing a company's carbon footprint can include using locally sourced materials which will reduce the emissions from transportation, as will managing waste on site wherever possible. Using lower embodied energy products i.e. products which use lower amounts of energy in their processing, manufacturing and transportation and using energy efficient plant and equipment that is regularly serviced can also really help to minimise a business' environmental impact. To guarantee that developments are more sustainable, managers can also assess the plans to ensure that they have energy efficient measures in place such as maximising the potential solar gain, maximising insulation, specifying renewable energy sources, using energy efficient lighting and using sustainably manufactured products.

In a society where we are growing increasingly aware of the impact that we have on the environment, those in the construction industry that choose to work more sustainably as part of their general practice will undoubtedly reap the environmental and business benefits of this way of working. It is essential for the construction industry as a whole to see their environmental impact as a serious problem that needs addressing and from consumer pressure to an increased tax burden there is more and more motivation for them to explore sustainable development. If they fail to do so now, there is a high risk the government will impose tighter sanctions in the future as they clampdown on businesses that stand in the way of meeting Kyoto targets.



Stamp duty relief for new zero carbon homes will increase the demand for eco-friendly houses. To meet this growing consumer pressure construction companies will need to develop the capacity to produce these developments



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Phlorum (www.phlorum.com) is an environmental consultancy that specialises in contamination, air quality, Japanese knotweed eradication, ecology and environmental management of new developments. Phlorum also has an energy efficiency division dedicated to helping developers with the energy efficient design or refurbishment of new or converted buildings.