

# Building Regulations Part L & F Review

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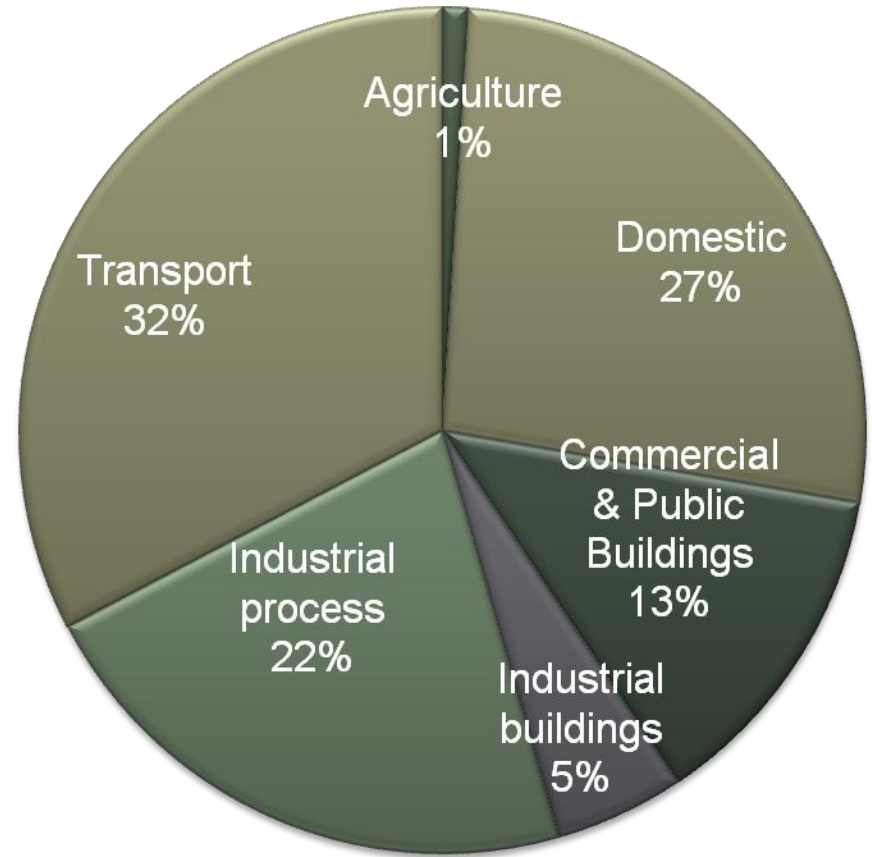
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# The challenge

- Climate Change Agenda
- Emissions reduction targets
- Emissions from buildings account for 45% of UK carbon emissions
- Energy White Paper 2007 sets out UK energy strategy
- Raising energy efficiency standards through Building Regulations
- Ensuring health standards are not compromised

In 2005, the UK emitted  
550m tonnes of CO<sub>2</sub>



# Aims of Review

- To debate how best to drive forward improved standards
- To inform affected stakeholders
- To review 2006 progress
- To inform the formal consultation exercise
- IAGs for domestic and non-domestic buildings
- Part L working groups to support development of detailed technical proposals
- Part F Industry Stakeholder Group
- BRAC Technical Working Parties (TWPL&F)

# Aims of Review

6 Part L industry advisory working groups to support development of detailed technical proposals

- WG1- building envelopes
- WG2- domestic building services
- WG3- non- domestic building services
- WG4 - domestic calculation method
- WG5- non- domestic calculation method
- WG6- compliance and feedback

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# Programme

Development work to consultation package	By early 2009
Consultation period	3 months
Post-consultation review	By around $\frac{3}{4}$ 2009
Lay amendment	By end of 2009
Coming into force	2010

# Part L Standards: Current thinking

- Forward thinking paper in 2004 Part L consultation
- Building a Greener Future Policy Statement (July 2007)
- Timetable for new homes:
  - 25% improvement in 2010
  - 44% improvement in 2013
  - Zero carbon by 2016
- Code for Sustainable Homes – levels 3, 4 and 6
- Government announced in 2008 Budget ambition for all new non-domestic buildings to be zero carbon from 2019
- Consulting on the timeline and feasibility for this ambition

## Part L Scope of Review

- Although driven primarily by proposals for new build, will also review standards for work on existing buildings
- Review of 2<sup>nd</sup> tier reference documents including compliance guides
- Review of calculation procedures and software and supporting data including emission factors
- Upgrading SAP and SBEM to produce 2009 software ready for formal consultation documents.



## Part L Considerations

- Handling Low and Zero Carbon systems
- Revising limits on design flexibility
- Handling solar over-heating
- Measuring of quality of construction
- Provision of information
- Targeting guidance
- Backward look at 2006
- Correlation with ADF - ventilation

## Correlation with Part F

- Part L is main bulk of the review but need to ensure health standards in ADF are not undermined
- Key task for the revision of ADF is how dwellings should be ventilated in future
- ADF (2006) guidance on ventilation has been designed to work at 3 m<sup>3</sup>/h/m<sup>2</sup> at 50 Pa
- Natural Ventilation (with local intermittent fans) continues to be the main form of domestic ventilation – some continuous Mechanical Ventilation in flats
- Reducing permeability limits will shift distribution resulting in more dwellings potentially tighter than 3
- This will give impetus to mechanical ventilation and rise to issues of installation, reliability and market transformation
- Research: mould growth, trickle vents, experience of others

## Part F Considerations

Given that Part F was reviewed in 2006, is there any need to review Part F this time?

Two main factors in answering this question are:

- Is there a requirement for increased ventilation provisions due to the drive to more airtight buildings?
- Is there evidence of poor indoor air quality (IAQ) built to ADF 2006?

## Part F Current Activities

- Review of Part F to provide adequate ventilation for homes in the next 5 years
- Determine need for modifications based on new information
- However, minimise modifications where possible to provide stability
- Undertake monitoring of ventilation and IAQ in airtight homes
- Review of cost benefit of trickle vents in replacement windows

# Possible modifications to Part F

Three options which could be considered

- No change to Part F 2006
- Make no allowance for infiltration for any new dwelling
- Make no allowance for infiltration for only very airtight dwellings

- New Part L – complicated
- Unaided, will Building Control find it difficult to cope?
- Performance is more important than just specification
- Carbon Saving is a national issue
- A need to gather and pass on information, bearing all this in mind

## Could an Independent Scheme provide:

- Higher levels of compliance
- A set of standard details with which industry is familiar
- Additional (guaranteed) 'points' under the CfSH
- Cost certainty without the need for compliance testing
- An additional layer of expert scrutiny and monitoring

If it could and house builders could be certain of:

- Short-term:
  - Easier transition to 2010 standards (whilst industry develops solutions)
- Long-term:
  - Exemption from compliance testing
  - Certainty of compliance / Code credits



- Would these benefits be enough for house builders to use such a scheme?
- HBF working parties to make industry response to consultations on Part F and L
- Consultation on Definition of Zero Carbon
- Contact [dave.mitchell@hbf.co.uk](mailto:dave.mitchell@hbf.co.uk)

# Thank you

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