

**BREEAM USA In-Use: Update of the Technical Standard to Version 6**

**BREEAM USA In-Use Version 6 seeks to make the program more accessible and transparent, continuing our drive to encourage all existing buildings – no matter building type, space use, building age or performance – to deliver better performing buildings that minimize environmental impacts, support occupant health and well-being and create, grow and protect financial value.** With the impacts of the changing climate on real estate increasing, there has been a shift from “green” as a marketing tool to ESG performance reporting to stakeholders and risk management. A sustainable building is no longer defined only by its past performance; resiliency, the ability to continue delivering performance and therefore asset value, in the future is now crucial. This update seeks to deliver the information investors, owners and managers need to understand their assets and make sound business decisions in this changing world.

BREEAM USA In-Use launched in 2016, seeking to support owners, managers and occupiers in any existing non-residential assets to measure their sustainability performance, use that information to drive improvements and seek certification where there was value in doing so. The update to BREEAM USA In-Use Version 6 reflects the feedback received thus far by Assessors, Clients and the wider market as well as the latest in science and research in the built environment.

While BREEAM standards are underpinned and driven by science and research, our organization is committed to seeking feedback and comments from our Clients, Assessor community and other stakeholders with an interest in improving the built environment whenever any of our standards goes through an update. **Public comments will be accepted beginning on August 8, 2019 and close on August 30, 2019.** The full draft Technical Manual will be available for download from <https://www.breeam.com/consultations/usa/> and a link provided to submit comments and feedback.

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## Operational Updates

### Separate Technical Manuals for Residential and Commercial Assets

Residential assets will be assessed within the same BREEAM In-Use framework but each will have their own Technical Manual. The programs will be known as BREEAM USA In-Use: Commercial and BREEAM USA In-Use: Residential. BREEAM USA In-Use: Residential has been piloted for the last year with a global group of participants, providing sufficient comment and feedback to not require an additional public comment period before publication.

### Simplifying certification maintenance

Certificate validity will be extended from one year to three years, without the requirement to renew annually, for all three Parts. This simplifies the process and allows buildings and portfolios to better plan their certification activities and focus their capital on the asset performance and improvement rather than certification maintenance.

### Incentivize ongoing performance monitoring and improvement

As with the previous version, the Performance Measurement will be valid for up to 12 months or until certification, whichever is soonest. Under the updated version though, the Performance Measurement will automatically reopen after certification, allowing assets to continue benchmarking and tracking their performance for the duration of the certificate's validity without any additional cost. The online tool will provide notifications when changes made to the performance overall are approaching what BREEAM defines as a Significant Change, encouraging assets to recertify to confirm their current performance. The threshold for a Significant Change will be amended from a change of five or more percentage points of the overall score (e.g. 75% to 80%) to a change of ten or more percentage points (e.g. 75% to 85%). Further incentivization to recertify during the three-year certificate validity will be provided by only requiring a desktop assessment by an Assessor (no on-site visit) when the change is less than 10 percentage points, with a full on-site verification required where the change exceeds that threshold. When submitted to an Assessor, the online tool will inform them of the percentage change made and which issues had changes from the certification. Recertification will be an option but not required during the three-year certificate validity. On-site audits will be required for recertification when the current certificate expires.

### Amendment of Version numbering

The first version of BREEAM USA In-Use indicated the year published (making it v2016 as it was published in 2016). All BREEAM programs globally are moving towards simple number structures. As BREEAM USA In-Use is aligned with BREEAM In-Use International, this updated version will adopt the same Version number, making the update Version 6.

## Technical Update

### Removal of Part 3 Occupant Management from the program

For this release Part 3 has been excluded from the updated scheme manual. As an organizational sustainability assessment, Part 3 has always had a different audience to the rest of BREEAM In-Use. As it was driven by policies and processes rather than the fundamentals of building performance it was also necessary to recertify every year. Combining these two factors BRE are keen to look again at how best to assess the sustainability of tenant organization that may not have control over the buildings they occupy. Therefore, BREEAM is planning to review and potentially update the Part 3 section as the next stage in development of the scheme.

For any users wishing to assess against 3 Parts of BREEAM In-Use International (Inc. Occupier Management), the BREEAM In-Use International 2015 will be left open for registrations for a period of up to one year following the launch of BREEAM In-Use International V6.

### Eligibility criteria now address vacancy, multiple buildings criteria revised

The criteria now address vacant space to bring further flexibility into the program. Statements on the assessment of more than one building within a single BREEAM USA In-Use assessments have also been revised.

### Category weightings updated

A review of the weightings was undertaken as the changes to the standard were significant in some respects. Energy continues to be weighted the heaviest for both Parts, followed by Health & Well-being. Resources and Resilience, our two new categories, tied for third and fourth place. For Part 1, the remaining categories in order are Water, Pollution, Transport and Land Use & Ecology. For Part 2, it is Management, Water, Land Use & Ecology and Pollution. The changes are shown here:

Sustainability category	Part 1: Asset Performance		Part 2: Management Performance	
	2015	2019	2015	2019
Management	0%	0%	15%	11%
Health & Wellbeing	17%	20%	15%	17%
Energy	26.5%	25%	31.5%	27%
Transport	11.5%	5%	0%	0%
Water	8%	11%	5.5%	9%
Materials	8.5%	--	7.5%	--
Waste	5%	--	0%	--
Resources	--	13%	--	11%
Resilience	--	13%	--	11%
Land use and ecology	9.5%	4%	12.5%	7%
Pollution	14%	9%	13%	7%

### Minimum standards introduced

While BREEAM provides flexibility for clients, there are mechanisms built into the program to ensure that performance against fundamental environmental issues is not over-looked in pursuit of a particular rating. As part of the update the minimum standards have been reviewed and new minimum standards have been introduced. To achieve a particular BREEAM rating, the minimum overall percentage score must be achieved as well as the minimum standards. The tables below provide the details on issue that include minimum standards.

BREEAM issue	Minimum standards by BREEAM In-Use rating: Asset Performance					
	Acceptable	Pass	Good	Very Good	Excellent	Outstanding
WAT 01 – Water monitoring	None		Answer option C (Criterion 1, 2 & 4 only)			
RSC 02- Reuse and recycling facilities	None				Answer options C & D (Criterion 1-3)	
RSL 03- Flood risk assessment	None			Answer option B (Criterion 2)		

BREEAM issue	Minimum standards by BREEAM In-Use rating: Management Performance					
	Acceptable	Pass	Good	Very Good	Excellent	Outstanding
MAN 02 - Management engagement and feedback	None				Answer option E (Criterion 3-4)	
MAN 04 - Environmental policies and procedures	None			Answer option B (Criterion 1)		
RSC 05- Sustainable procurement	Answer options C, D, E & F (Criterion 4 & 9 only)					

### New Resilience Category

BREEAM recognizes that Resilience is becoming a key aspect of how investors, owners and managers view assess ESG risks for their portfolios and asset's. BREEAM has introduced the Resilience category to respond to the market's need for clarity on performance in this area. This category considers an asset's exposure to physical risks (including those related to climate change), local watercourse pollution, excess material damage, and physical security. This encourages the pro-active management of these risks to minimize their impact and ensure rapid recovery. Core to this has been offering exemplary credits for assets that incorporate climate change scenarios into their assessment of natural hazards to the property, mitigation measures and emergency planning to protect life, property and the environment.

### Materials and Waste Category combined into Resources

The growing importance of circular economy has also prompted BREEAM to combine the separate categories for Materials and Waste into an integrated category called Resources. In a circular economy, the materials within a building sustain their value, leading to reduced waste and the use of fewer raw materials. This category encourages the responsible and circular use of physical resources in the asset to increase value and sustainability performance in operation and at the end of life. This is achieved by encouraging the asset owner to better understand the condition and value of the asset and to encourage them to maintain or improve its value and the value of the resources they contain. It also seeks to encourage the reuse or recycling of resources in existing assets, facilitating occupants to maximize the reuse and recycling of their waste, minimizing resource use overall and choosing reused or recycled resources instead of those from raw materials.

### Articulation of value and context

Summary, context and value statements have been provided for each Category and each Issue within the Category.

### Streamlining of Answer Options

The options to select “Don’t know” or “Other” answer options have been removed from all issues.

### Exemplary level credits

BREEAM USA In-Use has exemplary-level credits to encourage and reward assets that meet go beyond the standard BREEAM assessment criteria. Each exemplary-level credit achieved adds 1% to an asset's overall score. The maximum number of ‘exemplary-level credits’ that can be awarded for any one asset is 10 per Part; therefore, the maximum additional score available is 10%. Exemplary-level credits can be awarded at any BREEAM rating level, and no assessment can exceed 100% for the overall score. The table below summarizes the issues which now offer exemplary level credits.

Part	Issue	Answer Option	Credits
Asset performance	HEA 01 – Daylighting	Option E	1
Asset performance	HEA 03 – Internal and external lighting levels	Option E	1
Asset performance	HEA 04 – Lighting control	Option E	1
Asset performance	HEA 12 – Inclusive design	Option F	1
Asset performance	ENE 10 – Demand side management	N/A	4
Asset performance	TRA 01 – Alternative modes of transport	Option H	1
Asset performance	WAT 01 – Water monitoring	Option G	1
Asset performance	RSC 02 – Reuse and recycling facilities	Option E	1
		Option F	1
Asset performance	RSC 04 – Future adaptation	Option D	1
Asset performance	RSL 03 – Flood risk assessment	Option G	1
Asset performance	LUE 02 – Ecological features of planted area	Option I	1
Management performance	HEA 17 – Acoustics conditions	Option E	1
Management performance	ENE 24 – Reduction of carbon emissions	N/A	5
Management performance	RSC 05 – Sustainable procurement	Option G	1

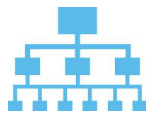
	Option H	1
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**Streamlining of issues, changes to number of credits offered**

Some issues have been merged, moved, renamed or where necessary deleted. Credits offered per issue have been amended and adjusted accordingly. The next section of this document sets out the issues per Part as they are in the proposed update followed by a mapping of each issue from Version 2016 to the update.

## BREEAM USA In-Use: Commercial Version 6

Any new issues for this version and/or category are marked in **magenta**. The aim, value statement and content of these issues are in the draft standard and we welcome your feedback on their inclusion.



### Management (MAN)

Part 1 Asset Performance	Part 2 Management Performance
Not assessed	MAN 01 – Building user guide MAN 02 – Management engagement and feedback MAN 03 – Maintenance policies and procedures MAN 04 – Environmental policies and procedures MAN 05 – Green lease



### Health & Well-being (HEA)

Part 1 Asset Performance	Part 2 Management Performance
HEA 01 – Daylighting HEA 02 – Control of glare from sunlight HEA 03 – Internal and external lighting levels HEA 04 – Lighting control HEA 05 – High frequency lighting control gear HEA 06 – View out HEA 07 – User comfort controls HEA 08 – Ventilation system air intakes and exhausts HEA 09 – Carbon dioxide sensors HEA 10 – Carbon monoxide sensors HEA 11 – Provision of rest areas HEA 12 – Inclusive design HEA 13 – Drinking water provision	HEA 14 – Thermal comfort HEA 15 – Smoking policy HEA 16 – Indoor air quality management HEA 17 – Acoustic conditions HEA 18 – Legionella risk management HEA 19 – Drinking water management



**Energy (ENE)**

Part 1 Asset Performance	Part 2 Management Performance
<p>ENE 01 – Building services                      ENE 02 – Percentage of mechanical ventilation                      ENE 03 – Envelope performance                      ENE 04 – Air permeability of the envelope                      ENE 05 – Cooling                      ENE 06 – Heating                      ENE 07 – Internal lighting                      ENE 08 – Ventilation                      ENE 09 – Water heating                      ENE 10 – Demand Side Management                      ENE 11 – Installed controls                      ENE 12 – Local energy performance asset rating</p>	<p>ENE 13 – Solar photovoltaic (PV) panels                      ENE 14 – Solar thermal panels                      ENE 15 – Monitoring energy uses                      ENE 16 – Monitoring tenanted spaces                      ENE 17 – External lighting                      ENE 18 – Energy efficient internal transport</p> <p>ENE 19 – Energy consumption                      ENE 20 – Carbon intensity of district heating and cooling                      ENE 21 – Electricity generated and exported                      ENE 22 – Non-standard energy consumption                      ENE 23 – Energy consumption reporting                      ENE 24 – Reduction of carbon emissions</p>



**Transport (TRA)**

Part 1 Asset Performance	Part 2 Management Performance
<p>TRA 01 – Alternative modes of transport                      TRA 02 – Proximity to public transport                      TRA 03 – Proximity to amenities                      TRA 04 – Pedestrian and cyclist safety</p>	<p><i>Not assessed</i></p>



**Water (WAT)**



Part 1 Asset Performance		Part 2 Management Performance
WAT 01 – Water monitoring	WAT 07 – Leak detection systems	WAT 11 – Water consumption
WAT 02 – Water efficient equipment - toilets	WAT 08 – Leak prevention	WAT 12 – Water recycling
WAT 03 – Water efficient equipment - urinals	WAT 09 – Isolation valves	WAT 13 – Water strategy
WAT 04 – Water efficient equipment - faucets	WAT 10 – Reducing utility-supplied water consumption	WAT 14 – Water consumption reporting
WAT 05 – Water efficient equipment - showers		
WAT 06 – Water efficient equipment - appliances		



### Resources (RSC)

Performance at the building level is now included; principles of circular economy introduced through new issues.

Part 1 Asset Performance	Part 2 Management Performance
RSC 01 – Condition survey	RSC 05 – Sustainable procurement
RSC 02 – Reuse and recycling facilities	RSC 06 – Optimizing reuse & recycling
RSC 03 – Resources inventory	
RSC 04 – Future adaptation	



### Resilience (RSL)

Part 1 Asset Performance	Part 2 Management Performance
RSL 01 – Alarm Systems	RSL 04 – Hazard preparedness and mitigation
RSL 02 – Durable and resilient features	RSL 05 – Security advice
RSL 03 – Flood risk assessment	RSL 06 – Alarm system monitoring and security guards
	RSL 07 – Fire risk management
	RSL 08 – Emergency plan



### Land Use & Ecology (LUE)

Part 1 Asset Performance	Part 2 Management Performance
LUE 01 – Planted area	LUE 03 – Ecology report

LUE 02 – Ecological features of planted area	LUE 04 – Biodiversity management plan
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**Pollution (POL)**

<b>Part 1 Asset Performance</b>	<b>Part 2 Management Performance</b>
POL 01 – Minimizing watercourse pollution POL 02 – Surface water run-off impact mitigation POL 03 – Chemical storage POL 04 – Local air quality POL 05 – Global warming potential of refrigerants POL 06 – Refrigerant leak detection systems	POL 07 – Reduction of night time pollution POL 08 – Inspection of watercourse pollution prevention features POL 09 – Refrigerant replacement POL 10 – Land contamination mitigation POL 11 – Response to pollution incidents

## Summary of Changes By v2016 Issue



### Management

Part	Issue	Title	Update
2	MAN 01	Building user guide	No change.
2	MAN 02	Building user education	<p><b>Amended title</b> Now titled <b>MAN 02 Management engagement and feedback</b></p> <p><b>Answer options amended</b> Options amended to reflect incorporated issues.</p> <p><b>Revised assessment criteria</b> This issue combines a range of issues relating to the communications to and from Building Management including Building user education, Building user information, Occupant satisfaction, Complaints procedure. Feeding back on Occupant satisfaction surveys is now required to achieve the credits. Complaints procedure rewarded with only 1 credit.</p> <p><b>Revised evidence requirements</b> Amended to reflect incorporated issues.</p>
2	MAN 03	Building user information	<b>Incorporated in another issue</b> See MAN 02 Management engagement and feedback.
2	MAN 04	Operation and maintenance manuals	<b>Incorporated in another issue</b> See new MAN 03 Maintenance policies and procedures
2	MAN 05	Maintenance procedures	<p><b>Amended issue number/title</b> Renumbered and renamed to <b>MAN 03 Maintenance policies and procedures</b></p> <p><b>Answer options amended</b> Options amended to reflect incorporated issues.</p> <p><b>Revised assessment criteria</b> This issue combines a range of issues relating to policies and procedures including operation and maintenance manuals, maintenance procedures, maintenance policy, building controls review. All maintenance policies must now be proactive.</p> <p><b>Revised evidence requirements</b> Amended to reflect incorporated issues.</p>
2	MAN 06	Maintenance policy	<b>Incorporated in another issue</b> See new MAN 03 Maintenance policies and procedures
2	MAN 07	Environmental policies and responsibilities	<p><b>Amended issue number/title</b> Renumbered and renamed to <b>MAN 04 Environmental policies and procedures</b></p> <p><b>Answer options amended</b> Options amended to reflect incorporated issues.</p> <p><b>Revised assessment criteria</b> Amended to reflect incorporated issues.</p> <p><b>Revised evidence requirements</b> Amended to reflect incorporated issues.</p>
2	MAN 08	Environmental policies	<b>Incorporated in another issue</b> See new MAN 04 Environmental policies and procedures
2	MAN 09	Operating procedures: Energy reduction	<b>Incorporated in another issue</b> See new MAN 03 Maintenance policies and procedures

2	MAN 10	Ventilation system leak testing	<b>Issue Removed</b> There is insufficient value doing leak testing of air handling systems or duct work unless a problem has been identified. There is more value in regular inspection and cleaning of ventilations systems which is now covered in <b>HEA 16 – Indoor air quality management</b>
2	MAN 11	Green lease	<b>Amended issue number</b> Renumbered to <b>MAN 05 Green lease</b> . The issue can now be filtered out for single tenant assessments. <b>Revised assessment criteria</b> Issue now provides a more intermediate reward and to encourage gradual improvement or encourage improvement for building managers who are unable to implement Green Leases for >75% of their tenants. There is now encouragement for tenants to share environmental data.
2	MAN 12	Building management system review	<b>Incorporated in another issue</b> All building management maintenance policies and procedures issues have been included in the newly created <b>MAN 03 - Maintenance policies and procedures</b> .
2	MAN 13	Functional adaptability	<b>Issue relocated</b> See new <b>RSC 03 – Resources inventory</b>



## Health & Well-being

Part	Issue	Title	Update
1	HEA 01	Glazing	<b>Amended title</b> Renamed to <b>HEA 01 Daylighting</b> . <b>Answer options amended</b> Options amended to reflect more robust assessment of the levels of daylight within a commercial asset. <b>Revised assessment criteria</b> Introduced new content based on industry experts' requirements which are appropriate for non-residential buildings. Amended to reflect more robust assessment of the levels of daylight within a commercial asset. <b>Revised evidence requirements</b> Amended to reflect more robust assessment of the levels of daylight within a commercial asset.
1	HEA 02	Glare control	<b>Amended title</b> Renamed to <b>HEA 02 Control of glare from sunlight</b> . <b>Answer options amended</b> New lower level for glare control for 80% of occupied space. <b>Revised assessment criteria</b> Criteria are now more outcome focused rather than solution focused.

1	HEA 03	Thermal control	<p><b>Amended title</b> Renamed to <b>HEA 07 User comfort controls</b>. Merges Thermal Control and Ventilation control</p> <p><b>Answer options amended</b> Options amended to reflect incorporated issues.</p> <p><b>Revised assessment criteria</b> Amended to reflect incorporated issues.</p> <p><b>Revised evidence requirements</b> Amended to reflect incorporated issues.</p>
1	HEA 04	Ventilation controls	<b>Incorporated in another issue</b> See new <b>HEA 07 User comfort controls</b> .
1	HEA 05	Minimizing Legionella contamination risk	<b>Incorporated in another issue</b> See new <b>HEA 18 Legionella risk management</b> in Part 2.
1	HEA 06	Drinking water provisions	<p><b>Amended issue number/title</b> Renamed to <b>HEA 13 Drinking water provision</b>.</p> <p><b>Revised assessment criteria</b> Minor changes to improve clarity and ensure availability to visitors to assets.</p>
1	HEA 07	Indoor and/or outdoor space	<p><b>Amended title</b> Renamed to <b>HEA 11 Provision of rest areas</b>.</p> <p><b>Answer options amended</b> Options provide more flexibility to ensure rest areas deliver value to the occupants.</p> <p><b>Revised assessment criteria</b> Amended to clarify the requirements.</p>
1	HEA 08	Illuminance levels (Lux)	<p><b>Amended issue number/title</b> Renamed to <b>HEA 03 internal and external lighting levels</b>.</p> <p><b>Answer options amended</b> Introduction of difference performance levels.</p> <p><b>Revised assessment criteria</b> Requirements to follow a procedure for measure illuminance introduced.</p>
1	HEA 09	Lighting control	<p><b>Amended issue number/ title</b> Renamed to <b>HEA 04 Lighting control</b>.</p> <p><b>Answer options amended</b> Introduction of different performance levels</p> <p><b>Revised assessment criteria</b> Expanded to address new performance levels</p> <p><b>Revised evidence requirements</b> Expanded to address new performance levels</p>
1	HEA 10	Inclusive design	<p><b>Revised assessment criteria</b> Issue completely revised to encourage assets to consider user needs beyond legal requirements and physical disability, broaden definition of accessibility through Universal Design.</p> <p><b>Revised evidence requirements</b> Amended to reflect changes to assessment criteria.</p>
1	HEA 11	Ventilation requirements	<b>Amended issue number/title</b> Renamed to <b>HEA 08 Ventilation system air intakes and exhausts</b> to better reflect the criteria.
2	HEA 12	Fresh air rates	<p><b>Amended issue number/ title</b> Renamed to <b>HEA 16 Indoor air quality management</b>.</p> <p><b>Revised assessment criteria</b> Combines elements of the original issue with aspects from HEA 17, HEA 18 Volatile organic compounds, HEA 19 Control of chemicals and HEA 21 Deep cleaning. New requirements for cleaning ventilation system components, regular monitoring of indoor air quality and provision of information to asset users.</p>

2	HEA 13	Operating temperature	<b>Amended issue number/ title</b> Renamed to <b>HEA 14 Thermal comfort</b> . <b>Revised assessment criteria</b> Rewritten to ensure requirements focus on occupant thermal comfort rather than simply on operating temperatures.
2	HEA 14	Internal environment: CO <sub>2</sub> monitoring	<b>Issue relocated</b> This issue was relocated to Part 1 <b>Amended issue number/title</b> Renamed to <b>HEA 09 Carbon dioxide sensors</b> . <b>Revised assessment criteria</b> More graded levels of performance if at least some areas have CO <sub>2</sub> sensors.
2	HEA 15	Internal environment: CO monitoring	<b>Issue relocated</b> This issue was relocated to Part 1 <b>Amended issue number/title</b> Renamed to <b>HEA 10 Carbon monoxide detection</b> . <b>Revised assessment criteria</b> Expanded to confirm when and where detectors are required.
2	HEA 16	Internal environment: NO <sub>x</sub> monitoring	<b>Incorporated in another issue</b> See new <b>POL 04 Local air quality</b> .
2	HEA 17	Internal environment: Refurbishment / renovation / redecoration	<b>Incorporated in another issue</b> See new <b>HEA 16 Indoor air quality management</b> . <b>Revised assessment criteria</b>
2	HEA 18	Volatile organic compounds	<b>Incorporated in another issue</b> See new <b>HEA 16 Indoor air quality management</b> .
2	HEA 19	Control of chemicals	<b>Incorporated in another issue</b> See new <b>HEA 16 Indoor air quality management</b> .
2	HEA 20	Acoustic conditions	<b>Answer options amended</b> Expanded to introduce different performance levels. <b>Revised assessment criteria</b> Expanded to include more guidance as to what measurements need to be taken and the performance standards that would be deemed as compliant, providing clarity on how the aim of the issue can be met.
2	HEA 21	Deep cleaning	<b>Incorporated in another issue</b> See new <b>HEA 16 Indoor air quality management</b> .
2	HEA 22	Legionella management	<b>Amended issue number/title</b> Renamed to <b>HEA 18 Legionella risk management</b> . <b>Revised assessment criteria</b> Incorporated criteria from HEA 05 Minimizing Legionella contamination risk. New and updated requirements to clarify what needs to be assessed and by whom.
2	HEA 23	Occupant satisfaction: Surveying	<b>Incorporated in another issue</b> See new <b>MAN 02 Management engagement and feedback</b>
2	HEA 24	Occupant satisfaction: Feedback	<b>Incorporated in another issue</b> See new <b>MAN 02 Management engagement and feedback</b>



## Energy

Part	Issue	Title	Update
1	ENE 01 – 26	Part 1 Energy Model	<b>Revised assessment criteria</b> The Asset Performance Energy calculator has expanded to recognize more areas that contribute to the envelope performance, and the effect these have on the overall energy performance of the asset. By asking for more information about the

	<i>Questions included in these issues were data points for calculating the energy efficiency of the asset's installed equipment and services</i>		building envelope it allows us to improve the energy modelling and therefore provide more accurate results to base the credit allocation on.
1	ENE 29	Benchmarking	<b>Revised assessment criteria</b> Looking to capture more details in order to differentiate between the scope and performance of different asset ratings with the purpose of move to a performance-based credit rewarding in future updates
1	ENE 30	On-site renewables	<b>Revised assessment criteria</b> This issue has been split into two new issues; <b>ENE 13 Solar photovoltaic (PV) panels</b> , and <b>ENE 14 Solar thermal panels</b> . The number of credits awarded relates to the potential areas of panels installed compared to the available area.
2	ENE 31 - 61 <i>Questions included in these issues were data points for calculating the Operational Energy score.</i>		<b>Incorporated in another issue</b> All these issues now within ENE 19 to ENE 22, which is the Operational Energy Calculator. <b>Revised assessment criteria</b> eGRID data set updated to the 2016 version released in June 2018 by the EPA.
2	ENE 62	Energy consumption monitoring	<b>Incorporated in another issue</b> See new <b>ENE 23 – Energy consumption reporting</b>
2	ENE 63	Energy consumption data use	<b>Incorporated in another issue</b> See new <b>ENE 23 – Energy consumption reporting</b>
2	ENE 64	Sub-metering: Main energy sources	<b>Incorporated in another issue</b> See new <b>ENE 15 – Monitoring energy uses</b>
2	ENE 65	Sub-metering: Other energy sources	<b>Incorporated in another issue</b> See new <b>ENE 15 – Monitoring energy uses</b>
2	ENE 66	Sub-metering: Tenanted areas	<b>Incorporated in another issue</b> See new <b>ENE 16– Monitoring tenanted areas</b>



## Transport

Part	Issue	Title	Update
1	TRA 01	Cyclist facilities	<b>Amended title</b> Amended from Cyclist facilities to <b>TRA 01 - Alternative modes of transport</b> <b>Answer options amended</b> Existing answer options have been split out, so they are no longer cumulative; allows for cycle storage and compliant cycle facilities to be awarded credits separately. Additional answers options for provisions such as electric car recharging stations and car sharing spaces. <b>Revised assessment criteria</b> Shower requirements have been added to with clarifications on accommodating gender. Electric car recharging station provisions and thresholds for car sharing capacity have been defined. Definitions of compliance have been expanded for cycle provision criteria to sites with multiple buildings.

1	TRA 02	Proximity to public transport	<b>Revised assessment criteria</b> Amended language for buses from 'chartered' to 'dedicated'. Language included to allow for compliance from multiple stops or services. Definitions added for 'Dedicated service' and 'Peak times'.
1	TRA 03	Proximity to amenities	<b>Answer options amended</b> Shortened to be more concise and clearer. <b>Revised assessment criteria</b> Methodology for measuring distances included and definitions of 'safe pedestrian routes' added.
1	TRA 04	Pedestrian and cyclist safety	<b>Answer options amended</b> Additional answer option added to provide an intermediate credit to rewarded improvements being implemented to assets where full compliance with the issue is not possible. <b>Revised assessment criteria</b> Specific guidance added on 'small scale deliveries' and how the assessment criteria can be met for these conditions. Definitions of 'safe pedestrian routes' added.



## Water

Part	Issue	Title	Update
1	WAT 01	Water metering	No change.
1	WAT 02	Water efficient equipment: Toilets	No change.
1	WAT 03	Water efficient equipment: Urinals	<b>Answer options amended</b> Change in answer options to remove types of controls and now only concentrates on flush volume. Removal of answer option of no urinals present receiving full credits <b>Revised assessment criteria</b> Guidance added for urinal troughs. Specific note added for assets with no facilities
1	WAT 04	Water efficient equipment: Hand washing sinks	<b>Answer options amended</b> Flow rate boundaries for highest credits changed to reflect current best practice <b>Revised assessment criteria</b> Removal of the need for automation on all taps, only for top credits. Removal of requirement for any automatic control type, now only accepting taps with proximity sensors. Specific note added for assets with no facilities
1	WAT 05	Water efficient equipment: Showers	<b>Answer options amended</b> Answer option percentage ranges increased <b>Revised assessment criteria</b> Now linked in assessment criteria to <b>TRA 01 – Alternative modes of transport</b> . Exception for medical reasons added. Specific note added for assets with no facilities
1	WAT 06	Water efficient equipment: Appliances	<b>Revised assessment criteria</b> Change to baseline levels to reflect best practice. Specific note added for assets with no facilities
1	WAT 07	Leak detection system	No change.



1	WAT 08	Leak prevention	No change.
1	WAT 09	Isolation valves	<b>Answer options amended</b> Answer option percentage ranges increased <b>Revised assessment criteria</b> Specific note added for assets with no facilities
1	WAT 10	Reducing utility-supplied water consumption	<b>Revised assessment criteria</b> Examples of uses of non-utility supplied water added
2	WAT 11	Annual consumption	<b>Amended issue number/title</b> Renamed <b>WAT 11 – Water consumption</b> <b>Revised assessment criteria</b> Clarification of exactly what water consumption should be recorded.
2	WAT 12	Water consumption: Monitoring and reporting	<b>Answer options amended</b> Changed to a free text box entry <b>Revised assessment criteria</b> Now linked in assessment criteria to <b>WAT 11 - Water consumption</b>
2	WAT 13	Drinking water provision	<b>Issue relocated</b> See Health & Well-being category, Part 1 <b>HEA 13 – Drinking water provision</b>
2	WAT 14	Refurbishment policy: Water efficiency	<b>Incorporated in another issue</b> See Water category, Part 2 <b>WAT 14 - Water consumption reporting</b>
2	WAT 15	Water system maintenance strategy	<b>Incorporated in another issue</b> See Water category, Part 2 <b>WAT 14 - Water consumption reporting</b>
2	WAT 16	Water recycling	<b>Answer options amended</b> Updated to capture the data relating to an asset's water consumption from alternative supplies, rather than just asking for the percentage this value makes up of the asset's overall consumption.
2	WAT 17	Water extraction	<b>Incorporated in another issue</b> See Water category, Part 2 <b>WAT 14 - Water consumption reporting</b>



## Materials

Part	Issue	Title	Update
1	MAT 01	Condition survey	<b>Issue relocated</b> See Resilience category, Part 1 <b>RSC 01 – Condition survey</b>
1	MAT 02	Security advice	<b>Amended issue number</b> See Resilience category, Part 2 <b>RSL 05 – Security advice</b>
1	MAT 03	Intruder alarm system	<b>Incorporated in another issue</b> See Resilience category, Part 2 <b>RSL 06 – Alarm system monitoring and security guards</b>
1	MAT 04	Alarm system monitoring	<b>Incorporated in another issue</b> See Resilience category, Part 2 <b>RSL 06 – Alarm system monitoring and security guards</b>
1	MAT 05	Natural hazards	<b>Incorporated in another issue</b> See Resilience category, Part 2 <b>RSL 04 – Hazard preparedness and mitigation</b>
1	MAT 06	Future adaptation	<b>Issue relocated</b> See Resources category, Part 1 <b>RSC 04 – Future adaptation</b>

1	MAT 07	Designing for robustness	<b>Issue relocated</b> See Resources category, Part 1 <b>RSL 02 – Durable and resilient features</b>
2	MAT 08	Condition survey	<b>Incorporated in another issue</b> See Resources category, Part 1 <b>RSC 01 – Condition survey</b>
2	MAT 09	Sustainable procurement policy	<b>Amended issue number &amp; title</b> See Resilience category, Part 2 <b>RSC 05 – Sustainable procurement</b>
2	MAT 10	Sustainable procurement initiatives	<b>Amended issue number &amp; title</b> See Resilience category, Part 2 <b>RSC 05 – Sustainable procurement</b>
2	MAT 11	Fire risk assessment	<b>Incorporated in another issue</b> See Resilience category, Part 2 <b>RSL 07 – Fire risk management</b>
2	MAT 12	Fire risk management	<b>Issue relocated</b> See Resilience category, Part 2 <b>RSL 07 – Fire risk management</b>
2	MAT 13	Emergency plan	<b>Amended issue number</b> See Resilience category, Part 2 <b>RSL 08 – Emergency plan</b>
2	MAT 14	Natural hazard management	<b>Incorporated in another issue</b> See Resilience category, Part 2 <b>RSL 04 – Hazard preparedness and mitigation</b>



## Waste

Part	Issue	Title	Update
1	WST 01	Storage of operational waste	<b>Issue relocated</b> Now in the Resources category, see <b>RSC 02 - Reuse and recycling facilities</b> adapted to also include construction waste and storing of spare materials (see answer options E and F) in order to focus on reducing waste



## Land Use & Ecology

Part	Issue	Title	Update
1	LE 01	Planted area	<b>Answer options amended</b> Addition of text box to answer question <b>Revised assessment criteria</b> Addition of methodology section to explain how to measure the asset footprint and % of planted area
1	LE 02	Ecological features of planted area	<b>Revised assessment criteria</b> Increase in the diversity of permitted ecological features and added option of offsite enhancement for assets with no outdoor space to influence.
2	LE 03	Ecology report	<b>Revised assessment criteria</b> Addition of time scales to the ecology report. Reduction in bought credits, the asset now has to implement some of the actions in the ecology report

			before it can be considered for any credits. Optional offsetting of ecological enhancement has been included.
2	LE 04	Biodiversity action plan	<b>Revised assessment criteria</b> A2 route option has been implemented – one for more complex sites. The option for offsetting the ecological enhancement has continued to be used.
2	LE 05	External landscaping/maintenance	<b>Incorporated in another issue</b> See <b>LUE 04 – Biodiversity action plan</b>



## Pollution

Part	Issue	Title	Update
1	POL 01	Pollution prevention	<b>Amended issue number/title</b> Changed to <b>POL 01 – Minimizing watercourse pollution</b>
1	POL 02	Flood risk assessment	<b>Issue relocated</b> Moved to Resilience, Part 1 <b>RSL 03 – Flood risk assessment</b>
1	POL 03	Surface water runoff impact mitigation	<b>Amended issue number/title</b> Changed to <b>POL 02 – Surface water runoff impact mitigation</b>
1	POL 04	Impact of refrigerants	<b>Amended issue number/title</b> Changed to <b>POL 05 – Global warming impact of refrigerants</b>
1	POL 05	Refrigerant leak detection systems	No change.
1	POL 06	NO <sub>x</sub> emissions	<b>Incorporated in another issue</b> See <b>POL 04 – Local air quality</b> <b>Revised assessment criteria</b> General principles of air quality monitoring included in a new issue. Specific content relating to onsite combustion of fuels leading to NO <sub>x</sub> emissions moved to Health and Wellbeing category
2	POL 07	Night time light pollution	<b>Amended issue number/title</b> Changed to <b>POL 07 – Reduction of night time light pollution</b> <b>Revised assessment criteria</b> Updated to give more information on what level of assessment is required, as well as values for lighting levels and types of lighting zones
2	POL 08	Chemical storage	<b>Issue relocated</b> Moved to Asset Performance, same category <b>Amended issue number/title</b> Changed to <b>POL 03 – Chemical storage</b>
2	POL 09	Secondary containment	<b>Amended issue number/title</b> Changed to <b>Pol 08 – Inspection of watercourse pollution prevention features</b>
2	POL 10	Light-liquid separators	<b>Incorporated in another issue</b> See <b>POL 08 – Inspection of watercourse pollution prevention</b>
2	POL 11	Refrigerants	<b>Amended issue number/title</b> Changed to <b>POL 09 – Refrigerant replacement</b>
2	POL 12	Land contamination mitigation	No change
2	POL 13	Emergency preparedness and response	<b>Amended issue number/title</b> Changed to <b>POL 11 – Response to pollution incidents</b>
2	POL 14	Complaints procedure	<b>Incorporated in another issue</b> Moved to Management category, <b>MAN 02 - Management engagement and feedback</b>