

Consultation Response Form - Building Regulations Part L Review - Changes to Part L (Conservation of Fuel and Power) and Part F (Ventilation) of the Building Regulations for new dwellings

This consultation sets out our plans to improve the energy efficiency requirements for new homes in 2020. The document also provides detail on the direction of travel for energy efficiency requirements for introduction in 2025.

This document is the first stage of a two-part consultation about proposed changes to the Building Regulations. It also covers the wider impacts of Part L for new homes, including changes to Part F (Ventilation), its associated Approved Document guidance, airtightness and improving as-built performance of the constructed home.

You can email your response to the questions in this consultation to:
enquiries.brconstruction@gov.wales

If you are responding in writing, please make it clear which consultation and which questions you are responding to:

Building Regulations Part L Review - Changes to Part L (Conservation of Fuel and Power) and Part F (Ventilation) of the Building Regulations for new dwellings.

Written responses should be sent to:

Building Regulations, Welsh Government, Rhydycar, Merthyr Tydfil, CF48 1UZ.

If you have any queries on this consultation, please email:
enquiries.brconstruction@gov.wales or telephone: 0300 062 8144.

Data Protection

Any response you send us will be seen in full by Welsh Government staff dealing with the issues which this consultation is about. It may also be seen by other Welsh Government staff to help them plan future consultations.

The Welsh Government intends to publish a summary of the responses to this document. We may also publish responses in full. Normally, the name and address (or part of the address) of the person or organisation who sent the response are published with the response. This helps to show that the consultation was carried out properly. If you do not want your name or address published, please tick the box below. We will then blank them out.

Names or addresses we blank out might still get published later, though we do not think this would happen very often. The Freedom of Information Act 2000 and the Environmental Information Regulations 2004 allow the public to ask to see information held by many public bodies, including the Welsh Government. This includes information which has not been published. However, the law also allows us to withhold information in some circumstances. If anyone asks to see information we have withheld, we will have to decide whether to release it or not. If someone has asked for their name and address not to be published, that is an important fact we would take into account. However, there might sometimes be important reasons why we would have to reveal someone's name and address, even though they have asked for them not to be published. We would get in touch with the person and ask their views before we finally decided to reveal the information.

Confidentiality

Responses to consultations may be made public on the internet or in a report.

If you do not want your name and address to be shown on any documents we produce please indicate here

If you do not want your response to be shown in any document we produce please indicate here

CONSULTATION FORM

Amendments to statutory guidance

Date:

Your Name:	Isaac Occhipinti
Your Position (<i>if applicable</i>):	Head of External Affairs
Your Organisation (<i>if applicable</i>):	Energy and Utilities Alliance (EUA)
Email / Telephone Number:	isaac@eua.org.uk
Your address:	Camden House, Kenilworth, CV8 1TH

Type of Organisation: Choose one of the following:	Select one
Builder / Developer	
Small/medium builder	
Volume house builder	
Designer / Engineer /Surveyor	
Local Authority	
Building Control Approved Inspector	
Architect	
Manufacturer/supply chain	
Energy Assessor	
Energy sector	
Construction professional	

Property Manager / Housing Association / Landlord	
Building Occupier/ Resident	
Other interested party (please specify)	Trade Association

Question 1

Do you agree with our expectation that a home built to our part L 2025 should produce 75-80% less CO ₂ emissions than one built to current Part L requirements?	
a. Yes	Yes
b. No– 75-80% is too high a reduction in CO ₂	
c. No - 75-80% is too low a reduction in CO ₂	
d. Unsure	
If no, please explain your reasoning and provide evidence to support this.	
<p>EUA agrees with the level of ambition shown by the Welsh Government and if we are to meet our 2050 Net Zero targets then we will need for new homes to be Net Zero as soon as possible.</p> <p>EUA therefore agrees with the target however we would like the Welsh Government to ensure that the solution allowed to meet these targets allow homes to be affordable to purchase and to run. For example, we do not believe that the Welsh Government should specify 'banned' products and should be open to certain vectors becoming zero carbon in the near future. We believe that hydrogen will be a viable technology for the future of heating and new homes should not be excluded from being connected to a future decarbonised gas grid. Hybrid solutions, that use both heat pumps and mains gas have been identified by the CCC as potentially being a key solution for decarbonising heat, the Part L Review should not prevent this technology from being installed. This also applies to off grid homes where Bio LPG and Bio Oil are effective solutions for decarbonisation.</p> <p>However, it is clear that to achieve such an ambitious reduction in CO₂ hot water storage will be required with current technologies. It is disappointing that this consultation does not make a provision that homes are at a minimum hot water ready. One of the biggest barriers to installing adequate hot water provision is lack of space, especially in new homes. We would like the Welsh Government to mandate that all new homes have provision for hot water storage in terms of floor space and hot water pipe design. We would also like them to ensure minimum performance standard for hot water provision to ensure low carbon and energy costs.</p>	

Question 2

We think heat pumps and heat networks should typically be used to deliver the low carbon heating requirement of the future standard. What are your views on this and in what circumstances should other low carbon technologies, such as direct electric heating, be used?
Please provide comments below:

We do not believe that the Welsh Government should be prescribing solutions to be installed in homes. The regulations should set parameters for carbon reduction in order to meet our Net Zero targets, but they should also be aware of how technology evolves over time.

Therefore, each technology type will have applications that are most appropriate for installation. EUA believes that alongside heat pumps, hydrogen and bio fuels will play an important role in decarbonising homes. The Part L Review should not act to prevent these technologies from being installed. The CCC has also stated that hybrid heating solutions will be a key solution, therefore creating a system that attempts to pre select technology choices could actually lead to higher installation and running costs for homeowners. EUA believes that this regulation should be technology neutral.

For direct electric, its use should be when appropriate to the build. For properties with very low heating demand, such as small houses and flats, direct electric heating may be the most cost effective solution. We also expect time of use tariffs to play a role in making these solutions more affordable.

EUA is concerned at the lack of mention for stored hot water. We believe that all properties should have provision for stored hot water because alongside reducing energy demand it can be used to manage electricity demand by acting as a battery. Using a Solar PV diverter excess electricity can be stored and used to reduce bills and for demand management. For larger property types stored hot water systems should be mandated to allow appropriate hot water provision and energy management. If the Welsh Government are moving towards an all-electric future for new builds, and for all new homes to have electric car charging points, have calculations been made on how much the additional electricity infrastructure required will cost. The consultation and impact assessment did not appear to explicitly outline how much all the additional infrastructure would cost developers, and there is a concern that new sites will not have the capacity required and so will need new electricity infrastructure provision. We believe these costs should be factored in to the calculations for new homes as it may make other technologies more viable in regards to cost.

Question 3

Do you agree that the fabric package for Option 1 set out in Chapter 3 and Annex A, but with the addition of higher specification glazing (i.e. triple glazing units), provides a reasonable basis for the fabric performance of part L 2025?

a. Yes	
b. No – the fabric standard is too demanding	
c. No – the fabric standard is not demanding enough	
d. No - high specification glazing (i.e. triple glazing) should be specified in option 1 for the 2020 proposed specification	
e. Unsure	

If no, please explain your reasoning.

Generally, the tighter the fabric specification, the less CO² to save on the heating and hot water, therefore we support the tightest fabric specification as it means better future-proofing of homes for lower bills and low carbon heat, especially when a

potential performance gap risk remains for the build. However, we do need to ensure we overcome the performance gap which remains far too prevalent in new build homes. If the standards are too demanding there is a risk that homes will be designed to specification but corners are cut in the actual build. Either the building industry has to accept the changes or the inspection regime needs to be tightened to ensure what is specified is actually built. This obviously affects consumers and the bills they pay, but it also affects the heating technology installed. If a heat pump is designed for a heat loss and the final property has a higher heat loss the performance of the heat pump will not be efficient and will cost more to run. This applies for all heating technology, but is more acute for electrical heating. Therefore, we agree with the suggested standards but it must be accompanied by the complete closing of the performance gap.

Question 4

What level of uplift to the energy efficiency standards in the Building Regulations should be introduced in 2020?	
a. No change	
b. Option 1 – 37% CO ₂ reduction (the government's preferred option)	
c. Option 2 – 56% CO ₂ reduction	
d. Other	
e. Unsure	
Please explain your reasoning.	
EUA agrees with the government's preferred option. This strikes the correct balance in preparing the industry for a bigger change in 2025 and ensures carbon emissions are reduced in line with meeting our net zero targets.	

Question 5

Do you agree with the concerns raised in paragraph 3.1 regarding MVHR systems at this time?	
a. Yes	
b. No	
c. Unsure	
please explain your reasoning or how these concerns could be overcome in the future.	

Question 6

Do you agree with using primary energy as the principal performance metric?	
a. Yes – primary energy should be the principal performance metric	
b. No – CO ₂ should remain the principal performance metric	
c. No – another measure should be	

the principal performance metric	
d. Unsure	
Please explain your reasoning and provide evidence to support this.	
Our understanding is that this is a requirement of the recast EPBD, and so does not appear to be optional.	

Question 7

Do you agree with using CO ₂ as the secondary performance metric?	
a. Yes	
b. No	
c. Unsure	
Please explain your reasoning.	
Yes, if the electricity grid decarbonises to the extent the Welsh Government predict over the SAP 10.2 lifecycle, then to optimise rational use of building energy, and uphold high build standards, primary energy seems to be the key metric moving forward. However, carbon budgets and the legally binding “net zero” target of 2050 for the UK all revolve around CO ₂ , and so it is appropriate to continue to adopt this a supplementary, key performance metric.	

Question 8

Do you agree the need to set a minimum target to ensure that homes are affordable to run?	
a. Yes	
b. No	
c. Unsure	
Please explain your reasoning.	
All homes should be affordable to run. It is essential that solutions to meet Net Zero are also just and fair to all property owners. We cannot build new homes that may cause additional fuel poverty. Therefore, we fully agree with the proposal to set a minimum target to ensure that homes are affordable to run.	

Question 9

If yes above should the minimum target used to ensure that homes are affordable to run be a minimum Energy Efficiency Rating?	
a. Yes	
b. No	
c. Unsure	
If yes, please suggest a minimum Energy Efficiency Rating that should be achieved and provide evidence to support this.	
If no, please suggest an alternative metric, explain your reason and provide evidence to support this.	
EUA believes that all new homes should meet EPC band B. As EPC's take into	

account energy running costs for the products installed in the home, this will ensure that the house is affordable to run and compatible with the carbon reduction targets proposed. We also believe it should be mandatory for all new homes to have a smart meter installed to help manage energy bills and keep them to a minimum.

Question 10

Do you agree with the proposed minimum fabric standards set out in Table 3.1?	
a. Yes	
b. No	
c. Unsure	
If you do not agree with any one or more of the proposed standards, please explain your reasoning and provide evidence to support this.	
The fabric first approach, ensuring modern homes are built to minimise energy use, is a good, and appropriate foundation for the Part L proposals. We believe that the minimum fabric standards should meet those in the notional housing type for Option 1. This would ensure that the fabric of new homes is compatible with long term carbon saving and would mean all future heating technologies operate efficiently. The concern with the minimum standards currently proposed is that these could form the basis for the fabric standards of new builds coupled with heat pumps which would lead to poorer performing products, especially with the current performance gap.	

Question 11

Do you agree that the limiting U-value for roof-lights should be based on a roof-light in a horizontal position?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning and provide evidence to support this.	

Question 12

Do you agree that we should adopt the latest version of BR 443?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning and provide evidence to support this.	

Question 13

Do you agree with the proposal of removing fuel factors to aid the transition from high-carbon fossil fuels?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	
Fuel factors should not be removed, to allow for innovations in bio fuels. Bio LPG would be near zero carbon, as would 100% Bio Oil, both of which are either available now or will be in the very near future. The regulation should not prevent innovation that could create cost effective solutions to meeting Net Zero.	

Question 14

Do you agree with the proposed changes to minimum building services efficiencies and controls set out in Table 3.2?	
a. Yes	
b. No	
c. Unsure	
If you do not agree with any or more of the proposed changes, please explain your reasoning and provide evidence to support this.	
The 92% ErP rating is already in place for replacement boilers. As such, and noting it is the same products which will be installed into new-build as for the replacement market, it is the appropriate value and metric to adopt. In reality we see that not much changes here, given the above, and as a note in the draft Part L guidance advises the SEDBUK value continues to be used for SAP compliance purposes.	

Question 15

Do you agree with the proposal that heating systems in new dwellings should be designed to operate with a flow temperature of 55°C?	
a. Yes	
b. No – the temperature should be below 55°C	
c. No – dwellings should not be designed to operate with a low flow temperature	
d. No – I disagree for another reason	
e. Unsure	
If no, please explain your reasoning and provide evidence.	
The wording in the consultation is “final heating circuit”, which we take to mean thermal stores could be fed at a higher flow temperature from the heat generator, if the delivered temperature to the emitter circuit was blended down to 55C or lower. Thermal storage should not be discouraged as it is a valuable technology for future load shifting, and balancing of the electricity grid. For new-build, low-temperature emitter sizes and locations can be designed in at the specification stage, and the build planned accordingly.	

For indirectly heating a cylinder, and to reduce the risk of Legionella, then higher temperatures are required for heating stored hot water. Current guidelines require at least 60 degrees (section 2.6; page 8 of link below). This guidance should be part of the regulations to ensure any final system has built in protocols to ensure compliance. <https://www.hse.gov.uk/pubns/priced/hsg274part2.pdf>

It should also be noted that the proposed 55C flow temperature should not be seen as a target temperature, but rather a maximum for gas boilers. For heat pumps 55 degrees would be too high and lead to a poorly performing product.

Question 16

How should we encourage new dwellings to be designed to operate with a flow temperature of 55°C?	
a. By setting a minimum standard	
b. Through the target primary energy and target emission rate (i.e. through the notional building)	
c. Other	
d. Unsure	
Please explain your reasoning.	

Question 17

Do you agree with the proposal to improve minimum fabric standards in new dwellings to help futureproof the house for low carbon/temperature heating systems?	
a. Yes	
b. No – the current minimum fabric levels are sufficient	
c. No – I disagree for another reason	
d. Unsure	
If the third option, please explain your reasoning.	

Question 18

Do you agree with the proposals to simplify the requirements in the Building Regulations for the consideration of high-efficiency alternative systems?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

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Question 19

Do you agree with the removal of government Approved Construction Details from Approved Document L?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 20

Do you agree with the proposal to introduce the technology factors for heat networks, as presented in the draft Approved Document?	
a. Yes	
b. No – they give too much of an advantage to heat networks	
c. No – they do not give enough of an advantage to heat networks	
d. No – I disagree for another reason	
e. Unsure	
Please explain your reasoning.	
<p>EUA agrees with the use of the technology factor for heat networks with the recognition that heat networks are easier to decarbonise in the future.</p> <p>However, the association has concerns about the process of how the technology factors are developed. It is believed that the proposed technology factors will only allow heat pumps to pass the target emissions and efficiency rates. This represents a significant shift in Government policy.</p> <p>The Government is currently funding heat networks through the Heat Network Investment Project (HNIP) according to eligibility criteria that includes – ‘The heat network is of an eligible type (i.e. heat generated from 75% gas CHP or from 50% renewable, recovered heat or a combination).’</p> <p>This means that the Governments decision on technology factors is not consistent with its own flagship project for heat network investment. We recommend that the technology factors are adjusted to ensure that heat network projects supported by HNIP can pass Building Regulations.</p> <p>The association has additional concerns with how SAP10.1 will treat large heat networks where build out is subject to multiple phases. Currently, heat networks could be built with CHP, meaning that future phases would not meet Building Regulations. This could lead to stranded assets with no possibility for growth or investment.</p>	

Question 21

Do you agree with removing this supplementary guidance from Approved Document L, as outlined in paragraph 3.65 of the consultation document?

a. Yes

b. **No**

c. Unsure

If no, please explain your reasoning.

In conjunction with the EUA response to this question, please also see additional supporting documents (5 files) sent to the consultation mailbox, and cross-referenced back to this EUA consultation draft, in the covering message.

We do not agree with the removal of reference to critically important information as part of this exercise.

We have reviewed the consultation draft ADL, and note that where the current ADL for Wales makes reference to the MHCLG Domestic Building Services Compliance Guide (hereafter DBSCG), the consultation draft does not. We are aware that the DBSCG may itself be subsumed in to the English ADL (as proposed by the FHS consultation in England), which has, as stated, influenced Welsh Government thinking here.

However, without reference to the DBSCG, or transposing other, key information from it, an unacceptable, and potentially regressive gap in industry guidance is created. This is the case for the “commissioning” section of the consultation draft of ADL, where the information given on the “minimum standard” as regards the cleaning of heating systems, is now minimal, and inadequate.

The accessibility of the DBSCG, and raised awareness of it in recent times (as the vehicle which implemented the Boiler Plus standards in England), means it has become increasingly important in recent times.

Removal of reference to BS 7593 (by proxy due to no longer referencing the DBSCG), which was updated and published by BSI in May 2019, risks rolling back industry standards, as BS 7593 was updated on the basis that the state of the art in these matters (water treatment) had moved on.

The 2019 update was driven by recognition that it is essential to competently manage the risk of magnetite sludge generation within all modern central heating systems, to ensure that the system continues to operate at design performance, and efficiencies. If the AD fails to conspicuously signpost to more focused industry guidance on this topic, or replicate the detail, this risks undermining the correct installation, and therefore long-term efficacy, of low carbon heating systems, with perhaps low temperature systems particularly vulnerable.

HHIC member boiler manufacturers estimate that circa 80% of warranty callouts to non-product faults are due to poor heating system water quality, which following BS 7593 guidance actively prevents, and we would highlight that BS 7593 is applicable to all domestic hydronic heating systems, including those fed by heat pumps.

BS 7593 is the pre-eminent standard for water treatment of domestic heating systems in UK, and is developed and agreed by a broad swathe of industry, including HHIC (representing circa 94% of all heating technology solutions in the UK). It is lent further credence by the fact that the current “minimum standard” text in the DBSCG is directly

transposed from the previous iteration of BS 7593 (2006).

Other, related, “supplementary information” within the DBSCG, and missing from the draft “minimum standard” in ADL for Wales, includes specific reference to the “BuildCert” scheme (now NSF CIAS), an industry-agreed minimum standard for chemical inhibitors (the use of which is still correctly identified as a fundamental part of the consultation draft’s own “minimum standard”), which UK boiler manufacturers lend support to. The removal of a BuildCert reference from the consultation draft risks lowering the standard performance, and proven effectiveness, of chemical inhibitors placed on the UK market, as installers/specifiers may migrate towards inferior products, unlikely to have any independent 3rd party accreditation to this industry-agreed performance standard.

Question 22

Do you agree with the external references used in the draft Approved Document L, in Appendix C and Appendix D?

a. Yes

b. **No**

c. Unsure

If no, please explain your reasoning and suggest any alternative sources.

BS 7593 should be a normative reference, in the annexes, but also referred to in the main text where the “minimum standard” is addressed.

Question 23

Do you agree with incorporating the Compliance Guides into the Approved Documents?

a. **Yes**

b. No

c. Unsure

If no, please explain your reasoning.

This is a difficult question to answer. We understand the Welsh Government’s wish to align with the Hackitt recommendations, and are supportive of the overarching aims and objectives. However, we wish to avoid any unintended consequences, particularly anything which risks a regression of industry standards and in installer behaviours. The DBSCG has served the heating industry well, and we harbour grave concerns if the new approach is so inflexible so as not to permit reference to information which is intrinsic to the minimum standard itself. If a more pragmatic compromise is available, we would undoubtedly offer full support to the new approach to guidance, as it would indeed simplify things for the reader, whilst being more obviously authoritative in supporting compliance with the Regulatory requirements.

Question 24

Do you agree that we have adequately covered matters which are currently in the

Domestic Building Services Compliance Guide in the new draft Approved Document L for new dwellings?

a. Yes

b. No

c. Unsure

If no, please explain which matters are not adequately covered.

In conjunction with the EUA response to this question, please also see additional supporting documents (5 files) sent to the Future Homes Standard consultation mailbox, and cross-referenced back to this EUA consultation draft, in the covering message.

Also see answer to question 21, where it is clear our concerns revolve around removal of reference to BS 7593, and related topics previously referred to.

Reference to, and thereby raised awareness of, BS 7593, in the current DBSCG, has driven increased best practice and quality installation of heating systems in the UK over many years. However, there is still work to do, and the new style approved document, with no direction to the more substantive guidance of BS 7593 in matters of water treatment, poses a very real risk of a regression in industry standards and practices. This is absolutely not something that Dame Judith Hackitt would have envisaged in making her recommendations to Government, far from it. Even today, aggregated cross-manufacturer boiler warranty call-outs where no product fault is found, attribute circa 80% of these non-product-faults to system issues associated with poor water treatment.

We would highlight the fact that, as the wider Part L review looks towards low temperature heating systems (e.g. 55C design flow temperature), and with lower return temperatures often associated with lower system flow rates, the importance of correct water treatment of heating systems becomes more important than ever. Of course, heat pumps, as encouraged by the wider Part L proposals, also invariably supply hydronic heating systems.

What should not be overlooked, in the critical context of Part L (conservation of fuel and power) is that contaminated heating system water, e.g. "sludge" lining radiator, pipework and heat exchanger surfaces, will adversely impact the heat generator efficiency, and result in consequential increases in CO2 emissions and energy consumption, to try and reach the same comfort and performance conditions.

Without a comprehensive treatment regime, research over a number of years, sponsored by several different organisations, has shown that magnetite sludge within heating systems leads to a reduction in radiator heat output by 15% or more, and a corresponding increase in gas use of up to 7% to maintain comfort levels within the property. This generates an increase in CO2 of 155 kg per affected household per year, equivalent to over 390 tons of CO2.

We are bemused that some requirements previously documented as the "minimum standard" in the DBSCG, have not been transposed to the new document at all.

Namely the requirement to treat the incoming cold mains feed to combi boilers in hard water areas, as much of the UK is in. This is an unacceptable regression in the accepted minimum standard, at a time when we are seeking to "raise the bar" in matters of energy efficiency and performance. It risks an increase in adverse impacts upon consumers and industry alike (e.g. a rise in "breakdown" of combi boilers due to issues associated with limescale in hard water areas).

Finally, yet another example where BS 7593 has progressed the "state of the art", not reflected in the new "minimum standard".....systems must be thoroughly cleaned and flushed out, but there is no mention of an appropriate cleaning chemical. This lends itself to the bare minimum action by the installer (a flush with water only), despite all

recognised cleaning methodologies in BS 7593 requiring the use of a suitable cleaning chemical.

Question 25

Do you agree that we have adequately covered matters which are currently in the Domestic Ventilation Compliance Guide in the new draft Approved Document F for new dwellings?

a. Yes

b. No

c. Unsure

If no, please explain which matters are not adequately covered.

Question 26

Do you agree with all of the proposals for restructuring the Approved Document guidance?

a. Yes

b. No

c. Unsure

If no, please explain your reasoning.

Again, this is difficult to answer as worded. Please also see response to question 24. We are supportive in principle, but it is paramount that where best practice has now become the minimum standard, as is the case, the information provided reflects this. We have given several, specific examples.

Question 27

Do you agree with our proposed approach to mandating self-regulating devices in new dwellings?

a. Yes

b. No

c. Unsure

If no, please explain your reasoning.

Question 28

Are there circumstances in which installing self-regulating devices in new dwellings would not be technically or economically feasible?

a. Yes

b. No

c. Unsure	
If yes, please explain your reasoning and provide evidence.	

Question 29

Do you agree with proposed guidance on providing information about building automation and control systems for new dwellings?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 30

Do you agree that the guidance in Appendix B to draft Approved Document F provides an appropriate basis for setting minimum ventilation standards?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 31

Do you agree that using individual volatile organic compounds, informed by Public Health England guidelines, is an appropriate alternative to using a total volatile organic compound limit?	
a. Yes	
b. No – the Public Health England guidelines are not sufficient	
c. No – individual volatile organic compounds should not be used to determine ventilation rates	
d. No – I disagree for another reason	
e. Unsure	
If no, please explain your reasoning, and provide alternative evidence sources if appropriate.	

Question 32

Do you agree with the proposed guidance on minimising the ingress of external pollutants in the draft Approved Document F?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 33

Do you agree with the proposed guidance on noise in the draft Approved Document F?	
a. Yes	
b. No – this should not form part of the statutory guidance for ventilation, or the guidance goes too far	
c. No – the guidance does not sufficiently address the problem	
d. No – I disagree for another reason	
e. Unsure	
If no, please explain your reasoning.	

Question 34

Do you agree with the proposal to remove guidance for passive stack ventilation systems from the Approved Document?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 35

Do you agree with the proposal to remove guidance for more airtight naturally ventilated homes?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 36

Do you agree with the proposed guidance for background ventilators in naturally ventilated dwellings in the draft Approved Document F?	
a. Yes	
b. No – the ventilator areas are too large	
c. No – the ventilator areas are too small	
d. No – I disagree for another reason	
e. Unsure	
If no, please explain your reasoning.	

Question 37

Do you agree with the proposed approach for determining minimum whole building ventilation rates in the draft Approved Document F?	
a. Yes	
b. No – the ventilation rate is too high	
c. No – the ventilation rate is too low	
d. No – I disagree for another reason	
e. Unsure	
If no, please explain your reasoning.	

Question 38

Do you agree that background ventilators should be installed for a continuous mechanical extract system, at 5000mm ² per habitable room?	
a. Yes	
b. No – the minimum background ventilator area is too low	
c. No – the minimum background ventilator area is too high	
d. No – other	
e. Unsure	
If no, please explain your reasoning.	

Question 39

Do you agree with the external references used in the draft Approved Document F, in Appendices B, D and E?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 40

Do you agree with the proposed commissioning sheet proforma given in Appendix C of the draft Approved Document F, volume 1?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning and suggest any alternative sources.	

Question 41

Do you agree with the proposal to provide a completed checklist and commissioning sheet to the building owner?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 42

Do you agree that there should be a limit to the credit given in SAP for energy savings from airtightness for naturally ventilated dwellings?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 43

Do you agree that the limit to the credit should be set at 3m ³ /m ² .h?	
a. Yes	
b. No – it is too low	
c. No – it is too high	
d. Unsure	
If no, please explain your reasoning and provide evidence.	

Question 44

Is having a standard level of uncertainty of 0.5m ³ /m ² .h appropriate for all dwellings undergoing an airtightness test?	
a. Yes	
b. No – a percentage uncertainty would be more appropriate	
c. No – I agree with having a standard level of uncertainty, but 0.5m ³ /m ² .h is not an appropriate figure	
d. No – I disagree for another reason	
e. Unsure	
If no, please explain your reasoning.	

Question 45

Currently, only a proportion of dwellings are required to be airtightness tested. Do you agree with the proposal that all new dwellings should be airtightness tested?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning and provide evidence to support this.	

Question 46

Currently, small developments are excluded from the requirement to undergo airtightness tests. Do you agree with including small developments in this requirement?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning and provide evidence to support this.	

Question 47

Do you agree that the Pulse test should be introduced into statutory guidance as an alternative airtightness testing method alongside the blower door test?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning.	

Question 48

Do you think that the proposed design airtightness range of between 1.5m ³ /m ² .h and the maximum allowable airtightness value in Approved Document L Volume 1 is appropriate for the introduction of the Pulse test?	
a. Yes	
b. No	
c. Unsure	
If no, please explain your reasoning and provide evidence to support this.	

Question 49

Do you agree that we should adopt an independent approved airtightness testing methodology?	
a. Yes	
b. No	
c. Unsure	
Please explain your reasoning.	

Question 50

Do you agree with the content of the CIBSE draft methodology?	
Please make any comments here.	

Question 51

Do you agree with the introduction of guidance for Build Quality in the Approved Document becoming part of the reasonable provision for compliance with the minimum standards of Part L?

a. Yes

b. No

c. Unsure

Please explain your reasoning and provide evidence to support this.

Yes, but the guidance itself must be correct, and verifiable as leading to sound construction quality and building performance, in line with the minimum standards. Any step towards eliminating the performance gap is welcome, and this will help mitigate the removal of approved details, if so decided upon.

Question 52

Do you have any comments on the Build Quality guidance in Annex C?

Please make any comments here.

No. All aspects are based on good workmanship to produce a quality dwelling.

Question 53

Do you agree with the introduction of a standardised compliance report, the Building Regulations Wales Part L (BRWL) report, as presented in Annex D?

a. Yes

b. No – there is no need for a standardised compliance report

c. No – I agree there should be a standardised compliance report, but do not agree with the draft in Annex D

d. Unsure

If no, please explain your reasoning.

We agree there should be a standardized compliance report but do not agree with the draft in Annex D.
The numerical values of the report will only have meaning for the compliance personnel. They will have no meaning for a householder unless there is a range of values that the actual figure must sit between. Other information provided in the BRWL appears OK.

Question 54

Do you agree with the introduction of photographic evidence as a requirement for producing the as-built energy assessment for new dwellings?

a. Yes

b. No

c. Unsure

If no, please explain your reasoning.

The geotagging will only identify dwellings on the same site but some mechanism has to be available to confirm that the picture attached to the BRWL is from the dwelling it is reported to be of. What is stopping a generic photograph being churned out for each dwelling's report?

Question 55

Do you agree with the proposal to require the signed standardised compliance report (BRWL) and the supporting photographic evidence to be provided to Building Control?

a. **Yes**

b. No

c. Unsure

Please explain your reasoning.

Yes; however, this must not be seen by building control as a way of avoiding carrying out the physical onsite inspections during the course of the construction stage.

Question 56

Do you agree with the proposal to provide the homeowner with the signed standardised compliance report (BRWL) and photographic evidence?

a. **Yes**

b. No

c. Unsure

Please explain your reasoning.

Yes, provided the issues raised above are dealt with.

Question 57

Do you agree with the proposal to specify the version of Part L that the home is built to on the EPC?

a. **Yes**

b. No

c. Unsure

Please explain your reasoning.

Question 58

Do you agree Approved Document L should provide a set format for a home energy guide in order to inform homeowners how to efficiently operate their dwelling?

a. Yes

b. **No**

c. Unsure	
If yes, please provide your views on what should be included in the guide.	
<p>We understand the intention behind a guide, however we don't believe the guide will be able to match the diverse range of product and control types that will be installed in homes. Instead it should point homeowners to the relevant instruction and user guides that should be provided to the homeowners once they have bought the property. This will also ensure that innovations in technology don't date the user guide.</p> <p>On a practical note, having been involved in drafting these types of documents in the past, once all stakeholders have had their say the guide becomes far too generic to be of much use anyway, or too divisive.</p>	

Question 59

Do you agree that the transitional arrangements for the energy efficiency changes in 2020 should not apply to individual buildings where work has not started within a reasonable period – resulting in those buildings having to be built to the new energy efficiency standard?	
a. Yes – where building work has commenced on an individual building within a reasonable period, the transitional arrangements should apply to that building, but not to the buildings on which building work has not commenced	
b. No – the transitional arrangements should continue to apply to all building work on a development, irrespective of whether or not building work has commenced on individual buildings	
c. Unsure	
If yes, please suggest a suitable length of time for the reasonable period in which building work should have started.	
If no, please explain your reasoning and provide evidence to support this.	

Question 60

Do you foresee any issues that may arise from the proposed 2020 transitional arrangements outlined in this consultation?	
a. Yes	
b. No	
c. Unsure	
Please explain your reasoning and provide evidence to support this.	
Due to the lack of detail on how the transitional arrangements will work in practice it is	

hard to be confident there won't be problems.

Question 61

Overall, do you think the assessment of the impact on development is broadly fair and reasonable?

a. Yes

b. **No**

c. Unsure

Please justify your view and provide alternative evidence if necessary.

The Impact Assessment costs are too generic and are not detailed enough to make a fair appraisal. We would urge the Welsh Government to provide a more detailed data sheet on all costing assumptions to allow industry to assess the actual impact of the proposed measures. For example, there are a number of claims on overall costs for options but little granular detail on the differences between the costs. It is also unclear where the boundary for the costs ends. So will costs to upgrade electricity sub stations and associated cables be included in the impact assessment.

Question 62

The Impact Assessment makes a number of assumptions on fabric/services/renewables costs, new build rates, phase-in rates, learning rates, etc for new homes. Do you think these assumptions are fair and reasonable?

a. Yes

b. **No**

c. Unsure

Please explain your reasoning and provide evidence to support this.

The Impact Assessment costs are too generic and are not detailed enough to make a fair appraisal. The Welsh Government need to provide great costing details. This will be especially important for the 2025 targets.

Question 63

Overall, do you think the impact assessment is a fair and reasonable assessment of the potential costs and benefits of the proposed options for new homes?

a. Yes

b. **No**

c. Unsure

If no, please explain your reasoning and provide evidence to support this.

See answers above

Question 64

Do you consider that it is reasonable for a 75% reduction of the combined cost of radiators and associated heating distribution pipework associated with reducing the space heating load to around 15kWh/m²/year in SAP?

a. Yes

b. No

c. **Unsure**

If either yes or no, please explain your reasoning and provide evidence to support this.

It is possible to reduce costs of radiators by around 75% because much smaller radiators are required. However, we do not believe this would have an impact on associated pipework and those costs would remain similar to homes built today.

Question 65

We would like to know your views on the effects that the proposals would have on the Welsh language, specifically on opportunities for people to use Welsh and on treating the Welsh language no less favourably than English.

What effects do you think there would be? How could positive effects be increased, or negative effects be mitigated?

Question 66

Please also explain how you believe the proposals could be formulated or changed so as to have positive effects or increased positive effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language, and no adverse effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language.

Responses to consultations are likely to be made public, on the internet or in a report. If you would prefer your response to remain anonymous, please tick **here**