

Dear Mr Broad,

**Energy Companies Obligation (EC): Consultation on requirements for demonstrating characteristic of hard-to-treat cavities.**

In response to the above consultation EUM have prepared the following counter proposal.

Firstly we as an industry have to recognize that there are issues within the supply chain regarding both ambiguity of rules and ability to evidence installations. Last year under CERT and CESP and now under ECO, we too are aware of outrageous practices such as:

- Generic “Google” images being used as “photographic evidence”
- Installers drilling walls but not actually filling the cavity.
- Installers claiming to insulate lofts but just piling insulation into the corner of the roof void.
- Installers turning up to jobs with sacks of their own rubble as “evidence” of remedial work.
- Deliberate underestimation of the width of a cavity (up to as much as 70MM).

The consequences of these actions have been not only increased costs (without the expected carbon reductions realized), but it has also further fueled the atmosphere of distrust for and already difficult industry.

If the objectives of the ECO are to be met in a cost effective manner it is not in the consumers interest to introduce unnecessary costs, however we as an industry have to eradicate this unacceptable fraudulent behavior of the minority to ensure the carbon reductions are actually achieved and that this achievement can be evidenced (Actually this needs to be for all measures, not just HTT cavities).

The evidencing method proposed by Ofgem would add a potential £195M cost to the already considerable £1.3Bn annual (disputed) costs for no additional carbon (and therefore consumer cost) saving. This would therefore be a direct unrecoverable cost increase of around £7.20 per account in the UK. (See appendix 1 for calculations)

We would also like to highlight the impractical nature of the proposal. There are currently around 9,000 registered Domestic Chartered Surveyors in the UK. The proposal would require over 10% of these individuals to stop what they are currently doing and transfer exclusively to this non value add process. As a country we are looking forward to the time when the housing market starts to increase again and therefore given the fact that it takes a minimum of 5 years to

train a CS there will no doubt be a capacity shortage and therefore a further cost risk.

Turning now to the important aspect of the impact on the customer. Insulation is already demonstrably a low engagement product. The poor uptake of the Green Deal has further evidenced the lack of pull from the householder for these measures; therefore any further obstacle put in their way will reduce the uptake thus increasing the search and therefore delivery costs.

At the moment the customer journey is already fragmented requiring a visit from an initial surveyor, then a DEA and finally an installation crew. Gaining customer commitment to be available for all three sessions is a challenge we are facing, to add an additional “no (perceived) value” verification visit will further fragment the journey, especially considering the explicit requirement that these individuals must not be on our payroll and therefore will no doubt cause scheduling issues, conflicts and delays, further adding to the customer impact.

Finally I would also like to highlight the ambiguity point raised above. At the moment RdSAP would not recommend cavity wall insulation for a post 1983 property, nor does it recognize the different u values of different insulation materials. A DEA carries out a non-intrusive survey that rejects around 40% of the initial surveys. A number of these rejections are, using a fact based method (described below) proven to be spurious. The fact is that the property is poorly insulated and would benefit from the measures an experienced Energy Surveyor has recommended.

Overall therefore we are concerned that as it currently stands, the proposal does not address the fundamental issue of indisputable evidencing based on facts rather than opinion. It will result in an unnecessary and significant cost burden on UK households pushing even more consumers into fuel poverty.

We would therefore like to outline the following counter proposal that would move from opinion-based views to fact-based evidence.

### **Fact Based Evidence**

In order to provide indisputable proof of the eligibility of any measure, evidence should be collected and retained at the point of survey (prior to installation) and post installation to prove the work has been done. It should not rely on the opinion (even of a professional) that cannot be evidenced post event.

Therefore the fundamental starting point for any evidence should be photographic proof that contains both date/time and GPS stamp. (Incidentally this should be the minimum for all ECO measures not just HTT)

Taking the specific need to evidence the nature of a HTT cavity we would suggest:

Narrow: We recognized the need to indisputably record the width of a cavity and therefore have invested our own capital in a revolutionary boroscope (patent pending) that will use laser measurement technology to evidence and record accurately without the reliance on human intervention (manipulation?). Furthermore the measurement is tied into a GPS time stamped photograph that ensures the property claimed is the actual property being measured. It then preserves the facts of the matter for any future inspection and audit.

Remedial: The boroscope will also be able to evidence (and record, again with GPS proof) the requirement for additional remedial work such as rubble filled, uneven cavity, damp, failed wall ties actually within the cavity, before the insulation is fitted, thus preserving the evidence for future inspection as required.

External time based remedial work such as access issues, blown mortar, cracked render, settlement cracks etc. could be evidenced again by GPS located photos and date/time stamped pre and post remedial activity.

Work requiring non-standard materials and or methods such as narrow mortar and uneven stone could also be evidenced in the same manner.

### **The Alternative Solution**

EUM have developed not only the patented boroscope but also a Survey App, an Installation App and an Inspection App that all work together to provide an end to end platform that records and collates all of the above evidence on one place. The apps allow no room for the user to manipulate the data meaning that rogues and fraudulent activity is all but removed. Access to the data is restricted and stored in a secure and compliant manner (not something that can be said of a number of alternative paper and phone based solutions that carry a significant risk to either loss and or manipulation of data)

The Apps combined with the unique boroscope technology provide exactly the fact based evidence the industry needs to ensure we deliver the ECO commitments in a professional, compliant and cost effective manner that best meets the consumer's interests.

We would estimate the addition cost of rolling out this technology as the minimum standard evidencing method would be just £0.50 per household a reduction of around 93% on our estimate of the implied costs of the Ofgem proposal.

Furthermore utilizing the boroscope to its fullest extent would mean that the amount of invalid cancelations due to the limitation of RdSAP could be reduced, meaning that it becomes self-funding or even serve to reduce the overall cost of ECO delivery.

Given the significant cost differential between the initial proposal and our alternative we urge you to rethink your proposed solution and recommend that consideration be given to our alternative method of fact based evidence.

We are of course more than happy to share with Ofgem on a confidential (at this stage) basis more detail on the design and specification of the scope and the capabilities of the app.

Yours sincerely

Mark McAlear  
Managing Director  
EUM Consultants.

**Enclosures:**

Appendix 1 Calculations  
Appendix 2 EUM company background.

## Appendix 1 Calculations

Total CERO Obligation	20,800,000	Tonnes
Percentage delivered so far	0.33%	
Carbon still to be delivered	20,731,360	Tonnes
Exclude EWI (est. 25%)	15,548,520	
Average Carbon saving per house	22	Tonnes
No of house left to install	706,751	Houses
No per Week	9,061	Houses
Visits per surveyor per day	2	Surveys
No of Surveyors required	906	Chartered Surveyors
Approx. cost per visit	£250	Per visit (high level cost est. from 2 CS Companies)
Failed Visit rate	10%	Of total visits
Total additional cost	£194,356,500	
No of Uk Households	27,000,000	No of accounts
Additional cost per account	£7.20	
Fact Based Solution	£0.50	
Reduction on Ofgem Proposal	93%	

## Appendix 2

### **EUM Company Profile**

EUM Consultants Ltd is one of the UK's largest providers of home energy efficiency surveys. Our mission is to help our customers to save money and to reduce their carbon footprint. We help thousands of people each week, all over the UK, reduce their energy bills and make their homes warmer.

EUM Consultants Ltd has a reputation for quality, professionalism and excellence. Our highly trained and motivated staff pride themselves on offering the best possible service and standards to our customers throughout the UK.

EUM Consultants Ltd specialises in advising our customers on the range of energy efficient measures they can make to their homes and properties to save them money. We provide our customers with an awareness of the government initiatives, namely ECO funding, available to them when making these energy efficient upgrades and access the grants available under ECO and arranging the funding on their behalf