

Carillion plc Response: APPG for Excellence in the Built Environment inquiry into Sustainable Construction and the Green Deal

Carillion plc

Carillion plc welcomes the opportunity to respond to this inquiry. In order to put our comments into context, it may be helpful to outline briefly the role of Carillion.

Carillion is one of the UK's leading support services companies with a substantial portfolio of Public Private Partnership projects and extensive construction capabilities. The Group has annual revenue of over £5 billion, employs in the region of 46,000 people and operates across the UK, the Middle East, Canada and the Caribbean.

Carillion Energy Services (CES), a division of the group, is a leading independent energy services provider and one of the largest installers of renewable technologies and domestic heating services in the UK. We currently operate within the private, domestic, social and commercial market sectors offering a range of energy efficient renewable technologies and domestic heating services. CES has the ability to source responsive funding solutions, design and implement a customer centric offering and deliver the installation of required measures with the support of an established supply chain network.

We manage Warm Front on behalf of DECC and also have experience of working for the Welsh Assembly Government on the Home Energy Efficiency Scheme, the Warm Homes initiative in Northern Ireland and the Central Heating and Warm Deal programme in Scotland. We also work closely with utilities and Local Authorities in managing the delivery of energy efficiency programmes.

Carillion is a leader in the construction industry with sector-leading sustainability credentials. We go beyond traditional design-and-build and integrate every stage of designing, financing, building, maintaining and servicing. Our success in sustainable design have been recognised and further information can be found at: <http://sustainability12.carillionplc.com/enabling-low-carbon-economies/sustainable-design.html>

Introduction

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1. Evidence of best practice of sustainable construction in the built environment - and how this could be repeated?

We have a number of examples of our approach to sustainable construction using initiatives that can be repeated.

Waste – Minimising waste throughout our contracts is intrinsic to our operational approach, helping us to save money and reduce adverse environmental impacts. We are committed to sending zero waste to landfill by 2015. We carefully considering the products and services needed for each contract, choosing recycled and/or recyclable materials where feasible, and taking care not to over order. We have requirements for subcontractors to report on waste generated and percentages diverted from landfill.

In addition to striving to reduce waste at the design stage and in our supply chain, we have waste reduction plans and train our employees to implement our bespoke waste management strategies across our different sites and operations. During the contracts, or elements thereof, we reuse or recycle waste materials. Where possible, we find other uses for them, such as donating them to the community.

Water – as part of our 2020 Sustainability Strategy, Carillion has set the target of monitoring and reducing our water consumption by 25% by 2015. We now have data on all our water consumption across the business and have targets for year on year reductions. Carillion is an international company and we implement measures learned abroad across the whole company. For example for contracts on Abu Dhabi, where water is scarce Carillion has:

- Installed flow reducers on all office taps
- Installed push taps on all site hand washing facilities
- Using a curing compound instead of water, saving 91,000-113,000 litres of water a day
- Installed an atmospheric water generator, which produces drinkable water by extracting humidity from the air.

Biodiversity – We aim to have 100% of construction projects conducting biodiversity risk assessment and setting actions plans to minimise our impact on biodiversity. In 2011, our business reviewed these assessments and the biodiversity plans in order to include restoration activities, and reflect the diverse and international issues we come across.

For Carillion Civil Engineering's contract on the M6 motorway in Birmingham we found a number of areas that had protected species including badgers, water voles and great crested newts. Working under the close supervision of an ecologist and in accordance with Natural England's licensing requirements, our team successfully impacts on species populations in 2011.

Sustainable Design - Al Futtaim Carillion is currently constructing a new corporate headquarters building for the Abu Dhabi Investment Council (ADIC). The two towers, which will provide 25 floors of commercial office accommodation, have gardens, auditoriums, prayer halls, and a feature at roof level. Another feature of the building is the 'Mashrabiya' – a unique, dynamic solar shading system made up of individual units designed to open and close during the course of each day in response to the movement of the sun. The system will provide the ADIC with significant sustainability benefits over the lifecycle of the building in terms of energy efficiency.¹

EcoPod - Another example of best practice would be our EcoPod product. Carillion Energy Services is the sole installer of EcoPod heating systems, a building level heat network, which can be installed on to a range of domestic, commercial and public buildings, including tower blocks and schools. When installed in dwellings, such as tower blocks, the Building Management System can fulfil a vital role in engaging residents with their energy usage, helping to alleviate fuel poverty. EcoPod has been shown to deliver savings of more than 43% on annual heating bills. A key strength to EcoPod is its retrofit excellence and its ability to improve the performance of the existing housing stock. There are 26 million homes and about 1.8 million non-domestic buildings in the UK and their energy use is responsible for 26% and 17% of our CO2 emissions respectively. The majority of those homes and buildings will still be standing in 2050, meaning that we need to undertake a massive programme of green retrofit and energy demand reduction across almost the entire stock. This is why products such as EcoPod are important.²

2. Barriers to sustainable construction - what is holding the industry back and how could this be improved?

We believe that the construction industry has often led the way in terms of sustainable construction – one example is our construction of the Library of Birmingham³ however a major issue has been hesitancy by the industry to sing its own praises.

That is not to say that barriers don't exist. We believe that among the barriers are –

¹ Carillion Al Futtaim <http://sustainability12.carillionplc.com/enabling-low-carbon-economies/sustainable-design.html>

² The UK Green Building Council, Retrofit: <http://www.ukgbc.org/content/retrofit>

³ Carillion: building Birmingham's flagship library - <http://www.guardian.co.uk/sustainable-business/best-practice-exchange/carillion-building-birmingham-flagship-library>

- **Definition**

There is confusion as to what is meant by sustainable construction. Often different sectors and organisations use the same term, but mean different things. A strong industry agreed definition backed by Central Government would help recognise gaps in sustainable construction and recognise achievements.

- **Procurement and integration**

During these difficult economic times, there is a tendency for sustainability to be seen within the procurement process as a 'nice to have' or add on rather than a necessity. In fact within many procurement contracts – sustainability is not included in the Key Performance Indicators. Whilst some Local Authorities may have procurement questions on environmental stewardship – these are often energy rather than sustainability related. We believe strongly that sustainability drives business benefit and innovation and that a barrier is that this is not reflected in an integrated procurement process which encourages sustainability. For instance, Network Rail recently introduced a simple but effective way of bringing sustainability into its procurement strategy under its sustainable procurement steering group, focusing on ballast, steel, transmission oil, fuel, paper, timber and concrete, and opening a new recycling centre in Whitemoor Yard Depot.

- **Lack of Awareness and Stakeholder support**

We would suggest that the Green Construction Board is in a position to raise awareness and break down barriers to Sustainable Construction. In particular we would suggest that the Green Construction Board establish 5 basic Key Performance Indicators as a measurement for the industry on Sustainability and thus raise awareness. A few KPIs are better than a multitude especially as we need to avoid falling into the trap of measuring too much rather than focussing on key issues.

Implementing these KPIs will help raise awareness. This lack of awareness has an impact upon stakeholder support – whether this is Central Government, Local Government or private customers. Whilst we welcome the work of Office of Government Commerce (OGC) and in particular their work on improving the sustainability of the Government estate and operations we would suggest that Government should lead the way in encouraging the same approach by Local Government and the private sector.

We believe that in particular both Central and Local Government need to take a role in encouraging a culture of understanding of the benefit of sustainability. The 2008 Strategy for Sustainable Construction was a first step in leadership at a Central Government level however this Strategy needs to be reviewed and updated.

3. Progress on sustainable homes - too much too fast?

Government need to send out a clear message that they are intent on increasing standards. The lack of consistency is a barrier to sustainable

house-building (and also a deterrent in the delivery of much needed housing). It is true that the development of standards toward a zero carbon target has in recent years, veered too much into the area of high technology and a focus on the regulatory impact assessment process. However, we fear that in the current economic climate, sustainable homes and the fear that 'green' is an unnecessary burden and barrier to growth will mean that we lose opportunities for real sustainability and cost effective improvements. Whilst understanding concerns regarding over regulation, we would urge that the Green Construction Board is used to encourage Best Practice amongst Housebuilders within the industry and that within DCLG a more testing regulatory impact assessment be incorporated. 'Making the UK's ageing housing stock more energy efficient is one of the fastest ways of creating construction jobs and boosting the economy. Retrofitting the country's 26m homes is also the only way the government can hit its carbon emissions targets.' ⁴

4. The Green Deal – is the policy the right one? What can be done to ensure take up?

CES believes that Green Deal is the right policy working in conjunction with the Energy Company Obligation (ECO) although other incentives will be needed. The success of Green Deal is connected to ECO. Many companies will use ECO funded work to support their supply chains where Green Deal activity is low.

We are pleased to be delivering Birmingham Energy Savers Green Deal initiative. This is the biggest and first initiative of its kind. However, this is an untested model and the public understanding is in early stages.

To ensure take up, we are working with SMEs as these businesses hold the trust of local communities and are the key to the success of the policy. It is essential that Local Authorities also work alongside private companies to generate interest in the policy. This partnership approach brings the Local Authority relationship with its constituents matched by private sector delivery. Our experiences with other energy measures would suggest that once initial interest is gathered and momentum is built, if just one street installs Green Deal measures, interest and enthusiasm will spread.⁵ Therefore the DECC marketing campaign is very important to build consumer awareness and confidence.

⁴ See Green for Growth 10 January 2013 | By Joey Gardiner and Tom Lane <http://www.building.co.uk/sustainability/green-for-growth/5048252.article>

⁵ MP Sees Benefits of Green Living, <http://www.solardigest.co.uk/installation-news/512-mp-sees-benefits-of-green-living>

We would support the need for additional policies and incentives such as Renewable Heat Incentives and Building Regulations to help drive the uptake of energy efficiency measures. CES are a supporter of the Energy Bill Revolution - we have concerns that Green Deal and ECO alone cannot deliver energy efficiency and eradicate fuel poverty.