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| Title of Report: | Discussion document and Pre-Consultation on a review of energy efficiency requirements and related areas of Building Regulations |
| Committee Report Submitted To: | Environmental Services Committee |
| Date of Meeting: | 12th December 2023 |
| For Decision or For Information | For Decision |
| To be discussed In Committee | No |

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| Linkage to Council Strategy (2021-25) | |
| Strategic Theme | Resilient, Healthy and Engaged Communities |
| Outcome | Provide a consultation response |
| Lead Officer | Head of Health & Built Environment |

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| Budgetary Considerations | |
| Cost of Proposal | N/A |
| Included in Current Year Estimates | N/A |
| Capital/Revenue | N/A |
| Code | N/A |
| Staffing Costs | N/A |

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|----------------------------------|-----------|
| Legal Considerations | |
| Input of Legal Services Required | No |
| Legal Opinion Obtained | No |

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|--|--|---------------|-------|
| Screening Requirements | Required for new or revised Policies, Plans, Strategies or Service Delivery Proposals. | | |
| Section 75 Screening | Screening Completed: | Yes/No N/A | Date: |
| | EQIA Required and Completed: | Yes/No N/A | Date: |
| Rural Needs Assessment (RNA) | Screening Completed | Yes/No N/A | Date: |
| | RNA Required and Completed: | Yes/No N/A | Date: |
| Data Protection Impact Assessment (DPIA) | Screening Completed: | Yes/No N/A | Date: |
| | DPIA Required and Completed: | Yes/No N/A | Date: |

1.0 Purpose of Report

1.1 The purpose of this report is to provide a Causeway Coast and Glens Borough Council response to the discussion document and pre-consultation.

2.0 Background

2.1 15% of Northern Ireland's greenhouse gas emissions stem from buildings, with 13% from our homes and residential buildings. Building Regulations set minimum, baseline performance requirements when building work is being carried out and when some specific material change of use cases occur. Other legislation and policies are used to incentivise, or require, retrofit of the existing housing stock, or to set additional requirements.

2.2 This Discussion Document and Pre-consultation considers the way forward for energy efficiency and related aspects of the Building Regulations in the coming years. The Executive's Energy Strategy - Path to Net Zero Energy (December 2021) and associated Action Plans included a commitment to an interim uplift through revised technical guidance, which took effect in June 2022. That strategy also seeks to ensure new buildings are designed and constructed to net zero ready standards from no later than 2026/27.

2.3 This discussion document represents the next step and seeks information and evidence on a range of technical issues to help inform subsequent uplifts. It covers a range of building regulations technical areas including:

- Part F- Conservation of fuel and power
- Part K- Ventilation
- a new Part on mitigation of overheating in dwellings; and
- a new Part on potential electric vehicle infrastructure requirements

2.4 The package of consultation documents which outline fully the proposed amendments can be found at the link below:

<https://www.finance-ni.gov.uk/consultations/review-energy-efficiency-building-regulations>

2.5 Attached as Appendix 1 is a suggested response to the consultation.

2.6 The closing date for submission of responses to the Department of Finance is 15th December 2023.

3.0 Recommendation

It is recommended that the Environmental Services Committee recommends Council endorses this response and approves submission by the closing date pending Council approval.

Review of energy efficiency requirements and related areas of Building Regulations Consultation Response

Section 2A: Background- legislative considerations and policy contexts

Question 2A.1

Do you agree that coming into force considerations would be best addressed through review of Article 19 of the Order, rather than by transitional provisions of any amendment to Part F?

This is best dealt with through a Review of Article 19.

As part of this review consideration should also be given to the introduction of –

1. No commencement before Approval &
2. No occupation before a completion certificate has been issued.

Question 2A.2

Do the current arrangements here, with up to three-year phasing in period, support an argument for a more ambitious uplift, as it provides scope for processes to be developed and training to take place?

From a Building Control perspective, it is not felt that the 3 year phasing in period is relevant as an application received in the 1st six months of changes may commence immediately so building control staff are in the position they have to be up to speed with the changes immediately and it is felt that this is why the publication 6 months prior to coming into operation is more important.

If it is felt that a more ambitious uplift is to be proposed then all stake holders i.e., network providers, utility regulators, product suppliers, installers, education authorities all need to be confident that the skills, knowledge, infrastructure etc. is there to support this uplift.

Ambitious targets clearly mean there is/will be a need for training across the industry, including local Council Building Control. The industry needs to find a method of training the small / medium sized enterprises which make up so much of the local construction industry. This should not be left to the enforcement body (Local Council Building Control) to carry out at the point of construction.

It is our view that a rigorous advertising and marketing campaign of the changes by the department for industry prior to the changes being implemented is essential. This should also be supplemented with training for local Council Building Control staff. It would then be up to individual councils, based on their readiness to implement the changes, a suitable few months of a phasing in period if considered necessary.

Question 2A.3

What do you consider should be the maximum time permissible for previously approved applications to commence on site after the introduction of the new standards?

As there is potentially 2 years between this and future changes reducing the 3-year period for previously approved applications to 2 years may be better.

Article 19 of the order states "works to which the plans relate have not been commenced within three years from the deposit of the plans". The wording of the order states the council "may" by notice declare the plans of no effect. Consideration should be given to the automatic expiry of the application after a specified time from initial deposit of the application whether it has been approved or rejected.

Question 2A.4

Do you have a view on any specific regulations or definitions which would benefit from reform, with a view to simplifying or clarifying Part F regulations²⁵ ? If so, please provide details.

1. Review of Regulation 38 and in particular the definition of a stand-alone building in Regulation 38(5).

Eg. You could have 2 identical buildings one of which is heated and the other not, and these buildings could get a similar size extension which Regulation 40 may apply to.

Building 1- heated (Reg. 38(3) (b) floor area greater than 100m² but extension not greater than 25% of the useful floor area of the existing building – so Regulation 40 is not applicable.

Building 2 unheated with the same floor area, but if you take the definition for a building in the European Directive - a building is "a roofed construction having walls, for which energy is used to condition the indoor climate". So as the existing building is not heated the extension may be classed as a stand-alone building meaning Regulation 40 does apply.

2. Review of Regulation 41 "Consequential Improvements" would also be beneficial see comments in latter section of consultation.
3. It is agreed that 'Places of worship' – should lose their exemption with regards Part F.

Section 2B: Background (developments elsewhere)

Question 2B.1

Have you modelling information directly comparing the compliant or 'notional' buildings across administrations, ideally using an up to date and consistent methodology for comparative analysis purposes (e.g. SAP 10)? If so, please provide a link or information on how to access this.

Building Control have no information on this.

Question 2B.2

Are there any additional local characteristics or issues around our local industry that the Department should be mindful of as we take forward proposals?

The dispersion of rural dwellings in NI (a high proportion of rural dwellings) would appear to be an issue in relation to the provision of any 'mains' type of energy supply. Consideration should be given to the increased costs to existing dwelling if the regulations lead to rising traditional fuel costs.

The lack of gas networks and NIE grid capacity to rural areas may mean that the impact on these areas is very significantly disproportionate to urban areas.

There may also be a negative impact by the lack of grid connections on the smaller builders who mainly work in the rural areas.

Lack of apprentices coming through local training centres. Specific apprenticeship schemes may need to be considered by industry.

Age profile of existing Building Control staff. Loss of skill set and likelihood of many staff retiring prior to implementation.

Implementation of new regulations likely to coincide with local changes to Building Control following the implementation of the Hackett report findings.

Question 2B.3

Do you agree with the proposed timing of uplifts planned for 2023/24 (Phase 3) and 2026/27 (Phase 4), which are intended to follow developments in England by 18-24 months in each case?

Has any consultation taken place with industry/network providers to see if the skills, technology and network capacity is readily available.

Section 3: Pre-consultation Phase 3 proposals for dwellings

Question 3.1

The Department's programme of proposals seeks to implement a 'Phase 3' uplift here in 2023 (likely now to be in 2024) to reflect the changes above. Do you agree that this is appropriate that this should cover the extent of issues above?

Council would be supportive of these uplifts but caveat that support with concern that it needs to be done in a cohesive manner with other stake holders (see Q 2A.2) which is outside the control of Building Regulations.

Section 3A: Part F (Conservation of fuel and power) proposals for new dwellings, Phase 3 (27 Questions)

Question 3A.1

Do you agree that a new primary energy metric and TPER targets should be introduced?

Yes, this needs to be introduced as it makes it more measurable especially with the decarbonisation of the electricity grid.

This should be accompanied with a training regime in advance of implementation for Building Control professionals.

Question 3A.2

Are you content that a FEES metric and targets should be introduced in line with the assessment in England?

Yes, as the retention of the limiting u-value in line with RoI would have an impact on the SAP software.

Question 3A.3

Could you provide a specification that house builders are actually adopting in practice in order to be compliant with England's current requirements? Please provide details and commentary or explanation.

We have no comment on this particular issue as we are not aware of any specifications available. It is not up to enforcement departments to provide specifications.

Question 3A.4

Do you think the proposed Notional Dwelling fabric is suitable for Option 1 and Option 2's proposals?

The notional building fabric applies equally to Options 1 and 2 but may be more beneficial to Option 2 given the use of Heat pumps as there is a significant reliance on the fabric u-values for option 2.

Question 3A.5

Would you agree with replication of England's limiting U-values? We would be grateful for any evidence or reasoning if you think these should remain in line with the Republic of Ireland or be otherwise different.

Agree with the replication of England's Limiting U-values.

With some councils, Building Control applications are often received by agents from ROI. An all-Island approach may therefore be considered useful.

Question 3A.6

Do you agree that the Department should not introduce a cost (SAP rating) metric assessment?

Agree that this should not be introduced as the cost assessment is based on a neutral UK location which would mean that the outputs would not be accurate.

Question 3A.7

Do you agree that a delivered energy or energy use intensity metric is not needed as part of the Phase 3 uplift?

Agreed based on the reasoning given in consultation documentation.

Question 3A.8

Do you agree that a renewable energy ratio assessment is not needed as part of the Phase 3 uplift?

Agreed based on the reasoning given in consultation documentation.

Question 3A.9

Have you any comment to make on the metrics the Department is proposing to adopt for Phase 3?

No Comments.

Question 3A.10

Have you any opinion or evidence to support limiting the extent of variance for any individual dwelling when using a whole-block average performance to demonstrate compliance with TER, TPER or TFEF assessments?

No Comments.

Question 3A.11

Do you agree that the changes to the airtightness testing regime should include the measures introduced in England, but provide for a lower maximum permissible air permeability level than $8.0 \text{ m}^3/(\text{h}\cdot\text{m}^2)$ @ 50 Pa? If so, what should the maximum permissible level be?

It is felt following the evidence that lowering the maximum permissible level to $5.0 \text{ m}^3/(\text{h}\cdot\text{m}^2)$ would only impact on 9.5% of dwellings. This would have a reasonable impact on industry and there should be a minimal effect on Building Control from an enforcement perspective.

Building Control also welcome the introduction of testing to every dwelling as this will get a fair representation of what is being built and therefore closing the performance gap.

Question 3A.12

Do you agree that all current fuel factors in TBF1 should be removed, so that targets (TER) are no longer relaxed where higher carbon fuels are used?

No, it is felt that this is a decision that cannot be properly determined until a more comprehensive Rural Needs Impact Assessment is completed, as there is a lack of a gas network and limitations with NIE grid capacity to rural areas. In the absence of a comprehensive Rural Needs Impact Assessment the retention of emission fuel factors for areas with no access to the gas grid in the next uplift may be better. The issue with this will be how often it is reviewed and updated as the gas network expands.

Question 3A.13

Are you content with the likely outcomes for biofuels under Option 1 and the proposed Primary Energy metric? If not, how should the regime be less, or more, permissive towards biofuels?

There should be more work around splitting the metrics in relation to Biofuels to see what additional measures would be required to fulfil compliance with Option 1 if you are using Biofuels.

Biofuels derived from waste have many advantages and should be encouraged. Biofuels derived from raw materials are counter intuitive and may need to be reduced. Clearly this can relate to what is put into a bio digester, rather than that technology.

Question 3A.14

Have you any evidence or concern around the extent of renewable generating technology expected under either Option 1 or 2?

No evidence but would have concerns around the onerous impacts of providing renewable technologies under Option 1 where it is not possible to provide an export connection. Building Control would also have concerns of how the provision of renewable technologies is comprehensively assessed across other agencies.

There may also be a conflict with planning in conservation areas, so consideration would also need to be given with planning legislation.

If PV panels are proposed then they must be proven to be cost effective over the annual cycle of the building. E.g., fitting to South facing elevations.

Question 3A.15

Have you any comment on the proposed revised treatment of non-export connections?

The new SAP 10 software gives you the option to make an assessment of how much electricity is being exported under a beta factor, so if it is the case that no electricity is being exported then it should be accounted for in the design stage.

It is essential that applicants have early engagement with NIE with regards to the connection type that will be available to them and this need to be highlighted in the technical guidance documents.

We would have concern that if a designer specifies an export connection and it then progresses on-site to an advanced stage and then discovers the export connection is not available or prohibitively expensive. A costed NIE confirmation may be beneficial at design stage and if not available then "non-export" should be assumed by default.

Question 3A.16

Do you agree that new heating systems should be designed and installed to operate with a maximum flow temperature of 55°C as per England's current guidance? If not please provide evidence to support a different maximum flow temperature, or position.

Yes, this is a sensible approach to future proof for any future retrofit to low carbon heating which operates more efficiently at lower flow temperatures.

Question 3A.17

Do you agree that replication of Sections 5 and 6 of England's Approved Document on building services and controls guidance into the next version of TBF1 would be appropriate for the Phase 3 proposals?

Yes, it would be better to replicate Sections 5 and 6 of England's approved documents as this would give a fixed point of what is required for building regulations approval.

Question 3A.18

Do you have any comments or issues around how UK and EU Ecodesign requirements might interact with Part F guidance requirements at Phase 3 or over the longer term?

Eco-design standard is a dynamic design standard which are good in theory but in practice there is a disconnection between the new standards and enforcement by building control.

Question 3A.19

Do you agree that designers, should be able to demonstrate a water efficiency assessment as per Appendix A of England's Approved Document G?

Yes, designers should be able to avail of the opportunity to demonstrate energy savings by taking account of the water efficiency similar to England's Approved Document G.

The query would be who is responsible for assessing the calculations and what would building controls role be in enforcing that and verification of same at completion stage.

Question 3A.20

Have you any suggestion or further insight on how heat networks should be assessed under the Phase 3 proposals? If so, please outline the issue and suggested handling in your response.

No comments.

Question 3A.21

Is the specification of the heat pump proposed for Option 2 appropriate? If not, how should it be amended?

No comments.

Question 3A.22

Do you have concerns or evidence on the viability and risks associated with either Option 1 or Option 2?

This requires input and delivery by 3rd parties such as NIE, and also the utility regulator as any concerns with regards to running cost impacts can be balanced by the utility regulator. These are two areas Building Control have no control over but has a direct impact on how we can enforce the building regulations depending on which option is chosen.

Question 3A.23

Should the Department implement Option 1 or Option 2 for the Phase 3 uplift?

Option 1 is likely to be more achievable in the short term and reduces risk to the industry of skills shortage or lack of achievement in reaching performance, thereby turning end users against the technology, and availability of grid capacity.

However, this should be considered as a short term stepping stone to Option 2 on Phase 4.

Question 3A.24

Have you any comment on how the Option 2 specification should be improved, for Phase 3 or Phase 4 or 5?

Increase in grid capacity has to be a primary aim, particularly of the gas grid. Once this is happening at pace, then change the fuel factor to further disincentive gas usage.

Question 3A.25

Do you agree that the Department should adopt the new BREL type format for notice of compliance with emissions, renewables and other requirements in keeping with England's provisions? See Appendix B of Approved Document L1 (2021) for further detail.

Yes, agree but have concerns that this checklist is only being done at completion stage of a dwelling and it offers little value during the construction process.

Question 3A.26

Do you agree that the Department's guidance should additionally require provision of a new non-technical Home User Guide in keeping with England's provisions? for further detail see <https://www.gov.uk/government/publications/home-userguide-template>

Yes, agree.

Question 3A.27

Do you agree that the Department should require geolocated photographs to be lodged to support evidence of the as-built construction?

There is merit in submitting geolocated photographs, but this again is putting an extra burden on Building Control to assess for minimal fees.

It is important that this does not become a culture, in that photographs become a substitute for site inspections. Also, is there any guidance of what should be photographed?

Who will be expected to take this picture i.e., the builder or the person who will be producing the As-Built SAP.

Another query will be if no pictures at construction stage what will be the consequences of enforcement for building control, i.e., how does builder prove compliance.

Section 3B: Part F (Conservation of fuel and power) work to existing dwellings, Phase 3.

Question 3B.1

Do you support the addition of a Primary Energy and FEES metric assessment alongside the current Carbon emissions metric assessment when using the Equivalent Target Approach to demonstrate compliance in cases of dwelling extensions or material changes of use?

Yes, agree with this approach.

Question 3B.2

Do you have any particular concerns or insight on the U-values used in standards related to existing dwellings for any of the various situations in other administrations?

No Comments.

Question 3B.3

Do you agree that our U-value standards should be largely in line with the proposed standards for new building elements in cases of extensions and replacement elements?

Yes, if they were in line, it would make Building Control checking easier and this will also raise the quality of the existing stock.

Question 3B.4

Do you agree that our U-value standards should be largely in line with the values used in England, in cases of a material change of use of a building, for renovated elements and where a change of energy status occurs?

Yes, Agree.

Question 3B.5

Are there any particular areas where alternative performance values for fabric elements (such as EWI) should be considered? If so please provide evidence and an indication of the value you consider appropriate.

No comment.

Question 3B.6

Do you agree that a maximum glazing area assessment should continue to form part of the requirements, where a material change of use to form a dwelling occurs?

Yes, it should continue to be part of the requirements.

Question 3B.7

Do you agree that traditional construction should be referenced out to third party guidance, with a greater scope for bespoke consideration in these situations?

It would be helpful if a definition was provided for what is considered "traditional construction".

Question 3B.8

Do you agree that the Boiler Plus measures introduced in England in 2018 and thermostatic control measures introduced in 2022 should be replicated and included in revised guidance here?

Yes, Agree.

Question 3B.9

Do you agree that where a new or complete replacement heating system is being installed in an existing dwelling, it should be installed to operate with a maximum flow temperature of 55°C?

Yes, as this will future proof the building, but needs to be clearly detailed that this is only when a new or complete heating system is being installed due to implications of radiator sizes, etc...

Question 3B.10

Do you agree that both an emissions and primary energy performance assessment should be applied to boiler replacements where a change of fuels is proposed?

Yes, agree it should be applied but the fees received for such applications do not reflect the additional checks that may be required.

Question 3B.11

Do you have information or evidence to help assure the Department that reversion from liquid biofuels to conventional home heating oil need not be a concern?

No evidence available.

Question 3B.12

Do you agree that Technical Booklet F1 should be amended to follow the minimum services provisions of Section 5 and 6 of England's Approved Document L1, subject to further NIBRAC and public consultations? Please include any 'lessons learned' from the roll-out of these provisions elsewhere which may merit consideration.

Yes, but subject to further public consultation as noted.

Question 3B.13

Do you agree that the consequential improvements similar to those applicable to extensions to dwellings in Wales should apply here?

Yes, would be in favour of this but while the measures introduced in Wales are pragmatic there is an additional burden, therefore the building control fees would need to be reviewed to allow for the additional time.

Question 3B.14

Do you have any evidence or insight on the major renovation measures in place in the Republic of Ireland to suggest the Department should prioritise a similar approach here? If so, please include the evidence with your response.

No evidence available.

Section 3C: Part K (Ventilation) dwellings- Phase 3

Question 3C.1

Do you agree that Technical Booklet K (TBK) should be split into two (similar to current Part F guidance) and that relevant guidance currently cited within the Ventilation Compliance Guides should be integrated within them?

Yes, this would make it easier to interpret.

Question 3C.2

Do you agree that Technical Booklet K guidance should cite background ventilator sizes in line with England and Wales?

Yes, Agree.

Question 3C.3

Do you agree that revised TBK guidance should align the three principal systems (natural, continuous mechanical extract and continuous supply and extract/MVHR) in keeping with air-permeability thresholds England and Wales?

Yes, Agree.

Question 3C.4

Do you have any evidence or guidance that should prompt the Department to develop an independent approach to noise of mechanical ventilation systems in dwellings?

No evidence available.

Question 3C.5

Do you agree that the updated performance-based specification in England's ADF1 (Ventilation – dwellings) should be replicated in equivalent guidance here?

Yes, agree as this will keep it up to date with industry changes.

Question 3C.6

Do you support amendment of the Technical Booklet K guidance in line with the developments in England and Wales, to address ventilation alongside fabric retrofit work?

Yes, Agree, but some concerns from an enforcement perspective as retrofit works can come in piece meal and can be quite complicated at times with a lot of the proposed interventions will have taken place prior to going to site therefore verification may be difficult.

Question 3C.7

Have you any comment or insight on how the Department or others should support skills or cite competence standards for the design, testing and commissioning of ventilation systems in dwellings? Please include relevant details in your response.

No comments. This is something for industry and education authorities to comment on.

Question 3C.8

Have you any other evidence on issues or suggestions on ventilation standards in dwellings, which the Department should consider as part of the review of Part K (Ventilation)?

No evidence available.

Question 3C.9

Do you agree that CO2 monitoring in dwellings should be a consideration for Phase 4?

Yes, and with dwellings getting more airtight the provision of air quality monitors may be beneficial.

Question 3C.10

Do you support inclusion of ventilation guidance to more specifically consider clothes drying, in line with current provisions in Scotland?

Don't disagree that there may be a benefit where clothes drying inside can lead to condensation issues and therefore appropriate ventilation is required.

Question 3C.11

Do you have any evidence or insight on other aspects of ventilation for dwellings which the Department should take into account?

No evidence.

Section 3D: Mitigating overheating risks in dwellings – Phase 3

Question 3D.1

Do you agree that local regulation and guidance will be needed to mitigate overheating in new dwellings and residential buildings?

Yes, but again the fees received by building control do not reflect the additional burdens that will be placed on assessment times.

Question 3D.2

Do you agree with the proposed course of action whereby DSM modelling to TM59 requirements would be used in more complex situations but a simplified approach, largely following Scotland's proposals, could be applied in more straightforward situations?

Yes.

Question 3D.3

Should the new requirements only apply to new-build situations (i.e. to the erection of a building) or should it also apply to material change of use situations and/or extensions and structural alterations?

Yes, it should only apply to new build as it may be unreasonable to change elevations etc. as existing buildings may be restricted by another requirement such as planning.

Question 3D.4

Should the noise assessment levels be based on planning issues, or should bespoke noise assessment and testing be expected where openings are proposed for purge cooling of rooms in dwellings or similar buildings?

It would be better placed in the planning assessment. Planning would consider the visual appearance and, in consultation with Env Health, whether the proposed dwelling internal living conditions are at a satisfactory level.

Question 3D.5

Are you content that the guidance in Appendix D of the current Technical Booklet K provides sufficient clarity on pollution assessment where natural purge ventilation for cooling is proposed?

Yes.

Question 3D.6

Do you agree that guidance should be revised to support a 1.1m high guarding at openings for purge cooling or should the current 800mm height for guarding at windows remain?

This issue needs to be considered along with Parts E, H and R and cannot be considered in isolation as it may create unintended outworking's.
Need to be careful that we don't over complicate the guidance by stating that guarding needs to be at 1.1m high as this leaves no room for error with regards to heights of means of escape windows.

Question 3D.7

Are there any other issues which should be taken into consideration in terms of the usability of openings for purge cooling?

No comment.

Question 3D.8

Have you any evidence or modelling to indicate if a requirement for cooling could result in new Carbon emissions or Primary Energy targets proposed in Section 3A (see Table 3A.1) being difficult, or impossible, to deliver in practice in some circumstances e.g. single aspect flats next to noisy/polluted roads? If so, please provide details and outputs.

No evidence available.

Question 3D.9

Can you evidence any 'lessons learned' from roll out of the overheating mitigation policies elsewhere that we should consider?

No evidence available.

Section 3E: Electric Vehicle infrastructure- background and Phase 3 proposals for dwellings

Question 3E.1

Do you agree with the proposed approach to use Building Regulations to legislate for EV infrastructure requirements?

It is felt that the assessment of the number of charging points and relevant infrastructure required should be considered earlier in the design stage of the works as the standard is based around the number of Parking Spaces. As this is something that is reviewed as part of the planning process it may be a better fit within their legislation. This should be submitted as part of the planning application would require consultation with DfI Roads. Updates to Creating Places and DCAN 15 which remain in place until such times as Council's bring forward their LDPs.

Another issue that may arise and make it difficult for Building Control to assess, is that with larger housing developments, whilst planning normally get the full scheme submitted, Building Control regularly get these in smaller phases depending on the demand for house sales. Building Control would not have the full details as to what parking will be available when the overall scheme is completed.

As parking spaces would not be considered when assessing fees for building regulation applications how will this be dealt with to account for the additional time resource being placed on building control.

Question 3E.2

Do you agree with the proposed approach to follow the technical provisions in England? The Department would be grateful for any comment on the guidance or out-working

It is felt that by developers submitting their applications in smaller phases, then the system may be open to abuse and consideration therefore should be given to removing the criteria of 10 parking spaces, meaning that it will be a requirement irrelevant of the number of parking spaces.

It is also felt that by taking a similar approach to the RoI of providing the ducting infrastructure to all parking spaces and not charging points would be a better approach as we could end up with charging points at dwellings which may never have a need for them.

Another factor that needs to be considered is that the charging capacity is currently 7kw but as technology develops this may become outdated so there may be a need to upgrade the charging capacity so we would support the provision of ducting only.

Another issue that needs to be considered for NI is that of consultation with NIE to determine if their grid network will be capable of supporting EV charging points.

Question 3E.3

Do you agree that for new dwellings with associated parking spaces; one CP per dwelling or one per associated parking space (whichever is the lesser) should be required and that, in addition, for those buildings with more than ten associated parking spaces, ducting to the rest of the residential

parking spaces to facilitate future installations, should also be required? s there or in other regions.

See comments in Question 3E.2.

Question 3E.4

Do you agree with the proposed limitations 1 and 2 (as outlined in paragraph 3E.34 and 3E.35) restricting the application of the requirements for EV infrastructure at parking spaces associated with new dwellings?

See comments in Question 3E.2

Question 3E.5

Do you think there should be a limitation to the application of the requirements, on the grounds of additional grid connection costs that may accrue to developers as a result of the provision of CPs?

It is felt that basing the provision on cost will create difficulties in building control enforcing and may lead to issues of inconsistencies as to what is considered to be a reasonable cost, or in some cases, not a reasonable cost of providing the requirements.

Question 3E.6

If the answer to Q 3E.5 is yes, do you think the amount of £3600 (which is currently under review) is appropriate and do you have any comment on how it should be assessed?

N/A

Question 3E.7

Do you agree that where a major renovation results in a residential building being associated with more than 10 parking spaces, then CPs should be provided at a rate of one per dwelling¹¹⁰, or one per associated parking space (whichever is the lesser) and that that ducting should be installed in each associated car parking space, to support the future installation of an EV CP?

See comments in Question 3E.2 and additional comments below.

Currently if buildings are undergoing major renovation as per the definition, Building Control would not normally be made aware of parking spaces and therefore it may be hard to determine this. For this reason, it may be better to follow the approach of RoI and get ductwork provided to all in-curtilage spaces.

Another issue with existing dwellings is that there is probably a higher likelihood that there will not be the grid capacity to provide charging infrastructure and as this is something outside building controls remit it leaves us in a difficult position to enforce.

Question 3E.8

Do you agree with the proposed limitations to requirements in the case of major renovations, as outlined in paragraph 3E.41-3E.47?

Limitation 3 – work to carpark may be done outside scope of work to building so building control may not be aware of it.

Limitation 4 – how would Building Control assess the capacity of an existing electrical supply?

Limitation 5 – Building Control is not in a position to determine if the installation would exceed 7% of the costs of renovations.

Question 3E.9

Do you agree that where a dwelling is created through a material change of use, a CP should be required at any parking space associated with the new dwelling?

As before, the assessment of car parking provided should be considered earlier in the design stage - see previous comments. Would require change to planning policy and guidance as stated at 3E.1

Question 3E.10

Do you agree with the proposed limitations to the application of the requirement, where a newly created dwelling is established under a material change of use, as outlined in paragraph 3E.51-3E.55?

See response to 3E.7 and also below.

Limitation 2 – work to carpark may be done outside scope of work to building so building control may not be aware of it.

Limitation 3 – how would Building Control assess the capacity of an existing electrical supply.

Question 3E.11

Should a cost cap apply, instead of limiting the number of CPs on the basis of the existing supply, where a new electrical supply connection to the building occurs alongside a major renovation, or a material change of use that creates a new dwelling?

It is felt that basing the provision on cost will create difficulties in building control enforcing and may lead to issues of inconsistencies as to what is considered to be a reasonable or in some case not a reasonable cost of providing the requirements.

How would Building Control determine the cost claimed by a developer are a reasonable amount for that work?

Question 3E.12

Should there be a requirement for cable routes to all spaces associated with dwellings newly created by way of a material change of use, in circumstances where a building has more than 10 parking spaces?

As before, the assessment of car parking provided should be considered earlier in the design stage - see previous comments. Would require change to planning policy and guidance as stated at 3E.1

Question 3E.13

Do you have any other views that you wish to provide on the EV section of the consultation (e.g. the minimum standard of EV charge point or safety and accessibility within the built environment)?

No further comments.

Section 4A: Part F (Conservation of fuel and power) proposals for new buildings other than dwellings Phase 3

Question 4A.1

Do you agree that the Department should adopt the same Primary energy metric for new non-domestic building assessments, as proposed for domestic buildings?

Yes, agree.

Question 4A.2

Do you agree that the Department should develop proposals to adopt the Notional Building specification in line with England's Part L 2022 specification and requirements? If not, please provide evidence of why and how the specification should be altered.

Yes, agree.

Question 4A.3

Do you agree that the Department should develop proposals to adopt the limiting fabric U-values in line with England's Part L 2022 requirements? If not, please provide evidence of how the specification is impractical here and what alternative standard should be required.

Yes, agree.

Question 4A.4

Do you agree that the Department should develop proposals to adopt maximum permissible air-permeability values for new builds of $5.0 \text{ m}^3 / (\text{h} \cdot \text{m}^2) @50\text{Pa}$, or should it maintain consistency with England's approach?

Yes, agree.

Question 4A.5

Do you agree that the Department should develop proposals to adopt the limiting services standards in line with the requirements in England, Wales and Scotland? If not, please provide evidence of how the specification is impractical here and what alternative standard should be required.

Yes, agree.

Question 4A.6

Do you agree that the Department should develop proposals to include the limiting services standards within the Technical Booklet guidance documents, or is a more explanatory, separate Non-domestic Building Services Compliance Guide preferable? Please provide reasoning in your response.

Yes, agree. It should be developed within the technical booklet.

Question 4A.7

Do you agree that the Department should develop proposals to require BACS in new buildings? If so, should the threshold be at 290kW or 180kW? Please provide evidence or reasoning for your view.

No evidence available.

Question 4A.8

What is your view on the value of requiring either TM54 modelling of actual energy use in buildings >1000m² (as applicable in England) or Scotland's conversion to Zero Direct Emissions Heating reports?

This would be an additional measure that puts extra burden on Building Control staff to assess and we would not be sure how relevant it is, and if it can be done on software not approved by government.

Section 4B: Part F (Conservation of fuel and power) proposals for work to existing buildings other than dwellings Phase 3

Question 4B.1

Do you support the addition of a Primary Energy metric assessment alongside the current Carbon emissions metric assessment when using the Equivalent Target Approach to demonstrate compliance in cases of work to existing buildings?

Yes, agree.

Question 4B.2

Do you have any particular comment, concern or insight on the U-values used for standards related to existing buildings in any of the various situations in other administrations?

No concerns, it should ensure you get consistency in u-values across all the building types.

Question 4B.3

Do you agree that our U-value standards should be largely in line with limiting standards for new buildings in cases of extensions and replacement elements on buildings other than dwellings?

Yes, agree.

Question 4B.4

Do you agree that our U-value standards should be largely in line with the values used in England, in cases of a material change of use of a building, for renovated elements and where a change of energy status occurs involving buildings other than dwellings?

Yes, agree.

Question 4B.5

Are there any particular areas where alternative performance values for renovated elements or services should be considered for buildings other than dwellings? If so please provide evidence and an indication of the value you consider appropriate.

No evidence available.

Question 4B.6

Do you agree that a maximum glazing area assessment should continue to form part of the requirements for extensions and be included where a material change of use occurs to buildings other than dwellings?

Yes, agree.

Question 4B.7

Do you agree that traditional construction should be referenced out to third party guidance, with a greater scope for bespoke consideration in situations applicable to traditionally constructed buildings other than dwellings?

It would be helpful if a definition was provided for what is considered "traditional construction".

Question 4B.8

Do you agree that where a new or complete replacement heating system is being installed in an existing building, it should be installed to operate with a maximum flow temperature of 55°C?

Yes, as this will future proof the building, but needs to be clearly detailed, that this is only when a new or complete heating system is being installed due to implications of radiator sizes etc.

Question 4B.9

Do you agree that Technical Booklet F2 should be amended to follow the minimum services provisions of Section 5 and 6 of England's Approved Document L2, subject to further NIBRAC and public consultations? The Department would be grateful to understand any 'lessons learned' from the roll-out of these provisions elsewhere.

Yes, but subject to further public consultation as noted.

Question 4B.10

Do you have any evidence on the success or otherwise of consequential improvements? If so, please include this with your response.

No evidence available.

Question 4B.11

Do you think consequential improvement requirements should be—
a. retained (i.e. maintained in keeping with England),
b. amended (for example to apply where the principal works are of a particular value, rather than being based on the total floor area of the existing building),
c. extended to apply to all extensions, or otherwise extended; or
d. revoked? Please provide a reasoning for your response and evidence that supports any changes you would propose.

Building control would be of the view that it may be the time to revoke this requirement based on the following –

- Building owners/designers are now more conscious of their energy use and already make provisions for upgrading when practical and feasible.
- It is also found that when we receive an application for an extension, they may already have carried out other works in the recent past that will have improved the energy conservation.
- Also, there have been instances that the building being extended is relatively new so the scope for doing improvements is limited.

Question 4B.12

Do you have any evidence or insight on the major renovations measures in place in the Republic of Ireland to suggest the Department should prioritise a similar approach here for buildings other than dwellings? If so please include the evidence with your response.

No evidence available.

Section 4C: Part K (Ventilation) buildings other than dwellings Phase

Question 4C.1

Do you agree that Technical Booklet K should take a similar approach to noise and installation of ventilation systems, as England and Wales?

Yes, but again, this is additional assessment work that the building control fees do not reflect.

Question 4C.2

Do you agree that Technical Booklet K should replicate the proposed performance based guidance outlined for dwellings?

Yes, agree.

Question 4C.3

Do you agree that Technical Booklet K (TBK) should bring the Appendix D guidance on polluted external air into the main body text of TBK?

Yes, agree.

Question 4C.4

Do you agree that the list of sources for design guidance provided in Annex F should be replicated in the new TBK, for application to specialist building types?

Yes, agree.

Question 4C.5

Are there any specific concerns or issues with the updated references proposed in the Table in Annex F, that the Department should consider? If so, please provide details.

No Comment.

Question 4C.6

Do you agree that requirements for air quality monitoring, similar to those introduced in England and Wales, should be included in the Phase 3 uplift package to Part K (Ventilation)

Yes, agree.

Question 4C.7

Do you agree that requirements for increased ventilation rates to certain higher risk spaces, similar to those in England and Wales, should be introduced in Phase 3?

Yes, agree.

Question 4C.8

Do you agree that additional requirements for ventilation in offices, similar to those introduced in England and Wales, should be included in the Phase 3?

Yes, agree.

Section 4D: Electric vehicle infrastructure-Phase 3 proposals for buildings other than dwellings

Question 4D.1

Do you agree with the proposed use of Building Regulations to implement Article 8.2 for the provision of EV charging point infrastructure at buildings other than dwellings?

It is felt that the assessment of the number of charging points and relevant infrastructure required should be considered earlier in the design stage of the works as the standard is based around the number of Parking Spaces. As this is something that is reviewed as part of the planning process it may be a better fit within their legislation. Would require change to planning policy and guidance as stated at 3E.1

As parking spaces would not be considered when assessing fees for building regulation applications how will this be dealt with to account for the additional time resource being placed on building control.

Question 4D.2

Do you agree that ducting infrastructure for one in five parking spaces and one CP, should be installed when a non-residential buildings with more than 10 non-residential car parking spaces is being erected or is undergoing a major renovation?

See response to Question 4D.1. Would require change to planning policy and guidance as stated at 3E.1

Question 4D.3

Do you agree with the proposed limitations (outlined in para 4D.13-4D.18) to the application of EV charging requirements for new non-residential buildings and for major renovations of such buildings? If not, please comment on how should they should be changed.

Limitation 1 – number of car parking spaces is not determined by Building Control

Limitation 3 – this work might be carried outside the scope of a building control application for major renovation.

Limitation 4 – Building Control is not in a position to determine if the installation would exceed 7% of the costs of renovations.

There is also a need to proceed with caution until research into fire safety of charging points is completed.

Question 4D.4

Do you agree that more onerous residential requirements should apply in mixed-use building situations and shared parking arrangements?

See comments to question 4D.1. Would require change to planning policy and guidance as stated at 3E.1

Section 5: Considerations for Phase 4 uplifts

Question 5.1

Do you agree that, for Phase 4, the Department should expect to replicate measures introduced in England's Future Homes and Future Buildings (2025) in the first instance, or is there a particular administration that we should seek to align with for Phase 4? If possible, please provide supporting evidence for your preference?

As we are reliant on software providers whose main market is England it would be better to align with England.

Question 5.2

Would you support a ban on direct emissions heat generators or combustion appliances, similar to Scotland's measures banning such appliances? (Please take into account your answer to Question 3A.23 on which Option you have supported.)

No, as it is not evident that the current NIE infrastructure is capable of supporting a change that requires all buildings to have heat pumps.

Question 5.3

Do you support efforts to more closely align the NCM and targets towards passive house standards, where possible?

No, as there will be less standardization of dwellings leaving harder for building control to determine what are acceptable levels therefore adding to an already complex assessment time.

There is also the question as to whether the industry has the skills in place that would be required.

The Department should monitor developments ongoing in Scotland with regard to passive house standards as this might guide phase 4 and 5 uplifts.

Question 5.4

Have you any advice or evidence as to how further verification measures might help ensure the standard is delivered in practice (please provide details)?

No evidence available.

Question 5.5

Are there any other particular or detailed issues that the Department should be considering for new build Part F requirements for non-domestic buildings as part of Phase 4 developments?

No comment.

Question 5.6

Are there any other issues which the Department should be considering for Phase 5? Please note that some further/concurrent issues are discussed in Section 6 which may influence input on this. It might be useful to have a review of the building control enforcement framework and a review of submission for non-compliance.

Section 6A: National Calculation Methodology issues

Question 6A.1

Do you agree that the local NCM should be consistent with England? If not, please provide any particular thoughts on how it should be varied, for example with the use of a local NI weather file, or with local cost or carbon intensity factors, rather than UK averages, in building regulation assessments.

Yes, agree.

Section 6B: Embodied Carbon

Question 6B.1

Do you have any comments on EPDs that you would like to bring to the attention of the Department at this stage?

No Comment.

Question 6B.2

Have you any insight or evidence on the likely professional costs incurred in carrying out a whole lifecycle assessment of carbon in a project? For example, is it likely to be comparable to the cost of a traditional Bill of Quantities? If so, what phases of the lifecycle assessment and data were included?

No evidence available.

Question 6B.3

Have you any opinion or insight on how to address any of the challenges listed? For example, a view on the extent and scope of assessments.

No Comment.

Question 6B.4

Do you agree that the intricacies and implications of embodied carbon mean that it is best considered at a UK wide level and that the Department should concentrate efforts on attending to the current gap in standard

Due to the complexities involved with embodied carbon assessments these would be better dealt with at a UK wide level as building control may struggle with capacity to oversee and manage any enforcement requirements.

Question 6B.5

Would you support the development of an advisory Information Note or Appendix to Technical Booklets on Part F to support embodied carbon assessment?

As any advisory note will not be enforceable by Building Control the information is unlikely to be looked at so may be a waste of resources to develop it at this time.

Question 6B.6

Have you any practical suggestions for how circular economy principles may be best encouraged in construction or, if necessary, regulated for in the future?

Demolition and disposal of material should ideally be controlled by an application process and certificate of disposal.

Section 6C: Over-sized new homes

Question 6C.1

Have you any evidence on new-build dwelling sizes that should be taken into account in future policy making on larger dwellings?

Building Control would be confident that the dwelling size data extracted as part of the consultation from EPC's would be reflective of what is being built.

Question 6C.2

Do you believe that action should be taken to better highlight the higher total energy demand for large, less spatially efficient dwellings? If so, how should this be best achieved?

It could be highlighted on the EPC, but it is felt it may be a pointless exercise as the majority of the houses in excess of the HAG standards are being built by future owner occupiers and they will be aware of the costs involved with the dwelling.

Section 6D: Performance gap

Question 6D.1

Do you have any particularly local evidence on design vs as-built performance gaps?

There can be various changes on-site, both minor and major, to what was designed/specified by the designer for a number of reasons, and this would be noted across all Building Control departments, but it is not easy to extract data in support of this.

Question 6D.2

Do you have any evidence or insight supporting specific actions to address specific performance gaps in Parts F or K of the Building Regulations?

There should be a more formalised process in place for the signing off by energy assessors.

Also obtaining approval prior to commencement and a completion certificate prior to occupation would be beneficial.