



elmhurst
energy

EXCELLENCE
IN ENERGY
ASSESSMENT

Elmhurst Energy Response to:
“Building a Market for Energy Efficiency”
In Confidence

Prepared for: BEIS

9th January 2018



Domestic

Commercial

On Construction



1. Introduction

Elmhurst Energy are pleased that BEIS are seeking a call for evidence on the Building a market for Energy Efficiency and as such we are delighted to respond to each question in turn.

The Call for Evidence asked 42 questions and we have answered them all below. We hope you find the responses considered and useful for taking Energy Efficiency forward in a progressive manner.

2. Questions and Answers

State of the market

1. What information do you have on current rates of delivery of measures outside of Government programmes, including through DIY etc?

The Government made EPC information 'open data' which is a rich source of data to understand what has changed in people's homes over the 10 years they (EPCs) have been in existence. In more recent updates to the EPC process the reason for the EPC has been expanded to include more options including Green Deal and ECO, as well as the original marketed sale, private or social rental. This level of data should be used to aid knowledge of what has occurred to people's homes in terms of energy efficiency upgrades.

Unfortunately the regulations themselves dictate that an EPC lasts for 10 years, which effectively means that the data does not have to be updated when the property is improved, sold or re-let. The enforcement that EPCs are produced for all the trigger points has been weak and has not been taken seriously by all third parties.

Finally the data released is not the full RdSAP or SAP data, therefore it can't be used to re-calculate and give anyone the chance to understand what could be done in various scenarios to the home to improve it.

It is generally thought that energy assessors can give advice on EPCs, this is not true; Government at the time of introducing EPCs in 2007, made this clear that this was not allowed, under a stance that this would gold plate EPCs.

These series of events mean that although there are over 18million EPCs available the data can be very easily misunderstood.

In order to allow the market to help consumers to improve their homes Elmhurst mandates that the following must be addressed urgently;

- A latest EPC is always required at all trigger points
 - Specifically before and after improvements
- New trigger points need to be introduced specifically around building works and installed measures
- The open data must be truly open data – and be re-calculable to help home owners make informed decisions
- The EPC format must be made more consumer friendly
- Energy Assessors must be able to give Independent Advice based on the EPC, giving good guidance based on the EPC assessment and some occupational questions would drive people to be armed with the correct information

Each Home Counts is putting forward a framework to ensure that the right measures are going into the right homes, and that they are installed in a quality assured manner. EHC is vitally setting a framework which will exist for able to pay market as well as Government sponsored initiatives. Elmhurst is adamant that the EPC has to be used as the starting position for people to understand their asset (the home), that the advice of what is right for that family occupying that asset will go some way to ensuring the correct measures go into the correct homes. With all of our suggestions above, putting the EPC at the heart of good independent advice is essential to allow industry to utilise the data to really start making a difference to the warmth and energy efficiency of the countries homes.

2.What information do you have on the remaining potential for energy efficiency improvements and what savings could be expected from these measures?

The EPC data contains all that is needed to unlock the potential of millions of homes in the UK. The issues identified in our previous answer mean that mistakes and misinformation will exist when drawing on the currently available open data. To fully bring out the benefits of the data, experts who understand the methodologies of RdSAP and SAP could analyse it and make it a better source of valuable data. The ‘experts’ would have to have knowledge of the changes in the methodologies, EPCs and conventions over the 10 years. This exercise would be valuable and also display to Government that the open data must be able to be put through approved calculators otherwise, it is a missed opportunity.

If the data was re-calculable then industry and families could look at different scenarios for their home quickly and easily. This is currently not an option at the moment, and is holding back industry. This must be addressed quickly.

Also there are at least 9million homes without an EPC, which means that they have not been built, sold or rented within the last 10 years. Therefore are highly likely to be inefficient and ripe for improvement; Elmhurst suggest that we need more triggers for EPCs to capture long term occupiers to ensure that they are not left behind.

Elmhurst as the leading EPC accreditation scheme can advise and undertake this analysis if required.

3. Do you agree with our assessment of the current market for energy efficiency amongst owner occupiers, including the trigger points and supply chain relationships?

The assessment appears to be correct and there are definitely a set of distinct markets operating with vastly different supply chains engaged in the current market for energy efficiency. The regional and national organisations are mostly looking at making the currently too complicated funding policies work, and the more local trades people are mostly unaware of the potential options available to home owners and tenants. EHC is very much trying to close this gap.

Elmhurst suggests that more trigger points are required to gain the EPC and the assessment this brings. The opportunity to assess the property and give impartial advice, which in most instances will go beyond just the one or two measures which an installer specialises, will give families the chance to first understand their home, and also where they would be better investing for their circumstances. Explaining to the occupants, that they can go the 'Information hub' to gain links to quality installers and further independent guidance is essential.

After the works are undertaken the EPC must be updated to measure the impact of the improvements and at the same time allowing the data for the property to be updated; identifying the next appropriate measure.

At the moment the chances of owner occupiers seeing the actual EPC are slim, they may have seen the Asset rating (A-G) on the agents particulars, but they will in all likelihood not have had the EPC explained to them in an independent way by a professional person. This is one of the biggest obstacles that we must address, and we at Elmhurst have tried to address in this consultation and other recent consultations.

4. Do you agree that it makes sense to prioritise those groups most likely to be open to investing in energy efficiency? And do you agree with our assessment of who those groups are most likely to be?

Whilst targeting groups that may invest in energy efficiency is a good thing, we must ensure that those people in the coldest homes that do not have the knowledge of how to improve their home or access the right finance are not marginalised at the detriment of easy quick wins. 'Each Home Counts' is a mantra that is 100% correct and we as a nation must recognise that we need different ways to get at different sets of people to ensure no one set of families are left behind. More research is required in this important area.

A start stop approach to policy is damaging, if a chosen policy doesn't work first time for all segments of society, it doesn't mean that it was wrong; the model should be adjusted to identify the improvements to the message so that industry finds the right triggers to promote action (continuous improvement model).

For all good energy efficiency policies we need strong 'carrots', 'sticks' and 'noise'. If one or more of these is weak or missing then it will not succeed. These are the vital lessons learnt of previous attempts in the energy efficiency arena.

Barriers to market growth

5. Do you agree with our assessment of the current barriers to market growth?

We agree with the current barriers indicated.

6. Are there other barriers that you think we should be addressing?

There are many issues with the current systems in place these include:

Issue: As part of the rental and sale of properties all that agents need to display are a set of graphs (A-G) which are not the actual EPC. This loophole needs to be addressed. Whilst the ratings are interesting they do not tell the consumer what they mean and what improvements can be made, and what savings can be made by considering the improvements.

Solution: Agents must link to the national register for the actual EPC.

Issue: Another major issue is that consumers DO NOT get independent advice from Domestic Energy Assessors when producing EPCs.

Solution: Energy Assessors need to be upskilled in Advice and give this in an independent manner – this is something that through Each Home Counts we as an industry are implementing.

Issue: Lack of certainty in savings

Solution: Occupancy Assessments are required, which work based on the asset (the EPC) and the lifestyle of the occupants, which will deliver more accurate saving predictions.

Issue: What does the consumer want? The consumer expectations are not understood and different policies attempt to measure success in different ways, this is not helpful.

Solution: Domestic Energy Advisors will produce an occupancy assessment based on an EPC and will ask what the consumer wants e.g. a warmer home, smaller fuels or reducing carbon.

Issue: Older EPCs do not reflect the current homes. Legislation dictates that EPCs are valid for 10 years. There is no requirement from homeowners or landlords to update them. Thus over time homes are improved, but nobody is any the wiser. If a home is sold and the EPC is 10 years old and has had a new boiler, and extension and new windows, it could easily be argued that renting or selling a property with such an EPC amounts to property miss-description.

Solution: At every trigger point get a new EPC. This will ensure that the consumer has the right information upon which to make informed choices.



Issue: Consumers do not understand the makeup of their home or how they should operate them, from complicated heating controls, to the makeup of walls, and loft insulation, to cylinder stats and cylinder insulation etc. The lack of knowledge makes it impossible for them to make informed choices about how to make their home warmer or cheaper to run.

Solution: A digital log book should be provided for all home owners/tenants. This should start with the latest EPC and contain information on how to run heating systems, giving access to information on warranties etc. This is easy in new build sector, and can be also extended to the existing dwelling sector. If held electronically it can be passed onto new tenants/owners easily.

7. Do you think there are any other important lessons to learn from past attempts to stimulate the market?

Stop start approaches to energy efficiency policy are extremely unhelpful. Government Departments must also work together in order to be successful.

Government should allow industry to add extra value to advice and occupancy information thus building upon this knowledge for the good of the occupant, whilst not getting in the way of the home buying/selling process. This is something that Elmhurst is working with EHC to make into a workable industry led solution.

Overly complex bureaucratic solutions do not work e.g. Green Deal. On the reverse over simplistic models such as ECO using deemed scores become tick box approaches to energy efficiency.

To keep it simple Elmhurst suggests a solution that;

- Puts EPCs at the heart (it is the measuring tape with which improvement will be measured)
- Provides consumers with independent advice
- Bring bits of existing jigsaws together – not create new jigsaws! (EHC, Mortgage lenders, Tax incentives, pre and post EPCs, data warehouse, independent advice, installers etc)
- Is fit for purpose for 'able to pay', 'ECO' or 'pay as you save' options

8. Are there other international examples we could learn from?

No further information

9. Are there any barriers preventing business models for energy efficiency that have developed in other countries from also developing in the UK?

No further information

Proposed approach

10. Do you agree with the set of proposed principles for guiding our approach?

Elmhurst agree wholeheartedly with the principals given

11. Do you agree that the policy areas we have set out are the correct ones?

Elmhurst agrees that the policy areas are correct in terms of demand and supply side having equal precedence.

Developing new ways for financing energy efficiency

12. Which of the fiscal levers described here would drive the greatest consumer demand?

As mentioned previously there is no 'silver bullet'; segments of consumer will behave in different ways to fiscal levers. As stated major works in properties are often funding via savings; this is not to say that if banks and mortgage lenders started to introduce green top up mortgages or attractive loans they wouldn't be successful. What we are saying is that an appropriate mix of all the measures indicated sound good. They will each attract different consumer groups.

The Green Deal may have been unable to gain traction, but this was mostly due to overly complex bureaucracy; there is and always will be a place for a good 'pay as you save' model. Elmhurst suggest that an EPC, with good independent advice, with quality installs through EHC would save people money and make homes warmer – this is 'pay as you save', but without all the unnecessary complex bureaucracy.

It is worth investigating whether bundling 'distress' purchases (e.g. boiler) or 'aspirational' purchases (e.g. double glazing) with 'hygiene' products (e.g. cavity wall insulation, which is effective but not 'required' or 'desired') could create an attractive product offering.

13. Is there evidence to suggest that any other fiscal levers not described here could drive consumer demand?

If the Government is serious about getting as many homes as possible to a 'C' rating then there must be adequate incentives to help consumers get there, with a solid enforceable 'exemptions' route for those who can't. This is especially true for those in fuel poverty, who should be signposted towards ECO, not direct to the installers, but to the Information Hub and to the EPC to ensure that they get the right improvements to their home in an impartial manner.

If each home does count, then the right measures must go in the right homes for the occupants benefit.



14. What would be the profile of homeowners likely to take up these different incentives?

Each segment of consumer groups will react differently to different incentives e.g.

‘Unable to Pay’ (fuel poverty /low income): they would only respond to direct subsidy.

‘Nearly able to pay’ (some limited money but probably poor credit rating): they would respond to a blend of subsidy and access to credit facilities e.g. if the boiler breaks, they may not be able to obtain loan, but need incentivising towards a scheme for them.

‘Able to Pay’: they would respond to good information and why investment in energy efficiency is sensible and is a good thing.

Overriding point: when analysing uptake it should be understood that intermediaries working on behalf of installers, (or the installer themselves) can ‘sell the subsidy’, this distortion can deflect the subsidy away from those for which it was intended. This is further evidence of why independent advice is fundamentally required before a purchasing decision is made.

15. How could these incentives be designed to deliver the best value for money for Government and best savings for consumers?

Answer to Q14 applies.

16. What barriers, regulatory or otherwise, exist to financial institutions developing any of these products or incentives themselves?

Barriers include:

Prediction of energy saving not realised - good quality independent advice, built on effective assessment of the asset and the occupant; will give the best prediction of actual savings.

Poor Quality Installs – have led to financiers not wanting to associate their brand to this market. The work of EHC is directly aiming to improve quality of installs.

Loan Security – limited access to finance for the ‘nearly able to pay’ market. This will require direct Government action to either underwrite the loan, or create a mechanism which makes default become difficult e.g. tying to the meter.

17. How could Government assist financial institutions with a retail presence, local authorities and other actors to run trials of these ideas?

No strong opinions

18. How could we ensure that any trials would lead to the development a self-sustaining market for support?

No strong opinions



Price signals to encourage homeowners to prioritise energy efficiency

19. What price signals would best drive uptake of energy efficiency measures?

Elmhurst believes that there are a number of improvements that can work in this area.

Firstly; for many years Elmhurst has boldly suggested that council tax should be based on 'energy efficiency' this would have the largest reach and impact into homeowners action surround EPCs. For this to work effectively Local Authorities (LAs) should set figures which take into account the Asset rating (the A-G score). The variance in council tax paid should relate to the cost of improvement. The aim is to make the payback period for energy efficient improvement attractively short.

If done correctly then the LA should also be able to financially help with the improvements.

At the moment a small amount of ECO funding is for LAs to use. This could be an avenue to enable LAs to make funds available for the fuel poor, so that they are not left in cold homes with unfair council tax. The LAs already have a commitment to understand and report on the EPC scores of all the homes in their area; this would be a way to engage LAs and also to incentivise them to enforce standards, whilst also using the extra funds available to be used in the local community.

Secondly; in addition to the above a simple % should be applied to stamp duty. Thus 'F' and 'G' rated homes could have say 0.5% added and 'D' and 'E' say 0.25% added. Paving the way for the next mandated step change. This would have a double whammy of incentivising sellers to improve homes before sale, and for purchasers to reflect this in their bids. This can be fiscally neutral by benefitting energy efficient homes at the expense of inefficient ones.

Thirdly; RICS surveyors should use the EPC rating more significantly in order to calculate the value of the home for mortgage valuations to incentivise energy efficiency in the lending process;

Fourthly: Lenders should utilise the EPC data to better predict energy spend from which affordability calculations are made. The impact is that lenders may lend more money to energy efficient homes (this is a recommendation of the Lenders Report.)

A combination of the above would really help energy efficiency become a proper part of the home buying and selling process.

20. What would be the impact on the housing market of such price signals?

The EPC should be at the heart of the buying and selling process. It is unfathomable that people buy homes and do not understand the running costs of the asset they are purchasing/renting. The suggestions above would get professionals such as Conveyancers, Mortgage Lenders and Chartered Surveyors all involved in the process of giving consumers advice. After all it is in all their interest that people buy homes with full information and can afford to live in them.

Sellers will consider undertaking energy efficiency improvements prior to placing their property on the market.

Purchasers will value and understand energy efficient homes.

Local Authorities will also be engaged at the community level.

None of the above will slow down the market, or place additional burdens on the home buying and selling process.

21. What protections would need to be in place to ensure that vulnerable or fuel poor customers are not unduly affected by these price signals?

It is right that vulnerable and fuel poor people are not left behind. By giving LAs more responsibility and vitally some finance when enforcing standards – that they are more incentivised to help and get involved. The funds for ECO (or any policy) can start to be deployed to the right people, not just in order to maximise tick boxes; but to put the right measures into the right homes in the right order. All of this is achievable.

The vast majority of fuel poverty home will not be affected by stamp duty changes.

Those who rent in poor energy efficient homes are being protected by MEES to ensure landlords improve these homes.

Any families that are adversely affected by any of the above, must have clean, clear mitigated routes in order to avoid these additional costs.

Research from the retail industry this week (the 'latte levy'!) has proven that consumers respond better with sticks than carrots. i.e. introducing a 25p levy on the use of paper cups is more effective than the offer of the same discount. In summary apply a tax linked to energy efficiency, but ensure that there are easy routes available to make the home more efficient

22. Could these ideas be rolled out in a smaller scale, to a particular subset of homes or in a particular geographic area, to test feasibility before a national rollout?

Some changes couldn't take place at a regional/local level for fears of distorting the housing market e.g. stamp duty.

But others, especially where the Local Authority benefits from the change, then regional trials are certainly possible e.g. Council tax.

Improving awareness of energy efficiency products and technologies, their benefits and advice to consumers

23. What evidence do stakeholders have on the link between installing an energy efficiency measure and the value of property? What research could bolster this evidence base?

Research the sale price at the Land Registry with the EPC rating, this could then be monitored to give evidence on the mass scale of the connection with ratings. By bringing the Land Registry and EPC data sets closer together enables this link to be made.

Energy efficiency is now a factor that RICS valuers may take into account when valuing a property. Research should take place surrounding this to understand how this currently works and what improvements we could add to help the surveying industry.

24. How could Government effectively deliver messages to promote energy efficiency through intermediaries and which are the most important intermediaries to target?

There are a number of issues with the current system;

- Most of the time the property is assessed by the energy assessor and very little interaction takes place with the future occupier.
- The framework surrounding EPC generation removed the ability for DEAs to offer advice.
- EPCs are hidden away in the national register with complex restrictions on visibility.
- There is no central trusted location for impartial energy efficiency advice

The opportunity here is that there are 8,000 energy assessors accredited to deliver EPCs. They need triggers that ensure they engage with the occupier or future occupier. They can then give appropriate advice. They could also ask some occupational questions, to give them effective energy efficiency advice there and then on the spot.

If other triggers were used the advice can be given at a national scale at reasonable cost to homeowners, by utilising these local energy assessors who can be trained up to become advisors.

The current situation of graphs on online portals which are not the EPC are not particularly useful to engage people in energy efficiency. The shackles of bureaucracy surrounding the EPC on the national register need to be broken, to allow consumers' access to the information that is required.

Through the EHC work Government will need to point people towards the information hub and the ESAS will likewise do.

25. At which additional points could homeowners be required to have an EPC, and how could this improve their value and the awareness of potential energy efficiency improvements?

When any notifiable works takes place in a home e.g. boiler replacement or extensions. To be most effective a pre and post EPC should be undertaken, the first to give independent advice about options that might not be obvious to the owner; the second to confirm the measure(s) has been done. This gives the opportunity to ensure that right measures are installed in the right home.

We would also recommend that consequential improvements came back through the Building regulations (Part L1b)– making people take cost effective improvement to the existing home when building extensions. Thus giving people the information on how to save money and make the whole home warmer, whilst upgrading a part of it.

In order for council tax proposal to be adopted all properties would require a current EPC and the application of any discounts/supplements could then be implemented. Consumers would be then motivated to update their EPC if they undertook any energy efficiency improvements including DIY measures. Government would then receive a complete dataset that reflects the current situation with all recent improvements thus demonstrating progress.

EPCs need to be part of any new policies moving forward surrounding energy efficiency; it is fundamental if we as a nation want to monitor how the stock is improving towards the 'C' rating target for homes.

26. How could EPCs be displayed more prominently to prospective homebuyers at different stages of the home buying process?

The vast majority of potential homebuyers do not ever see the physical EPC; the current requirements see a minimal A-G graph on a portal. Estate Agents should link through to the official EPC from the national register. From here home owners must be able to click through to get independent specific advice about the measures indicated. This is something that the information hub, through the EHC is proposing.

Elmhurst also suggest that rather like when purchasing white goods that the A-G rating is attached to all marketing materials including the 'For Sale' or 'To Let' Board.

The homes energy cost are not currently well considered in affordability calculations. The EPC should be built into affordability criteria for Mortgage Calculations, so that lenders risks of default are reduced and consumers are attracted to energy efficient properties.

When discussing mortgages in principal, Lenders should explain to consumers that energy efficient properties will obtain more attractive rates.

Conveyancers must not see the EPC as a tick box exercise; but must advise the customer in relation to long term implications on property sale or rent for low energy performing homes, as required by MEES and possible changes to stamp duty, council tax and any proposed restrictions suggested in the Clean Growth Strategy.



Creating the conditions so that those who derive value from energy efficiency can be key players in the market

27. Have we captured all the main sources of additional value of energy efficiency?

The focus appears to be removing utility companies from their current responsibilities to be replaced by the DNOs. We think they all have a part to play. The benefits for the DNOs need to be recognised and this needs to be added to the contribution made by the utility providers.

28. What other ways could we seek to monetise the benefits of energy efficiency?

We could consider some sort of carbon trading on a regional scale.

29. How could both Distribution Network Operators (DNOs) and Gas Distribution Networks (GDNs) be incentivised or required to deliver energy efficiency savings?

They should be set mandated energy reduction targets over short and medium periods based on actual energy consumed.

30. Do current market arrangements allow for DNOs and GDNs to fully realise the potential of energy efficiency savings? If not, what needs to change?

No strong opinion

31. What are mortgage lenders' plans for improving the way they factor energy efficiency into lending decisions?

Mortgage lenders should use the lenders report to understand the value of taking into account the EPC rating into the mortgage calculation. This will allow lenders to make more informed decisions in relation to disposable income for the consumer. Thus able to lend more money to energy efficient homes, or offer better interest rates? They can also offer mortgages in principal linked to the EPC rating, thus encouraging purchasers to look at cheaper to run homes.

32. What support would lenders need in order to be able to commit to a voluntary target for improving the average energy efficiency of the properties they lend to?

Mortgage lenders should be asked to report each year in the companies' annual report the average EPC rating for properties under mortgage. Year on year comparisons and competitive pressures between lenders will create desired improvements.

'Buy to let' Lenders should already aware of the risk of lending to 'F' and 'G' rated properties. Informed lenders will see this as a opportunity to help landlords improve their portfolios.

The roll out of the national standards for all homes to be 'C' rated by 2035 will get the lenders involved. By using the EPC data they can manage their own risk and identify opportunities to lend money to owners of potentially non compliant properties.

33.How can lenders develop a more accurate model of fuel bill savings, and would they be willing to lend 'green mortgages' on this basis?

EPCs are asset ratings; by asking some simple questions surrounding age profiles, temperature and operating times etc Elmhurst could derive a model that can be used to derive more accurate predicted fuel bills.

Overlaid with bill data and in future smart meter data, we have an opportunity to provide consumers with great guidance.

The asset, the occupier and real time data must be the long term goal. Any one on its own is useful, but all together is invaluable to make good choices and drive real change.

34.What other changes would encourage lenders to offer more 'Green Mortgage' products?

- More accurate affordability calculations to reduce risk
- Opens up more lending opportunities
- Good Public Relations
- Pre-empting restrictions e.g. MEES that could undermine of mortgaged properties

Enabling innovative energy efficiency products and services

35.How could thinner, less intrusive insulation products be made to be compliant with building regulations?

Elmhurst does not have a view on thinner insulation product; but to respond to the wider question of innovative products we have answered below.

Innovation per se is not always good. Any product must be considered to ensure that it is both effective and safe. By ensuring recommendations for improvement come from an EPC you can minimise the risk of dubious claims. The recent re-allocation of the SAP development contract which now includes industry representation should ensure a balanced and objective assessment of new technology.

36. Are there any ways that current regulations are preventing innovative energy efficiency products and services coming to market?

Our answer to Q35 applies. We understand that this area is extremely important, Elmhurst welcome innovative approaches, but all claims must be substantiated and subject to peer review. Thus it is imperative that the process to put the innovation into the methodologies and the EPC is improved. This must be through a professional quality assured route. Any bypass leads to alternative approaches and misguided claims; which can't be measured.

The route to amend the SAP methodology has been recently revised, with an intention to make it streamlined and quicker. To protect consumers from miss selling any routes around the process need to be avoided.

37. What changes should be made to the Energy Company Obligation to ensure that it supports the development of innovative energy products and services?

No changes are required specifically for ECO. The RdSAP and SAP are the measuring calculation for domestic dwellings in the UK and with the improvements outline above will ensure that measures are effective and safe. Creating specific alternative methodologies would be confusing and potentially unsafe.

Improving data to open up the market for investment

38. Are there other ways that Government could help improve access to data on energy efficiency and performance of homes for research purposes?

The EPC open data is not the full RdSAP data set. By releasing all the data, stakeholders will be able to undertake high quality research including re-modelling to maximise potential.

39. What would be the impact on the market and investment in energy efficiency of the availability of better data on the actual performance of homes? Improving supply chain capability

Collecting and measuring data has to be a good thing. However the call for evidence does introduce some concepts and terms that could be misleading and be potentially dangerous.

Modelling of energy performance is a prediction of future performance. Initiatives such as that employed in California, and maybe being considered with Government research, are not suitable replacements for energy modelling because;

1) energy measurement requires the property to have been built and occupied before data can be collected. It is better to design an energy efficient home rather than retrofit an inefficient one and good energy efficiency always starts with good design. That's why you need a energy modelling.

2) monitoring actual performance will not produce recommendations for improvement nor predict the benefits that can be achieved to justify investment. For that you need energy modelling.

3) it is impractical to suggest that every property in the country can be individually monitored and those that are not need to be modelled. For that you need energy modelling.

4) the measured performance of a property will not be a reliable indicator of performance for future occupiers. For that you need energy modelling.

5) Energy efficiency is as much about comfort and health as energy consumption. To focus on energy consumption, with an unintended consequence of under-heating, could be hazardous to health. That's why you need energy modelling.

Actual energy performance should be measured wherever possible and the results used to both create a more accurate baseline, from which recommendations can be made, and to improve the methodology. Making this data accessible to stakeholders, as proposed by EHC, is wholly sensible.

The process must start with a bespoke property assessment, undertaken by an independent expert, and then the property modelled. The report will recommend improvements, within the limitations of the model.

Over time, known data (either measured or lifestyle information added by the occupant / future occupant) can then supplement, or replace, model data to refine predictions and improve the quality of the recommendations. The term "virtual EPC" is misleading and may be better described as a "dynamic EPC".

An EPC, supplemented by actual energy consumption and in home monitoring are a powerful set of tools; but without energy modelling it will lead to poor design and blind recommendations that mislead consumers into bad decisions

The concept of a dynamic EPC is a great idea and would give consumers the knowledge to make informed choices.

Improving supply chain capability

40. Would the supply chain benefit from having a feature in the new Energy Savings Advice service for installers to share best practice and access a repository of advice?

The information hub and the ESAS should be giving independent advice to the supply chain as well as consumers. By getting local builders to understand the benefits of joining the EHC process they will by nature be involved in local installs.

41. Would funding for local supply chain growth and coordination lead to additional retrofit measures?

All funding is welcome to engage local supply chain to good quality energy efficiency installs. Perhaps some local social enterprises could exist to create connections between local installers in order to maximum benefit to consumers.



elmhurst
energy

EXCELLENCE
IN ENERGY
ASSESSMENT

42. Is there anything else that central Government could do to support local retrofit supply chain growth and to support builders to carry out retrofit projects? Enabling innovative energy efficiency products and services

Add 'consequential improvements' into the Building Regulations (Part L1b) to add the requirement to improve the rest of the home when undertaking renovations. This will engage the local supply chain.

If Government are firm in terms of raising standards for people's homes, then this is an obvious trigger point to aid consumers, train builders and get people improving their homes in pragmatic and sensible ways.

If the local supply chains are members of a trade body that signs up to the EHC code; then they will share in opportunities beyond their own specialism.

3. Contact Details

Should you require any further clarifications please contact us at:

Elmhurst Energy

Head Office:

16 St John's Business Park

Lutterworth

Leicestershire

LE17 4HB

Tel: 01455 883 250

www.elmhurstenergy.co.uk