Does less carbon mean more value?

Not equipping buildings to fulfil low energy requirements leaves them at risk of competition from better designed, fitted and managed stock, says George Fowkes.

George Fowkes is co-founder of Low Carbon Workplace Ltd, a Carbon Trust subsidiary and the exclusive Carbon Advisor to the Low Carbon Workplace Partnership.

What creates value in the property industry? It's always been buying low, selling high; it's clearly location-location-location. And now, is it also carbon?

Let's look at this issue through the lens of an asset's yield: that is, the gaining of early lets, the maintenance of sustained rents and the holding of long-term, quality occupiers. As a driver of yield this trinity is hard to beat.

The UK government has set the bold ambition of reducing carbon emissions by 80 per cent by 2050 compared to 1990 levels, and there is now an interim target of 50 per cent by 2023-2027 which is much nearer. As non-domestic property accounts for nearly a fifth of the UK's carbon emissions it's not surprising that the sector is a target for government initiatives, and will continue to be so until emissions have been reduced and remain on a downward trajectory. But according to Carbon Trust research, it is likely that half the office buildings that will be in use in 2050 have already been built today. Indeed, only 2 per cent of commercial stock is less than five years old. In short, UK non-domestic property is severely exposed to future carbon legislation.

The UK Government maintains pressure on emissions reductions in buildings primarily by pushing both cost and risk on to occupiers. To illustrate this, currently the Government is enacting its influence on value through two broad types of regulation:

1 The Renewable Obligation, Feed-in Tariffs, Climate Change Levy and CRC energy efficiency scheme.

These all – directly or indirectly - increase the cost of energy. And it's widely accepted that the wholesale price of energy is going to increase, with a corresponding impact on energy prices for occupiers – or landlords (which may be passed through to the occupiers anyway).

2 Display Energy Certificates

– the equivalent of schools having to post exam results on the school gates, DECs are a public, if imperfect, statement of a building's energy performance in use. They provide a basis for league tables and – inevitably – publicity of good and poor performance.

These measures are only the start – and whilst they may be secondary considerations today, they are slowly racheting up the list of influences on occupiers' property decisions. It is becoming increasingly important to secure low and stable running costs and mitigate against future legislation and energy price rises. As well as financial value, overall corporate reputation, customer preference and improved employee perception is at stake. Simply put, a building that can deliver these occupier aspirations will let up more quickly, and hold its tenants for longer at sustained rents against the equivalent building that cannot. Where there is a choice, occupiers will gravitate towards the lower carbon building. This drives yield.

There is already evidence in the US that sustainability credentials drive superior returns and a growing sense that this may be the case in the UK. In truth there is not sufficient evidence yet to claim a green premium, but building owners and their advisors should beware the 'grey discount'. Several leading service companies already specify high environmental performance as a requirement in their office stock, and there is a growing risk of a shift –gradual or sudden – away from poorly-performing buildings in competitive areas. A building that takes longer to fill or whose occupants exercise their lease breaks due to high energy costs or reputation-damaging carbon performance will soon earn itself this grey discount, or become obsolete.

Occupiers of all types are aware of the growing primacy of carbon as an environmental issue, yet a number of near term

Figure 1: Typical characteristics of a low carbon building (Source: Verdantix and Low Carbon Workplace Partnership, 2011)

George is also the founder of The Clear Alternative, which provides interim director expertise to clean technology companies to catalyse their start and growth phases. He has worked in carbon markets and renewables and waste since 2000 and has been instrumental in the foundation of six businesses valued at over £250m to date.

measures are clouding the necessary course of action – for now. For example, it is not unusual for occupiers to move into a 'BREEAM Excellent' building only to be presented with a DEC 'G' rating. Whilst the BREEAM rating system has many benefits, specifying actual energy usage isn't one of them. The market increasingly recognises that a BREEAM 'Outstanding' or 'Excellent' is not enough by itself to guarantee an energy efficient building or indeed, lasting sustainability credentials. Most buildings 'type' certifications are like 'go faster' stripes on a new car. They may help get it out of the showroom, but they don't contribute to long-term value.

Another area receiving more than its fair share of attention is embodied carbon as the design and construction industries grapple to minimise its impact in the build process. This is fed by bold claims in widely-read journals: "The industry has got very good at creating low-energy buildings in a surprisingly short space of time… there is one carbon challenge left for designers to get stuck into: how to reduce the energy embodied in building materials."[1] being just one. We shouldn't forget that the challenge lies in keeping occupiers through improving the energy efficiency of the 98 per cent of commercial building stock that is more than five years old. In contrast embodied carbon accounts for at most 20 per centof today's carbon emissions from property and largely affects new-build. It is not the subject of any primary or secondary legislation yet, and it has no resultant costs on occupiers. Can we honestly claim that this is driving yields?

A much less appreciated fact is that developers and landlords have the greatest degree of influence over operational energy consumption (and hence carbon emissions) in the entire buildings supply chain. Further, much of this can be achieved at low or no additional cost compared to business as usual when coupled with systematic attention to the issue.

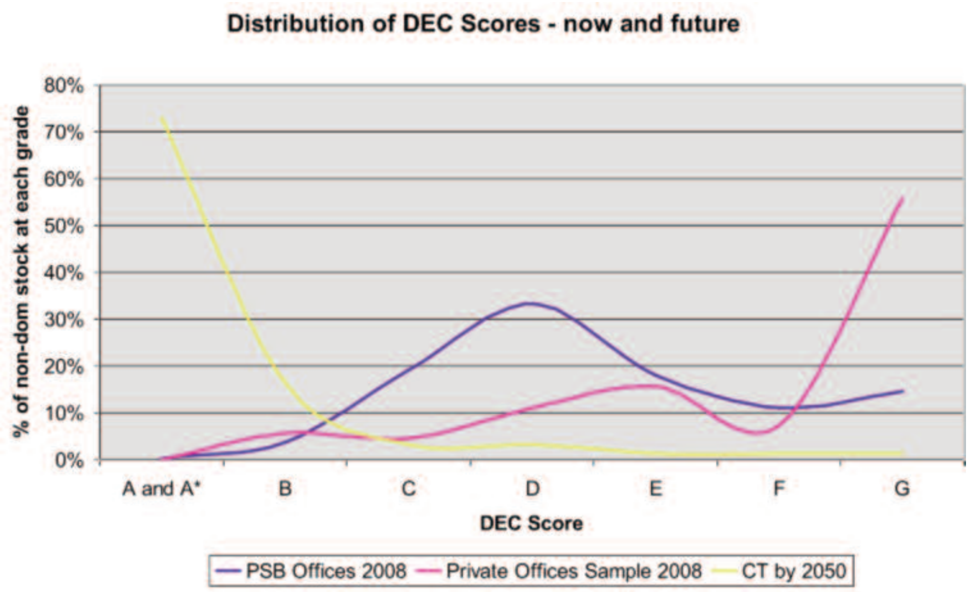
To illustrate, Low Carbon Workplace Partnership[2] has analysed the factors critical to success in low carbon developments and uses a five-point set of development principles:

- Monitoring: provide zonal real time energy consumption monitoring and reporting to every building
- Smart passive building measures: choose not too much glazing, open space, mixed mode temperature control, double glazing and interstitial blinds. These are also all strong drivers of occupant satisfaction
- Efficient active building measures: make best use of real time local meters, zonal control including shut-down, modern plant with variable drives
- An engaged landlord: set carbon budgets and follow through into construction, and Facilities Management contracts. Assess performance against promises.
- Engaged occupiers: instruct occupiers in how to manage the building's environmental control system; devise strategies to minimise energy consumption and review their performance with them.

In conclusion, occupiers of all types are becoming aware of the increasing primacy of operational carbon emissions against other environmental issues. Coupled with volatile energy costs, this means that occupiers will increasingly value buildings with low energy consumption as more desirable. Not equipping buildings to fulfil this requirement quite simply leaves them at risk of competition from better designed, fitted and managed stock. This is almost always within the developer's and landlord's control.

That's the value of low carbon.

Figure 2: It is estimated that commercial buildings will need to improve by four DEC ratings to meet the government's 2050 targets



1 Building magazine, 4 June 2010

2 The Low Carbon Workplace Partnership, set up by the Carbon Trust, developer Stanhope and asset manager Threadneedle in 2010, acquires buildings in need of modernisation and updates them to provide modern, financially competitive and energy efficient properties.