



CONCERTED ACTION
ENERGY PERFORMANCE OF BUILDINGS

EPBD Key Implementation Decisions in The UK Scotland

Status in March 2017

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NATIONAL WEBSITES

www.gov.scot/Topics/Built-Environment/Building/Building-standards

1. Key Implementation Decisions, KIDs

no	Key Implementation Decisions - General Background	Description / value / response	Comments	Description
1.1	Definition of public buildings (according to article 9 b)	Not available		
1.2	Definition of public buildings used by the public (according to article 13)	<p>In Scotland the calculated energy EPC required on construction, sale or rental is also displayed in “public buildings”. The requirement applies to:</p> <ul style="list-style-type: none"> • Buildings occupied by public authorities with a floor area >250m² and frequently visited by members of the public. Qualifying occupiers must obtain and display an EPC. • Other non-residential buildings with a floor area >500m² and frequently visited by members of the public. Qualifying occupiers must display the EPC only if they have one. 		
1.3	Number of residential buildings	<p>-27 million homes* in the UK 2.5 million (March 2016) in Scotland^</p>	<p>(*) UK National Energy Efficiency Action Plan, April 2014, Department of Energy & Climate Change</p> <p>(^) Housing Statistics for Scotland - Key Information and Summary Tables, http://www.gov.scot/Topics/Statistics/Browse/Housing-Regeneration/HSfS/KeyInfoTables</p>	
1.4	Number of non-residential buildings	<p>>2 million non-domestic premises* in the UK 200,791 in Scotland^</p>	<p>(*) Estimated based on: Live tables on commercial and industrial floorspace and rateable value statistics (England & Wales), Tables P401 & P402, Department for Communities and Local Government, 2012</p>	

			<p>Northern Ireland Government http://www.northernireland.gov.uk/news-dfp-280513-non-domestic-revaluation</p> <p>Mapping non-domestic building stock, The Scottish Government, June 2011</p> <p>(^) Mapping non-domestic building stock, The Scottish Government, June 2011</p>	
1.5	If possible share of public buildings included in the number given in 1.4	Not available		
1.6	If possible share of commercial buildings included in the number given in 1.4	80,705* in Scotland	<p>(*) Estimated based on building types: cultural, shops, hotels, leisure, public houses.</p> <p>Mapping non-domestic building stock, The Scottish Government, June 2011</p>	
1.7	Number of buildings constructed per year (estimate)	<p>Residential: see 1.8</p> <p>Non-residential: not identified</p>		
1.8	If possible share of residential buildings constructed per year (estimate, included in the number given in 1.7)	<p>Scotland new dwellings completion[^]:</p> <p>2016: 16,498</p> <p>2015: 16,410</p> <p>2014: 15,507</p> <p>Average: 16,138</p>	<p>([^])Housing Statistics for Scotland - New build summary; Time series tables on new house building at national level http://www.gov.scot/Topics/Statistics/Browse/Housing-Regeneration/HSfS/NewBuildSummary</p>	
1.9	If possible share of non-residential buildings constructed per year (estimate, included in the number given in 1.7)	Not identified		
1.10	Useful floor area of buildings constructed per year in million square meters (estimate)	Not identified		

2. KIDs for New Buildings

no	Key Implementation Decision - New Buildings	Description / value / response	Comments	Description
2.1	Requirements for energy performance of residential buildings in current building code	<p>Technical Handbooks support the implementation of Building Regulations energy requirements and set out ten criteria for new residential and non-residential buildings.</p> <ol style="list-style-type: none"> 1. Ensure the Building CO₂ Emission Rate (BER) is no greater than the Target Emission Rate (TER). TER is set using a notional building specification which includes a low carbon equipment element e.g. photovoltaic panels. 2. Reduce heat losses through the envelope (including minimum fabric performance, thermal bridging and air permeability). Scottish Accredited Construction Details for linear thermal bridging are available and airtightness testing is generally required. 3. Energy efficient space heating and hot water systems, including controls, minimum performance, etc. 4. Minimum insulation levels for pipes, ducts and vessels. 5. Energy efficient lighting (e.g. minimum 60 lamp lumens/circuit-watt in offices) and controls. 6. Reduce overheating (e.g. through the proportion and orientation of translucent glazing, solar shading/control, thermal mass, etc.) and ensure energy efficient mechanical ventilation and air-conditioning (AC) and controls. 7. Commissioning of building services to achieve optimum energy efficiency. 8. Information for building occupiers on the operation and maintenance of building services and energy supply. 9. The provision of Energy Performance Certificates (EPCs). 10. Metering of fuel and power of buildings (or parts) and of end-uses. 		

2.2	Requirements for energy performance of non-residential buildings in current building code	Ditto 2.1		
2.3	Is the performance level of nearby zero energy (NZEB) for new buildings set in national legislation?	No		
2.4	Nearly zero energy (NZEB) level for residential buildings (if set)	Not applicable		
2.5	Nearly zero energy (NZEB) level for non- residential buildings (if set)	Not applicable		
2.6	Are nearly zero energy buildings (NZEB) defined using a carbon or environment indicator	Not applicable Note: the UK is legally bound (under the Climate Change Act 2008) to reduce greenhouse gas emissions by at least 34% by 2020 and 80% by 2050. This is measured in tonnes of CO ₂ e (carbon dioxide equivalent).		
2.7	Year for nearly zero energy (NZEB) to be implemented for residential buildings	Not defined		
2.8	Year for nearly zero energy (NZEB) to be implemented for non-residential buildings	Not defined		
2.9	Is renewable energy a part of the overall or an additional requirement	Not defined		
2.10	Specific comfort criteria for new buildings, provide specific parameters for instance for airtightness, minimum ventilation rates	See 2.1		

3. KIDs for Existing Buildings

no	Key Implementation Decision - Existing Buildings	Description / value / response	Comments	Description
3.1	Is the level of nearly zero energy (NZEB) for existing buildings set in national legislation?	No		
3.2	Is the level of nearly zero energy (NZEB) for existing buildings similar to the levels for new buildings?	Not defined		
3.3	Definition of nearly zero energy (NZEB) for existing residential buildings (if different from new buildings)	Not defined		
3.4	Definition of nearly zero energy (NZEB) for existing non-residential buildings (if different from new buildings)	Not defined		
3.5	Overall minimum requirements in case of major-renovation	<p>The Building Regulations energy standards apply to new works on existing buildings. Exceptions are detailed in the Technical Handbook.</p> <p>Similarly to England, an elemental approach has been adopted for existing buildings.</p> <p>In non-residential buildings, under certain circumstances, the existing services must be improved to meet the current performance recommendations in the Technical Handbook. This approach is referred to as “consequential improvements”.</p>		
3.6	Minimum requirements for individual building parts in case of renovation	Ditto 3.5		

4. KIDs for Energy Performance Certificates, EPCs

no	Key Implementation Decision - Energy Performance Certificates	Description / value / response	Comments	Description
4.1	National database for EPCs	Yes	https://www.scottishepcregister.org.uk/	
4.2	Number of energy performance certificates per year (for instance average of 3 years)	Scotland* Domestic EPCs: 153,466 Non-domestic EPCs: 3,130	(*) Estimated (total EPCs as per item 4.3 / 8 years)	
4.3	Number of EPCs since start of scheme	Scotland* Domestic EPCs (total to December 2016): 1,227,728 Non-domestic EPCs (total to December 2016): 25,043	(*) Local Government and Communities Directorate, 2017	
4.4	Number of assessors	Scotland*: 3,231	(*) Local Government and Communities Directorate, 2017	
4.5	Basic education requirements for assessors	The Scottish Operating Framework requires Approved Organisations to reference the UK National Occupational Standards (NOS) when establishing requirements for Energy Assessors. NOS specify the qualifications and skills, which Energy Assessors should meet to be accredited to produce regulatory outputs. Different accreditations are available depending on the building type, the software to be used, and the type of regulatory outputs to be produced.		
4.5	Additional training demands for assessors	The Scottish Operating Framework requires Continued Professional Development (CPD). A minimum level of CPD hours is specified by each Approved Organisation.		

4.6	Quality assurance system	<p>Under the Operating Framework, Approved Organisations have Quality Assurance responsibilities. Since 2013, Approved Organisations must check a representative sample of EPCs. Checks repeat the EPC calculations using data on the register. In 2016, 260,206 EPCs were produced and 6,604 (2.53%) were checked. Most checks are desk-based. Assessors' outputs are checked every six months minimum. Poor performance can lead to targeted auditing, retraining, suspension, or being struck off.</p> <p>Government audits Approved Organisations to ensure compliance with the Operating Framework. Approved Organisations who fail to meet the terms of the Framework are subject to a schedule of corrective action and may have their agreement terminated.</p>		
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5. KIDs for Inspection Systems

no	Key Implementation Decision - Inspection Systems	Description / value / response	Comments	Description
5.1	Is there a national database for heating inspections	No	The UK decided to provide advice on boilers/ heating systems, rather than implement an inspection regime.	
5.2	Is there a national database for cooling inspections / AC	No	Protocol Organisations to maintain records to allow Government compliance audits.	
5.3	Are inspection databases combined with EPC database for registration of EPCs and inspection reports	Not applicable		
5.4	Chosen option A or B for heating systems (inspection or other measures)	Option B	Ditto 5.1	
5.5	Number of heating inspections; reports per year (if option A)	Not applicable		
5.5	Chosen option A or B for cooling systems (inspection or other measures)	Option A	Ditto 5.2	
5.6	Number of air-condition / cooling system inspections; reports per year (if option A)	600 AC inspection reports were produced in 2016* Note that due to the Scottish climate, there are few qualifying AC systems.	(*) Local Government and Communities Directorate, 2017	



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