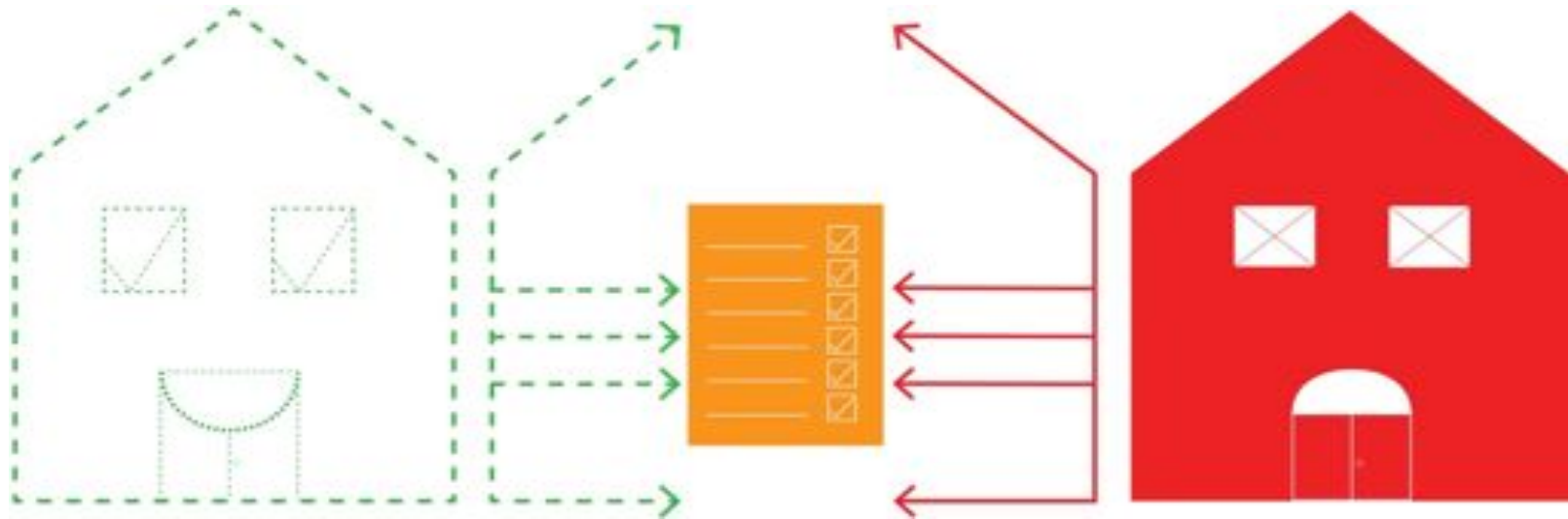




Edge Commission Report on the Future of Professionalism: **do our performance gaps matter?**



Robin Nicholson CBE RIBA Hon FStructE Hon FCIBSE
A Senior Partner, Cullinan Studio and the Edge

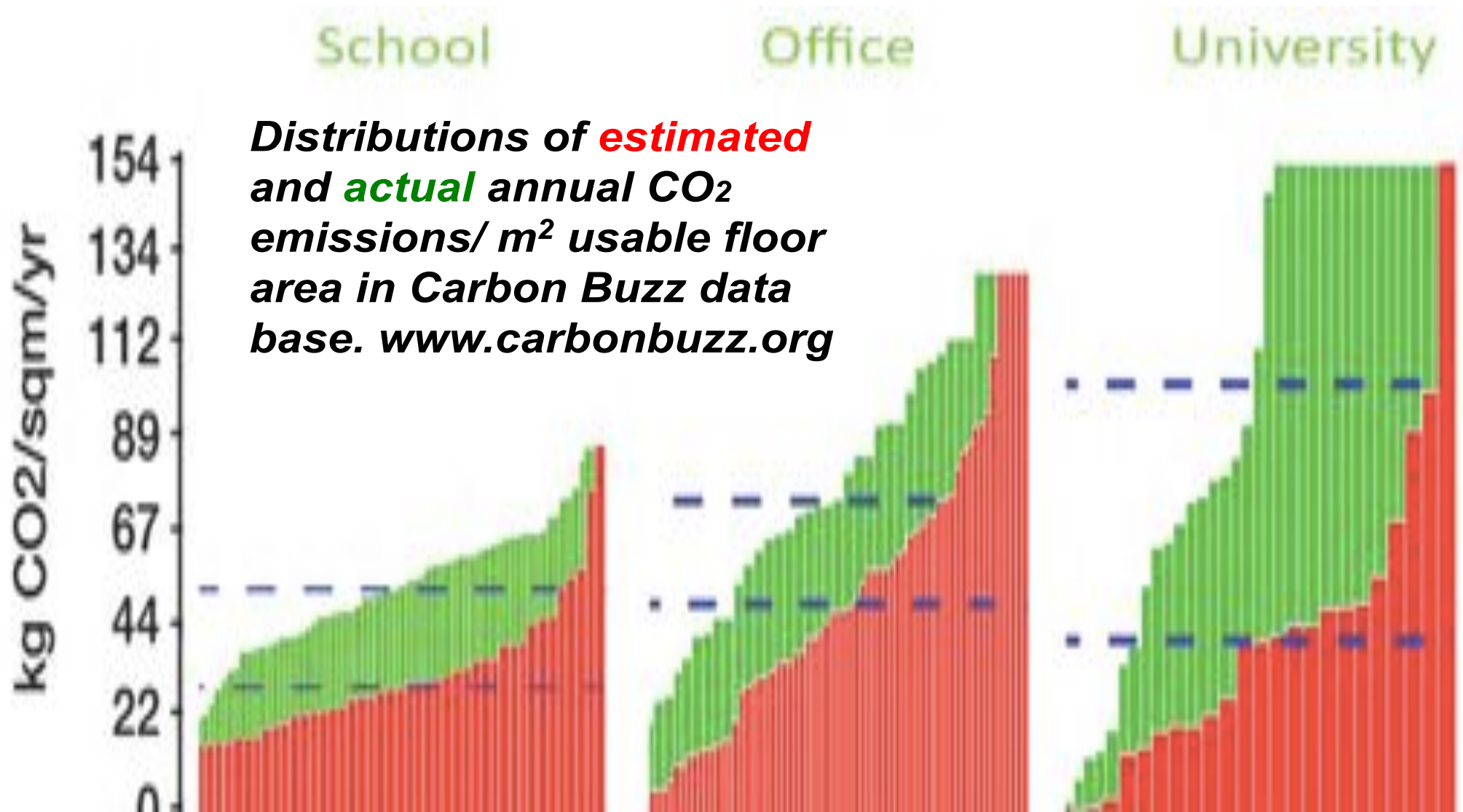
Simon Foxell RIBA

Principal, The Architects Practice and the Edge



16 March 2016

Carbon Buzz: Anticipated vs actual CO₂ emissions



Performance gaps: Not just energy

Occupant survey, multi-award winning school

RED: Below average; AMBER: Average; GREEN: Above average



Source: Bill Bordass – UBT: BUS Method survey of a building services engineering award-winning Academy school in SE England 2009

Performance predictions: Economic



*“**HS2** will support economic growth across Britain. The monetised benefits of the network to business are forecast to be approximately £34-45 billion. These come both from faster, more comfortable and convenient journeys, and from businesses being able to operate more efficiently, increasing their productivity, accessing new markets and labour pools.”*

From High Speed Rail: Investing in Britain’s Future – Decisions and Next Steps
Department of Transport, January 2012

Performance predictions: Social



“The mission here is nothing short of social turnaround, and with massive estate regeneration, tenants protected and land unlocked for new housing all over Britain, I believe that together we can tear down anything that stands in our way.”

David Cameron

The Sunday Times, January 2016

Performance predictions: Environmental



“The Green Deal will be the biggest home improvement programme since the Second World War shifting our dated draughty homes from the past into the future, so it’s vital people can trust it”

Greg Barker – Climate Change Minister, 2011

Performance outcomes:



Tender price £43m

Outturn cost £470m

Claims cost £47m

Yet buildings are 'free' if their design increases productivity by 6%

Collaboration for Change



Launch at Arup on 18th May 2015

Tony Burton identifies 3 out of the 6 areas for CIC to follow up

- Ethics
- Education
- Performance Gap

and the need for CIC Mark II



We explained the headlines to the CEO or President of 17 institutions:

ACE + APM + BIFM + cabe + CIAT
+ CIBSE + CIC + CIHT + CIOB
+ CIPHE + ICE + IStructE + LI + RIBA +
RICS + RSA + RTPI

Much has been done and is being done to improve our industry, so what is this Performance Gap?

There is little or no feedback loop in construction but are there different areas of performance gap according to who you are?

- For clients – time, money, profit, pleasure...
- For designers – detail, function, build quality, place...
- For constructors – time, defect free, profit, repeat work...
- For facility managers – proper commissioning, understandable controls, logical meters, access to manage ...
- For users – comfort, functionality, security, accessibility, delight...

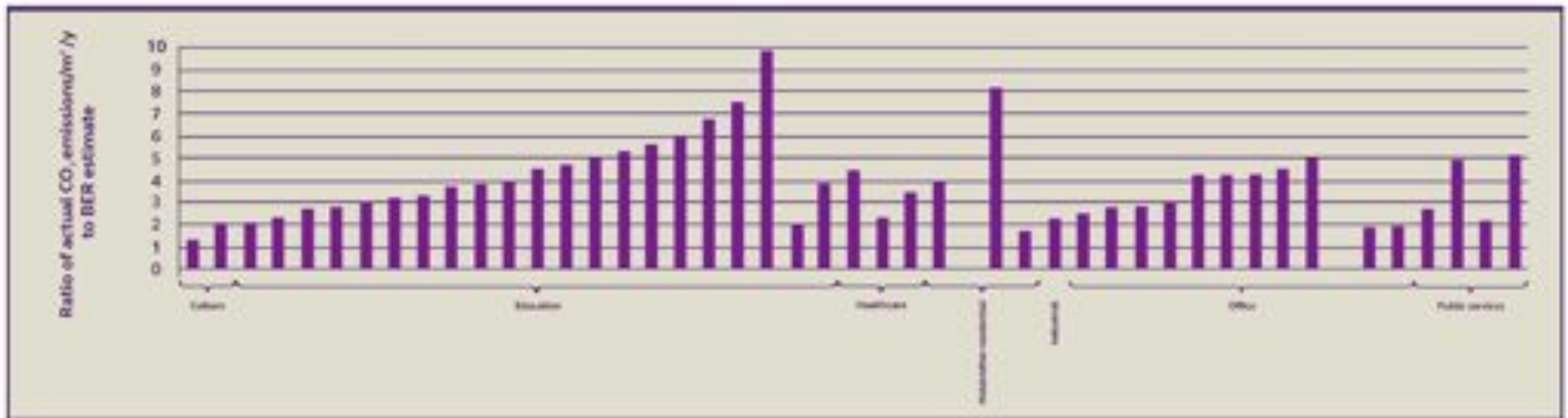
Or looking at the Performance Gap by sector:

- Infrastructure: the gap between the original budget and ...
- Workplaces: the gap between productivity gains promised and ...
- Communities: social benefits of housing regen promised and ...
- Schools: educational benefits claimed by new approaches and ...
- New procurement policies: efficiency savings promised and ...
- Refurbishment: energy savings modelled and

Energy matters but it is much more than just that

The Performance Gap: a definition

“The difference in performance between the as-designed intention for a project and the as-built outcome”



Source: Innovate UK. Building Performance Evaluation Programme: Findings from non-domestic projects. Getting the best from buildings. January 2016



“In this respect, health was no different at the time from most other public services employing professionals. In education and social care, for example, there were few, if any, national standards as to what a pupil or an elderly person could expect of the education or social services systems.”

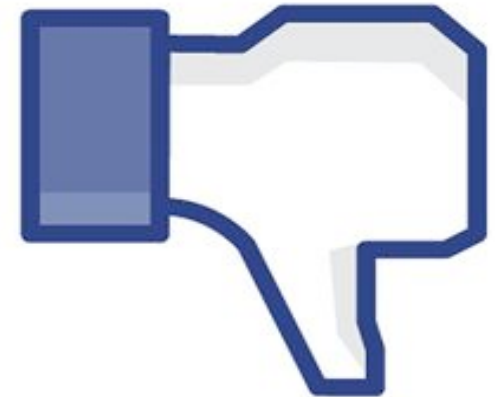
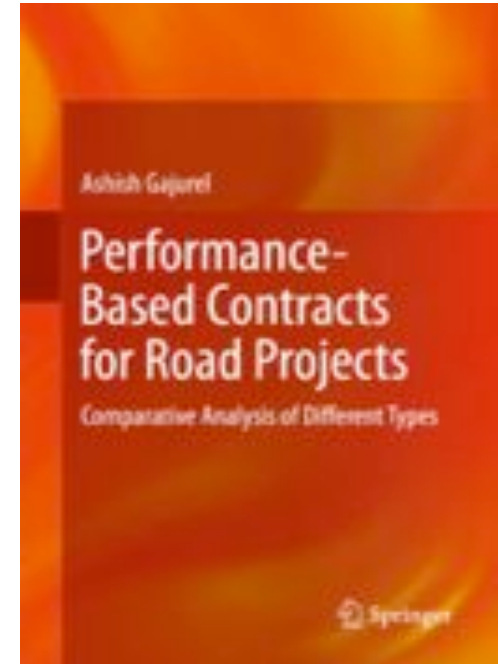
“Performance monitoring and a concern for the effectiveness of a service were only in their infancy. There was an unarticulated but, nevertheless, prevailing consensus which dominated thinking about public services up until at least the late 1980s: if enough well-qualified professionals could be educated and trained, they could then be relied upon to provide services of high quality throughout their working lives. Indeed, the prevailing wisdom was that policy-makers and managers should keep out of matters involving professional judgment.”

“One such matter was the quality of the service delivered. That was the preserve of the professionals.”

2001 Kennedy Report

Are we about to be found out?

- Performance-based contracting
- Air quality monitors
- Affordable thermal cameras
- Social media



Performance assurance: NABERS



What is NABERS?

➤ A performance-based rating system for existing buildings, based on measured operational impacts from **energy**, water, waste, **indoor environment**.

➤ Benchmarking

➤ Stakeholder engagement



NABERS ENERGY

★★★★★

Rating valid until
May 2013

Derwent Park Developments
achieved 5 star NABERS Energy whole building rating for









Derwent Building
183-189 Main Road
Moonah TAS 7009

The NABERS Rating is based on 10 months of operational energy use. More information about energy performance and how to improve it is available at www.nabers.com.au. NABERS is a voluntary initiative of the Commonwealth, State and Territory Governments. It is not a government department. © 2012 NABERS. All rights reserved. www.nabers.com.au

NABERS:

(Ecobuild on 8th March 16.30 Robert Cohen of Verco)

Can UK copy the success factors behind NABERS?

- In Australia, utility metering generally follows the base building / tenant split 
- From 2004, Federal and State governments demanded 4.5 stars or better 
- Some large corporates followed suit 
- In 2006, Property Council of Australia required Prime or grade A office to be minimum 4.5 star (and 5 stars in 2012 for new build) – BCO could help here 
- In 2002, Commitment Agreements were conceived for developers/landlords to ensure new offices could operate at their target energy efficiency level 
- And enable major office occupiers to specify the performance they wanted 
- Investment-grade, yet consumerised star rating has total market credibility 
- No agency, no result: developer & landlord “own” base building performance 

The prize is huge but there's a lot to catch up with



Building Performance: latest



CIBSE



Zero Carbon Hub



Innovate UK

UK-GBC launches project on building performance

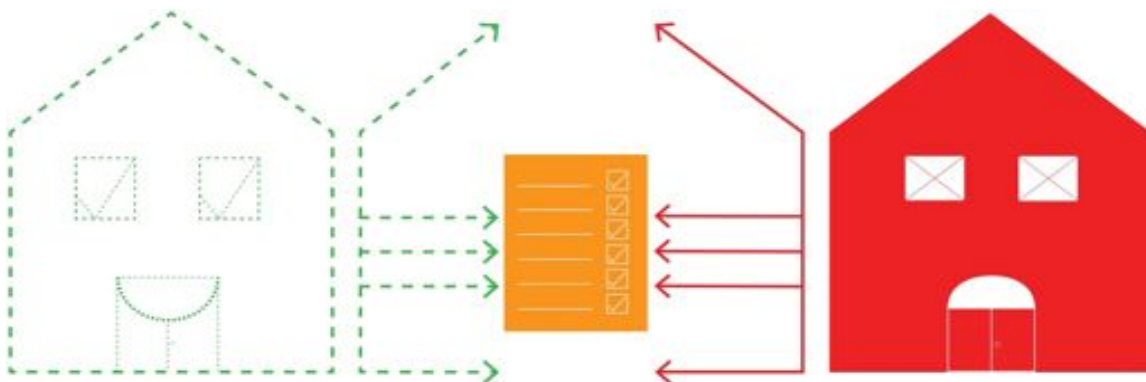
The UK Green Building Council is launching a new research project that will tackle the way industry currently designs, constructs and operates non-domestic buildings. Examining industry approaches, tools and behaviours, the group will focus on how to maximise building performance, not just in energy terms, but also other aspects of performance that impact both the building user and the wider environment.

UK-GBC

Collaboration for Change: page 89

“...The absence of a feedback loop in the industry and the consequent gap in the performance of built assets as offered to clients and the performance actually achieved in use – with energy performance being just one marked example of that gap.”

“...the difference between the promise and the performance of the industry’s product was widely equated with misspelling in the evidence session . It would be a scandal in any other sector, and should be in construction.”



3 Building

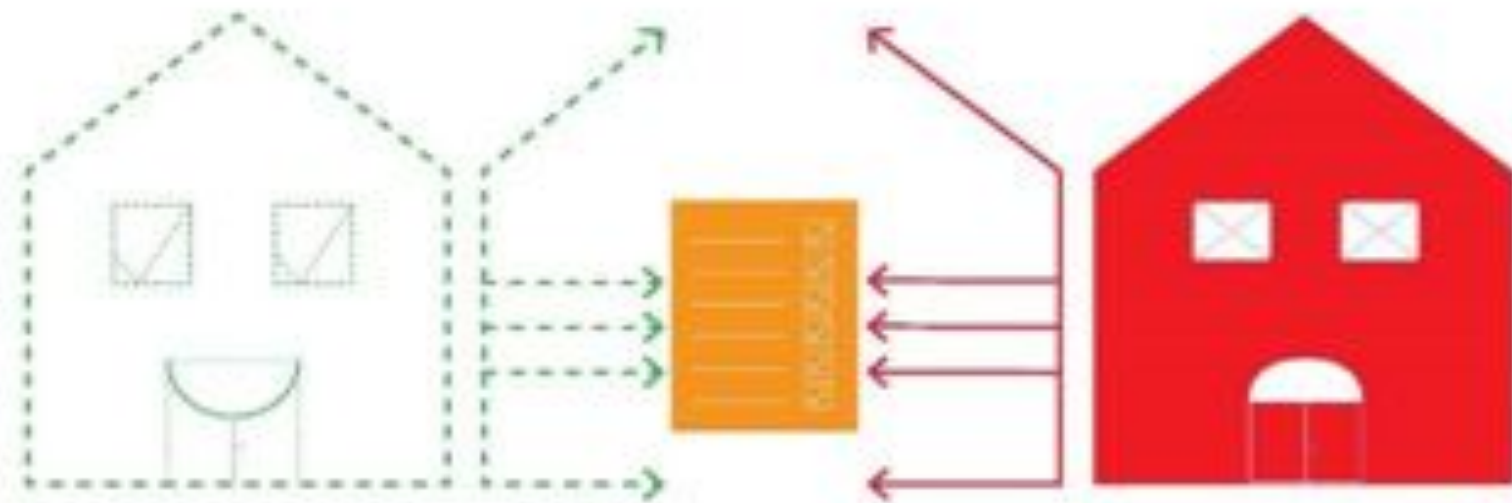
Performance

Sponsored by  in partnership with 



'Closing the Performance Gap: a plan for action' at Ecobuild 9/3/16

Closing the Performance Gap



A plan for the built environment

Performance: A pledge ...

We:

- *Agree that the persistently wide gap between the designed and actual performance of built environment projects, whether functionally, socially or environmentally, represents a serious and damaging failure on the part of the design, construction and operations industries that must be urgently addressed by all its representative organisations working closely together to find and embed effective solutions.*
- *Acknowledge that understanding the performance gap is made considerably more difficult by the lack of data publicly available on the way built environment facilities were intended to and then perform in reality and that a means of open disclosure of performance information is essential if this fundamental problem with our 'product' is to be tackled.*
- *Confirm that we will join and contribute to a joint working group focusing on the study and closure of the performance gap that will report back to the Presidents, Chief Executives and Councils of the participating professional institutions and organisations by the end of October 2016 with a Plan of Action for the industry to adopt and follow.*

Performance: ... and a Plan

Objectives (where appropriate) to:

- Join and contribute to an industry working group
- Make closing the performance gap a core organisational goal
- Support and disseminate collaborative research into the performance gap
- Collaborate to find solutions and achieve innovation
- Develop a platform for recording and sharing performance information
- Work with member companies and individuals to create understanding, agree responsibilities and embed solutions to the performance gap
- Ensure performance evaluation is a core part of professional education and training
- Communicate best practice and celebrate achievement

Can we collaborate to close the gaps?

Partners:



...



More are interested – RIBA, Design Council Caba
but RICS, ICE?