

PEOPLE & COMMUNITIES COMMITTEE

Subje	Guidance to Part F (Conservation of fuel and power) of the Building Regulations.					
Date:	:	7 December 2021				
Repo	rting Officer:	Ian Harper, Building Control Manager				
Conta	act Officer:	Mark McCleery, Principal Building Control Surveyor				
Restricted Reports						
Is this report restricted?					No	X
If Yes, when will the report become unrestricted?						
After Committee Decision						
After Council Decision						
Some time in the future						
Never						
Call-in						
Is the decision eligible for Call-in?			Yes	х	No	
4.0	Dumpers of Depart or	Cummany of Main Januar				
1.0	-	Summary of Main Issues response to a Department of Finance co	nsultat	tion o	n pro	posed
	amendments to Technic	cal Booklet Guidance to Part F (Conservation	of fuel	and p	ower)	of the
	Building Regulations (N	lorthern Ireland).		•	•	
2.0	Decision(s) required a	and recommendations				
2.1	The Committee is aske	d to:				
	Consider the draft response to the Department of Finance consultation and agree,					
	subject to any a ratification.	mendments, a response on behalf of the Co	uncil.	Subje	ct to C	ouncil

• The closing date for responses to this consultation is 23:59 on Sunday 19 December 2021, with responses to be made online.

3.0 Main report

Key issues

3.1 The Buildings Standards Branch of the Department of Finance (DoF) is seeking the views of the Council on their proposals to amend Technical Booklet Guidance to Part F (Conservation of fuel and power) of the Building Regulations.

Background

- 3.2 The Building Regulations (Northern Ireland) Order 1979 (as amended) places a duty on a district council to enforce building regulations in its district. Part F (Conservation of fuel and power) of the Building Regulations sets minimum standards for building work with respect to carbon performance and energy conservation measures.
- 3.3 Building Regulation 43B (*Nearly zero-energy requirements for new buildings*) of Part F requires that new buildings are 'nearly zero-energy buildings' (NZEB). This requirement has applied to all newly erected buildings from 31 December 2020.
- 3.4 NZEB is defined as "a building that has a very high energy performance, as determined in accordance with the National calculation methodology, where the nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby".
- 3.5 Regulation 39 (Conservation measures) requires reasonable provisions for conservation of fuel and power by limiting heat losses and through use of efficient services with appropriate controls.
- 3.6 Regulation 40 (Target carbon dioxide emission rate) of Part F requires that a new building's rate of emissions does not exceed a Target carbon dioxide Emissions Rate (TER) when modelled in accordance with the National Calculation Methodology (NCM).
- 3.7 Regulation 43A (*Consideration of high-efficiency alternative systems*) of Part F requires that designers of new buildings consider "high-efficiency alternative systems", (e.g. decentralised renewables, district heating, combined heat and power systems, heat pumps, etc.). The requirement is only to demonstrate that these options have been considered. In practice, very

few high-efficiency alternatives are proposed for inclusion in the proposed building after consideration.

- 3.8 The UK government is developing a programme of amendments to the NCM software to reflect the latest scientific understanding of building physics, revised carbon, primary energy and cost factors for UK fuels, and to implement various technical adjustments necessary for compliance with Directive 2018/844/EU.
- These changes will result in new software, a new Primary Energy (PE) target metric and revised cost and carbon factors, which will input to the calculation of a revised TER. The new software will apply alongside an uplift in Building Regulation requirements in each administration, rolling out from early 2022 onwards. However, the outworking of these revisions is complex, and consequences need local consideration (e.g. reduced carbon and PE factors could encourage uptake of electric heating, which would be more expensive to operate than standard boilers). The Department and industry will need to consider these issues and proposals once the position in England has settled.
- 3.10 However, considering concerns that energy efficiency standards here have been too low for too long and in consideration of the Assembly's declaration of a climate emergency and commitments to address climate change in the *New Decade, New Approach* proposals, the Department is keen to prioritise improved standards around NZEB and not to delay uplift further whilst we consider this, more complex, position. While some subsequent re-adjustment of standards and a potential further uplift will be necessary in consequence of the UK NCM development process, the Department is of the view that this should not delay action where possible.
- 3.11 The Department accepts that a fundamental in-depth review of Part F (Conservation of fuel and power) and Part K (Ventilation) will be required to take account of the position and proposals of the other administrations and that ongoing work will be required thereafter.
- 3.12 The Department is developing a Discussion Document for public consultation in the coming months, which will provide further input on the relevant issues and seek to outline pathways towards very high efficiency standards for new buildings in the medium term. The proposals within this current consultation are intended to provide an uplift to the requirements for new buildings as an interim "steppingstone" measure.

Consultation proposals

3.13 The Department is consulting on proposals to uplift the minimum energy efficiency standards for new buildings. Three options have been considered —

Option 1: do nothing.

Option 2: require NZEB buildings to better the current Target carbon dioxide Emissions Rate (TER) outputs by 25%, in the case of new dwellings, and 15%, in the case of new non-domestic buildings; and

Option 3: require NZEB buildings to better the current Target carbon dioxide Emissions Rate (TER) outputs by 40% in the case of new houses, 25% in the case of new flats, and 15%, in the case of new non-domestic buildings.

- 3.14 Option 3 is the Department's preferred option with a better overall return on investment. It would deliver more carbon savings and better reductions in energy bills, albeit with higher build costs for developers. In the draft response we have confirmed that this is the preferred option for the Council as well.
- 3.15 The proposed variation in betterment between houses, flats and non-domestic buildings is proposed so that in the case of dwellings, any on-site renewable generating technologies (e.g. photovoltaic panels), used to achieve the improved emissions performance, should normally be able to avail of the more straightforward (G98) grid connection processes.
- 3.16 Options 2 and 3 set new limits on fabric standards to require provision of building fabric with U-values (and in the case of dwellings, a glazing assessment), as specified within TBF1 and TBF2. A whole building area-weighted U-value assessment provides an alternative approach, provided the overall U-values deliver the same level of performance; and encourage air tightness testing, including removing options on air permeability assessment for a default value of 15 m³/(h.m²) to be submitted on small sites for untested dwellings and the similar 500 m² threshold currently permitted for non-domestic buildings.
- 3.17 All options retain the use of the existing SAP 2009 software, while the new NCM software is developed at UK level. Carbon factors in SAP 2009 do not reflect recent decarbonisation of the electricity grid supply. This means that where the 'betterment' is delivered with an electricity-led solution (e.g. with photovoltaic panels), the actual carbon abatement is likely to be significantly less than the betterment requirements.
- 3.18 New guidance is proposed to deal with circumstances where the local electricity network cannot accommodate export from on-site renewables that generate electricity (e.g.

photovoltaic panels, small wind turbines, etc.) which cannot be directly used in the building. It is unclear if this will be a long-term issue as increasing use of electricity and smart systems developments may facilitate more renewables in the medium term. Future uplifts and a revised NCM should also look to deal with this again in future uplifts. 3.19 Other amendments are intended to clarify, or rectify, previous guidance to reflect the current working and enforcement practices. The changes include re-wording to promote an expectation of air-tightness testing and to clarify provisions in relation to thermal bridge assessments. 3.20 The package of consultation documents can be found on the Department's website: https://www.finance-ni.gov.uk/consultations and includes the following: -Consultation document outlining the proposals. Draft Regulatory Impact Assessment. Draft amended Technical Booklet F1 Draft amended Technical Booklet F2 **Rural Needs Impact Assessment** and Draft Equality Screening, for the proposed changes. 3.21 The proposed consultation response is included as Appendix 1 to the report. **Financial & Resource Implications** 3.22 Some additional training of staff on the changes to the requirements/guidance will be required, as well as guidance for customers on the council website, etc. These will be carried out as normal course of business by existing staff. **Equality or Good Relations Implications/Rural Needs Assessment** 3.23 The proposed amendments have been screened out of equality impact assessment requirements by DoF. The draft equality impact screening assessment is on the Departmental Website.

4.0

Appendices – Document Attached

Appendix 1. Proposed Consultation Response