



South West Sponge

Response to the Governments draft Strategy for Sustainable Construction.

General

The Draft Strategy for Sustainable construction is a welcome document, helping to bring together various industrial and governmental organisations and departments to provide a united approach to tackling climate change.

The aim of the document is quite clear in its content which focuses primarily on Carbon. Clear benefits both to future generations and the impact of reducing the carbon yield of our current society must be at the forefront of decisions at all stages.

However a significant part of what makes development sustainable is still lacking from the document. Underpinned by the triple bottom line of economy, social and environmental perspectives, the document does not challenge each of these principles with its current focus. Significant savings in carbon can be made through social projects, providing a more holistic view on sustainable design both in its construction and through its lifetime, as both periods are inextricably linked.

A carbon currency framework should be considered within this document and its impacts on the construction industry with clear lifecycle analysis in terms of carbon is important to enable practicable and constructive decisions to be made.

Also fundamentally, the strategy ignores both the existing stock and large sections within the commercial (leisure, education etc) sector, both new and existing. These are significant emitters of CO₂ and cannot be omitted from any strategy to manage emissions. Their absence undermines the strategy.

The Government is currently sending market signals which encourage new build over renovation and upgrading of the existing stock viz:

- VAT is charged on upgrading new houses and offices, not on the building of new properties.
- Housing corporations are only funded for new build properties.

In addition, whilst trying to reduce the reliance on fossil fuels, Warm front grants are only available to those using fossil fuel driven systems.

We believe that this document should seek to address and amend the market signals that are being sent out remembering that the existing building stock counts for such a significant percentage of CO₂ outputs.

Companies are in the market to make money. They will (generally) respond to 3 signals:

- Legislation;
- price signals (reduction in prices for raw materials);
- market demand.

Being responsible for such a significant part of the UK construction, the Government has the major part to play in influencing each of these.

Increasing the efficiency of existing stock is vital to providing a fast and effective way of reducing our carbon emission. A framework to allow the distribution of resources within current new developments to link to existing developments where it can be utilised more cost effectively in both economic and environmental terms is required.

Legislation

Whilst the strategy talks of reductions in regulations, there is an increasing need for good legislation that is enforceable and enforced with penalties to ensure that all companies are playing on a level playing field. This will give companies the comfort that building sustainably will not disadvantage them through incurring the extra costs that this might entail.

This could be managed by way of building regulations/ planners (who need training in sustainability issues) or another government agency. There needs to be a significant increase in coordination between these two areas and a consistency of approach.. Although understandable the document makes no reference to planning it is still an important driver and a association must be made.

Price signals and innovation

The Government role in sending the price signals is achieved through either the tax system (see above) or through the significant investment in purchasing appropriate technologies through their procurement process. If it is known that the Government is serious about sustainability (this should be read to include toxicity and the use today of hydrocarbons) then there will be more market entrants, supply will increase etc.

The draft strategy should set earlier, higher targets for Government (or PFI) funded projects to be exemplars of sustainability and encourage the uptake of the relevant technologies.

Increasing market demand

A further way in which the Government can affect behaviour is to provide funding for public education programmes on sustainability that move beyond “taking things off stand by” and explain to people what a sustainable building is and why

they are important. By increasing the awareness of the benefits of living/working in a sustainable building, demand for the sustainable product should also increase.

The targets for sustainable building set out in the draft strategy, are, in our opinion, not bold enough. To affect real change, the bar needs to be raised high, the government needs to be bold – show leadership. Targets, for example the requirement for 20% BREEAM excellent ratings by 2008, are too low. The technology is around now for this to be raised to 80-90%. The planning system can be changed relatively quickly to only grant planning where excellent ratings will be achieved.

The Draft Strategy is also silent on several matters on which we feel it should speak:

- What is the government strategy for dealing with the effects of peak oil and how does it inform this strategy?
- What will happen if the targets in this strategy aren't met? Who will be held accountable, what are the penalties/incentives?
- How can the industry be confident that the Government will deliver on their side of the bargain – this can be evidenced by significant early changes to procurement behaviour and the planning process.
- Healthy homes (rather than simply low carbon/water etc) are not mentioned. The current solutions to achieve Code 6 require the use of toxic chemicals and can produce dwellings which are lightweight and therefore require mechanical ventilation to cool.

Specific responses to questions:

General

Q8

Major impacts on industry include

- Extra resources or training required to comply
- Increase product costs

As stated above, the Government can have a role in reducing these impacts.

Positive benefits include building a leading economy based on renewable and emerging technologies for which currently we are still lagging behind large developed countries within the European community.

We have a historically had an impressive manufacturing base which has been lost over the last 20-30 years, this strategy can provide a building block to reintroducing manufacturing within the UK..

Building a base of knowledgeable skilled workers capable of dealing with the various issues raised within the strategy. These Skills should be utilised across multi-national companies as well as through the government.

Importantly better understanding on who and where the money comes to pay for this needs to be considered. CSR within corporations can bring a significant yield into the market to help reduce cost to both for public and private sectors within the industry.

Q9

We have observed that it is the smaller developers who have been at the forefront of developing technologies and solutions to respond to the issues we all face. However, they are also sometimes faced with a bewildering swathe of regulation. A government department (or independent body – see below) should be established to assist these entrepreneurs to help them to comply with other regulations. Their work tends to encourage working together, local trades and craftsmen. Accordingly they should be incentivised, and more large developments should be broken up in the masterplanning processes and allocated to smaller developers.

Procurement

Q12

- Industry involvement in the product in the longer term can lead to increased sustainability. Linking the producer and end user from the start of the project reduces the likelihood of “design/construct and walk away”

and increases the chances of a more sustainable community. This again suggests a role for smaller producers in communities.

- Procurement of local labour and materials.
- With increased competition for the funding of sustainable development there needs to be a clearer prioritisation of where the money should go. It is important that funding is directed where the boundaries are being stretched. This could be achieved through devolution of funding decisions to RDAs or by establishing a set of criteria which must be fulfilled before funding is granted.
- Establishing procurement clubs/ buying consortia leading to economies of scale for smaller organisations which we are able to benefit. This can also lead to a reduction in site waste.

Design

Q13, 14

As stated above, the targets in this section contain insufficient stretch. The targets should be raised to 100% of all projects (5.1) and 80% of all, with the remainder achieving Very good (5.2).

There is currently no requirement for Post occupancy review/assessment or mention thereof in the Strategy document. Consumer behaviour is one of the larger areas of emissions and can undo a lot of the good achieved in design.

In group discussions, it was felt that the BRE is conflicted in delivering ratings, running what is in effect a closed shop of assessment – you must employ one of the BRE trained assessors who pay the BRE for their training to get a rating which is needed for planning purposes.

There is a need for an independent (not-for-profit) organisation to take on Environmental assessment, guided by the BRE. This could be a government department eg NAO, or environment agency, or not - but the scheme should be run on a not for profit basis.

As councils are using BREEAM as a tool to raise the environmental standards of buildings, should the rule book by which the ratings are calculated be made available to all, as is the case with the Code and other areas of secondary legislation. This will give developers and their agents an opportunity to design in requirements from day one, without having to appoint (and pay) an assessor. There can be specialists in the field without them being assessors.

Q13

As stated above, we feel this target is not sufficiently stretching or ambitious. We believe that 80% of developments should be capable of achieving an Excellent rating if properly designed, but would welcome a 100% target. Further, the threshold of £1m seems arbitrary, and the requirement should be applied to all building projects.

Our major concern with the strategy as it is stated is that it raises the question of who decides which buildings fall into the 20% (this comes back to the point of a level playing field) ie are they going to ensure that the first number of applications are so graded and the rest can do what they wish? If there is to be a target, it should be applied nationally, equally and consistently.

Again, the targets need to be consider refurbishments as well.

Q14

The involvement of end users, operators and maintenance staff (5.23) is considered to be priority No 1. This requires good guidelines on how to achieve this, and we recognise that there are end user understanding or technical, market and industry constraints.

If suitably skilled professionals are involved in the process from inception to completion, they are more likely to develop a more sustainable product.

That said, developers often begin the scheme without employing appropriate team members to manage costs. If developers are clear at an early stage of the development that they need to achieve an “excellent” rating under BREEAM (or equivalent) they are more likely to employ appropriately skilled staff who can take them through the process. This holistic approach in terms of design members can be driven through public bodies and the procurement process.

Other priorities considered important include;
Integrated design & construction teams
The use of DQI etc from contractors

People

Q15&16

Providing a substantial increase in the numbers of people within the industry is important to achieving the requirements within both this document and other relevant legislative drivers, and is welcomed within this document and has been mentioned and considered within various other questions

Further links between the construction industry and education is required to help this process.

Further sharing of resources and particularly people and knowledge is required, provided through CSR projects.

Waste

Q23, 24, 25 & 26

The 2012 target of a 50% reduction of construction, demolition and excavation waste to landfill compared to 2005 is seen as ambitious but an achievable target and should help gear the industry towards resource efficient construction methods.

2020 target of zero waste (construction, demolition and excavation?) to landfill is seen as overly ambitious and could result in detrimental criticism of the strategy.

More achievable targets should be considered set against achievable benchmarks. These targets are still required to make industry re-evaluate their current waste disposal methodology.

A consensus among the parties was that a reduction in landfill against a set benchmark to which the industry can work is more realistic and will significantly aid the development of further resolutions. An 80% reduction in site waste was seen as a demanding yet achievable target.

Further clarification and aids to how these targets are to be achieved is required through the strategy with clear support mechanisms highlighting with whom and where these can be found.

There needs to be further consideration as to procurement and purchasing procedures in order to reduce waste on site. An economically viable company can provide a non-site specific delivery procedure to reduce the quantity of waste. However to provide the framework for this to be built up government support and specific regulations to utilise this form of purchasing is required.

Materials

Q27

The targets in 12.2.1 and 12.2.2 are good to see but not high enough – why can't we aim for 100%?

Whilst the strategy addresses waste (and it is good to see those targets) not enough is being said on resource depletion.

Embodied energy of building is largely ignored. This may be because it will be hard to work out. However, just because it is hard, doesn't mean whole life costings shouldn't be done and understood.

The country needs to be prepared for when oil is \$300 a barrel and getting companies to understand their product life cycle now will give the industry and the government a better understanding of what the impacts of energy price rises will be.

To ease the problem of calculating embodied energy, the Government could publish assumptions on which manufacturers can base their calculations. These will allow purchasers to make an informed decision on the products they are choosing. It would be important that the assumptions are refreshed periodically and that they are realistic and readily available – witness the treasury forecast of \$35/barrel in 2025 used in determining transport policy.

Proper labelling on a consistent basis, together with educating the buyers on the impact of their purchases will allow them to make informed decisions about their activities.

Water

Q20, 21

With the introduction of the Code for sustainable homes and BREEAM (or equivalent), the need for specific regulation on water begins to reduce. Use levels can effectively be made mandatory through these tools and the building regulations.

Flooding and adaptability – assuming that we are going to have these changes in weather patterns, the government should be encouraging the adaptation of the existing stock to minimise the impact of future flood events.

Whilst the encouragement of PPS25 is laudable, EA officials need to be a little more pragmatic in applying the letter of the law (recent example – an application to redevelop a city centre site in need of redevelopment is being questioned by the EA as the sequential test has not been applied by the council in determining which areas to redevelop. The site is the only site that the Client holds, proposals are in place to deal with floodwater and the client has no control over the council's work.)

Water saving devices are slowly making a presence due to the requirements of BREEAM and the Code for sustainable housing. However, in this as so many other areas, the devices need good labelling to allow consumers to make more informed choices.

Install water meters everywhere – 75% of users by the end of 2009, 100% by end 2010. Force water companies to account for their lost water.