A DECADE OF ACTION

RIBA MEMBERS AND THE SUSTAINABLE DEVELOPMENT GOALS

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2 A Decade of Action: RIBA Members and the Sustainable Development Goals

Foreword

The RIBA maintains its commitment to placing public interest, social purpose, ethics and sustainable development at the core of its activity.

The RIBA's purpose is defined through its Charitable Objectives as being: ' to advance architecture by demonstrating public benefit and promoting excellence in the profession". Presently there is no public benefit greater than our securing a sustainable future and no greater disbenefit than the built environment's current contribution to the degradation of our planet.

The RIBA is committed to helping members and broader society reduce its carbon impact, not least through the RIBA 2030 Climate Challenge.

It is also committed to the wider demands of sustainability through being a signatory to the UN Global Compact. Integral to both these is a commitment to the United Nation's Sustainable Development Goals (SDG's) which balance the indivisible social, economic and environmental elements of sustainable development. Ultimately, they aim to end poverty, protect the planet and bring peace and prosperity to all.

The 17 SDGs were adopted by world leaders in 2015, with a commitment to reach them by 2030. We have only nine years left to achieve them. The decade of action is now, and before us lies a challenge not faced by any previous generation; to preserve humanity and the planet's future.

Architects have a vital role to play in collaboratively engaging our clients, the communities within which we work and the construction industry in the addressing the urgent challenges we all face as we design the low carbon future.

By seeking to achieve the SDGs (in significant part, through high-quality, innovative design) architects and the entire construction industry can ensure their positive contribution to our shared Decade of Action.

This report gives a view of how far the SDGs are embedded in architectural practice. It gives a picture of much achieved, but much more left to do. The RIBA will continue to support its members so that together we can meet the challenge of the SDGs, the challenge of the Decade of Action.

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Simon Allford October 2021

Introduction

This section is a description of the main findings of the second "Ethics and Sustainability" survey conducted by the RIBA. The survey itself forms part of the RIBA fulling its commitment to the 17 UN Sustainable Development Goals¹ (SDGs).

The SDGs outline a way for all countries, both rich and poor, to create a shared sustainable future. Central to the SDGs is addressing the climate emergency. However, the climate emergency cannot be addressed in isolation; intertwined are the imperatives of ensuring economic growth, reducing inequality and improving health and education for all.

The SDGs are part of the 2030 Agenda for Sustainable Development. We need to reach the goals within nine years to give ourselves and our children a sustainable future. It is becoming increasingly urgent that all RIBA members familiarise themselves with the SDGs and implement them within their professional practice.

The "Ethics and Sustainability" survey of 2021 was similar to that of 2020. It covered the core issues of knowledge, measurement and leadership in ethics and sustainability. It remains clear that architects are committed to addressing the climate emergency, to designing sustainable buildings. Most see sustainability as core to what they do. However, there remain gaps in the knowledge and implementation of the SDGs. Time is running out; those gaps need to be filled very soon.

RIBA members were sent an invitation to the survey towards the start of 2021. Over 600 individuals took part. Our thanks to all those who shared their views. Further details of those who responded to the survey are provided towards the end of this report.

Sustainable in Practice and Buildings

Sustainable Practice

The RIBA membership continues to show high levels of commitment to addressing the climate emergency. Last year two-thirds (66%) told us that "my organisation has a commitment to addressing the climate emergency" This proposition has increased significantly; in just over a year, it has risen to almost three quarters (72%). Indeed, a majority (54%) now describes sustainability as "at the core of everything we do"; that's up from 47% last year.



Creating sustainable designs is, for many, integral to running a commercially successful practice. Almost half (48%) say they would become obsolete "if we did not design sustainable buildings". Fewer than a third (32%) feel they would fail as a business "if we only produced sustainable design". Sustainable design is commercially sustainable.

Sustainable Buildings

Buildings, throughout their life, account for around 40% of global CO2 emissions. So if we don't have sustainable buildings, we don't have a sustainable planet.

The survey asked what percentage of projects were sustainable. Among respondents, their view was that just over half (51%) of the projects that their organisations work on are sustainable. This is a very slight increase from last year's figure of 48%. The proportion is increasing, but not fast enough.

Some practices describe themselves working on a higher proportion of sustainable projects than others. Five per cent describe all their practice's projects as sustainable, whilst 3 per cent say none are. For 60% a majority of projects are sustainable.

For clarity, the figures aren't based on any given set of criteria for sustainability; it is what respondents feel is sustainable *in their view*.



Barriers to Sustainability

There remain significant external barriers to creating sustainable buildings. Four factors are seen by a majority as 'often' or 'always' 'standing in the way' of creating sustainable buildings.

The percentage who cite these is given below.

- **Project Cost Constraints**, 72% (down from 79% last year)
- Client Requirements, 65% (down from 70% last year)
- A lack of client engagement, 62% (down from 67% last year)
- Product substitution and value engineering, 57% (down from 63% last year)

Beneath these "big four" barriers is the second group, the barriers of data gaps. Forty-three per cent cite 'a lack of understanding of the value sustainability brings to the project'. Understanding the value of sustainable is engendered by providing accurate data about expected and actual performance of buildings.

Accurate data about expected performance comes from accurate data about:

- the performance of similar buildings (36% see this as a barrier)
- the performance of similar elements, systems or spaces (33% see this as a barrier),
- product performance (31% see this as a barrier)

Accurate data about actual performance comes from Post-Occupancy Evaluation.



Knowledge of Ethics and Sustainability

The RIBA sets out what is required of Chartered Members in the "Code of Professional Conduct". Honesty, integrity and competence, as well as concern for others and the environment, are the foundations of the three principles that underpin the Code. To be a RIBA Chartered Member is, therefore, to be committed to professional ethical conduct, to continue to be well-versed in professional ethics.

The survey asked about the levels of knowledge of ethics and sustainability among individuals and practices. By comparing the results to last year we can see where and if the body of professional knowledge has grown. Eighty-eight per cent of respondents tell us they have at least practical knowledge of professional ethics, a change of only one per cent from last year. Thirty-one per cent of practices have either advanced knowledge or are recognised experts in professional ethics.

Levels of knowledge about sustainable development are also high, with a clear majority of both practices and individuals having practical knowledge or higher (85% and 81% respectively). These figures are comparable to last year.

In our previous report, we noted that "Knowledge about the UN 2030 Sustainable Development Goals (SDGs) is lacking". Then, a third of individuals and 28% of practices were unaware of the SDGs and only 32% of individuals and 35% of practices have practical knowledge or higher. The picture has improved somewhat. Now 22% of both individuals are unaware of the SDGs. Forty-four per cent of practices and 72% of individuals have practical knowledge or higher.



The importance to practices of the SDGs is split:

- 30% view them as "Extremely" or "Very" important to their organisation and the work they do
- 40% see them as somewhat important
- 29% see them as "Not Very" or "Not at all" important

Given that, in the words of the UN, the SDGs provide "a shared blueprint for peace and prosperity for people and the planet, now and into the future", they're worth getting to know. SDG 11 is particularly relevant ("Make cities and human settlements inclusive, safe, resilient and sustainable"). Resources are available, whether a description of the goals, how the UK is intending to meet them or UK data about progress.





What's important to practices?

Professionalism and EDI

The high level of knowledge about professional ethics is complemented by the importance individuals and organisations give to professional competence and integrity. Over 90% describe professional competence and integrity as 'extremely or 'very' important.

Eighty per cent of respondents told us that Equality, Diversity and Inclusion (EDI) was important to their organisation, and 45% that it was very or extremely important. However, 20% see EDI as either 'Not very' or 'Not at all' important. These numbers are lower than last year, suggesting EDI is seen as slightly less important now than it was previously.

The <u>RIBA</u>² "is committed to making architecture and the broader construction industry more inclusive and believes a diverse and inclusive profession, representative of the societies our members work within, is vital to meeting the challenges of the future faced by our profession".



² https://www.architecture.com/about/equality-diversity-and-inclusion

The RIBA 2030 Climate Challenge

The RIBA 2030 Climate Challenge has been developed so that architects have a practical and set of targets to adopt. Meeting the 2030 challenge alone won't solve the climate crisis, but if these targets are met, we are more likely to have a sustainable future. The 2030 Climate Challenge targets are rooted in the SDGs and cover three elements of building performance:

- water use;
- operational carbon; and
- embodied carbon.

It looks like architects agree with the priority given to these areas as 80% see reducing water use as important to the work of their organisation, 94% see reducing embodied carbon as important, and 95% see reducing energy use as important.



Measuring the 2030 Climate Challenge

If something is important and measurable, it's best measured. Measurement allows improvement to be tracked, and best practices to be identified, repeated, shared, and improved upon.

Eighty-two per cent of practices quantify anticipated energy use at least sometimes during the design process. Almost a half quantify it either always (17%) or often(32%). Eighteen per cent never quantify it, however.

Post completion, the numbers fall significantly, with 60% quantifying energy use post-completion, and less than a quarter measuring it either always(9%) or often (14%).

Given the significant "performance gap", post-completion measurement is invaluable for understanding how any difference between anticipated and actual energy performance came about and so rectified in future projects.



Seventy-two per cent of practices quantify anticipated water use at least sometimes during the design process. Around a third quantify it either always (12%) or often (23%). Over a quarter (28%) never quantify water use.

Again, post completion, the numbers fall significantly, less than half (48%) quantifying water use postcompletion, and just 13% measuring it either always (6%) or often (7%). Over half never quantify actual water use, post-completion.



Embodied Carbon is more difficult to quantify. At the design stages, construction product data about embodied carbon may be absent or partial. At completion, the exact materials used in a building may be undocumented.

Embodied carbon is the least well quantified. Whilst 60% sometimes quantify embodied carbon during the design process, 40% never do. Only 6% always quantify embodied carbon during the design process.

The best approach to minimising the carbon put into the atmosphere through a building's existence is a "<u>whole life carbon assessment</u>³", an assessment that quantifies both the anticipated operational and embodied emissions of a building through its life, so allowing identification of potential carbon savings. But such an assessment does involve detailed data collection and reporting.

3 https://www.rics.org/globalassets/rics-website/media/news/whole-life-carbon-assessment-for-the--built-environment-november-2017.pdf



Forty-three per cent of practices sometimes carry out whole-life carbon assessments, 57% never do. Only 5% always carry out whole-life carbon assessments.

Beyond the RIBA 2030 Climate Challenge

The proposed <u>RIBA Mandatory Competences</u>⁴, outline a direction of travel in which ethical and sustainable practice is core to architectural professionalism. Within the <u>Climate Literacy Knowledge Schedule</u>⁵ sustainability is described more broadly than the embodied carbon, energy use and water use of the 2030 Challenge, covering, for example, the circular economy, ecology and biodiversity, connectivity and transport and human factors. The graph below indicates these themes are already important to architects, with minimising waste being important to 89% of architects, preserving and promoting biodiversity to 88%, and minimising air pollution to 87%. Specifying materials with high recycled is important to 82% of architects, suggesting that the more construction products are made with recycled products, the more likely they are to be specified.



 ${}^4\ https://www.architecture.com/knowledge-and-resources/resources-landing-page/mandatory-competences$

⁵ https://www.architecture.com/-/media/GatherContent/Mandatory-competences/Additional-documents/

RIBA-Knowledge-Schedule-Climate-Literacy-March-2021.pdf

This broader description of sustainability fits with the SDGs. We can note that

- Sustainable Development Goal SDG 11, 'Make cities and human settlements inclusive, safe, resilient
 and sustainable', includes the target 'by 2030, reduce the adverse per capita environmental impact of
 cities, including by paying special attention to air quality'. In 2016, in all regions except Australia and
 New Zealand, the annual mean levels of fine particulate matter (PM2.5) exceeded the World Health
 Organization air quality guidelines⁶.
- Sustainable Development Goal 12, 'Responsible consumption and production', includes the target 'by 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse'. For context, developed countries have at least twice the raw material extraction per capita than that of developing countries⁷.
- Sustainable Development Goal 15 *'Life on land'* includes the target *'halt biodiversity loss'*. Although the UN notes progress on slowing deforestation, nevertheless, "biodiversity loss is occurring at an alarming rate".

Linking project outcomes to the SDGs demonstrates how architects can play a unique and vital role in the decade of action to reach the Goals.

Government

In 2015 the UK Government committed to achieving the UN's Sustainable Development Goals (SDGs) by 2030. Part of this commitment is to provide an update on our progress. This is done via a 'Voluntary National Review⁸' and is supplemented by presenting data about the UK's progress towards the goals⁹.

Despite this commitment and monitoring, the findings of the 2020 survey suggest that architects' feel that the UK government can and should do more to enforce the creation of a sustainable built environment, with over three-quarters believing the UK Government must legislate for higher sustainability standards.

Central to this are the Building Regulations and the Approved Documents. The Building Regulations provide a sustainability backstop where a client seeks a regulatory compliant building for the lowest capital cost. As the UK Government look to raise the performance of new buildings through revisions to Parts L and F, it has been carrying out a two-stage consultation, firstly about homes, and then about other buildings. Publications¹⁰ to date *suggest* a significant uplift in the required performance of buildings will be implemented through a Part L & F update by 2025.

The architectural community is clearly in support of the Building Regulations being used to improve the energy performance of buildings, with 73% welcoming a higher standard of energy efficiency in Part L, and 72% welcoming the Building Regulations mandating zero-carbon by 2030. Whilst the issues of existing stock and embodied carbon would remain, a zero-carbon approach to new buildings would do much to lower the industry's carbon footprint.

Following the new trading arrangement with the EU, the UK is now free to move away from harmonized regulations and standards. Around half of those who responded to our survey see Brexit as "a risk to our current standards on energy efficiency", with 49% agreeing with the statement. However, that is a fall on last year's figure, where 61% perceived leaving the EU as a risk to UK standards.

⁶ https://unstats.un.org/sdgs/report/2018/goal-11/

⁷ https://unstats.un.org/sdgs/report/2018/goal-12/

⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/816887/ UK-Voluntary-National-Review-2019.pdf

⁹ <u>https://sdgdata.gov.uk/</u>

¹⁰ https://www.gov.uk/government/consultations/the-future-buildings-standard



A similar number (48%) see the new trading arrangement making it difficult to obtain sustainable construction products. More recent data¹¹ suggests it's not only *sustainable* products that are difficult to obtain.

Despite a Government commitment to cut carbon emissions by 78%¹² by 2035 (compared to 1990 levels), just 34% of respondents think that Government policy is heading in the right direction on sustainability within the built environment.

Leadership on Sustainability



¹¹ https://www.architecture.com/-/media/GatherContent/Business-Benchmarking/Additional-Documents/FutureTrends-June2021pdf.pdf ¹² https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035 Within the many trades and professions that make up the construction sector and which create our built environment, who is going to assume the leadership role? Only 21% of respondents see clients as "leading the way on sustainability", and only 10% see contractors similarly.

Sixty per cent of respondents see "design consultants, such as architects, as leading the way". The industry needs someone to take a lead; architects are well placed.



Sample

The findings given in this report are based on an analysis of 613 responses to the survey. The survey was live from February and May 2021. Invites to take part were sent to RIBA Chartered Members, so to registered architects.

The respondents came from a range of large to small practices and organizations, with over a third coming from very small practices (1 or 2 people), and a fifth coming from people working in practices with 50 or more people employed.

Just over 50% of respondents worked within RIBA Chartered Practices. Other types of organisation included practices that are not RIBA Chartered (28%), Multi-disciplinary organisations (11%), Local or Regional Government (2%), as well as from main contractors or other private sector organisations.

Sixty-eight per cent of respondents were male, 27% female, with 4% either not identifying as male or female, or preferring not to say. Respondents were of all ages of 25 or over.

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