

Report on	Consultation on energy efficiency requirements and related areas of the Building Regulations
Date of Meeting	4 th December 2023
Reporting Officer	Terry Scullion, AD Property Services
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Is this report restricted for confidential business? If 'Yes', confirm below the exempt information category relied upon	Yes	
	No	x

1.0	Purpose of Report
1.1	To advise Members and seek retrospective approval on the Consultation forwarded by the Department of Finance, inviting a response on the proposed amendments to the energy efficiency requirements and related areas of the Building Regulations.
2.0	Background
2.1	The Department of Finance (the Department) has policy responsibility for maintaining and amending the Building Regulations. The Building Regulations apply to new buildings and to buildings being altered, extended or subject to a material change of use and are made principally to secure the health, safety, welfare, and convenience of people in or about buildings; further the conservation of fuel and power; further the protection and enhancement of the environment and promotion of sustainable development.
2.2	Intended work that is subject to the provisions of the Building Regulations (Northern Ireland) 2012 (as amended) must be notified to the District Council. The Building Regulations are enforced by building control departments in each District Council through the existing mechanisms and sanctions provided through the Building Regulations (Northern Ireland) Order 1979 (as amended).
2.3	The Building Regulations set minimum 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 stock, or to set additional requirements, but the Building Regulations set baseline construction standards for any work being done.
2.4	The Climate Change Act (Northern Ireland) was passed by the Assembly in March 2022 and received Royal assent on 6 June 2022. The Act provides for a local route map and carbon budgets to reduce emissions by 100% by 2050. It follows the New Decade, New Approach agreement published in January 2020, which provided an agreed basis for the restoration of devolved government in Northern Ireland, with climate change being a strategic priority.
2.5	

<p>2.6</p> <p>2.7</p> <p>2.8</p> <p>2.9</p>	<p>Some 15% of Northern Ireland’s emissions stem from buildings. The vast majority of new buildings constructed in the coming years should still exist in 2050, alongside the many that have already been built, so today’s regulatory requirements need to develop quickly for the net zero future demanded by Climate Change legislation.</p> <p>A provisional programme of uplifts to Part F (Conservation of fuel and power) of the Building Regulations was published by the Department for the Economy in the Energy Strategy – The Path to Net Zero Energy (December 2021). This set out a phased approach to uplifting the requirements of Part F and the more inter-related Parts, with a view to ensuring new buildings suitably contribute to the ‘net zero’ requirements for 2050 under Climate Change legislation. That strategy also seeks to ensure new buildings are designed and constructed to net zero ready standards from no later than 2026/27. The Building Regulations programme is led by the Department of Finance (‘the Department’) but impacts across other department’s functions.</p> <p>Phase 1 of the programme amended the technical guidance to Part F to provide an interim step to deliver a pragmatic uplift as quickly as possible. This was published in March 2022 and came into effect on 30 June 2022.</p> <p>This consultation is the second phase in the Department’s programme for Part F and related aspects of the Building Regulations. Subsequent Phases are likely to require significant change from industry.</p> <p>The consultation document covers a range of building regulations technical areas which are mutually influential, including:</p> <ul style="list-style-type: none"> • 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
<p>3.0</p>	<p>Main Report</p>
<p>3.1</p> <p>3.2</p> <p>3.3</p> <p>3.4</p>	<p>Correspondence has been received from the Department of Finance (See Appendix 1) regarding a consultation seeking the views of the Council in relation to the proposed next steps on energy efficiency requirements and related areas of the Building Regulations.</p> <p>The consultation document covers a range of building regulations technical areas as follows:</p> <p>Section 1: Introduction to consultation. This section provided an introduction on the purpose of the consultation.</p> <p>Section 2: Background <u>Section 2A: Background- legislative considerations and policy contexts</u></p>

- Generally, this section discussed if a 3-year phasing in period was prudent, but we have deemed this not relevant as it is best that industry is prepared and suitably trained before implementing any new legislation.
- Separately, as there is potentially 2 years between this and future changes reducing the 3-year period for commencement to previously approved applications to 2 years may be better.

3.5 Section 2B: Background- (developments elsewhere)

- This section discussed that 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 disproportionate to urban areas.

3.6 **Section 3: Pre-consultation Phase 3 proposals for dwellings**

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

- Generally, this section discussed following closely current energy targets used by England except when the targets do not permit the use of Higher Carbon fuels.
- Proposals would be that mains gas would be a primary source of heating complimented with solar panels. When mains gas is not available, then a heat pump system would likely be used as an alternative. Also, any excess power created by solar panels should be exported back into the grid.
- It is however felt that this cannot be properly determined as a viable proposal until a more comprehensive Rural Needs Impact Assessment is completed, due to the lack of gas network and limitations with NIE grid capacity in rural areas.
- Any new heating system is also to be designed to work at a maximum flow temperature of 55°C.

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

This section discussed:

- Using u-values similar to England
- Using a very high efficient boiler when replacing existing boiler and that an emissions and primary energy performance assessment should be applied to boiler replacements where a change of fuels is proposed.

- Clarification that the complete heating system would require to be replaced before the requirement that it should be designed to work at a maximum flow temperature of 55°C becomes applicable.

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

This section discussed:

- Current Technical Booklet K (TBK) guidance booklet to be split into 2 separate guidance documents – one for domestic and the other non-domestic.
- TBK guidance should align the three principal systems (natural, continuous mechanical extract and continuous supply and extract/MVHR) in keeping with air-permeability thresholds in England and Wales.
- Supporting an amendment of the Technical Booklet K guidance in line with the developments in England and Wales, to address ventilation alongside fabric retrofit work, but some concerns from an enforcement perspective as retrofit works can come in piece meal and can be quite complicated leaving verification difficult.
- That CO2 monitoring in dwellings should be a consideration for Phase 4 as dwellings get more airtight. The provision of air quality monitors may be beneficial.
- Whilst ventilation guidance to more specifically consider clothes drying, in line with current provisions in Scotland was considered, it was felt that this would be better placed outside of the Building Regulations

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

This section discussed:

- Agreeing that local regulation and guidance will be needed to mitigate overheating in new dwellings and residential buildings – but that it should not apply to material change of use situations and/or extensions and structural alterations.
- Noise assessment and testing be expected where openings are proposed for purge cooling of rooms in dwellings or similar buildings would be better placed under Planning Assessment.

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

This section discussed the following:

- It is felt that for developments 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.

- Consideration 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 to have charging points. It is also felt taking a similar approach to RoI of providing the ducting infrastructure to all 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 issue that needs to be considered for NI is has consultation taken place with NIE to determine if their grid network will be capable of supporting EV charging points.

3.11 **Section 4: Pre-consultation Phase 3 proposals for buildings other than dwellings**

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

- Generally, this section discussed following closely current energy targets used by England which we agree to.

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

- Generally, this section discussed following closely current energy targets used by England which we agree to.
- Clarification that the complete heating system would require to be replaced before the requirement that it should be designed to work at a maximum flow temperature of 55°C becomes applicable.

3.13 Section 4C: Part K (Ventilation) buildings other than dwellings Phase 3

This section discussed the following:

- Agree that Technical Booklet K should replicate the proposed performance-based guidance outlined for dwellings.
- 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).
- 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.

<p>3.14</p>	<ul style="list-style-type: none"> • Agree that additional requirements for ventilation in offices, similar to those introduced in England and Wales, should be included in the Phase 3. <p><u>Section 4D: Electric vehicle infrastructure- Phase 3 proposals for buildings other than dwellings</u></p> <ul style="list-style-type: none"> • It is felt that 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. • NIE should be consulted on the matter regarding capacity.
<p>3.15</p>	<p>Section 5: Considerations for Phase 4 uplifts</p> <p>This section discussed:</p> <ul style="list-style-type: none"> • To 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 as we are reliant on software providers whose main market is England. • We would not support a ban on direct emissions heat generators or combustion appliances, similar to Scotland’s measures banning such appliances as it is not evident that the current NIE infrastructure can support a change that requires all buildings to have heat pumps.
<p>3.16</p>	<p>Section 6: Concurrent issues - headline summary</p> <p><u>Section 6A: National Calculation Methodology issues</u></p> <ul style="list-style-type: none"> • To agree that the local National Calculation Methodology should be consistent with England.
<p>3.17</p>	<p><u>Section 6B: Embodied Carbon</u></p> <ul style="list-style-type: none"> • It is felt that 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. • Demolition and disposal of material should ideally be controlled by an application process and certificate of disposal.

3.18	<p><u>Section 6C: Over-sized new homes</u></p> <ul style="list-style-type: none"> We consider that action taken to better highlight the higher total energy demand for large, less spatially efficient dwellings may be a pointless exercise as many over-sized houses are being built by future owner occupiers and they will be aware of the costs involved with the dwelling. 			
3.19	<p><u>Section 6D: Performance gap</u></p> <p>This section discussed the following:</p> <ul style="list-style-type: none"> There does be changes on-site to what was designed/specified and what is then provided on-site, but it is not easy to extract data in support of this. There should be a more formalised process in place for the signing off by energy assessors. Obtaining approval prior to commencement and a completion certificate prior to occupation would be beneficial. 			
3.20	<p>The changes proposed to be implemented are similar changes introduced in other jurisdictions particularly England.</p>			
3.21	<p>One other point of note. A common thread throughout this consultation is that all these proposals will put an additional burden on Building Control staff and that Building Control fees would need to be reviewed to reflect the additional workload that will be required to implement these proposals.</p>			
3.22	<p>Building Control Northern Ireland (BCNI) is a voluntary umbrella grouping of the Building Control Departments of the 11 local councils. The Lead Building Control Manager within each Council is a member of BCNI. The proposed amendments have been reviewed and discussed within BCNI and have broadly similar opinions on the proposals. BCNI have forwarded a separate consultee response to the Department of Finance with these findings in light of the tight turnaround time for response.</p> <p>The Consultation Document Response on the proposal for this consultation can be viewed in Appendix 2.</p>			
4.0	Other Considerations			
4.1	<p>Financial, Human Resources & Risk Implications</p> <table border="1" data-bbox="231 1848 1428 2033"> <tr> <td>Financial: Within Current Resources</td> </tr> <tr> <td>Human: Within Current Resources</td> </tr> <tr> <td>Risk Management: None</td> </tr> </table>	Financial: Within Current Resources	Human: Within Current Resources	Risk Management: None
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Risk Management: None				

4.2	<p>Screening & Impact Assessments</p> <p>Equality & Good Relations Implications: None</p> <p>Rural Needs Implications: None</p>
5.0	<p>Recommendation(s)</p>
5.1	<p>Members are requested to note the content of this report, and seek members retrospective approval for submission of same to meet the consultation response deadline.</p>
6.0	<p>Documents Attached & References</p>
	<p>Appendix 1 – Department of Finance Invite to Consult on Energy Efficient Requirements and related areas of the Building Regulations</p> <p>Appendix 2 – Consultation Response to Department of Finance (online response)</p>