

Wales Building Regulations 2013 Part L2

AECOM

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Contact

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Content

- Context: Welsh Government and their Agenda – *Francois Samuel*
- England and Wales: policies relevant to Part L 2013 - *Alison Crompton*
- Building Characteristics in Wales – *Graeme Chinery*
- Approach to Energy Modelling – *Sam Archer*
- Approach to Cost Modelling – *Sam Archer*
- Approach to Existing Non-Domestic – *Sam Archer*
- Transition, Compliance and Enforcement – *Alison Crompton*
- Programme – *Francois Samuel*
- *Group Session*

Build Mix Characteristics in Wales

Graeme Chinery (AECOM & Welsh Government Non-Domestic Technical Lead)



Build Mix Characteristics

The reason:

- Part L of the Building Regulations addresses heating, cooling, lighting, ventilation and auxiliary energy which will vary according to the building type, function and form
- Wales Regulations need to reflect the characteristics of construction in Wales (Especially energy and cost modelling)
- To inform discussions regarding the carbon emission standard:
 - 'Flat' approach or
 - **'Aggregate'**
 - **Relative**
 - Absolute

Build Mix Characteristics

Investigated by:

- Data review (particularly WG CBA)
- Stakeholder engagement (to help address data limitations)

Key Issues being identified are:

- Build rates (market uncertainty)
- Location of future development
 - Land values
 - Level of Developer contributions
 - Regulatory burdens

Build Mix Characteristics

- Cultural : places of worship, auditoria, etc
- Education : primary school | secondary school | other
- Government : prisons | defence buildings | other
- Health : acute hospitals | other
- Hotels : 5* | 3 / 4* | other
- Industrial
- Offices : deep plan, A/C | shallow plan, A/C | shallow plan heated only
- Retail : large out of town supermarket | small local supermarket | other
- Warehouse : distribution | retail
- Multi-Residential
- Other

Build Mix Characteristics

BRE data collection similar to that undertaken by DCLG for England, drawing on a variety of publicly and commercially available data sources

- Construction Statistics
- Commercial & Industrial Floor Space Statistics
- Planning Statistics
- Education Statistics
- Department of Health Estates Data
- Rating Valuation Data

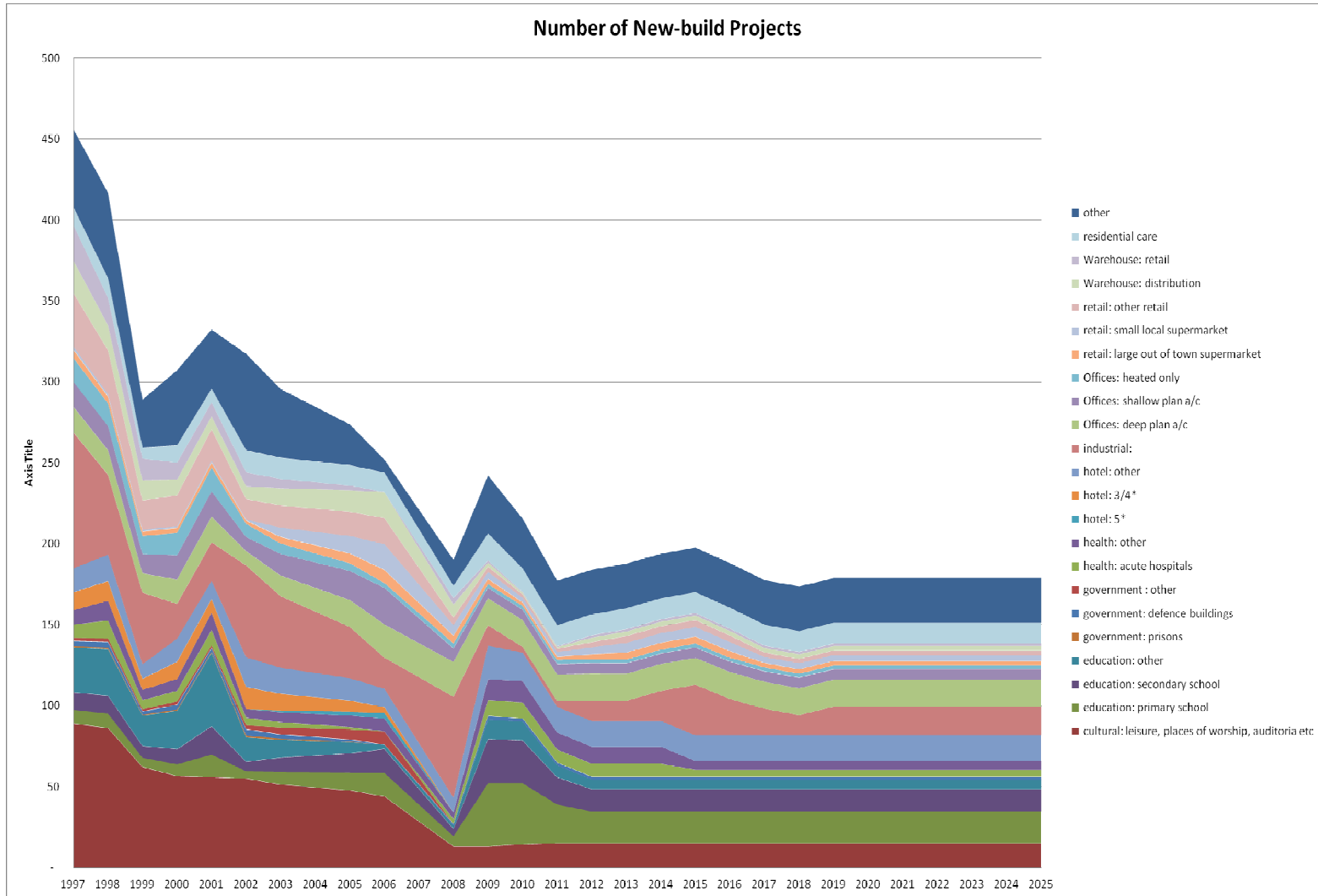
Build Mix Characteristics

Adding Comfort to the Projected Data:

- Education : DfES
- Government : HMCTS
- Health : NWSSP(FS)
- Hotels : BETS – Tourism & Marketing

Build Mix Characteristics

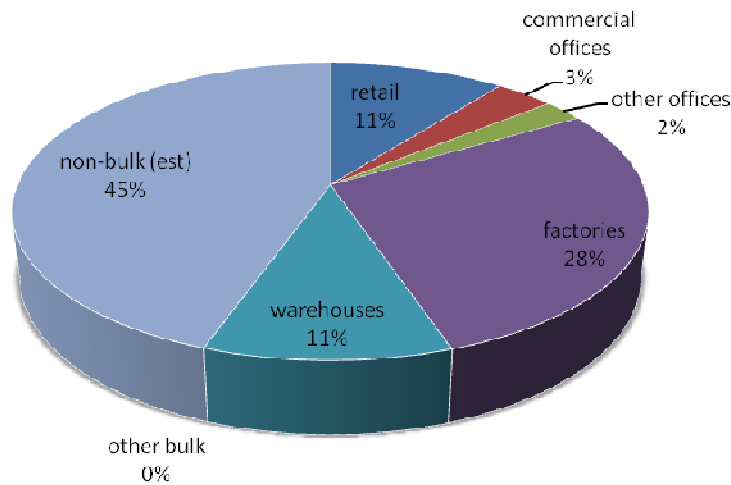
Llywodraeth Cymru
Welsh Government



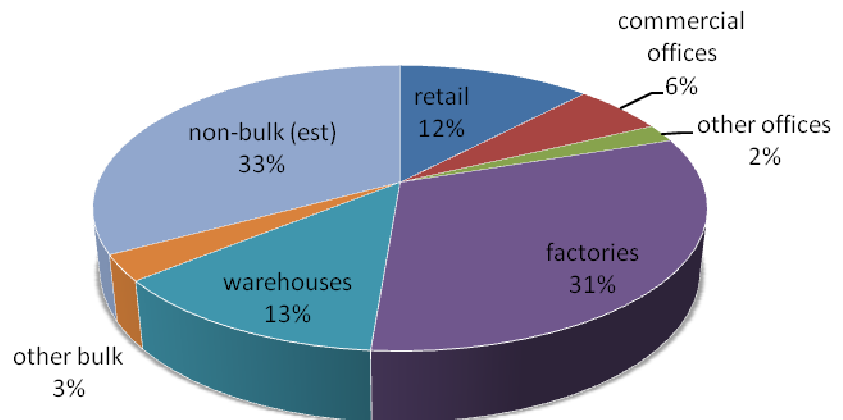
Build Mix Characteristics

Bulk classes from Commercial and Industrial rateable value data

Existing Stock - 1998



Existing Stock - 2008



| | |
|-----------|--------------------------------|
| 1998 / 99 | circa 51m m ² . |
| 2000 / 04 | circa 64m m ² . |
| 2005 on | less than 50m m ² . |

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Build Mix Characteristics

Typical Built Area

| | | |
|---------------------|----------------------------|---------------------|
| ➤ Education | : primary school | 3,043m ² |
| ➤ Health | : acute hospitals | 2,128m ² |
| ➤ Hotels | : Branded Budget Type | 1,459m ² |
| ➤ Offices | : Shallow plan heated only | 919m ² |
| ➤ Retail | : Small local supermarket | 1,248m ² |
| ➤ Warehouse | : distribution retail | 5,322m ² |
| ➤ Multi-Residential | | 1,555m ² |

Thank You

Questions?

Group Exercise

Delegates



Group Exercise

What are your views on the following:

1. Are the building types we have selected representative of those built in Wales?
2. Is the approach to target setting right?
3. Is PV the right choice for the Notional Building?
4. Are there building types with specific issues that we should take into account?
5. Are we being ambitious enough with the performance specifications of elements
6. Is our approach to costing correct?