

Whole-life Performance through:

1. The Next Generation of BREEAM
2. BREEAM and the race to Net Zero Carbon
3. Expanding our portfolio: enter 'BRIDG.'



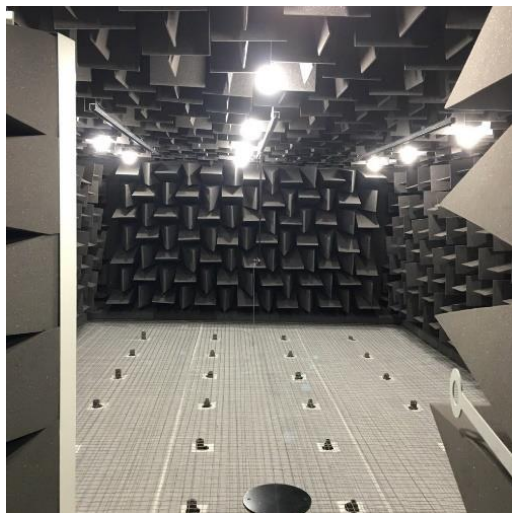
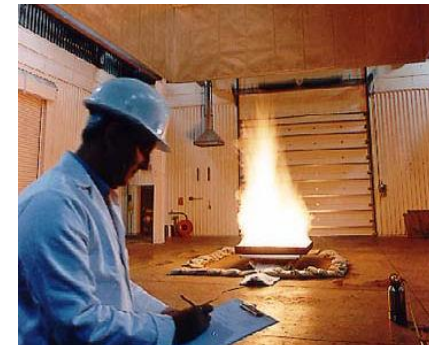
Charlene
Clear, Head of
Products and
Services




Jen Dudley,
Senior Product
Manager

An International cohort of ~600 scientists, building and professional specialists celebrating a centenary of **scientifically underpinned services**:

- Assurance – testing, verification and certification
- Training – the BRE Academy
- Advisory – toolkits and consultancy
- Transformation – programme delivery and innovation parks





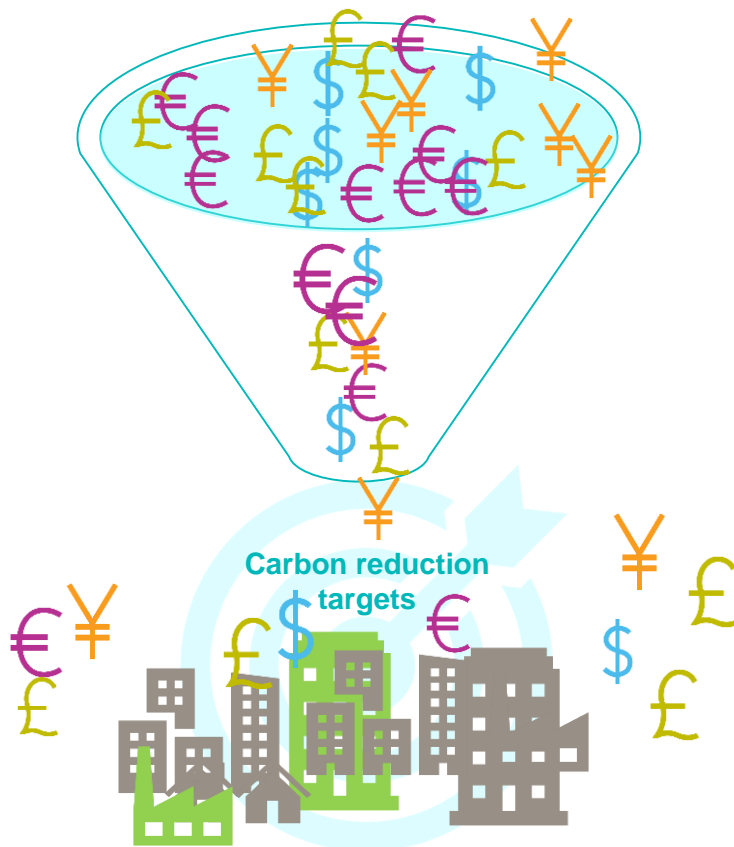
- Comprehensive sustainability scope; robust management of unintended consequences
 - Locally adapted; i.e. Scotland, by life cycle stage and asset type
 - Common performance framework used by all industry stakeholders
- 



Despite the billions invested, built environment carbon emissions have yet to be stabilised.

Funds are at risk of missing their mark due to the urgent need for core sector transformation.

A whole life approach, with a focus on the performance gap, must be established if we are to successfully upscale to the investment point needed to truly achieve net zero.



Moving from...

“...less paper chasing”

“overly onerous in some aspects”

“hard to relate aspect to project specific objectives”

“disjointed customer journey”



and towards...

“BREEAM needs to be more digital, more contemporary!”

“...more outcome and KPI driven”

“additional value from the process”

“look beyond life-cycle stages to a whole-life approach to asset sustainability performance”

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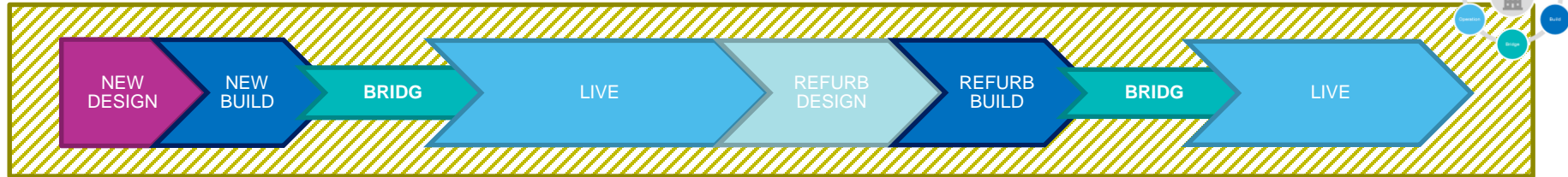
BREEAM: Next Generation

BREEAM Next Gen enables clients to ascertain, and demonstrate **asset and portfolio whole-life, sustainability performance through robust and holistic benchmarking and insight**. It empowers them to future proof and build resilience into their operating norms whilst moving forward with decarbonisation and other ESG investments underpinned by greater assurance in actual performance.

BREEAM Next Gen: the sustainability benchmarking and insight needed to invest and progress in confidence.

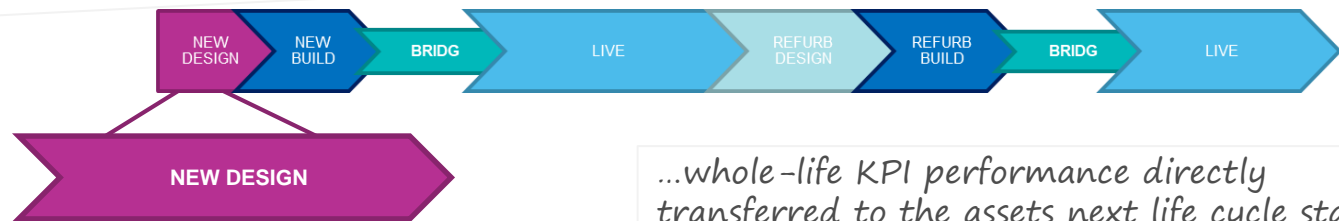
Brought to life with a 'pioneer' service...

Whole-life insight as a service...powered by BRE



Re-definition of sustainability performance tailored to each life cycle stage























Benchmarking, insight and assurance across a holistic suite of whole-life and life cycle KPI's



...whole-life KPI performance directly transferred to the assets next life cycle stage.

| | | |
|--------------------------|--|---|
| Net Zero | e.g. kg CO ₂ eq/m ² , kg CO ₂ eq/m ² per year | e.g. kg CO ₂ eq/m ² per year |
| Circularity | e.g. kg/m ² per year, m ³ storage/no. occupants | e.g. m ³ storage/no. occupants |
| Resilience | e.g. adaptability measures implemented, % chance of the building flooding based on a 100 year flood risk | e.g. % chance of the building flooding based on a 100 year flood risk |
| Social Impact | e.g. % of products (by kg or value) with ethical labour cert. in their supply chain, area of facilities provided (m ²) e.g. VOC ppm | e.g. area of facilities provided (m ²) |
| Health and Wellbeing | or. PM ₁₀ , PM _{2.5} ppm, % occupied hours in comfort range | e.g. % occupied hours in comfort range |
| Natural Environment | e.g. % improvement in ecological value, kg pollutant/m ² | e.g. kg pollutant/m ² |
| Quality and Productivity | e.g. defect rectification as % total project cost, value (£/m ²) | e.g. value (£/m ²) |

...2x tier access and functionality.

| | Benchmarking | Benchmarking + Insight | Dashboard/Reporting + BIU comparator | Verify? |
|--------------------------|---|--|---|---|
| Carbon |  |     | |  |
| Health |  |     | | |
| Circularity |  |     | |  |
| Quality and Productivity |  |     | | |

Dashboard reporting acting as self assessment but verification also as an option...

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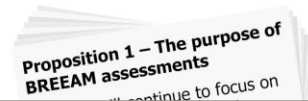
Net Zero Carbon

NZC Propositions:

1. **Asset performance** – BREEAM's core methodology drives asset (and asset management) value and performance; not corporate policy, to provide performance ratings that are tangibly relatable to the asset over its whole life.
2. **Zero Whole Life Carbon** – BREEAM's core methodology will continue to drive the reduction of embodied and operational energy; merging both assessments to develop a highly aspirational 'Zero Whole Life Carbon' (ZWLC) performance metric and benchmarking scale.
3. **Net Zero Carbon (NZC) trajectories** – as pathways towards NZC enter the market and mature, BREEAM ratings and scoring will be mapped and aligned to support stakeholders in tracking NZC performance using such pathways to determine their performance against Paris (and other relevant) targets.
4. **Offsite and Onsite renewable solutions** – Inline with proposition 1, BREEAM's core methodology will continue to recognise onsite renewable solutions and also continue to exclude offsite solutions to maintain an accurate representation of the assets performance over its whole life. However, we will recognise offsites within a NZC verification alternative.
5. **Offsetting** – In line with proposition 1, BREEAM's core methodology will continue to exclude offsetting's to maintain an accurate representation of the assets performance over its whole life. However, we will recognise offsets within a NZC verification alternative.
6. **Net Zero Carbon verification** – Inline with propositions 4 and 5, BREEAM will develop an alternative NZC verification option based on the core methodology and project rating, and aligned to the NZC definition(s) most widely accepted by the market. This will include offsite renewable solutions and carbon offsets (differentiating between offset removals and offset avoidance). In doing so, we will also work with industry to align said definitions.

Next Steps...

-
- Net Zero Carbon**
- With buildings generating nearly 40% of annual meaningful action by the real estate and construction sectors, the 2016 Paris Agreement target to limit global warming to 1.5°C is a significant challenge for the built environment.
- All BREEAM standards strongly incentivise carbon benchmarks relating to operational and embodied carbon, with a focus on reducing operational carbon through energy efficiency measures and renewable energy.
- Through BREEAM's innovation and leadership pathways, which have been developed to help building owners and operators achieve net zero carbon, the industry is encouraged to explore and implement innovative solutions to reduce carbon emissions.
- Watch this space for more information on the latest developments in net zero carbon.
- 1. Summary**
- Circular**
- The circular economy



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BRIDG.

Zero Carbon aspirations (and aspirations more generally) during design need to be followed by performance, yet the Performance Gap continues to thwart efforts across sectors and national boundaries.

How many anecdotes have we all heard about buildings that haven't quite hit the mark? Resulting in:

- Policy failure
- Risk to ROI and failure to meet client/investor/specifier expectations
- Costly remedial works
- Dissatisfied tenants/occupants

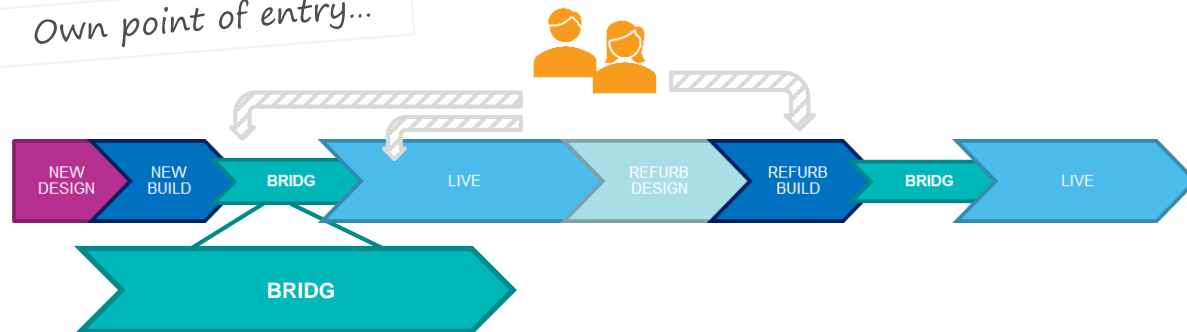
We must be...



BRidging the **D**esign and **I**nnovation **G**ap



Own point of entry...



BREEAM integrated
but a lighter touch...

| | Benchmarking | Benchmarking + Insight | Dashboard/Reporting + BiU comparator | Verify? |
|--------------------------|--------------|---------------------------|---|---------|
| Carbon | | | | |
| Health | | | | |
| Circularity | | | | |
| Quality and Productivity | | | | |

Help transition new
build and refurb
during that crucial
performance
optimisation phase...

- Soft market testing
- Technical steering group to define methodological underpinning
- Specify, develop, test and roll out digital platform and applications



Thank you

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