Next steps to zero carbon homes – Allowable Solutions

Consultation - Response Form

How to respond:

Please respond by email to: Building.Regulations@communities.gsi.gov.uk.

About you:

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(i) Are the views expressed on this consultation an official response from the organisation you represent or your own personal views?

Organisational response ☒
Personal views

Are the views expressed on this consultation in connection with your membership or support of any group? If yes please state name of group:

Yes ☒
Name of group: **Chartered Institution of Building Services Engineers**

The Chartered Institution of Building Services Engineers is the professional body that exists to:

'support the Science, Art and Practice of building services engineering, by providing our members and the public with first class information'

CIBSE members are the engineers who design, install, operate, maintain and refurbish the energy using systems installed in buildings, including homes, and are specifically trained in the assessment of heat loss from building fabric and the design of systems for carbon compliance.

As an Institution CIBSE publishes Guidance and Codes which provide best practice advice and are internationally recognised as authoritative. The CIBSE Knowledge Portal, makes our Guidance available online to all CIBSE members and is the leading systematic engineering resource for the building services sector. Over the last twentyone months it has been accessed over 200,000 times, and is used regularly by our members to access the latest guidance material for the profession. Currently we have users in over 170 countries, demonstrating the world leading position of UK engineering expertise in this field.

CIBSE is pleased to respond to DCLG's consultation on the Government's proposals for Allowable Solutions. As a general observation we welcome the proposals to reduce the energy used in our homes and the consequent emissions from them.

CIBSE's full response to the questions posed by the Department is set out below.

This response has been prepared by the CIBSE Homes for the Future Group, a Specialist Interest Group of the Institution, which is made up of a very wide range of specialist interests in the domestic buildings sector, including those involved in the mixed use sector and social housing provision. In addition, it has been reviewed and approved by the Technology Committee of the Institution.

Please tick the *one* box which best describes you or your organisation:

Builders / Developers:		**Property Management:**	
Builder – Main contractor	☐	Housing association (registered social landlord)	☐
Builder – Small builder (extensions/repairs/maintenance, etc)	☐	Residential landlord, private sector	☐
Installer / specialist sub-contractor	☐	Commercial	☐
Commercial developer	☐	Public sector	☐
House builder	☐	**Building Control Bodies:**	
Building Occupier:		Local authority – building control	☐
Homeowner	☐	Approved Inspector	☐
Tenant (residential)	☐	**Specific Interest:**	
Commercial building	☐	Competent Person Scheme operator	☐
Designers / Engineers / Surveyors:		National representative or trade body	☐
Architect	☐	Professional body or institution	☒
Civil / Structural Engineer	☐	Research / academic organisation	☐
Building Services Engineer	☐	**Energy Sector**	☐
Surveyor	☐	**Fire and Rescue Authority**	☐
Manufacturer / Supply Chain	☐	**Other** (please specify)	☐

(ii) Please tick the *one* box which best describes the size of your or your organisation's business?

Micro – typically 0 to 9 full-time or equivalent employees (incl. sole traders)

☐

Small – typically 10 to 49 full-time or equivalent employees

☐

Medium – typically 50 to 249 full-time or equivalent employees

☐

Large – typically 250+ full-time or equivalent employees

☐

None of the above (please specify)

As described above, CIBSE is a professional institution with a membership of over 20,000. It has a staff of over 50 based in London to support the work of the Institution.

☒

(iii) Would you be happy for us to contact you again in relation to this consultation?

Yes ☒

No ☐

DCLG will process any personal information that you provide us with in accordance with the data protection principles in the Data Protection Act 1998. In particular, we shall protect all responses containing personal information by means of all appropriate technical security measures and ensure that they are only accessible to those with an operational need to see them. You should, however, be aware that as a public body, the Department is subject to the requirements of the Freedom of Information Act 2000, and may receive requests for all responses to this consultation. If such requests are received we shall take all steps to anonymise responses that we disclose, by stripping them of the specifically personal data - name and e-mail address - you supply in responding to this consultation. If, however, you consider that any of the responses that you provide to this survey would be likely to identify you irrespective of the removal of your overt personal data, then we should be grateful if you would indicate that, and the likely reasons, in your response, for example in the comments box.

Questions:

Please note: We very much welcome your views to help inform our decision on the way forward on standards. However, you are not obliged to answer every question. You can focus only on the sections that are most relevant to you.

Introductory Remarks
As noted above, CIBSE welcomes the overall thrust of policy to reduce energy use in, and carbon emissions from, our homes. We have three comments on the proposed policy for allowable solutions which do not readily fit the questions below, and are general remarks on the policy framework. These are as follows.

a) Allowable Solutions and the Energy Performance of Buildings Directive
Allowable Solutions form a part of the overall zero carbon buildings policy framework, and date back to about 2007, at least in overall concept. They are a domestic policy, not an EU policy, and they predate the recast of the Energy Performance of Buildings Directive (EPBD) which was adopted in 2010. However, we have to acknowledge EU policy when developing domestic policy, and so it is relevant to look at the EPBD as recast.

It is therefore relevant to look at the "definition" of "nearly zero energy building" as given in the recast EPBD, which is:

> *"For the purpose of this Directive, the following definitions shall apply:*
> *1. 'building' means a roofed construction having walls, for which energy is used to condition the indoor climate;*
> *2. 'nearly zero-energy building' means a building that has a very high energy performance, as determined in accordance with Annex I. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby;"*

We believe that this raises an interesting question – given the definition of "nearly zero energy building" above, and in particular the reference to covering the residual energy demand "to a very significant extent by energy from renewable sources", namely, where does the EPBD leave scope for "allowable solutions" as set out in the consultation?

We realise that they are a domestic measure, in support of the domestic zero carbon buildings policy, and we realise (and the European Commission has acknowledged that, as currently framed, the zero carbon buildings policy may go further than the nearly zero energy buildings policy. However, from the end of 2020 the UK must implement nearly zero energy buildings (as already included in principle in recent changes to the Building Regulations 2010), and that implementation must meet the definition of nearly zero energy in Art 2(2).

We do not believe that this analysis has yet been undertaken. If we are wrong then we would be pleased to receive a copy and for the Department to formally publish the analysis.

It would be unfortunate, to say the very least, for the UK to set off on a path of Allowable Solutions in 2016, only to be hauled back in 2020/1 because the policy was deemed not to be compatible with EU law at that point. Given the difficulties the UK is experiencing with the Commission over its implementation of the recast to date, we believe that early attention to this question is imperative.

b) Allowable Solutions and additionality

It is not clear to the Institution how Allowable Solutions deliver additionality in all cases, particularly the third party fund approach, and do not merely substitute for improvements to the wider building stock that would otherwise have to be made under other programmes. Whilst in the short term there is an economic case for allowing alternative improvements that deliver equal carbon savings to those that would be made by delivering a truly zero carbon dwelling, because the savings are achieved with optimal resource allocation, in the longer term, and with the issues around the definition of nearly zero energy noted above, there will remain an element of carbon emissions and energy use from new homes built under the allowable solutions regime.

Those homes will have a lifetime energy demand, the cost of which will be borne by the occupiers, whether owners or occupiers of social housing, often on low incomes. Whilst that is not a matter for consultation, it is a matter of concern in relation to the ongoing issue of fuel poverty.

Some potential allowable solutions may merely serve to provide funds from the allowable solutions route instead of other funding sources, and allowable solutions will therefore act as displacement funding and not additional funding. We believe that this needs to be considered further.

c) Allowable Solutions and innovation

Allowable solutions offer a fiscal alternative to meeting the zero carbon target. Whilst there are good arguments for doing this under certain constraints, one consequence of the Allowable Solutions regime may be to reduce or even remove the need or incentive for innovation in the delivery of zero carbon or nearly zero energy homes. We believe that this has wider implications for future building standards which need to be addressed.

Chapter 1: Fabric energy efficiency and carbon compliance

Question 1	Do you agree that the government should base its consideration for energy performance standards for 2016 on the fabric energy efficiency and carbon compliance standard recommended by the Zero Carbon Hub and endorsed by the government in May 2011?
Yes ☒	
No ☐	
Please give reasons for your answer: Supporting the fabric efficiency standard will push the industry towards improving the performance of the building envelope which is the first step in the energy hierarchy (i.e. reduce energy demand first). It will encourage designers and constructors to optimise the building form and specification to reduce the demand for heating and cooling. Work is still needed to address questions around FEES for certain dwelling types and Carbon compliance for bungalows and highrise dwellings, and this work should be taken forward as a part of the 2016 strategy as a matter of urgency.	

Question 2	Do you have evidence, including data on costs, which you can make available to DCLG and could be used in reviewing the assumptions underpinning the Fabric Energy Efficiency and Carbon Compliance standards?
CIBSE supports and has contributed to the work of the Zero Carbon Hub in its development and promotion of the fabric efficiency standard, and would refer to studies available from ZCH. CIBSE also supports the efforts of ZCH to extend its work on carbon compliance (see comment in response to Q1).	

Chapter 2: Design principles for Allowable Solutions

Question 3	Do you agree with these design principles for Allowable Solutions set out in paragraph 2.4 (a to e) of the consultation document?
Agree with all √ But please see introductory comments	
Disagree with: a ☐ b ☐ c ☐ d ☐ e ☐	
Please provide reasons why you disagree with any of the design principles	

Question 4	Are there other design principles which you think that the government should consider? Please provide an explanation for any other design principles suggested
Comments: Compliance with EU law, verification of genuine additionality, especially under delivery routes 3 and 4 of para 2.7 and the third bullet under para 2.1, ensuring that funds are spent appropriately on carbon abatement, are three further key elements of the policy.	

Question 5	Do you agree that house builders should have a variety of routes, as set out in paragraph 2.7 of the consultation document, to meet their zero carbon homes obligations?
Yes ☒	
No ☐	
Comments: Alternative approaches will allow house builders to assess best value in the allowable solutions available.	

Question 6	Do you agree or disagree with any of the routes ((i) to (iv)) identified in paragraph 2.7 of the consultation document and do you have other routes to suggest.
Agree with all √	
Disagree with: route (i) ☐ route (ii) ☐ route (iii) ☐ route (iv) ☐	
Suggested other route(s) and reasons:	

Question 7	**(For house builders)** How likely are you to use any of the routes identified in paragraph 2.7 of the consultation document? Please complete the table below

Route	**Very likely**	**Occasionally**	**Unlikely**
(i) Doing more onsite	☐	☐	☐
(ii) Delivering off-site through own actions	☐	☐	☐
(iii) Contracting with a third party	☐	☐	☐
(iv) Payment into a fund	☐	☐	☐
Please add any comments about your reasons.			

Question 8	Do you think the current market could scale up to meet additional demand for carbon abatement?
Yes √	
No	
Comments: We consider that the market in principle could scale up to meet the demand in the next few years but it will be crucial for the government, industry, trade bodies and professional Institutions to support the necessary skills to increase capacity. There is evidence, from the research carried out by London South Bank University and others, that capacity constraints could hinder large scale attempts	

to implement energy savings, adequately install renewable sources and adequately install district energy CHP systems on the scale implied by the zero carbon building programme, in particular the 2016 target for new homes.

CIBSE accredited low carbon consultants provide a source of expertise in the evaluation, planning and design of low carbon development but the capacity of the whole supply chain needs to be evaluated.

The government should work with the industry, relevant professional bodies, universities and training providers to ensure that sufficient training programmes, apprentice schemes and educational courses are supported to ensure that the necessary skills and capacity are in place by 2016.

Chapter 3: Other delivery options considered

Question 9	Do you agree that the government should set out a national policy framework for Allowable Solutions and not leave it to local authorities to decide locally?
Yes ☒	
No ☐	
Please give reasons for your answer. A level playing field is essential, with a national framework for allowable solution measures. This will provide a consistent approach across England allowing for a more secure position for all Allowable solution providers. As referred to in the consultation document if a fragmented approach was allowed then this would lead to confusion and possibly incorrect use of funds. A national policy will allow for greater consistency, manageability accountability and verification. A consistent national approach is also compatible with the thrust of the Housing Standards Review, to adopt a more streamlined and nationally coherent framework of technical standards. Within that framework local authorities are free to suggest local allowable solution measures, since they will be aware of local opportunities and may be able to put forward cost effective carbon saving measures that are attractive to a house builder. But the ultimate choice will be for the housebuilder, in keeping with Principle 2.4 (a).	

Question 10	Do you agree that a mandated local approach to the delivery Allowable Solutions has no role in this national policy for the reasons set out in paragraphs 3.13 to 3.18 of the consultation document? We think this question could be confusing. We think it asks “Do you think that a mandated approach has a role. We do not think it has a role. But its not clear what a yes or no means.
Yes ☐	
No	
Please give reasons for your answer. A flexible approach should allow both local and national delivery mechanisms, in order for developers to seek best value.	

Chapter 4: Allowable Solutions measures and verification

Question 11	Should Allowable Solutions be concentrated on particular types of measure?
Yes	
No √	
Please give reasons for your answer The policy should set the criteria for implementing allowable solutions without specifying which technologies or techniques are permissible. This will encourage developers to be innovative and find best value, within the constraints of the specified criteria for eligible delivery strategies, and demonstration of additionality.	

Question 12	Do you think that Allowable Solutions should be confined to only to measures in the non traded sector of the economy?
Yes ☐	
No √	
Please give reasons for your answer Opportunities to exploit energy savings in heating and power systems, would enable a greater range of measures to be reviewed, which may or may not be in the traded sector, provided these can be demonstrated as being additional and verifiable.	

Question 13	Should measures in the traded sector be supported by Allowable Solutions, provided that they meet the appropriate criteria?
Yes √	
No ☐	
Please give reasons for your answer Yes, provided they meet the criteria of additionality, are verifiable and meet the other nationally set conditions, as this allows greater flexibility.	

Question 14	Do you think that Allowable Solutions should be confined to

	measures in the built environment?
Yes ☒ Subject to the proviso that energy related infrastructure is included within the term built environment.	
No ☐	
Please give reasons for your answer If Allowable Solutions can be any carbon abatement measure, then they cease to be allowable solutions, and become carbon offsets. This does not deliver the original objective of domestic (ie UK) policy of reducing emissions in the UK built environment, nor the more recent EU policy of nearly zero energy buildings. We have noted in our introductory comments the question about whether the Allowable Solutions approach is compatible with the EPBD Recast definition of nearly zero energy building. If it can be shown that the AS approach is delivering additional carbon abatement in the built environment, then it is at least reasonable to argue that it is a cost optimal approach to nearly zero energy buildings. But if it is merely a carbon offset applied to new homes, that argument will not be feasible. If any carbon abatement measure is permitted under Allowable Solutions, then it should is not “Allowable Solutions”, but carbon offsets for new homes. Confining allowable solutions to the built environment and energy related infrastructure such as renewable generation installations has the following benefits: • It would encourage improvements in carbon reduction skills and resource capacity in the sector, which is responsible for nearly half of UK emissions. • The built environment sector needs a push to improve the performance of the existing building stock, and the allowable solutions mechanism potentially provides an additional funding source for improving efficiency of existing stock. Transport, manufacturing and agriculture are already more conscious of the impacts of energy costs. In addition, lifetimes of many systems in the transport, manufacturing and agricultural sectors are generally shorter than building lifetimes and are more likely to be improved and upgraded more quickly themselves, whereas improvements in the existing stock occur on much longer cycles • There is likely to be a better public perception and acceptance of the zero carbon building agenda if the public understand that an allowable solution measure needs to be implemented in the built environment sector. • Using Allowable Solutions to deliver carbon abatement in existing buildings is a cost optimal abatement solution for buildings, in line with the EPBD cost optimal approach to setting minimum standards.	

Question 15	Do you think that measures should just be confined to residential buildings or should also cover non domestic buildings?

Residential buildings only
Residential and non-domestic buildings √
Please give reasons for your answer Flexibility in allowable solution measures should enable best value and opportunities for innovation. For example, it should be possible for a house builder to invest in carbon saving measures in a school, office or other building type if these offer cost effective opportunities. This is particularly true of a mixed-use developer, where a developer may own a portfolio of residences and other building types such as offices or retail accommodation which could be upgraded as part of the allowable solutions package of measures. This is necessary in order to avoid perverse outcomes , for example with mixed use developments, where the Allowable Solution may be delivered in the non residential elements of the development.

Question 16	Do you think that there should be any spatial limitations on Allowable Solutions?
Yes ☒	
No ☐	
Please give reasons for your answer We do not believe that it is realistic to impose spatial restrictions, if the Allowable Solutions are limited to the built environment and energy related infrastructure, and there is a clear requirement to demonstrate additionality. Indeed, given the uneven distribution of poor quality existing homes and those in fuel poverty, there is an argument that a UK wide approach will help to direct investment through Allowable Solutions into the most deprived areas.	
If yes, do you think that Allowable Solutions should be limited to projects located in:	
(a) the locality of the development ☐	
(b) England ☐	
(c) United Kingdom ☒	
Please give reasons for your answer. See above	

Question 17	Do you consider that the five criteria set out in paragraph 4.17 of the consultation document are appropriate to determine Allowable Solutions' measures?
Yes ☒	
No ☐	
Please give reasons for your answer	

Question 18	Are there other criteria you consider should be used?
Yes ☒	
No ☐	
Please give reasons for your answer Each measure must also show additionality. There is potential confusion here between allowable solutions, which relate to the developer, and EPCs which relate to the home, and are nothing to do with AS, and should remain nothing to do with AS.	

Question 19	Do you have evidence that you are willing to share with DCLG about the likely supply of Allowable Solutions' measures?
Comments:	

Question 20	Do you agree that the verification system for Allowable Solutions should include arrangements for deeming savings as a form of ex ante verification?
Yes ☒	
No ☐	
Please give reasons for your answer Yes it is logical to do this, ideally at the same time as SAP calculations, in order to avoid delays during the completion process. The emphasis on verification and robustness in 4.22 - 4.25 is welcome. However, it is vital that this is carried through into implementation, and that robust checks for	

delivery and additionality are implemented and happen. Otherwise we risk a repeat of the carbon offsetting saga, which in some cases bordered on fraud, a few years ago. That would surely discredit the whole AS approach, and probably remove any tolerance that the EU may have for it as well.

Assessment and verification tools must be demonstrated to be fit-for purpose; this should entail a review of carbon emission assessment tools currently used for dwellings, which can currently assume ideal efficiencies in SAP calculations. There is evidence that the SAP assessment process overestimates these efficiencies, shown by Zero Carbon Hub performance gap evaluation work and NHBC findings on MVHR performance in practice. If AS is to be effective, then this needs to be addressed.

Question 21	Do you have views on how such a system might best operate?
Comments: Through the system for Building Regulations which is already in place to ensure there is no conflicts between compliance and verification arrangements.	

Question 22	Do you agree that the verification system for Allowable Solutions should include arrangements for ex post verification?
Yes ☐	
No √☐	
Please give reasons for your answer A new property cannot be sold without a CML certificate. In order to obtain that certificate at the time of sale all certification measures must be complete and signed off on the completion of the dwelling.To keep the system simple for the homeowner/ developer and building control, once the certificate is provided then that is the end of the matter for the purchaser and BCO. If the AS provider has overestimated or produced ‘credits fraudulently then that should be dealt with independently of the purchaser by the regulatory body (which should not be the BCO).	

Question 23	Do you have views on how such a system might best operate to provide the best balance of assurance while avoiding overly burdensome reporting and monitoring processes?
Comments:	

Question 24	Should there be sanctions for non delivery of the expected carbon savings for Allowable Solutions' measures?
Yes ☒	
No ☐	
If Yes, how should those sanctions operate? An allowable solutions provider who is audited and whose carbon abatement mechanism is discovered to have overreported a CO^2 reduction should face sanctions from the regulator. *If* gross negligence or deliberate miss-selling or fraud was found then appropriate sanctions must be applied, including criminal sanctions where appropriate. This goes well beyond the role of Building Control Bodies It is essential that the regulator sets clear rules of engagement and establishes a method of monitoring quality. The regulator should be adequately resourced so that it can appropriately police the system, in order that the reputation of the allowable solutions policy is maintained.	

Chapter 5: Price cap

Question 25	Please provide your view on whether the government should: (a) allow the market to set its own price? Or ☐ (b) set a single fixed price? Or ☐ (c) set a ceiling price but enabling Allowable Solutions to be brought forward at lower prices? Or ☒ (d) set a floor price for Allowable Solutions? ☐ *(tick one box above only)*
Comments: A ceiling price, based on the cost of installing solar PVs, would give a house builder some certainty of upper costs in the financial appraisal of a project. If a house builder finds an allowable solution measure that has a lower cost this would provide best value. This is also likely to encourage the implementation of desirable energy efficiency measures, as these carbon reduction strategies are often more cost effective than the addition of LZC technologies.	

Question 26	Which price do you think should be adopted and why? low ☐ central ☐ high ☒
Comments: For ZCH to be meaningfull it should reflect the cost of abating carbon in the built environment sector and housebuilding in particular. If the allowable solutions payement is set below the cost of abating carbon in the built environment the funds available may not be sufficient to really off-set the residual CO2 linked to new homes.	

Question 27	What impact do you think the different price caps will have on the extent to which Allowable Solutions projects will be brought forward?
Comments: A high cap will incentivise a broader range of measures from housebuilders and allowable solutions providers.	
Question 28	What impact do you consider the different price caps will have on

	the viability of house building and would the impact differ in different parts of England?
Comments: The maximum cost of allowable solutions as presented in the consultation is around 1% of the average UK home price £164,000 according to the ONS. With prices rising faster than 1% this shouldn't be an issue. The certainty that allowable solutions with a cost cap gives a developer should outweigh the relatively small uplift.	

Question 29	Is 3 years an appropriate interval to review the price cap?
Yes ☒	
No ☐	
If no, how often do you think it should be reviewed? The price cap should be responsive to changes in the cost of abatement and be adjusted to stimulate innovation and CO2 reduction in the built environment sector.	

Question 30	Should Allowable Solutions cover 30 years of residual emissions?
Yes √	
No ☐	
If no, how often do you think it should be reviewed?	

Question 31	Do you think the calculation of the carbon abatement required should take account of the expected and actual decarbonisation of the electricity grid?
Yes ☐√	
No	
Please give reasons for your answer The calculation should consider a realistic prediction of decarbonisation of the grid	

so that the evaluation of savings from electricity is fair. The decarbonisation prediction should be reviewed regularly (such as every 1 to 3 years).

Chapter 6: Allowable Solutions delivery routes

Question 32	Do you agree that route (i) of the house builder 'menu' can be accommodated within current Building Regulations compliance processes?
Yes ☐√	
No	
Please give reasons for your answer Yes, the 100% on-site option should be available through the Building Regulations compliance process, as this will allow a house builder to be fully zero carbon on the development site, where appropriate and technically feasible to do so Currently we assume the Part L Standard Assessment Method (SAP) would be the methodology to calculate the dwelling emission rating (DER), and thus would be used to calculate carbon savings possible from a range of efficiency or LZC measures. Whilst responding to this consultation, it should be acknowledged that findings from the Zero Carbon Hub performance gap programme have shown that the methodology and assumptions made SAP may not accurately reflect how energy will be used or generated on site. This may sometimes give false impressions of the performance of carbon reduction measures. The carbon saving methodology should aim to be as accurate and well supported as possible, to ensure the reputation of the allowable solutions policy is well respected in the industry. We would recommend that the SAP methodology be reviewed and updated to better reflect construction practice and that better guidance be provided on assumptions to use in the calculations. The recent research findings from the NHBC Foundation on MVHR, for example, found that specific fan power factors and thermal efficiencies of heat recovery were worse than assumed in the SAP calculation.	

Question 33	What kinds of Allowable Solutions measures undertaken under route (ii) of the house builder 'menu' do you consider could be accommodated within current Building Regulations compliance processes?
Comments: As long as suitable certification schemes are in place this could be accommodated through Building Regulations, since any measures under this route will fall within scope of the building control regime. If trading of on-site carbon reductions between different new build developments (by	

the same housebuilder/a different housebuilder) is facilitated by the Allowable Solutions framework - that could be a good flexible outcome. Measures could include retrofiting thermal insulation and replacing inefficient HVAC plant etc, if these could be demonstrated as additional and not part of an upgrade programme that was going to happen anyway.

Question 34	Do you think that house builders should be able to enter into a direct transaction with third parties, including local authorities, to deliver Allowable Solutions?
Yes ☒	
No ☐	
Please give reasons for your answer Verification is going to require that all off-site carbon reduction is approved in some way. Provided that third parties and local authorities are approved and competent for allowable solution fund gathering and project implementation, this provides flexibility for the developer.	

Question 35	How might that approach operate?
Comments: Third parties and local authorities should comply with certain provider criteria and become accredited as allowable solutions providers and then offer measures that can be purchased by the house builder.	

Question 36	Do you have any evidence of how such a system might work which could be drawn upon in developing such an arrangement?
Comments	

Question 37	Do you agree that provision of a matching service should be considered?

Yes ☒
No ☐
Please give reasons for your answer:

Question 38	Do you have views on how such a system might work to assist house builders?
Comments:	

Question 39	Do you have any evidence of existing matching services which could be drawn on in developing such an arrangement?
Comments:	

Question 40	Do you agree that provision of a brokerage service should be considered?
Yes	
No √	
Please give reasons for your answer Why not allow brokerage? If the costs added on by the broker are too high they won't get the business. We should support the creation of a variety of 'providers' and routes, one of which might be via a broker.	

Question 41	Do you have views on how such a system might work to assist house builders?
Comments:	

Question 42	Do you have any evidence of existing brokerage services which could be drawn on in developing such an arrangement?
Comments	

Question 43	Do you agree that provision of a fund approach should be

	considered?
Yes ☒	
No ☐	
Please give reasons for your answer:	

Question 44	Do you have views on how such a system might work to assist house builders?
Comments:	

Question 45	Do you have any evidence of existing funds which could be drawn on in developing such an arrangement?
Comments:	

Question 46	If invested in a fund, Allowable Solutions payment capital and profits can both be reinvested on a revolving fund basis to increase long-term potential carbon savings. However, commercial returns and/or capital could be given back to house builders rather than reinvested, but this would mean less carbon being abated and hence a higher upfront investment would be required to meet the house builder's zero carbon homes obligation. Is there any interest from house builders in investing into a fund which abates carbon and also makes a return rather than making a smaller one-off payment?
Yes ☐	
No ☐	
Comments:	

Question 47	What are your views on the assessment of the delivery options set out in the table below paragraph 6.19 of the consultation document?
Comments:	

Question 48	Are there other considerations which government should be taking into account?

Comments:

The most significant omission is the lack of any proposals for the regulation of the AS regime, for setting out the rules of the scheme and for undertaking the verification and monitoring that is referred to. As noted below, we do not think these are tasks for Building Control or Trading Standards, as this is intended to be a national policy.
A credible regulatory framework is essential, or this will descend into the difficulties of carbon offsetting, and will become a disreputable scheme with significant consequences in terms of Europe and the nearly zero carbon homes policy.

We would suggest that the government should review whether there is a need to improve capacity through the provision of training courses and other means. Currently, many building control departments are busy and under resourced, having little opportunity to take on the additional burden of managing the allowable solutions process. The process needs to be simple to understand implement and police

The existing building control process should remain largely unaltered with the BCO /AI simply required to ensure that a certificate for the outstanding emissions is provided. On the other side –the supply side – the monitoring and verification of allowable solutions should not be part of BC as it is not an inspection task.

Question 49	In the light of this analysis what is your preferred delivery route?
	house builder DIY ☐
	bilateral ☐
	matching / brokerage ☐
	fund ☐
	(tick one box above only)

Please provide reasons for your answer.

All delivery routes listed above seem reasonable in order to allow maximum flexibility, and allow housebuilders to choose the delivery route relevant at the time in the light of market conditions and any other relevant considerations.

Chapter 7: Next steps

Question 50	What do you think an appropriate familiarisation period might be for industry and appropriate transition arrangements for Allowable Solutions?

Please provide reasons for your answer.

We propose that the Government should start as soon as possible to develop the framework and criteria for the delivery routes, so that the industry can be prepared in advance of implementation in 2016. It will also be important for the effectiveness of the delivery routes to be monitored by an appropriately resourced body that can assess the impacts and any room for improvements. Reviews should be published to the industry annually and made available on-line.

As noted above, the consultation is worryingly silent on how Allowable Solutions will be formally regulated. Building Control are not the body to do that, and the consultation is entirely silent on who should do it. Given the experience of the wider EPBD it should clearly not be Trading Standards. Given the proposals for the Energy Savings Opportunity Scheme, perhaps this is another task for the Environment Agancy to take on?

Question 51	A development stage impact assessment accompanies this consultation document. Do you have any views on the analysis, costs and benefits presented in that impact assessment? Can you provide any additional evidence to inform the further development of the impact assessment?

Comments: