Draft Future Buildings Standard Consultation Response

Question 1): Our aim is that buildings constructed to the Future Buildings Standard will be capable of becoming carbon neutral over time as the electricity grid and heat networks decarbonise. Do you agree that the outline of the Future Buildings Standard in this chapter meets this aim?
Yes ***No***
Please explain your reasoning and provide supporting evidence or alternative suggestions.

The REA are supportive of the proposed Future Building Standard (FBS), recognising it provides a route to enabling buildings to become carbon neutral over time as the grid networks decarbonise. However, the REA stress that the future building standards must also enable non-grid solutions to be installed. While electrification and gas grid decarbonisation will be crucial to meeting a high proportion of future building energy needs, non-grid solutions, such as the use of biomass heat, biofuels or anaerobic digestion, will also be important within specific circumstances, especially where high heat loads maybe required or other limiting factors are present. The use of the right technology for the right situation must not be restricted by the introduction of the Future Building Standard.

Equally we encourage the Future building Standard to go further and fully consider full building energy systems, enabling integration between energy efficiency, onsite energy generation, electric and thermal energy storage, futures requirements for electric vehicle charging, management of waste and import of energy from decarbonised grid systems. As such, in addition to seeing energy efficiency and passive energy demand methods maximised at the outset of building design, the FBS should also implement:

1. Mandate Solar PV as a minimum standard where practical to do so. Solar PV systems should also be installed in such a way as to enable them to be used in future alongside other technologies. The installation guidance should be designed to prevent poor installation that would be inhibitive to the installation of other complementary technologies, further down the line.
2. Ensure all new buildings, especially with car parks, have smart electric Vehicle charge points installed.
3. Energy Storage (both electric and thermal) should be considered for all new buildings or developments within energy system designs.
4. All buildings should have three-phase electricity supplies in order to help facilitate electrification of both heat and transport requirements.
5. Both SAP and SBEM should be reviewed to ensure renewables and other clean technologies are appropriately scored and incentivised.
6. Renewable heat systems to be standard in all new developments, with the right technology being installed to meet the specific energy needs of that development.
7. Consider building waste management and collection systems, enabling building users to easily separate and store waste in defined areas, while making it easy for local authorities to conduct efficient collection services.

Question 2): We believe that developers will typically deploy heat pumps and heat networks to deliver the low carbon heating requirement of the Future Buildings Standard where practical. What are your views on this and in what circumstances should other low carbon technologies, such as direct electric heating or hydrogen, be used?

The FBS requires a multi-technology approach. As identified within the consultation, electrification will be of strategic importance to decarbonise heat in most situations, but it will not be the only solution given the heterogeneity of dwellings, the infrastructure they rely upon (water, energy, transport, internet) and the diverse needs and behaviours of property owners and users. As such, the FBS must prioritise the best technology for each situation, developing a resilient policy approach that recognises there is no 'one size fits all solution'.

The FBS will need to enable building developers to consider a wide variety of factors including, but not limited to:

- levels of energy efficiency,
- energy usage activities within the building (including process heat),
- local infrastructure for that heat source (including power and gas grid and feedstock availability),
- Ability to supply a renewable power supply, either imported from the grid or via on-site generation.
- Ability to store either electrical or thermal energy.
- Further electricity demands being placed on the building, including EV charging.
- the level of carbon savings provided by different solutions,

key technologies expected to play a role in heat decarbonisation Include:

Heat pumps–The electrification of heat is expected to play a prominent role in new builds, especially in high energy-efficient properties. Heat pumps are very well suited to residential apartments and commercial buildings in cities or towns due to their small internal and external space requirements. They may also play an important role in energy-efficient off-gas grid properties. Consideration will, however, need to be given to the increased electricity demand on some localised grid infrastructure, especially when combined with an increasing number of electric vehicles.

Biomass –a versatile alternative particularly suited to contexts where a high heat load is required and/or where levels of energy efficiency are low, typically in off-gas grid rural areas and certain on-grid urban areas. There is also potential in buildings with larger residential or commercial sites, such as schools, hospitals, and offices or in powering heat networks. Utilising biomass is also particularly efficient where there are significant capacity or grid connection cost constraints. Industrial process heating will also be needed to be considered in the FBS, where biomass can provide an immediate solution for decarbonising commercial heat use. As biomass is already the largest current contributor to non-domestic renewable heat it must not be ignored within the FBS.

On-site biogas/biomethane - Renewable heat generated from the combustion of biogas or biomethane produced from anaerobic digestion or thermal gasification can also replace the fossil fuel heat required for non-domestic buildings such as farm or food manufacturing buildings, warehouse, commercial dwellings or heat networks, whilst delivering numerous additional environmental and agronomic benefits. There is an opportunity in these sorts of projects in the agricultural and food manufacturing sector where they create added value. This route can be pursued as an option where there is a workable feedstock supply.

Directly piped biomethane - 'Private-pipe'/direct connection of biomethane projects to buildings where the gases supplied are 100% clean biomethane should also be an option. An appropriate tracking methodology must be adopted to ensure each unit of green gas can be tracked from its point of injection to the point of sale to a customer. Guarantees of Origin (GoO) provide tracking, for example through a mass balance or a book a claim methodology.

Hybrid systems - green gases or renewable heating fuels combined with heat pumps also allow for the installation of lower powered heat pumps in localities where there are constraints on the electricity network (where grid connection costs prove to be high) and switching to green gas when electricity prices are high.

Hydrogen - Hydrogen has a role to play in decarbonising heat, though should target dwellings and buildings where electrification or already established bioenergy options are not possible or cost-effective. Hydrogen should only be supported if the production pathway is sustainable, such as produced from electrolysis powered by renewables sources and biohydrogen. We also recognise that Blue Hydrogen may have a role but only where carbon capture and storage is used. Under this scenario, it is also important that an appropriate tracking methodology is adopted to ensure each unit of green gas can be tracked from its point of injection to the point of its sale to a customer. Guarantees of Origin (GoO) provide tracking, for example through a mass balance or a book a claim methodology.

Direct electric heating - A building developer may consider direct electric heating where overall heat demand is so low that the cost of installation of an alternative renewable heat system would be prohibitive compared to demand and resulting bills.

Biopropane - Biopropane (sold as bioLPG) is already available in the GB market and, like biomass provides an alternative where electrification isn't possible. Biopropane is chemically identical to conventional propane (LPG) so can be blended in any ratio with conventional LPG, allowing a smooth transition to a 100% renewable product. The UK's liquid gas industry has committed to a 2040 100% renewable target.

Deep Geothermal - Deep Geothermal provides baseload dispatchable green heat perfectly suited to powering renewable heat networks, as it does in the Paris basin region which has over 40 geothermal plants feeding district heating networks. Future building standards should recognise the potential for deep geothermal heat in powering heat networks.

Solar thermal - Solar Thermal provides baseload water heating which may be most suited to domestic or commercial settings with high energy efficiency levels, or low heating requirements.

Heat Batteries – provide thermal energy storage for industrial & commercial buildings, social housing and private homes. They can be charged off the grid or used in conjunction with technologies green heat technologies, to prevent heat loss and enable heat to be saved, stored and reused. These can help to minimise peak energy usage, reduce demand charges and generate new revenue streams from DSR programmes.

Grid delivery of biomethane - Sourcing green gas from the grid should also be included as an option where other solutions are not viable. An appropriate tracking methodology will need to be adopted. Guarantees of Origin (GoO) provide tracking, for example through a mass balance or a book a claim methodology.

Question 3): Do you agree that some non-domestic building types are more suitable for low carbon heating and hot water, and that some non-domestic building types are more challenging?

Yes No

If you answered no, please explain your reasoning.

As expressed in answer to question two, the REA highlight that there are many factors, beyond just total energy consumption, that could mean that some non-domestic buildings are more challenging. The FBS needs to be able to consider all these factors and enable developers to install the right technology in the right situation.

Question 4): Do you agree with the allocation of building types to space and water heating demand types, as presented in Table 2.1 of this consultation document?

Yes No

If you answered no, please explain your reasoning, including how different building types should be allocated.

The REA generally agree with the proposed allocation of building types, although warn that the FBS should avoid being overly prescriptive within definitions to avoid creating market signals that drive undesirable developments due to one building type being perceived as easier to develop in line with the standards than another. The building types should be used to help determine the best technology for the specific development.

Question 5: We would like to introduce the Future Buildings Standard for all buildings as quickly as possible. When do you think the Future Buildings Standard should introduce low carbon space heating for buildings with Type 1 or Type 2 demand (buildings that have space heating demand more suitable for heat pumps)?

2025 – our proposed date
Another date (please specify)

Please explain your reasoning.

The REA believe 2025 is reasonable but this must be accompanied by Government policy and industry commitment to developing skills availability around energy-efficient and renewable heat system design and installation, along with policies to help drive down the development cost of net-zero buildings. This will help to transition the building sector to the new requirements. A lack of market preparedness for the implementation of the FBS in 2025 cannot be used as an excuse to later water down, or scrap, the new standards - as was the case with the Zero Carbon Homes Standard in the past.

Government must also recognise that renewable heat industries that have already been established must also be maintained in time for the new standard to come in, in order that supply chains, skills and businesses are able to continue to grow. The end of the Non-Domestic RHI on the 31st March 2021, sees the opening up of a substantial policy gap that will see these renewable heat sectors contract just as the sector needs to be building up to meet the demands of the FBS coming into force. Meeting the 2025 date is dependent on this non-domestic heat decarbonisation policy gap being addressed as soon as possible.

Question 6): We would like to introduce the Future Buildings Standard for all buildings as quickly as possible. When do you think the Future Buildings Standard should introduce low carbon space heating for buildings with Type 3 demand (buildings that have space heating demand less suitable for heat pumps)?

2025

Another date (please specify)

Please explain your reasoning.

The REA believe 2025 is reasonable, but this must be accompanied by Government policy and industry commitment to developing skills availability around energy-efficient and renewable heat system design and installation, along with policies to help drive down the development cost of net-zero buildings. This will help to transition the building sector to the new requirements. A lack of market preparedness for the implementation of the FBS in 2025 can not be used as an excuse to later water down, or scrap, the new standards - as was the case with the Zero Carbon Homes Standard in the past.

Question 7): We would like to introduce the Future Buildings Standard for all buildings as quickly as possible. When do you think the Future Buildings Standard should introduce low carbon water heating for buildings with Type 1 or Type 3 demand (buildings that have water heating demand more suitable for point-of-use heaters or heat pumps)?

2025 – our proposed date
Another date (please specify)

Please explain your reasoning.

The REA believe 2025 is reasonable, but this must be accompanied by Government policy and industry commitment to developing skills availability around energy-efficient and renewable heat system design and installation, along with policies to help drive down the development cost of net-zero buildings. This will help to transition the building sector to the new requirements. A lack of market preparedness for the implementation of the FBS in 2025 cannot be used as an excuse to later water down, or scrap, the new standards - as was the case with the Zero Carbon Homes Standard in the past.

Question 8): We would like to introduce the Future Buildings Standard for all buildings as quickly as possible. When do you think the Future Buildings Standard should introduce low carbon water heating for buildings with Type 2 demand (buildings that have water heating demand less suitable for point-of-use heaters or heat pumps)?

2025
Another date (please specify)

Please explain your reasoning.

The REA believe 2025 is reasonable, but this must be accompanied by Government policy and industry commitment to developing skills availability around energy-efficient and renewable heat system design and installation, along with policies to help drive down the development cost of net-zero buildings. This will help to transition the building sector to the new requirements. A lack of market preparedness for the implementation of the FBS in 2025 cannot be used as an excuse to later water down, or scrap, the new standards - as was the case with the Zero Carbon Homes Standard in the past.

Question 9): We would welcome any further suggestions, beyond those provided in this consultation, for improving the modelling process; Part L and Part F compliance; and the actual energy performance of non-domestic buildings. Please provide related evidence.

Member feedback welcome

Question 10): What level of uplift to the energy efficiency standards for non-domestic buildings in the Building Regulations should be introduced in 2021?
Option 1 – average 22% CO2 reduction
Option 2 – average 27% CO2 reduction (this is the Government's preferred option)
No change
Other level of uplift (please specify)

Please explain your reasoning and provide supporting evidence or alternative suggestions where applicable.

A 27% uplift in 2021 is acceptable, although we encourage the government to be as ambitious as possible. This uplift will send a strong market signal for ratcheting up standards and further increases should be proposed in the following consecutive years, providing a clear route to full FBS delivery in 2025.

Question 11): Do you agree with the way that we are proposing to apply primary energy as the principal performance metric?

Yes ***No***

With the UK having moved towards a target of net-zero Greenhouse Gas Emission by 2050, carbon emissions should now be the principal performance metric of all buildings. This is to allow for buildings where reducing primary energy consumption may prove expensive, to take a lower-cost alternative to reduce their carbon emissions by offsetting the energy consumption through on-site low carbon generation.

Primary energy does not take account of how the energy used is produced, which means that using primary energy as the principal metric instead of an opportunity to incentivise the greater deployment of onsite renewables and flexibility would be lost. This issue was previously raised in REA's response to the Future Homes Standard consultation. Close examination of both CO2 and primary energy assessment is needed to identify whether either will have loopholes.

We understand that the Government states that primary energy demand is being introduced as the principal metric to encourage the greater use of energy-efficient materials in construction. However, the proposals are then inconsistent in placing minimum fabric standards as the lowest priority metric. It would be better for CO2 emissions to be used as the primary metric with energy-efficient materials directly mandated through the FBS requirements.

We wonder whether the primary energy is being introduced due to a perception that CO2 emission measurements are more 'gameable' – however, we believe that any measurement has the potential to itself be manipulated and can see several issues with primary energy. The energy demand of a building is likely to vary significantly in line with seasonal patterns, the time of day, the number of people present on a site at any one time, and the business activities being undertaken.

We also understand that visibility of transmission levels requirements in buildings may have been a factor in choosing to make primary energy the principal metric. However, if this is the case, the Government needs to explain and set out this reasoning. There are questions about how accurate, on a macro level, the figure of transmission level requirements from buildings would be if 'worst case scenario' were used to calculate the requirements level. We also note that there will be times in the future when there are excess levels of energy on the grid and building owners may want to be able to increase demand to take advantage of cheap power or participate in DSR services. For that future, the best thing for the grid is to use CO2 as a metric and thereby encourage the use of technologies that can facilitate the flexible use of energy.

We argue that while primary energy demand data should be measured and stored to help understand the transmission levels requirements and system balancing needs. However, it should not be the principal metric of measuring a building's energy performance. We are also moving towards a system of auditing CO2 emissions of large corporations, so it makes little sense to move away from auditing CO2 emissions in another area of the economy.

Question 12): Do you agree with using CO2 as the secondary performance metric?

Yes **No**

If you answered no, please explain your reasoning.

As stated above, CO2 should be the principal performance metric, not the secondary metric. As we are heading to a Net Zero world and the UK is legally committed to Net Zero by 2050, it would be most consistent with our legal obligations to make carbon emissions the principal metric. Primary energy should be the second performance metric, to help reduce our total energy consumption and reduce strain on the grid. Consideration should also be given to including "flexibility readiness" or "flexibility" as a performance metric, to support lower costs and strain on the grid.

Question 14): Do you agree with the proposals for natural gas being assigned as the heating fuel for any fuels with a worse CO2 emission factor than natural gas?

Yes

No

If you answered no, please explain your reasoning and provide supporting evidence or alternative suggestions.

Yes, with a particular exception for direct-electric heating which is compared to a nominal fuel-oil heat source.

Question 15): Do you agree with our proposal of using a hybrid electric/heat pump heating system in the notional building when electricity is specified as a heating fuel?

Yes No

If you answered no, please explain your reasoning and provide supporting evidence or alternative suggestions.

Yes, but heat batteries should also be considered.

Question 20): We would welcome any further suggestions for revising the outputs from SBEM, which would enable easier checking by building control on building completion. Please provide related evidence.

SBEM should be reviewed to ensure low carbon systems are appropriately recognised and rewarded within the calculation for non-domestic buildings, with the link between carbon emissions and energy use being made stronger in SBEM results. The REA welcomes the Government's proposals to emulate the Australian NABERS scheme within their consultation on introducing a performance-based policy framework for large commercial and industrial buildings [1]

[1] Introducing a performance-based policy framework in large commercial and industrial buildings, https://www.gov.uk/government/consultations/introducing-a-performance-based-policy-framework-in-large-commercial-and-industrial-buildings

Question 32): Do you agree with the proposals to require building automation and control systems in new non-domestic buildings, when such buildings have a heating or air-conditioning system over 290kW?

Yes
No, a different trigger point should be used
No, I do not agree that building automation and control systems should be required in new buildings
No, I disagree for another reason

If you answered no (b, c or d), please explain your reasoning and provide alternative suggestions. Please also highlight any unintended consequences that may result from setting this standard.

The REA Supports proposals to require building automation and control systems in new non-domestic buildings. This will encourage the installation of well-designed and efficient energy systems linking onsite generation, storage and energy demand, both in relation to heat and power. We do, however, recognise there may be situations where this is not necessary for certain building uses and where it may not be economical or cost-effective to install such systems. The FBS should make clear where such exemptions may apply.

Question 34): Do you agree with the proposals for improving the commissioning guidance for new non-domestic buildings in Section 8 and 9 of draft Approved Document L, volume 2: buildings other than dwellings?

Yes
No, the standards go too far
No, the standards do not go far enough
No, I disagree for another reason

If you answered no (b, c, or d), please explain your reasoning and provide alternative suggestions.

In principle REA agrees, as this will help to ensure that onsite generation is installed appropriately.

Question 35): Do you agree with the proposals for requirements relating to the assessment of overall energy performance of building services installations and providing information to building owners for new non-domestic buildings given in sections 8 and 9 of Approved Document L, volume 2: buildings other than dwellings?

Yes
No

If you answered no, please explain your reasoning.

In principle, REA agrees, as this will help to ensure that onsite generation is installed appropriately. It would require installers to assess and provide information to building owners regarding the energy performance of the installation and the whole system. This could build on a strong industry reputation among consumers.

36. Do you agree with the guidance proposals for adequate sizing and controls of building services systems in new non-domestic buildings, as detailed in Sections 5 and 6 of draft Approved Document L, volume 2: buildings other than dwellings?

a) Yes

b) No, I do not agree with providing guidance on this

c) No, the guidance should be improved

Question 37): Do you agree with the proposal that wet space heating systems in new buildings should be designed to operate with a flow temperature of 55°C or lower?

a) Yes, through a minimum standard set in paragraph 5.9 of the Approved Document L, volume 2: buildings other than dwellings
b) Yes, through carbon and primary energy credit in SBEM
c) Yes, by another means
d) No, the temperature should be below 55°C
e) No, this standard should not be applied to all new buildings
f) No, I disagree for another reason

Please explain your reasoning

While the REA is supportive of seeing new buildings designed to operate with a flow temperature of 55°C where heat pumps are the best option, we raise concern that the building standard has not yet fully considered the wide range of energy uses different buildings may require. A 55°C wet system may well be very suitable for an office building but may not be appropriate in buildings such as warehouses or factory settings where higher heat loads may be required, depending on commercial activities. We are concerned that such a requirement may either drive the utilisation of heat pumps in situations where they may not be the best option or may create a barrier to renewable heat technology deployment as developers are disincentivised by having to design a 55°C wet system that is not appropriate to the building needs. While the current drafting of 5.9 does suggest that there could be circumstances that this requirement would not apply, we believe this needs to be made

clearer. The FBS must be focused on delivering the right technology for the right situation, rather than prioritising the delivery of any one technology.

Question 44): Do you agree with our proposed approach and guidance to mandating self-regulating controls in existing non-domestic buildings, including technical and functional feasibility, as detailed in Sections 5 and 6 of draft Approved Document L, volume buildings other than dwellings?

Yes
No

If you answered no, please explain your reasoning.

Question 47): Do you agree with the proposals that when Building Automation and Control System is installed in an existing non-domestic building with a heating or air-conditioning system over 290 kW, it should meet the same minimum standards as new non-domestic buildings?

Yes
No, a different trigger point should be used
No, a different standard should be used
No, for another reason

If you answered no (b, c or d), please explain your reasoning and provide alternative suggestions.

The REA supports proposals to require building automation and control systems in existing non-domestic buildings. This will encourage the installation of well-designed and efficient energy systems linking onsite generation, storage and energy demand, both in relation to heat and power. We do, however, recognise there may be situations where this is not necessary for certain building uses and where it may not be economical or cost-effective to install such systems. Requirements for building automation and control systems, should not in themselves become a barrier to the installation of carbon saving and energy-efficient systems. The FBS should make clear where such exemptions may apply.

Question 48): Do you agree with the proposals for requirements relating to the assessment of overall energy performance of building services installations and providing information to building owners for existing non-domestic buildings?

Yes
No, I do not agree with providing this guidance
No, the guidance should be improved

If you answered no (b or c), please explain your reasoning, including any further suggestions.

REA is broadly supportive of this, which would require installers to assess and provide information to building owners regarding the energy performance of the installation and whole system. As noted above, this might help to reduce the impact of (rare) poor installations on industry reputation with consumers and to ensure the systems installed can maximise the carbon reduction benefits potential with these technologies.

Question 49): Do you agree with the guidance proposals for adequate sizing and controls of building services systems in existing non-domestic buildings, as detailed in Sections 5 and 6 of draft Approved Document L, volume 2: buildings other than dwellings?

Yes
No, do not agree with providing this guidance
No, the guidance should be improved

If you answered no (b or c), please explain your reasoning.

This seems appropriate, given that it stipulates replacement systems should not be smaller than the old systems, barring exceptional circumstances.

Question 50): Do you agree with the proposal that when whole wet space heating systems (i.e. boiler and radiators) are replaced in existing non-domestic buildings the replacement system should be designed to operate with a flow temperature of 55°C or lower?

Yes, through a minimum standard set in paragraph 5.9 of Approved Document L, volume 2: buildings other than dwellings
Yes, through carbon and primary energy credit in SBEM
Yes, by another means
No, the temperature should be below 55°C
No, this standard should not be applied to all existing buildings
No, I disagree for another reason

Please explain your reasoning.

While the REA is supportive of seeing existing buildings designed to operate with a flow temperature of 55°C where heat pumps are the best option, we raise concern that the building standard does not fully consider the wider range of energy uses different buildings may require. A 55°C wet system may well be very suitable for an office building but may not be appropriate in buildings such as warehouses or factory settings where higher heat loads may be required, depending on commercial activities. We are concerned that such a requirement may either drive the utilisation of heat pumps in situations where they may not be the best option or may create a barrier to renewable heat technology deployment as developers are disincentivised by having to design a 55°C wet system that is not appropriate to the building needs. While the current drafting of 5.9 does suggest that there could be circumstances that this requirement would not apply, we believe this needs to be made clearer. The FBS must be focused on delivering the right technology for the right situation, rather than prioritising the delivery of any one technology.

Q61) Do you agree with the proposals for transitional arrangements for buildings other than dwellings?

Yes No

If you answered no, please explain your reasoning and provide alternative suggestions.

We support the transitional arrangements proposed for introducing the standards. It would be useful for construction to have a consistent approach with the Future Homes Standard in regards to transitional arrangements.

Question 114): Do you agree with our proposed approach to mandating self-regulating controls in existing domestic buildings, including technical and economic feasibility, as detailed in Sections 5 and 6 of draft Approved Document L, volume 1: dwellings?

Yes No

If you answered no, please explain your reasoning.

Question 115): Do you agree with the proposed specifications for building automation and control systems installed in a new or existing home, as detailed in Section 6 of draft Approved Document L, volume 1: dwellings?

Yes No

If you answered no, please explain your reasoning

The REA supports proposals to require building automation and control systems in existing domestic buildings. This will encourage the installation of well-designed and efficient energy systems linking onsite generation, storage and energy demand, both in relation to heat and power. However, especially in relation to domestic buildings, this should only be a requirement where cost-effective to do so. Requirements for building automation and control systems, should not in themselves become a barrier to the retrofitting of energy-efficient or renewable heating systems to see carbon reductions. The FBS should make clear where such exemptions may apply.

Question 116): Do you agree with the proposals for extending commissioning requirements to Building Automation and Control Systems and on-site electricity generation systems, as detailed in Sections 8 and 9 of draft Approved Document L, volume 1: dwellings?

Yes No

If you answered no, please explain your reasoning.

Question 117): Do you agree with the proposals for requirements relating to the assessment of overall energy performance of building services installations and providing information to homeowners, as detailed in Sections 8 and 9 of draft Approved Document L, volume dwellings?

Yes
No, I do not agree with providing this guidance
No, the guidance should be improved

If you answered no (b or c), please explain your reasoning.

Question 119): Do you agree with the guidance proposals for adequate sizing and controls of building services systems in domestic buildings, as detailed in Sections 5 and 6 of draft Approved Document L, volume dwellings?

Yes
No, I do not agree with providing this guidance
No, the guidance should be improved

If you answered no (b or c), please explain your reasoning.

Question 120): Do you agree with the guidance proposals on sizing a system to run at 55°C when a whole heating system is replaced, as detailed in Section 5 of draft Approved Document L, volume 1: dwellings?

Yes
No, I do not agree with providing this guidance
No, the guidance should be improved

While the REA is supportive of seeing existing buildings designed to operate with a flow temperature of 55°C where heat pumps are the best option, we raise concern that the building standard does not yet fully consider the wide range of energy uses different buildings may require. A 55°C wet system may well be very suitable for an office building but may not be appropriate in buildings such as warehouses or factory settings where higher heat loads may be required, depending on commercial activities. We are concerned that such a requirement may either drive the utilisation of heat pumps in situations where they may not be the best option or may create a barrier to renewable heat technology deployment as developers are disincentivised by having to design a 55°C wet system that is not appropriate to the building needs. While the current drafting of 5.9 does suggest that there could be circumstances that this requirement would not apply, we believe this needs to be made clearer. The FBS must be focused on delivering the right technology for the right situation, rather than prioritising the delivery of any one technology.
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