Advancing Net Zero

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Senior Policy Advisor
Tuesday 17 September 2019
2050

New buildings net zero whole life carbon

Existing buildings net zero carbon in operation

2030

New buildings net zero carbon in operation
Whole life carbon – new buildings

RICS Professional Statement ‘Whole life carbon assessment for the built environment’
Industry task group

Acclaro Advisory
AECOM
Allies and Morrison
Arup
Atelier Ten
BAM Construct UK
Berkeley Group
Bioregional
BRE
BuroHappold
Carbon Credentials Energy Services
Cundall
Currie & Brown
Derwent London
EcoEnergy Insights, UTC
Elementa
Greengage Environmental
Grosvenor
Haringey Council
Hawkins \ Brown Architects
Hoare Lea
Hodkinson Consultancy
HTA Design LLP
JLL Ltd
Kingspan Insulation Ltd
Landsec
Lendlease
Max Fordham LLP
Redevco
Skanska
Skidmore, Owings & Merrill LLP
Targeting Zero LLP
The Carbon Trust
Turley
Twinn Sustainability Innovation
Verco
Willmott Dixon
Industry task group

UKGBC - Together for a better built environment
Net zero carbon framework

Overarching principles:

1. Polluter pays
2. Improve measurement and transparency
3. Encourage action today and tighten requirements over time
Net Zero Carbon scopes

- **Net Zero Carbon – Construction**
  - Construction products and processes
    - Modules A1-A5

- **Net Zero Carbon - Operational Energy**
  - Operational energy e.g. heating, lighting and appliances
    - Module B6

- **Net Zero Carbon – Whole Life**
  - Maintenance, repair, refurbishment and water use
    - Modules B1-B5 & B7
  - Demolition, waste, and disposal
    - Module C
  - Carbon savings from material re-use
    - Module D

LCA Modules from EN15978
## Framework

<table>
<thead>
<tr>
<th>Reduce construction impacts</th>
<th>New buildings/major renovations</th>
<th>Buildings in operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce operational energy use</td>
<td><img src="image" alt="Icon" /></td>
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<tr>
<td>Increase renewable energy supply</td>
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<td>Offset any remaining carbon</td>
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<td>Public disclosure</td>
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= Achieve net zero carbon balance for construction

= Achieve net zero carbon balance for operational energy
Future development

- Energy efficiency targets
- Renewable energy guidance
- Phasing out offsets
- ‘Net zero ready’ new buildings
- Net zero carbon - whole life
- ‘Time of use’ emissions factors
- ‘Net zero’ new buildings
Net zero whole life carbon

<table>
<thead>
<tr>
<th>Life Cycle Emissions</th>
<th>How to account for operational emissions (LCA Module B)?</th>
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<tbody>
<tr>
<td></td>
<td>How to account for demolition and waste (LCA Module C)?</td>
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<tr>
<td></td>
<td>How to account for future carbon benefits (LCA Module D)?</td>
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</tbody>
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<th>Targets</th>
<th>Can robust targets be set for different building types?</th>
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<td>Is there a performance gap for embodied carbon?</td>
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<th>Offsets</th>
<th>What type of offsets should be used?</th>
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<tbody>
<tr>
<td></td>
<td>When should emissions be offset for ‘net zero’?</td>
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</tbody>
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Thank you

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www.ukgbc.org/AdvancingNetZero