



The UK's existing buildings are reportedly responsible for 45% of the UK's carbon emissions, with 27% of that attributed to existing housing stock. The AD Construction Group has been working with Social Landlords to help resolve the issue and offer innovative Retrospective Refurbishment options, which could prove beneficial to us all.

With the current public interest and government emphasis on carbon reduction and green homes, The AD Construction Group have been helping to lead the way in Social Housing upgrades using their experience and skills of Retrospective Refurbishments; which can be a quick win for reducing the emissions caused by the UK's existing housing stock. How we manage and reduce the emissions generated from social, private and commercial property will play a significant role in combating climate change and achieving the Government's Sustainability Agenda.

In response to the need to address our carbon rich buildings The Technology Strategy Board has recently announced its **"Retrofit for the Future"** competition, which will look at 50 prototype "whole dwelling" solutions within housing, addressing the issues surrounding the costs and the long term benefits - not only for the reduction of emissions, but for reduced fuel costs and increased performance. The competition is the first step to finding innovative solutions in the Retrofit sector; AD is planning to compete in the competition, with the intention of taking a pivotal role in exploring the possibilities and working collaboratively towards finding the most advantageous solutions, ensuring we can upgrade the UK's homes into carbon friendly homes of the future, in the most efficient way possible.

The Government Department for Communities and Local Government (CLG) recently held direct consultations with housing contractors, AD included, hot topics for discussion were in relation to carbon reduction targets for "whole house" environmental upgrades and the potential for the government to commit funds for a "Retrofit Programme". The anticipated mobilisation times were surprisingly short.

According to the **Existing Homes Alliance** the government target of 80%

Carbon Dioxide (CO₂) reduction by 2050, requires energy efficiency renovation of as many as **450,000** existing homes every year. The anticipated average investment required per property is around £23,000 (based on 6 generation homes).

So what is the solution...?

Retrospective refurbishment can be as comprehensive, or as basic as required.

Every property has the potential to benefit from retrospective refurbishment and environmental upgrade. Choosing the most efficient solution for the property type and its use is the first step in creating a solution that will provide tangible, measurable results.

Energy - Don't just reduce – produce . . .

The simplest measures are becoming well known as part of the green agenda; insulation, energy efficient lighting, reduced waste, double and triple glazing, etc all of these things are of course of great benefit and will help to reduce the emissions created per property; but what about the bigger picture? The potential is there to not only reduce energy usage and emissions, but also to produce energy via renewable energy solutions.

In terms of retrofit what is clear is that a *"one size fits all"* approach will not suffice; assessments in relation to specific property specifications will ultimately result in the greatest benefits. Solar Photovoltaic's, Solar Thermal Heating and Wind Turbine technologies enable properties that fit the specification to actually produce energy for themselves.

Air/Ground Source Heat Pumps and Combined Heat and Power Units (CHP) are capable of collecting energy created as a byproduct, and using or converting this energy into a useful resource in itself.

The Good News...

With new technologies becoming available all the time, it can be difficult to keep track of what really adds value and advantage. **Energy Performance Certification (EPC)** will make these results far more visible. Thanks to the data being collected in a generically comparable, standard format – it should soon pave the way for "evidenced" confirmation of the claims being made about the **eco** credentials of the products and solutions in the marketplace.



The London Mayor's Green 500 initiative involves collaboration from London's businesses, who are actively seeking to reduce their environmental impact. AD is just one of the London Businesses involved. The initiative will see all of the businesses involved reduce the harmful effects their daily activities and their buildings have on the environment around them and set the example for sustainable and environmentally conscious business in practice.

AD Eco and Environmental Services - providing expert eco upgrade services and advice throughout the UK.



If you would like further information please contact:

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For further information in relation to the Green 500 please visit the website www.green500.co.uk