

# A DECADE OF ACTION



RIBA MEMBERS AND  
THE SUSTAINABLE  
DEVELOPMENT GOALS

MAY 2020



**United Nations**  
Global Compact

**RIBA**   
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# Foreword – RIBA

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The RIBA seeks the “general advancement of Civil Architecture” and strives to continue to be “a global professional membership body... being ethical, inclusive, environmentally aware and collaborative”.

In becoming a signatory to the UN Global Compact in 2015, the RIBA publicly made its commitment to sustainability and professionalism through a commitment to further the Sustainable Development Goals (the SDGs).

The RIBA aims to share this commitment with its membership and to support both Chartered Practices and individual members to practice ethically and sustainably, furthering the SDGs and Agenda 2030.

Architects have a significant role in shaping communities and society as a whole; the impact of their work extends beyond the physical structures they design. Architects are uniquely placed to influence how places are shaped, how they function and who they engage in the process, thereby having a tangible impact on the four pillars underpinning the SDGs: human rights, labour, the environment and anti-bribery and corruption.

Balancing these considerations is core to the role of the architect and presents the RIBA and its members with both a tremendous opportunity and a responsibility to ensure that their influence is positive.

In the times of: an environmental and climate emergency; increasing awareness of modern slavery on construction sites; and growing and ever more complex global supply chains, the RIBA is more deeply embedding the SDGs within its operations and initiatives.

Following the RIBA Council’s reassertion of the Institute’s unequivocal commitment to placing public interest, social purpose, ethics and sustainable development at the heart of its activities in December 2018, the Institute has furthered the SDGs, including by: delivering core CPD on sustainability and ethics, declaring an environmental and climate emergency, launching the 2030 Climate Challenge, publishing a Sustainable Outcomes Guide and launching a new Plan of Work including key elements on health and life safety.

Now, at the beginning of a Decade of Action for the SDGs, the RIBA is seeking to drive forward all 17 goals through its own actions and through its membership.

**Alan Vallance**  
RIBA Chief Executive

# Foreword – UN Habitat

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As the COVID-19 pandemic sweeps across the globe, people in cities and human settlements of all sizes have had to adapt to a new reality of work and life. The impact of the pandemic is felt the most in our cities, where 95 per cent of those infected with the virus live. COVID-19 has had a massive impact on the economies of our cities. And at the same time as we are responding to this unprecedented crisis, we also need to be looking at what our future cities will look like and how we will live in them.

The importance of good, innovative planning and management of cities has moved into the spotlight because of the spread of COVID-19. UN-Habitat, the UN agency focused on sustainable urbanization and human settlements, welcomes this report on the importance of the urban and architectural dimension of the Sustainable Development Goals (SDGs).

We have now entered the Decade of Action and have just 10 years to achieve the 17 Sustainable Development Goals (SDGs) adopted by world leaders in 2015. The 169 global targets are designed to balance the social, economic and environmental dimensions of sustainable development.

This report ‘A Decade of Action’ calls upon members of the Royal Institute of British Architects to become leaders on sustainability and to implement the SDGs through sustainable building design. This initiative to promote the SDGs and their broader aims to end poverty, protect the planet and ensure that all people enjoy peace and prosperity with sustainable urbanization as an enabler, is very much welcomed by UN-Habitat.

Urbanization is widely recognized as being a transformative process capable of galvanizing momentum for many aspects of global development. Architecture professionals, working together with the wider network of built environment professionals, can contribute to sustainable development programmes and policies, promoting the sharing of best practices and experiences relating to the implementation of sustainable development on local, national and global levels. Looking forward, UN-Habitat and its partners will be supporting cities to develop innovative planning and expansion models that can contribute towards slowing the spread of future pandemics.

Together we can ensure that cities and human settlements achieve SDG 11 and become “inclusive, safe, resilient and sustainable”.



**Maimunah Mohd Sharif**  
Executive Director of UN-Habitat

# Executive Summary

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Building on previous work, including: the UN Sustainable Development Goals in Practice<sup>1</sup>, the Ethics of Architectural Practice<sup>2</sup> and the findings and recommendations of the Ethics and Sustainable Development Commission<sup>3</sup>, this publication seeks to drive forward the RIBA's commitment to the UN Sustainable Development Goals (SDGs) and to call on the RIBA Membership to come together to help accelerate progress towards achieving the goals by 2030, in this the 'decade of action'<sup>4</sup>.

This publication explores the findings of a recent Member survey, encouragingly showing that the architectural profession is knowledgeable about sustainable development and committed to leading the necessary transformation of the built environment, but also showing that there is some way to go yet, perhaps requiring the wider adoption of a more focussed and measurable approach, including that advocated by the RIBA 2030 Climate Challenge<sup>5</sup>.

The piece then goes on to explore how the SDGs can be more meaningfully supported, and therefore achieved, throughout the architectural profession – from schools of architecture to specific projects to business strategy and leadership.

In schools we see the positive impact of formally referencing and discussing the SDGs as well as more implicitly connecting architecture and its impacts with the relevant context – both local and global. We see schools empowering their students to drive forward the sustainable development agenda, establishing fora for discussion and action; and we see schools committed to developing in their students the critical, inquisitive, holistic mindset necessary to drive constructive change.

On projects we seek to encourage practices to use the language of the SDGs to encourage their clients and other built environment professionals to join the challenge and increase progress. We use examples to help practitioners realise the opportunities for progress represented by even the smallest of projects – every architectural project can contribute to the sustainable development agenda in a meaningful way.

Within practices, we explore how business strategies can embrace the SDGs and lead to a successful decade of action, not only in specific project outcomes, but also through business operations, supply chain management, client relationships, practice structure and partnerships. We explore how bold mission statements, publicly shared and meaningfully embedded in processes and policies, can drive change. We also find how practice level goals and targets support progress year on year, and how considered leadership programmes can ensure progress is maintained or even improved.

This publication is aimed not at putting exemplars on a pedestal, but at highlighting examples of best practice while also provoking discussion and action across the architectural profession and across the built environment sector. It is a call to arms, a call for a step change in practice now – in this decade of action – for people, prosperity and planet.

## **Carys Rowlands**

RIBA Head of Professional Standards

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<sup>1</sup> <https://www.architecture.com/knowledge-and-resources/resources-landing-page/un-sustainable-development-goals-in-practice>

<sup>2</sup> <https://www.architecture.com/-/media/GatherContent/UN-Sustainable-Development-Goals-in-Practice/Additional-Documents/EthicsinArchitecturalPracticeCaseStudiespdf.pdf>

<sup>3</sup> <https://www.architecture.com/knowledge-and-resources/resources-landing-page/ribas-ethics-and-sustainable-development-commission-final-report>

<sup>4</sup> <https://www.un.org/sustainabledevelopment/decade-of-action/>

<sup>5</sup> <https://www.architecture.com/about/policy/climate-action/2030-climate-challenge>

# Findings of the Member Survey

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# Findings of the Member Survey

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## Introduction

Following the RIBA Ethics and Sustainable Development Commission report, the RIBA reasserted its commitment to place public interest, social purpose, ethical behaviour, and sustainable development at the heart of the Institute's activities. It also committed to developing a plan of action based on the UN's 2030 Sustainable Development Goals (SDGs).

In June 2019 the RIBA joined the global declaration of an environment and climate emergency, declaring support for the UK government's legislation to bring UK greenhouse gas emissions to net-zero by 2050.

In line with that declaration, the RIBA is encouraging all practices to sign up to the 2030 Climate Challenge. The challenge is made up of four targets:

- Reduce operational energy demand by at least 75%, before offsetting<sup>1</sup>
- Reduce embodied carbon by at least 50-70%, before offsetting<sup>2</sup>
- Reduce potable water use by at least 40%<sup>3</sup>
- Achieve the RIBA 2030 Challenges core health and wellbeing targets on temperature, daylight and indoor air quality

These targets are ambitious, but it is an ambition commensurate with the climate emergency.

With that as background, this report is an overview of the responses to an RIBA survey into "Ethics and Sustainability". A survey can be a blunt instrument in assessing such a complex, nuanced and, at times, politically and economically charged issue. Nevertheless, the survey format provided a way for the views of the entire membership to be canvassed. Understanding current practice and belief lets us see where we need to focus attention to meet our shared challenge.

This report will look at the elements of sustainable design and practice, the measurement of sustainability, and the differing levels of knowledge about sustainability among both architects and their practices. It will also draw attention to the United Nations Sustainable Development Goals (SDGs), and their importance to a shared sustainable future.

Before the detail, an overview of the findings may be helpful. Architects are committed to sustainability, to designing sustainable buildings. Using the design expertise of an architect is more likely to make any building project socially, economically and environmentally sustainable. Architects in the UK design world-leading sustainable buildings. The RIBA Stirling Prize-winning Goldsmith Street is one example. Another is the finalist Cork House, with its innovative use of material and very low (and measured) whole life carbon. There are many more.

RIBA members were sent an invitation to the survey towards the end of 2019. Over 900 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.

### **Adrian Malleson**

RIBA Head of Economic Research and Analysis

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<sup>1</sup> Current benchmark 146 kWh/m<sup>2</sup> /y for domestic buildings, and 225 kWh/m<sup>2</sup>/y for non-domestic

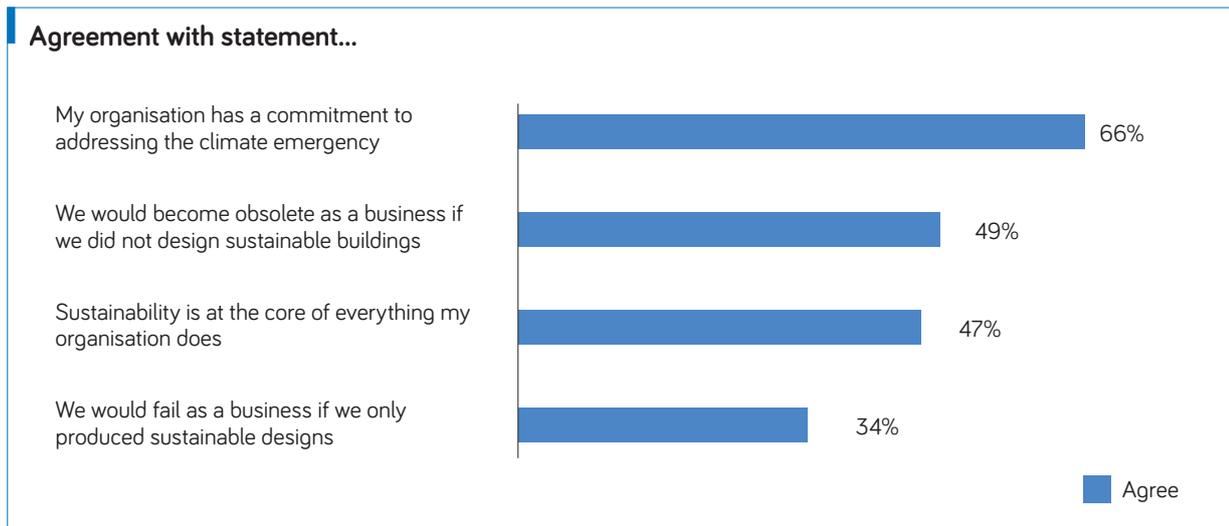
<sup>2</sup> Current benchmark 1000 kgCO<sub>2</sub>e/m<sup>2</sup> for domestic buildings, and 1100 kgCO<sub>2</sub>e/m<sup>2</sup> for non-domestic

<sup>3</sup> Current benchmark 125 l/p/day for domestic buildings, and >16 l/p/day for non-domestic

# Sustainable in Practice and Buildings

## Sustainable Practice

The membership suggests that there is widespread commitment to addressing the climate emergency (66%). Forty-seven per cent describe sustainability as “at the core of everything we do”. Sustainability makes sense for the business of architecture too. Almost half (49%) say they would become obsolete “if we did not design sustainable buildings”. A third (34%) feel they would fail as a business “if we only produced sustainable design”. This suggests that one-third of architects rely on briefs for unsustainable buildings. Conversely, it also suggests that two-thirds see producing ‘sustainable-only’ building design as a viable business model.

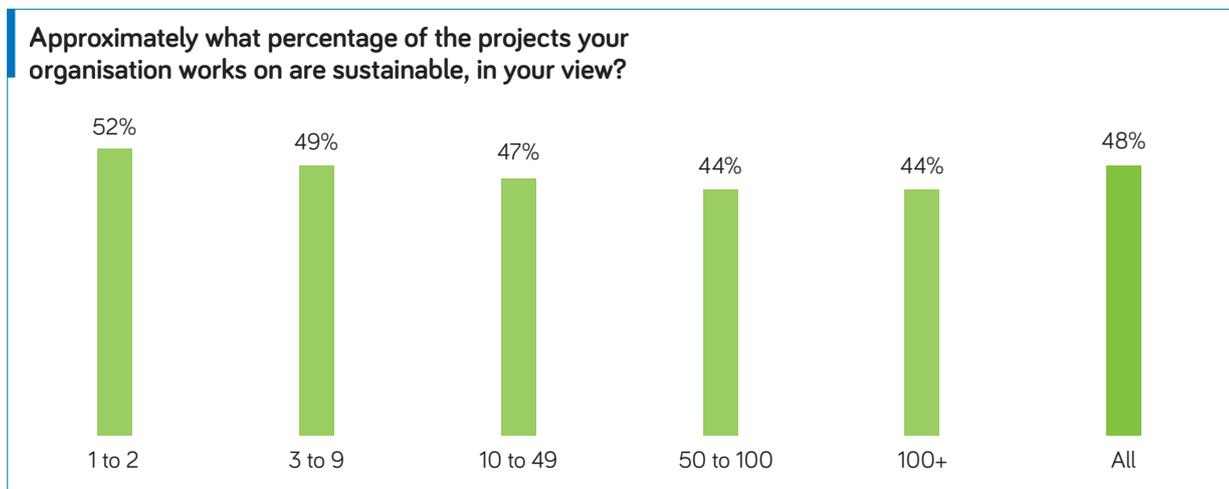


## Sustainable Buildings

We asked what percentage of projects were sustainable. Before looking at the results, it’s worth noting that these figures aren’t based on any given set of criteria for sustainability; it is what respondents feel is sustainable in *their view*. What is ‘sustainable’ may differ between practices and people.

Among respondents, their view was that around half (48%) of the projects that their organisations work on are sustainable.

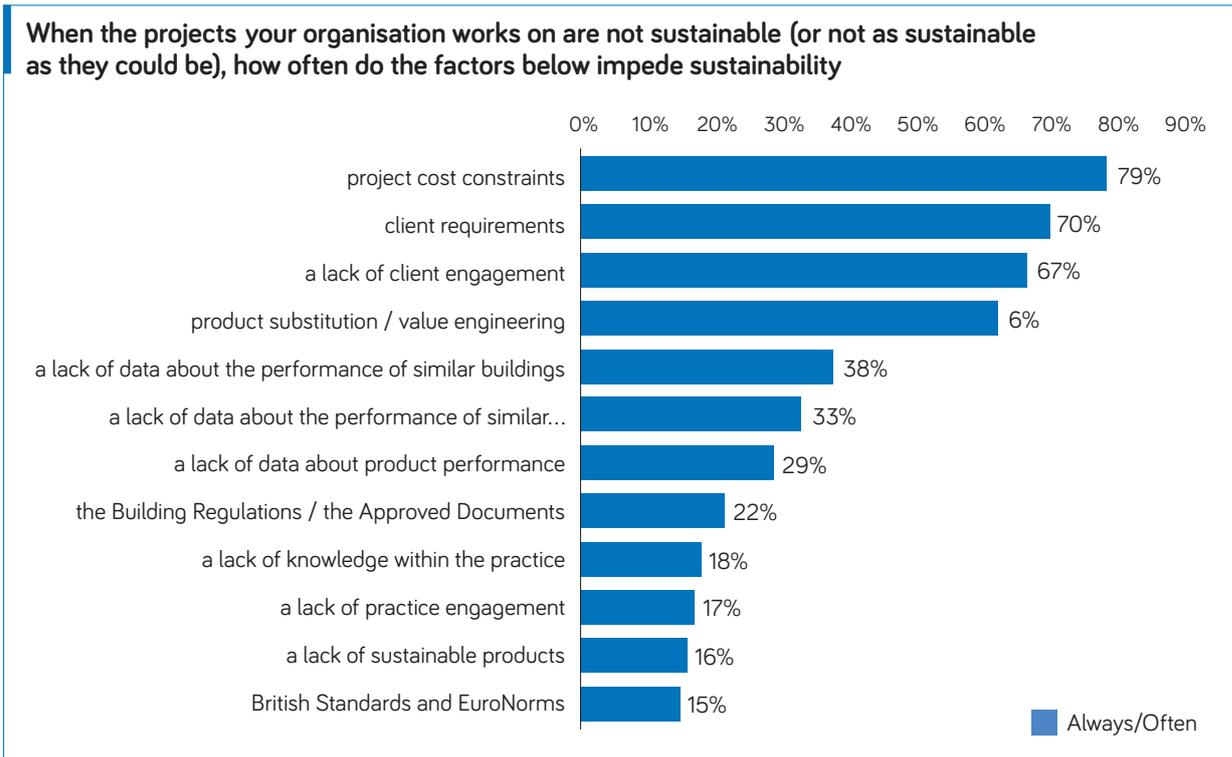
This figure decreases slightly as practice size increases, with 52% of projects from very small practices (1 to 2 people) being sustainable, compared to 44% of those from very large practices (100+). Whilst it is encouraging that half of the projects are sustainable, as the urgency of the climate emergency increases, it is not enough.



What stands in the way of sustainability? Four factors stand out:

- Project Cost Constraints (79%)
- Client Requirements (70%)
- A lack of client engagement (67%)
- Product substitution and value engineering (63%)

Money and clients. At the time of the survey, the construction industry was weak, but not in a recession. At the time of writing, as the effects of COVID-19 unfold, an acute recession looks unavoidable. At any time, economic uncertainty increases client caution and reduces demand. Ensuring a return on investment, or minimizing costs, is always important for clients; now more than ever. A two-pronged approach may be needed. Firstly, clients need to be aware of the whole life value sustainable design brings (where it is a consideration). Secondly, the regulatory environment in which buildings are created needs to be tightened.



A lack of the right data can also be a reason that projects are not fully sustainable, with the following percentages giving these reasons for projects not being sustainable:

- a lack of data about the performance of similar buildings; 38%
- a lack of data about the performance of similar elements, systems or spaces; 33%
- a lack of data about product performance; 29%

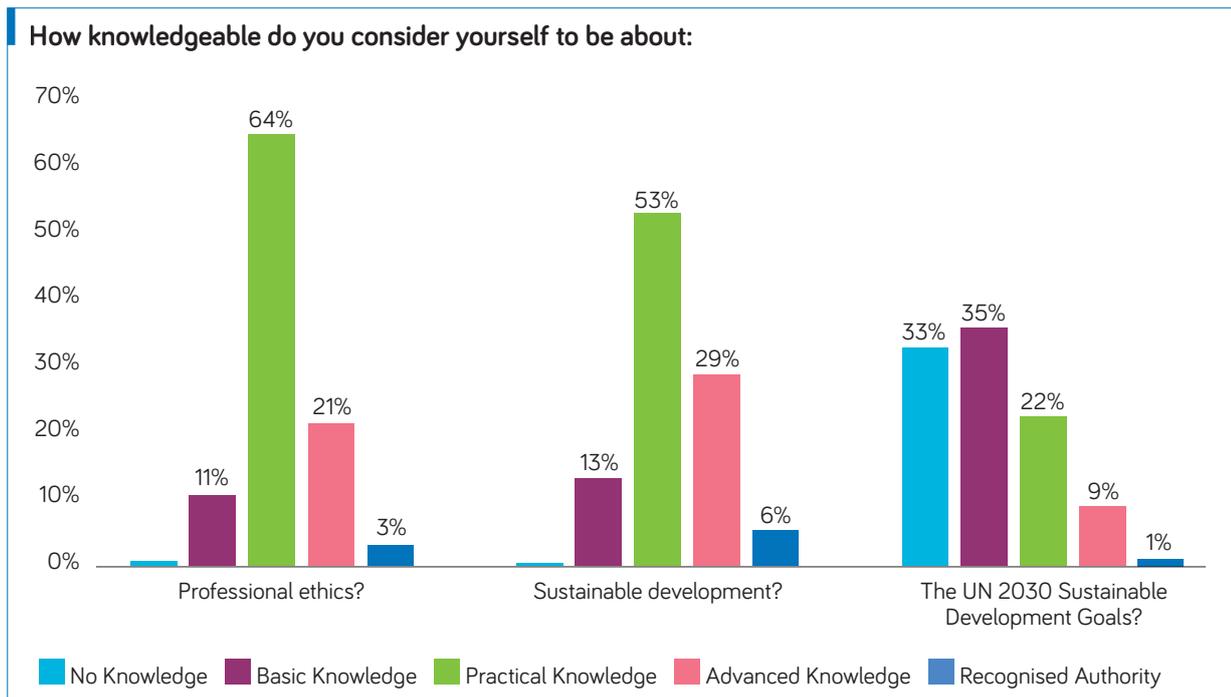
The digital transformation of design and construction may help here. So too may a database of building design and performance; about which, more later.

# Knowledge of Ethics and Sustainability

The survey asked about the levels of knowledge of ethics and sustainability, both among individuals and among practices. By seeing current levels of knowledge, we recognize where more may be needed.

The profession is knowledgeable about professional ethics. Eighty-nine per cent of respondents tell us they have practical knowledge or higher. Over a third of practices have either advanced knowledge or are recognised experts. For reference, professional behaviour that embodies a high standard of professional ethics is described in the 2019 RIBA Code of Professional Conduct.

Levels of knowledge about sustainable development are also high, with a clear majority of both practices and individuals having practical knowledge or higher (87% and 81% respectively). However, with 13% describing themselves as having only “basic knowledge”, and 18% describing their practice so, there is still educative work to do.



Notably, as we move from individual knowledge to practice knowledge of sustainability, the percentage with practical knowledge shrinks. Counter-intuitively the percentages of *both* basic knowledge and advanced knowledge grow. It seems that for some practices, collective knowledge is greater than individual knowledge. But for others, knowledgeable individuals may not grow the knowledge of a practice as they might.

Knowledge about the UN 2030 Sustainable Development Goals (SDGs) is, however, lacking. A third of individuals and 28% of practices don't know about them. Only 32% of individuals and 35% of practices have practical knowledge or higher. As meeting the SDGs is essential to world sustainability, a world where no-one is left behind, this is a knowledge gap that needs responding to.

Through the following discussion of the survey results, the importance of the issues covered will be illustrated by reference to the SDGs. The 17 SDGs are made up of 234 indicators. Two-thirds of these indicators have urban components. In meeting the internationally agreed targets of the SDGs the role of architecture in the future urban form is critical and irreplaceable.

The SDGs give a holistic vision of a sustainable future. They describe not only tackling the climate emergency but also strategies to improve health, reduce inequality, further economic growth and end poverty whilst preserving life in the oceans and on land.

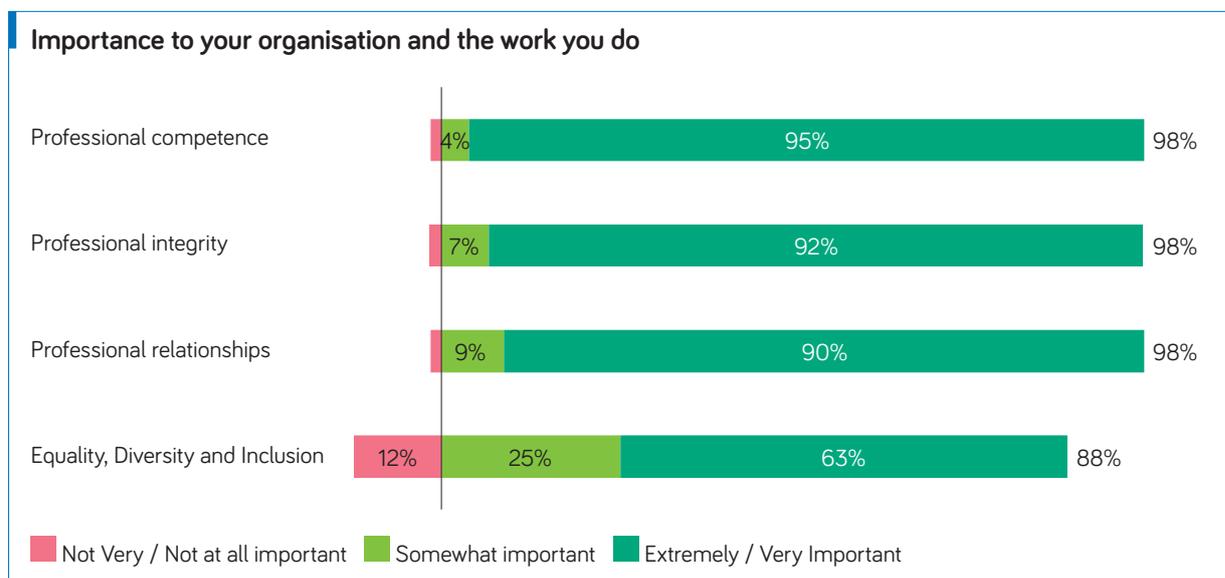
When we look at the data in more detail, it's not that members and their practices are failing to work towards the targets and goals that make up the SDGs, more that there's a knowledge gap. Architects are working towards the SDGs but don't always know they are. This is illustrated in the following sections.

## Professionalism and Equality, Diversity and Inclusion (EDI)

Professionalism is important to the membership. Ninety per cent describe professional competence, integrity and relationships as 'extremely' or 'very important'. Virtually all the remainder agree they are 'somewhat important'. As this survey was completed by members of the RIBA, a professional body, the importance placed on professionalism shouldn't surprise us.

Eighty-eight per cent of respondents told us that Equality, Diversity and Inclusion (EDI) was important to their organisation, and 61% that it was 'very' or 'extremely important'. However, 12% see EDI as either 'Not very' or 'Not at all' important. The RIBA's view is that the implementation of an EDI strategy is essential to creating opportunity and enabling success. It is through ensuring equality, diversity and inclusion that practices can build and maintain a creative, cultural, and commercial competitive advantage.

Implementing an EDI strategy will also help our realising the Sustainable Development Goals, specifically, Sustainable Development Goals 5, 'Achieve gender equality and empower all women and girls' and Sustainable Development Goals 10, 'Reduce inequality within and among countries'.



# The RIBA 2030 Climate Challenge

The RIBA has issued the 2030 Climate Challenge so that, through meeting the challenge, practices will help address our global climate crisis.

The challenge has four targets, each with a clear set of metrics; water use, operational carbon, embodied carbon, and health and wellbeing.

The RIBA 2030 Climate Challenge directly links to and is informed by, the SDGs. The target on water use is a direct response to SDG 6: 'Ensure availability and sustainable management of water and sanitation for all'. Targets on operational carbon emissions respond to SDG 7 'Affordable clean energy', and those for embodied carbon, to SDG 12, 'Responsible consumption and production'.

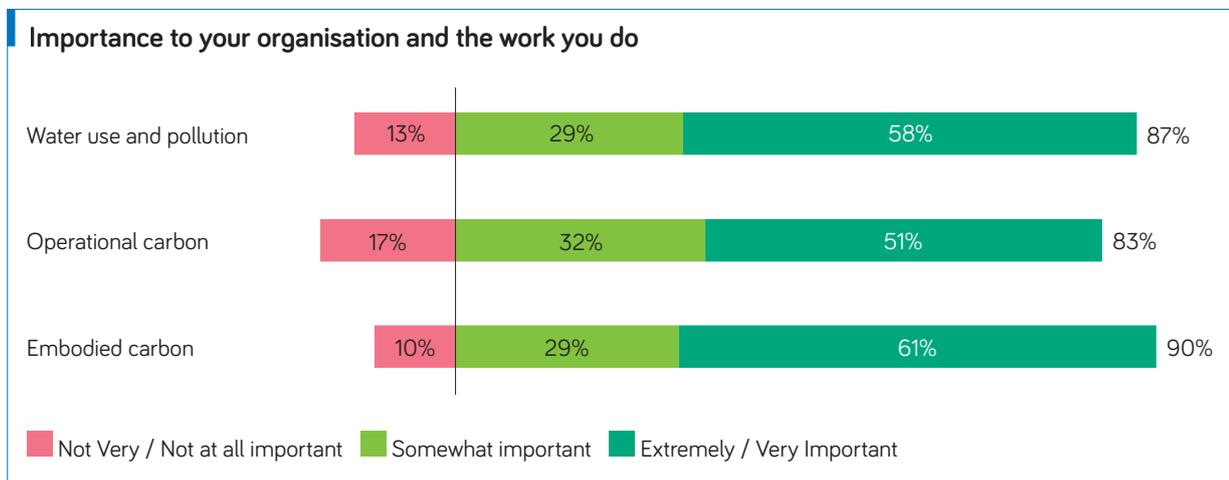
The health and well-being targets are there to ensure that buildings are not overheated, have sufficient daylight, and have acceptable levels of CO2 and formaldehyde. These were not covered in the survey, but you can find out more in the '2030 Climate Challenge Guidance'.

The RIBA 2030 Climate Challenge gives incremental targets for three elements of building performance:

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

Each target begins with the base-line of the current, unsustainable minimum regulatory requirement and progresses with targets for 2020, 2025 and 2030 to reach, at least, a satisfactory trajectory.

The survey allowed us to test whether the RIBA membership feels these three target areas are important. A clear majority of respondents do. Eighty-seven per cent see water use and pollution as important to the work their organisation does. Eighty-three per cent see operational carbon, and 90% see embodied carbon, as important. That said, there remains a minority who see these as 'not very important', or as 'not at all important'; 13% for water use, 17% for operational carbon and 10% for embodied carbon.

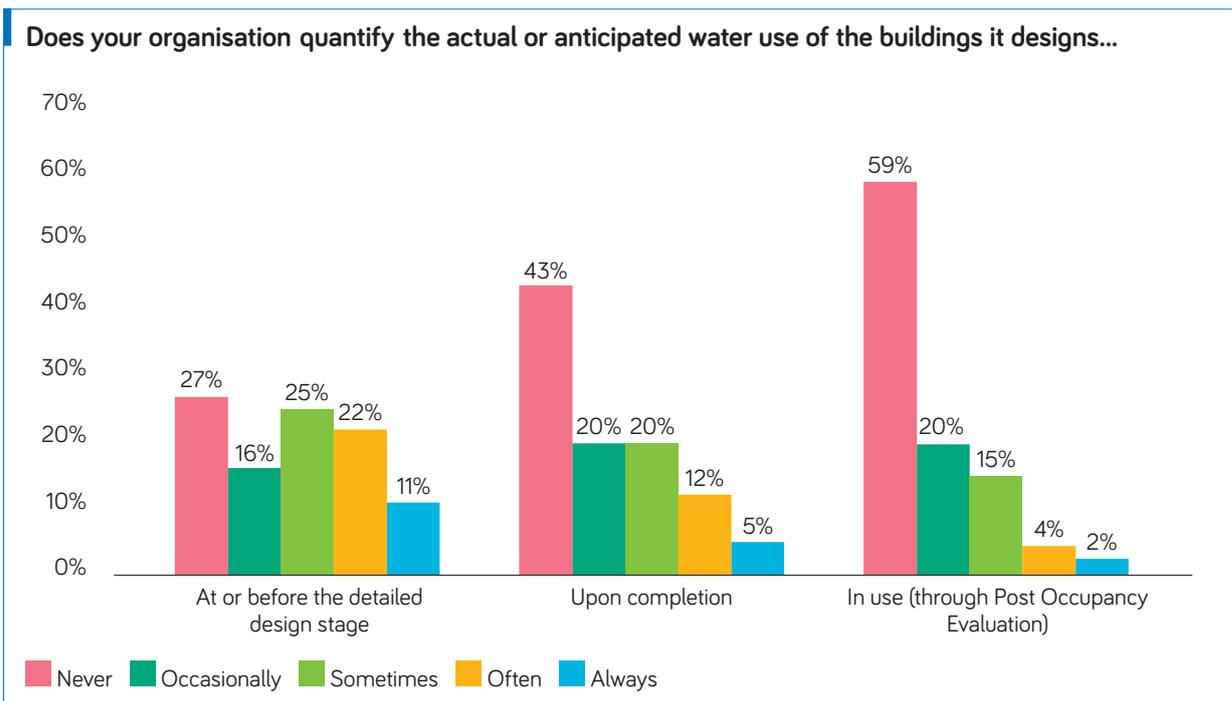


# The RIBA 2030 Climate Challenge: Measurement

Water use, embodied carbon and operational carbon are important to RIBA members. To show progress towards targets, measurement is needed. However, measurements aren't always being taken.

For actual or anticipated **water use**:

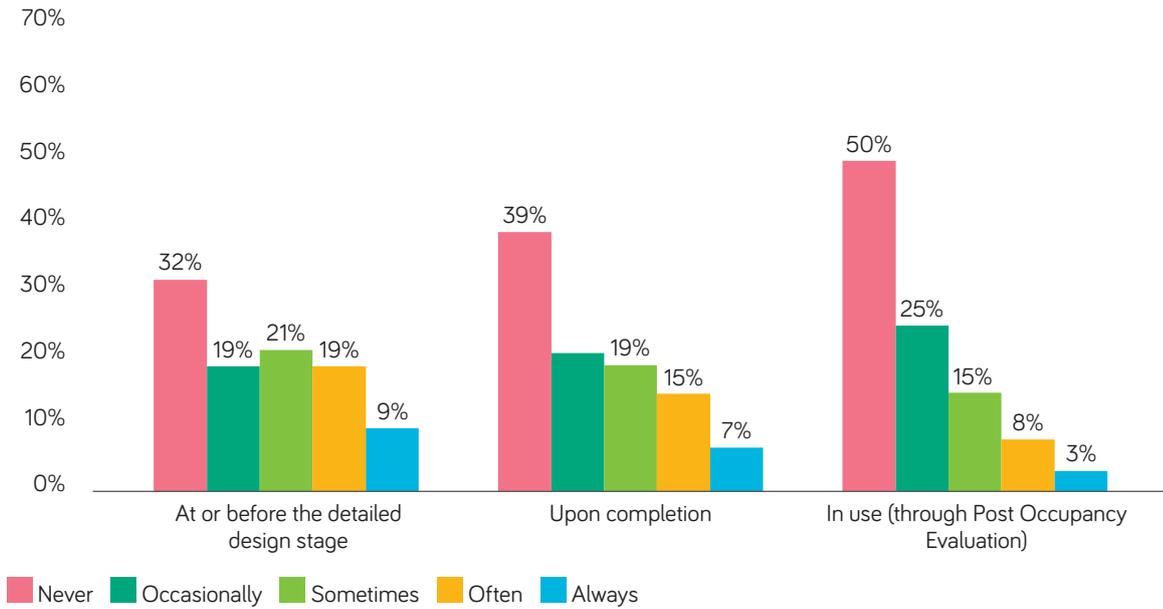
- **At or before the detailed design stage:** only 11% always measure actual or anticipated emissions, and 27% never do.
- **Upon completion:** only 5% always measure actual or anticipated emissions, and 43% never do
- **When in use:** (through Post Occupancy Evaluation) only 2% always measure actual or anticipated emissions, and 59% never do.
- **Overall,** seventy-three per cent of practices quantify the actual or anticipated potable water use in some or all of the buildings they design, at one or more work stages.



For actual or anticipated **operational carbon emissions**:

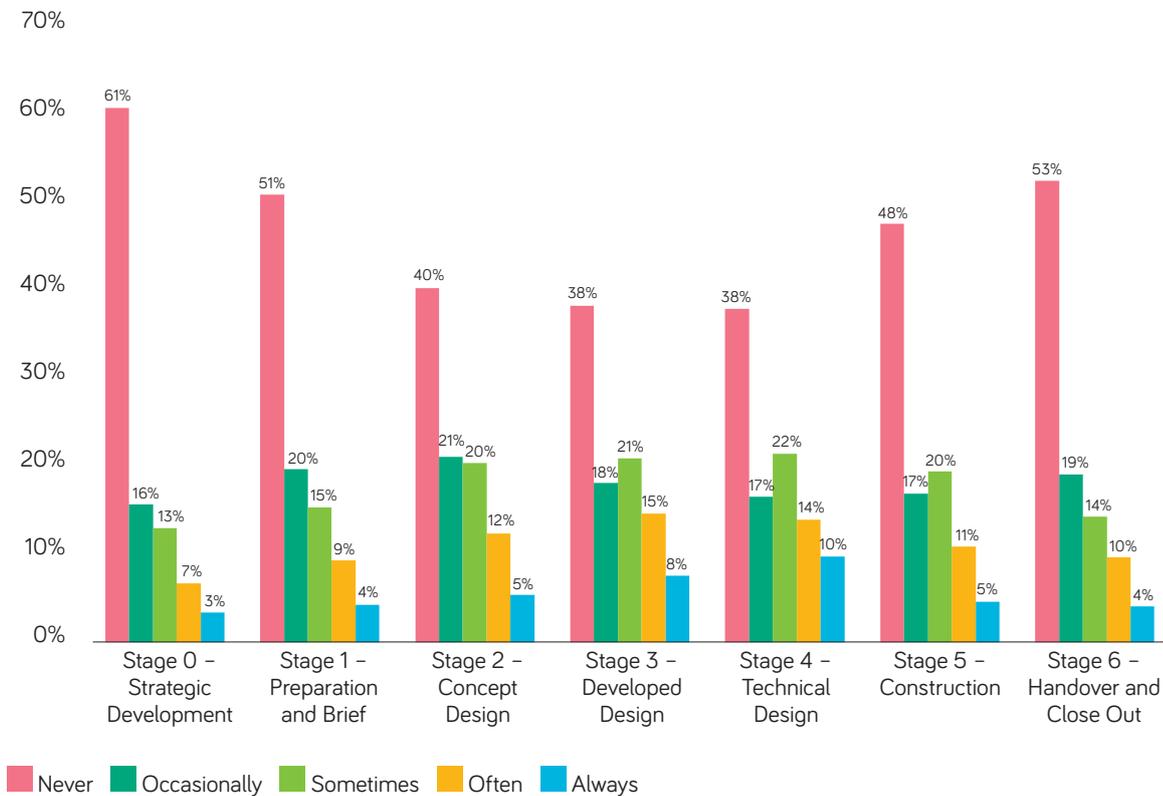
- **At or before the detailed design stage:** only 9% always measure actual or anticipated emissions, and 32% never do.
- **Upon completion:** only 7% always measure actual or anticipated emissions, and 39% never do
- **When in use:** (through Post Occupancy Evaluation) only 3% always measure actual or anticipated emissions, and 50% never do.
- **Overall,** sixty-eight per cent of practices quantify the actual or anticipated carbon emissions in some or all of the buildings they design, at one or more work stages.

**Does your organisation quantify the actual or anticipated operational carbon emissions of the buildings it designs...**



For measurement of embodied carbon, the survey asked for a more granular response, asking for the frequency of measurement at each of the stages of the (then-current 2013) RIBA Plan of Work. Overall, 31% did not measure actual or anticipated embodied carbon at any stage. Sixty-nine per cent, however, measured it at least occasionally, at least at one work stage. Measurement peaks at stages three and four. In the detailed design stage, almost a quarter (24%) measure embodied carbon 'often' or 'always'.

**At which stages does your organisation quantify the actual or anticipated embodied carbon of the buildings it designs...**

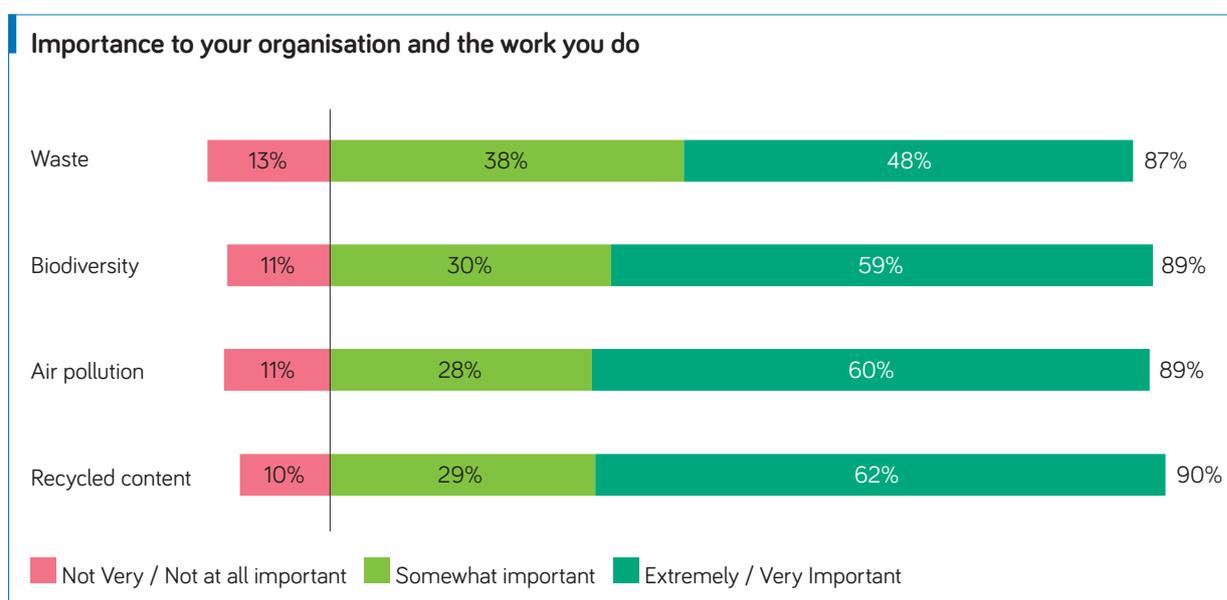


## Beyond the RIBA 2030 Climate Challenge

Looking beyond the targets of the 2030 challenge, we wanted to explore a range of other issues directly related to sustainability and the SDGs. Respondents overwhelmingly told us that waste, biodiversity, air pollution, and recycled content are important to the work their practice does. Between eighty and ninety per cent of people said that each of these issues was important. However, a minority see these as 'not very important', or as 'not at all important'.

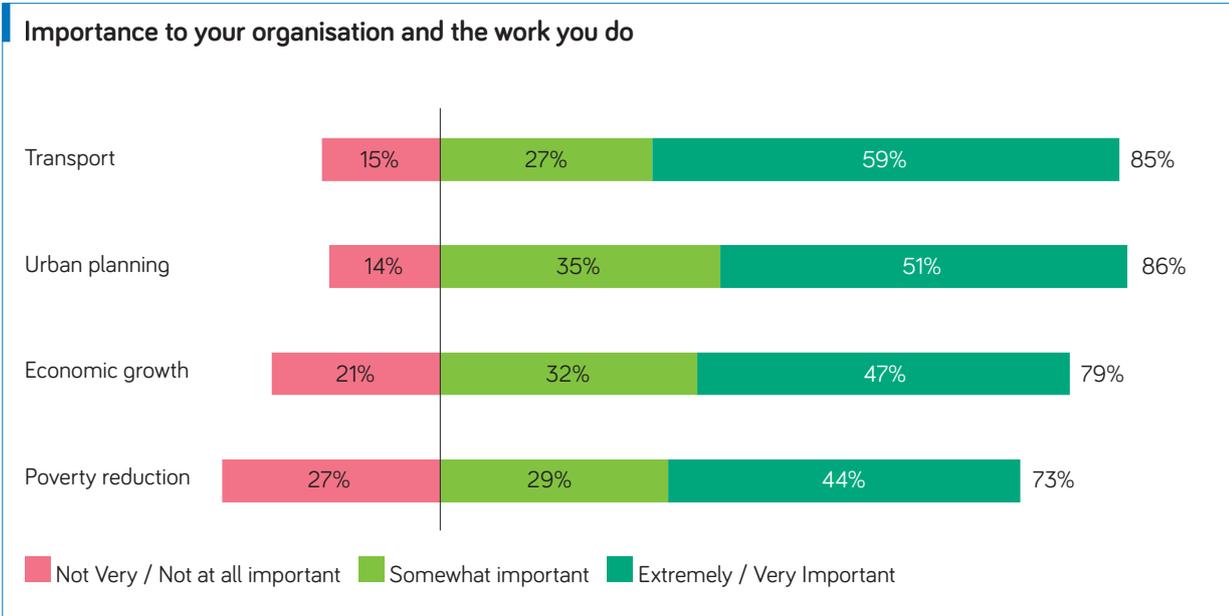
Again, these issues relate directly to the SDGs:

- Waste and recycling are included within SDG 12, 'Responsible consumption and production', (which includes the target 'By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse')
- Biodiversity is held within Sustainable Development Goal 15 'Life on land' which includes the target 'halt biodiversity loss'
- Air pollution is covered in SDG 11, 'Make cities and human settlements inclusive, safe, resilient and sustainable', (which includes the target 'by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality'). In 2016, 90% of urban dwellers have been breathing unsafe air.



Sustainable buildings have their place within sustainable communities and places. Those who responded to the survey see the importance of this, with 85% seeing transport as important to the work their organisation does, and 86% seeing urban planning as important. This underlines the importance of cross-disciplinary working in the built environment, particularly as we strive to meet SDG 11, 'make cities and human settlements inclusive, safe, resilient and sustainable'

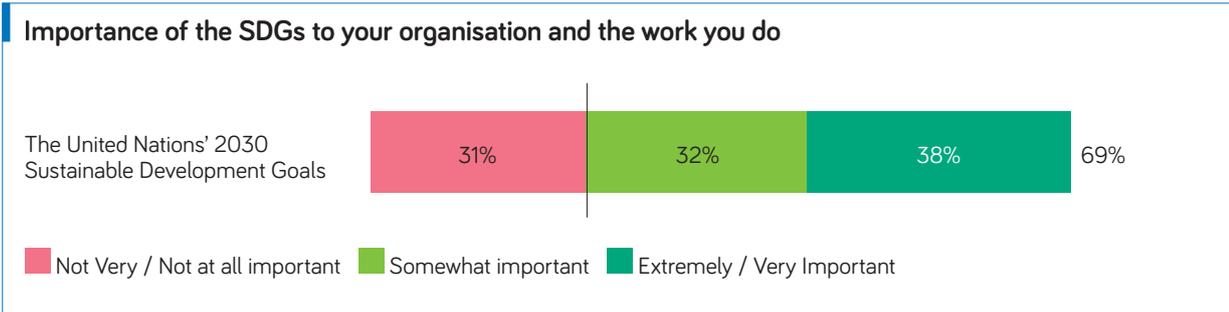
There is also an emphasis on economic sustainability, with 79% seeing economic growth as important. Economic growth that leaves no-one behind is the aim, and 73% see poverty reduction as important to their organisation's work. These themes are covered by SDG 8, 'Decent Work and Economic Growth', and SDG 1 'No Poverty'.



In the preceding paragraphs, we have seen the importance of ethics and sustainability to the work UK architects and their organisations do. These ethical and sustainable concerns directly link to the United Nations 2030 Sustainable Development Goals.

The RIBA has undertaken to make the SDGs part of organisational strategy, culture and daily operations. Through this report, and the “UN Sustainable Development Goals in Practice” report, the RIBA looks to inform the membership of the importance of the SDGs, and to encourage its members to embed the SDGs in their architectural practice.

However, when asked about the importance of the SDGs to their organisation, a significant number (24%) did not know if they were important. Of those that did know, 31% told us they were not important. That said, a majority, 69%, did tell us they were important to the work of their organisation. This suggests that there is a lack of knowledge about the SDGs and their direct relevance to architectural practice among some. For others, however, they are important; almost a third of those who know of their importance describe them as ‘extremely’ or ‘very’ important.



## About Data

When seeking to reduce the environmental impact of buildings, having accurate data available is essential. Only by knowing the performance of past design can future design be improved; so, the data should not just be about the performance expected, but about the performance delivered too.

To assist with meeting the RIBA 2030 challenge, such a database would need to cover:

- Embodied carbon
- Operational carbon and
- Potable water use

### Embodied Carbon

The construction industry, including the manufacturing of materials for building such as steel and cement, accounts for around 11%<sup>4</sup> of global energy-related CO<sub>2</sub> emissions. Data about embodied carbon is currently available through, for example, the Bath Inventory of Carbon and Energy (ICE) database<sup>5</sup>, or through Environmental Product Declarations (EPDs). However, many construction product manufacturers do not routinely provide embodied carbon information when providing data about their products.

Whilst embodied carbon assessments can be carried out using software that supports whole-building life-cycle assessments, there is a lack of information about embodied carbon, not only at the level of products but also of systems, spaces and whole buildings, or complexes.

### Operational carbon

As people use and live in buildings, they use energy; this totals 30% of global final energy consumption. At the design stage predictions might be made about how the people who spend some of their time in a building will use, for example, the heating, cooling, lighting, and ventilation systems. These predictions will be based on metrics such as the predicted thermal performance of the building. Predictions about the future generation of electricity through installed small electrical power systems might also be made, potentially with optimism. Once a building is in use, and measurements are made of actual energy use (and generation), a 'performance gap' may emerge, showing the predictions to be inaccurate in one way or another. Collecting and structuring data about predicted and actual energy use (and so operational carbon) offers a route to reducing this gap, allowing for iterative design improvement, learning from similar buildings how best to reduce in-use energy consumption.

### Water Use

The average UK water consumption per person per day is 141 litres per day. Part G of the Approved document sets a domestic limit of 125 litres/person/day (or, at local discretion, 110 litres/person/day). To maintain the current level of resilience within the UK, according to the DEFRA Water conservation report<sup>6</sup>, at least 3,300 million litres per day extra capacity is needed by 2050. Two-thirds of this should come from demand management measures. This is one reason the RIBA 2030 challenge puts a domestic target of 75 litres/person/day by 2030 (plus 10 litres/person/day for non-domestic usage).

As with both embodied and operational carbon, recording anticipated performance and comparing it to actual performance is essential to iterative design improvement.

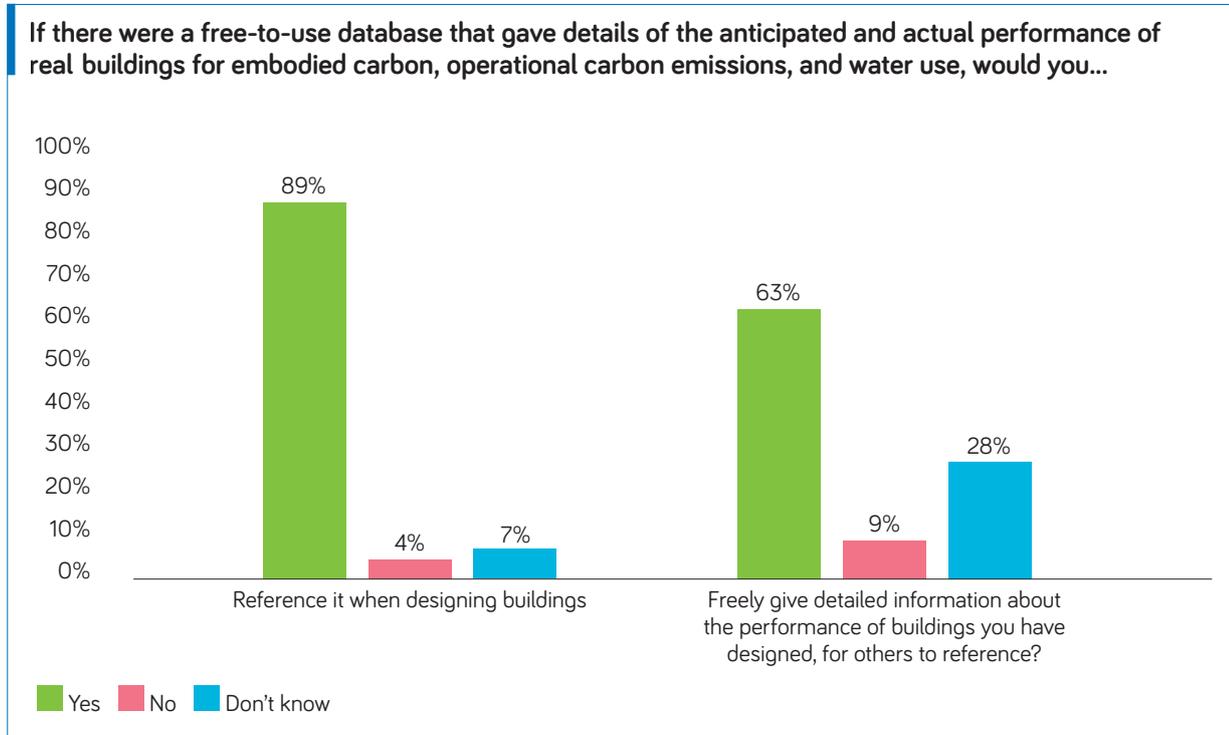
<sup>4</sup> [https://www.worldgbc.org/sites/default/files/UNEP%20188\\_GABC\\_en%20%28web%29.pdf](https://www.worldgbc.org/sites/default/files/UNEP%20188_GABC_en%20%28web%29.pdf)

<sup>5</sup> <http://www.circularecology.com/embodied-energy-and-carbon-footprint-database.html>

<sup>6</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/444444/water-conservation-report-2017.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/444444/water-conservation-report-2017.pdf)

## A potential database

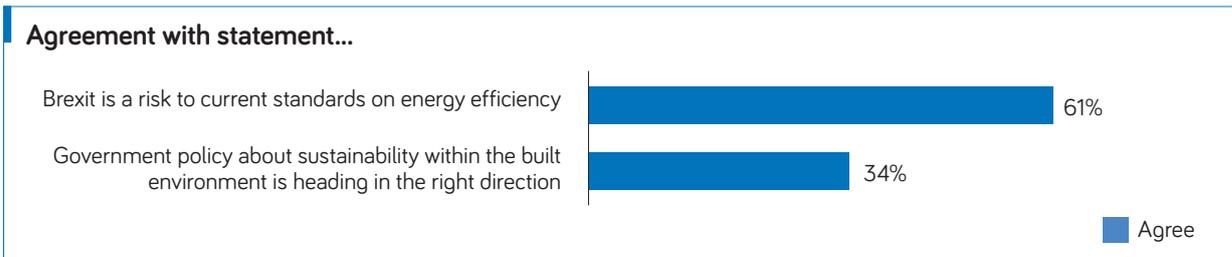
The shared population of, and access to, information about the actual and anticipated performance of systems, spaces and building would allow shared learnings and so more rapid design improvement. Eighty-nine per cent of respondents would reference such a database when designing buildings, and a clear majority, 63%, would be willing to contribute to it, by freely giving information about the performance of the buildings they have designed, for others to reference. The RIBA will look to provide such a database as a part of the RIBA 2030 Challenge platform.



## Government

The EU has a commitment to sustainability and the UN Sustainable Development Goals. A general commitment to sustainability is described in the 'European Union Strategy for Sustainable Development'<sup>7</sup>, and specific requirements for the built environment are given in the 'Energy performance of buildings directive'<sup>8</sup>.

Following Brexit, the UK is free to maintain, enhance, or deprecate UK law that enshrines current EU directives. Those who responded to our survey see Brexit as "a risk to our current standards on energy efficiency" (with 61% agreeing with the statement). Just 34% think that Government policy is heading in the right direction on sustainability within the built environment. There is a perceived risk that the UK's commitment to sustainability, expressed as law, will diminish post-Brexit.



Despite that risk, respondents expressed an appetite for the UK Government to go further with legislation relevant to sustainability, with 82% agreeing that their organisation "believes that the UK Government must legislate for higher sustainability standards". Specifically, 76% would welcome "Part L setting higher standards for energy efficiency". Seventy per cent agree that their organisation would "welcome the Building Regulations mandating 'zero carbon' by 2030". Among architects, there is a desire for the UK Government to go further and faster than currently.

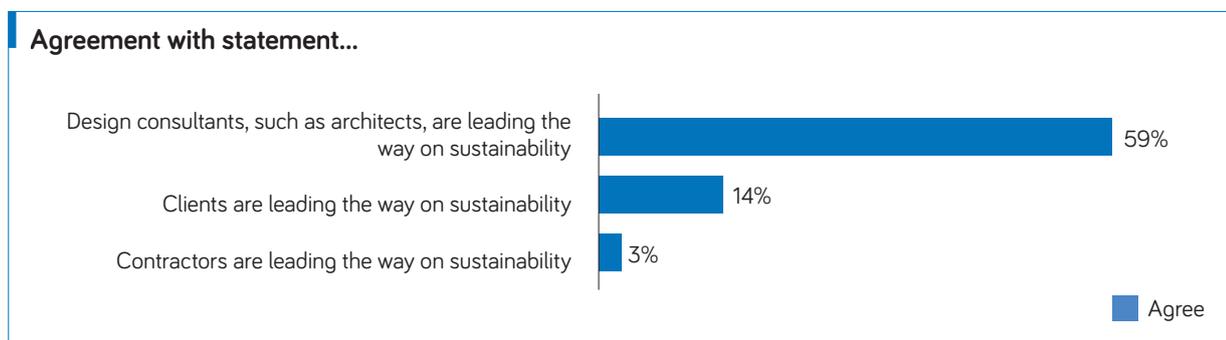


<sup>7</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52001DC0264&from=EN>

<sup>8</sup> <https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-performance-of-buildings/energy-performance-buildings-directive>

## Leadership on Sustainability

The survey gathered the views of architects; among those who responded, 59% saw “design consultants, such as architects, as leading the way on sustainability”. Less encouragingly, only 14% saw clients as “leading the way”, and only 3% saw contractors as “leading the way”.



## Sample

The findings given in this report are based on analysis of 906 responses to the survey. The survey was live in October and November 2019. Invites to take part were sent to RIBA Chartered Members, i.e. to fully qualified architects.

The respondents came from a range of large to small practices and organizations, with a third coming from very small practices (1 or 2 people), and a quarter coming from people working in practices with 100 or more people employed.

Sixty-three per cent of respondents worked within RIBA Chartered Practices. Other types of organisation included practices that are not RIBA Chartered, Multi- disciplinary organisations, Local or Regional Government, as well as from contractors or other private sector organisations.

Sixty-six per cent of respondents were male, 32% female, with 2 per cent either not identifying as male or female, or preferring not to say. Respondents were of all ages of 25 or over (those under 25 are unlikely to be fully qualified architects).

## Endnote

The survey results show that UK practices are knowledgeable about sustainable development. They also show that the core elements of sustainability are embedded in architectural practice. There is both practice and personal commitment to architecture leading the transformation of the built environment, towards a sustainable future.

There is work to do. The better measurement and recording of building performance, particularly in relation to the RIBA 2030 Climate Challenge, is needed so that sustainable design can be increasingly evidence-based. Standards and regulations can be tightened to raise the base level of building design. Knowledge of the SDGs can be widened.

The RIBA see the SDGs, as the way that countries, institutions, organisations and citizens can share a broad description of, and ways of achieving, a sustainable future. The RIBA is committed to furthering the SDGs, and we hope that this report helps us together rise to the challenge of the decade of action we have ahead.

# The SDGs in Schools of Architecture

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An exploration of ideas for advancing the SDGs through architectural education



# The London School of Architecture (the LSA)

## A meaningful connection with the natural world

James Soane, Director of Critical Practice

The LSA is a new post-graduate school of architecture, set up in 2015, with a clear goal: “Our vision is that people living in cities experience more fulfilled and more sustainable lives. Our school educates future leaders to design innovations that contribute to this change.” Furthermore the LSA was the first UK school to formally adopt the UN SDGs as a formal reference, and as a result was invited to participate in the RIBA’s Ethics and Sustainable Development Commission during 2018. A year later, the school joined the Climate Emergency declaration, framing our teaching and learning across all modules with this powerful driver.

As architects we see the UN Sustainable Development Goals as an opportunity to reimagine the way we live and bring to life the design elements of a new, sustainable world. Last year at a lecture to the students Professor Henrietta Moore from the UCL Institute for Global Prosperity explained:

*‘We are at a point where radical new models are needed, and quickly. We need also to consider that sustainable futures mean cities and communities that enable humans and the natural world to flourish. To this end, we cannot continue to think about cities and communities as engines of economic growth. We need to think about, and design for, the health of society, inclusive political institutions, a guarantee of human capital development and civil liberties.’*

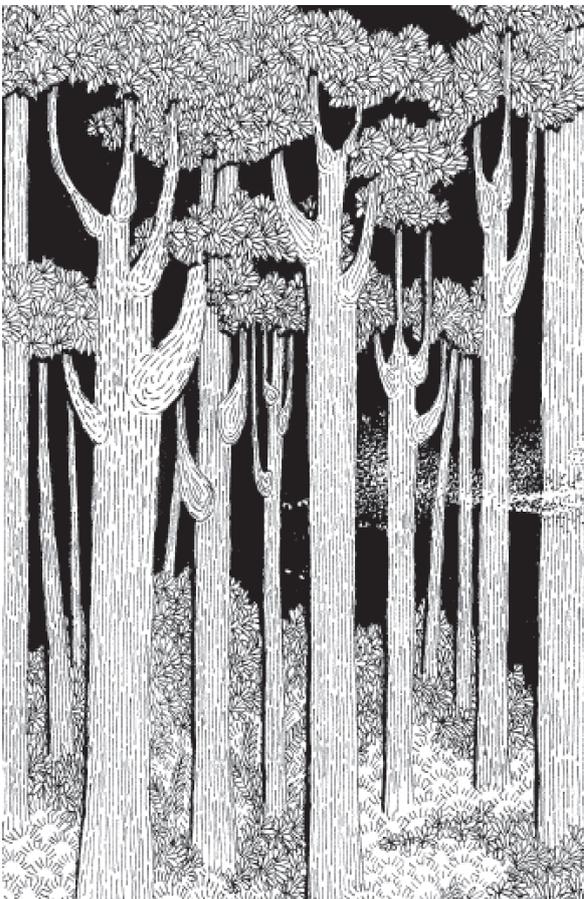
On the very first day of term we ask the students three questions: What change do you want to see in the world? How does your architecture contribute to that change? And who do you want to be as a designer? The school presents theories of change as models for leveraging ideas as a practice which is understood as giving purpose to architecture. Throughout the first year all students are working in practice three days a week, as well as working in the studio. A key project is the



© New Knowledge Think Tank



© Nancy Jackson



© Nancy Jackson

'Design Think Tank' (DTT) where students and practices work together as a group on an urban proposition. Here the influence of the SDGs is key in aligning research with one or more of the goals, in order to create fundamental links between research undertaken in practice and within the school. In 2019 the school launched *Citizen*, a new quarterly magazine for everybody engaged in the challenge of creating the future city, which describes DTT work as: 'Collaborative projects between students and leading architectural practices at the London School of Architecture. The UN Sustainable Development Goals address the global challenges we face, including those related to poverty, inequality, climate, environmental degradation, prosperity, peace and justice. They are a blueprint to achieve a better and more sustainable future for all.' The project is a 10-month long thesis, which necessarily picks up on research from previous modules, moving towards a thoughtful proposition that is worked through in detail.

When it comes to the role of theory in architecture, the LSA makes a case to move beyond the formal or philosophical concerns that have pre-occupied the discourse for so long, and instead seek to interrogate the levers of power in order to understand the wider agency of the architect in society. This necessarily points to asking ethical questions relating to the impact on our wider environment. As alumni Josh Fenton pointed out, *'There is a need for us to continually reiterate our political position as architects – not in terms of parties or alliances, but with our engagement with issues that affect the public.'* We have also been exploring what Professor Jem Bendell terms 'Deep Adaptation,' reflecting on the likely consequences of climate change on global society and considering what kind of radical hope we can seed.

In these uncertain times, with troubles ahead, it is important to create a meaningful connection with the natural world, rather than feel there is nothing we can do. The LSA suggests that the future can be different and that change is possible. As alumni Nelli Wahlsten reflected in her writing: *'The reasons why students decide to study architecture are many and varied, but there is often an underlying desire to contribute to the notion of common good.'*

# The Welsh School of Architecture (the WSA)

## Ethical, creative, curious and critical engagement with the SDGs

Dr Steve Coombes and Dr Juliet Davies: Co Directors of Learning and Teaching

Dr Edmund Green, Chair of BSc year 2

Dr Julie Gwilliam: Dean of PG Studies, College of Physical Sciences and Engineering

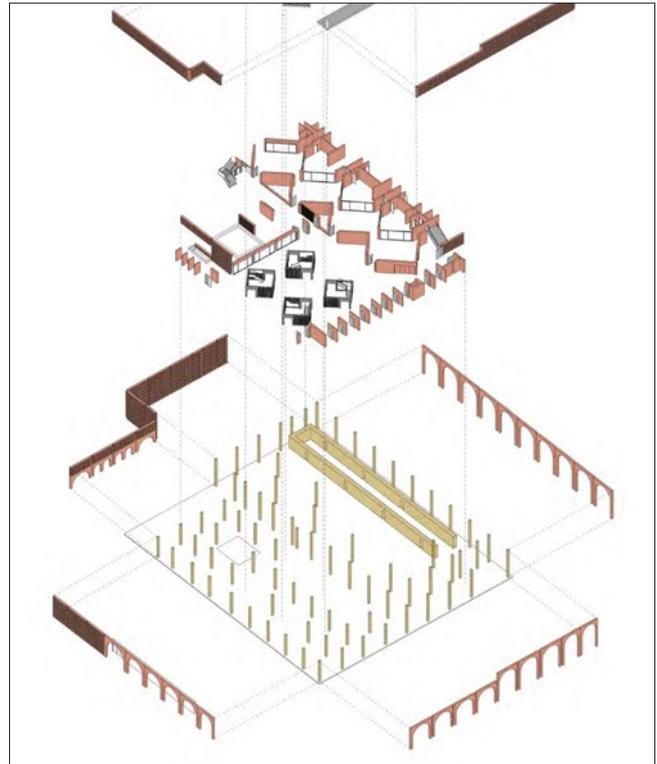
Sustainability lies at the core of the Welsh School of Architecture's research and teaching and has done for many years, but with its recently declared mission to *'create a built environment that enhances people's lives, without destroying the planet for future generations'* this heart is now writ large. Indeed this mission is supported by explicit commitment at the university level including declaration of a climate emergency as well as signing up to the SDG Accord that commits Cardiff as an institution *"to embed the Sustainable Development Goals into our education, research, leadership, operations, administration and engagement activities"*. Further, as a school of architecture located in Wales, we work in the context of unique legislation, developed to ensure that sustainability is at the forefront of national concerns. The Wellbeing of Future Generations (Wales) Act 2015 (WFGA), developed in parallel with the international SDGs, requires that we consider long term impact over short term experience. Thus anyone working, or studying, in Wales has a clear imperative to understand the aims of the SDGs, and to think in a sustainable way.

The implications of these commitments and innovative policy change are still being understood, and the WSA is embedded in this process. Undergraduate and Masters students are in contact with the Future Generations Office, and the goals of WFGA are being used to frame teaching and learning, with the act providing a framework with which to evaluate students' work at all levels. Researchers are working with the Future Generations Office to develop sustainable visions of the built environment - including housing and public buildings. Most importantly, this means that students and staff at the WSA are continually developing a critical position with regards to the connection between practice, sustainability and the SDGs.

Indeed, we believe that the relationship between architecture and sustainability is one of continual transformation as new understandings of the concept of sustainable development and cities come to the fore, and as new knowledge of ways of designing and building sustainably emerges. Throughout our teaching, at both undergraduate



The Role of the Past in Waterfront Regeneration: A New Urban Framework of historic building nodes for cultural programmes in Swansea by Yue Peng, MA Urban Design Student



© Isabella Castelli, XIII Liveable Urbanism

and postgraduate (PGT) levels, we expect all of our students to have an open, questioning approach to sustainability concepts such as the SDGs and WFGA. We seek to support our emerging designers, not to seek to merely apply, but to approach these concepts critically, to test, develop, refine and also define them in context through study, engagement with research and design.

Students will encounter issues and questions of sustainability through a variety of different modes of learning opportunities and assessments: from technology studies; to architectural history and theory; to the design studio. Indeed we believe that the studio is a vital setting for synthesising the different sorts of knowledge and aspects of sustainable development as well as for approaching the challenge of sustainability with creativity and imagination. While, later in their studies (MArch, RIBA Part 2), we seek to foster opportunities for our students to develop specialisms in specific aspects of sustainable development, including health and wellbeing, comfort, sustainable communities, affordable energy and water management.

Opportunities for specialism continue in the PGT programmes on the topic of sustainable design and development that the school has offered for over thirty years. Over which time, the range of programmes has evolved and grown, while sustainability has remained a key theme. In all the nine PGT programmes we now offer, each explores this broad and evolving concept in different ways – applying a range of opportunities to develop

students' existing skills to evolve to include those necessary to enable the critical evaluation, design and management of sustainable architecture and urbanism. The 'Architectural Science Masters' collectively equip students with understandings of the challenges of sustainable design/development in global architectural practice and in relation to different scales of building and the dimensions of energy and environmental performance. While our Masters in Urban Design places strong emphasis on the challenge of sustainable communities – a challenge that extends well beyond the carbon footprint or energy efficiency of urban forms to encompass issues of physical and mental health associated with design and city making practices, issues of poverty and social inclusion connected to the built environment. Similarly, our Masters in Architectural Design places emphasis on the social aspects of sustainability through design studios focussed on such complex topics as social inclusion in contexts of rapid social change, design for non-human urban life and the application of the concept of the circular economy to design and construction.

Through our teaching at WSA we aim to support our graduates to become leaders and innovators in their chosen field and to place sustainability at the heart of the decision making and design solutions. To do this we expect our students to learn the right questions to ask of themselves and others in order to optimise the delivery of a sustainable future, to be ethical, creative, curious and critical in all that they seek to be.

# The Architectural Association School of Architecture

## A holistic, implicit approach to sustainable development

Paul Crosby, Head of Part 3

The Architectural Association School of Architecture (the AA) has come a long way since it was founded as a night school in 1847. The last 10-15 years have seen a clear shift from a fairly technical and structured focus on 'the urban', on 'materials', on the structure of 'the city', to a broader consideration of the role of the architect in shaping the world in which we live – from the buildings we inhabit to the public spaces we enjoy to the communities in which we participate to the planetary resources at our disposal.

This change of perspective has been an organic process – the product of a changing world, the awareness and concerns of the students coming to the school and the practice/research interests of the tutors involved.

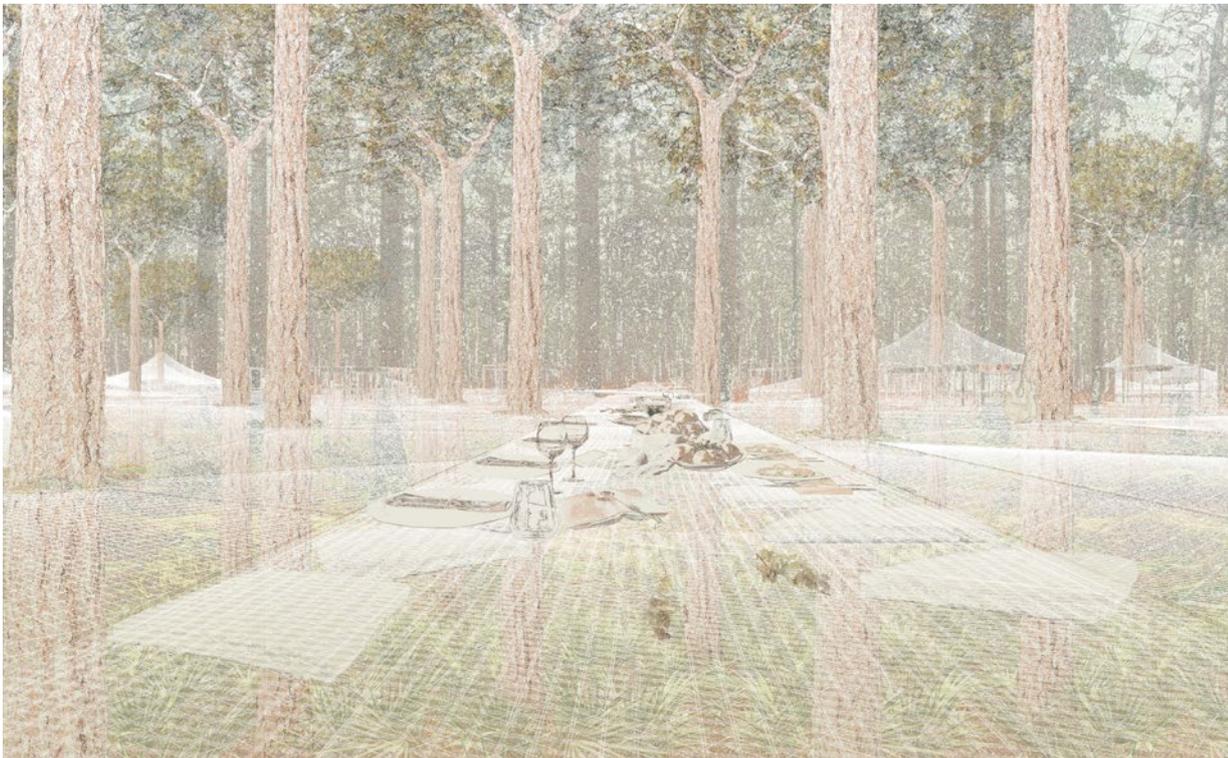
The AA's experimental undergraduate programme now includes units such as:

- 'Myths of the New Forest' – exploring the role of the architect in forest ecosystems (clearly supporting Goals 13 – climate action, and 15 – life on land);

- 'Some Like it Hot: Exhibiting in a Warming Climate' – exploring the role of art and architecture in educating the public on the climate emergency, including ethical, social and political implications (clearly supporting goal 13 again, but also goal 16 – strong institutions, and goal 4 – quality education);
- 'Mix-Up: Tall Towers as Catalysts for Social Interaction' – exploring the relationship between tall buildings and social interaction, challenging design to positively influence social interaction and vice versa (supporting goal 10 – reduced inequalities, goal 11 – sustainable cities and communities and also arguably goal 3 – good health and wellbeing).

And the Diploma (MArch) offers a wide array of social, environmental and economic focussed units, including:

- 'The Civic Programme' – looking at architecture's role in structuring collective life and how that translates into the digital world (exploring the innovation aspect of goal 9, facets of communities within goal 11 and a large part of goal 16 – peace, justice and strong institutions);



A Table's story: The Forest Banquet, Georgia Kestekoglou, AA Intermediate Unit 6, 2018-19, AA Archives



Climate Summit symposium hosted by AAction student group, 4th October, 2019. AA Archives

- ‘Deep Adaptation’ – exploring habitat and architecture in the context of the need to significantly adapt our relationship with the natural world; preparing architects for ‘radically different conditions’ (supporting an array of the SDGs, including: goal 15 – life on land, goal 10 – reduced inequalities, goal 8 – decent work and economic growth, goal 12 – responsible consumption and production, by exploring radical new ideas for human existence);
- ‘The Publicness of Architecture: Radical Democracy in Urban Space’ – examining ‘critical architectural agency’ and the role of the architect in strengthening communities and democracy in the context of ‘gentrification and financialization’ (strongly focussed on goal 16 – peace, justice and strong institutions and the softer infrastructure incorporated within goal 9);
- ‘Salvage: Exploring, Designing and Building with Reused Materials’ – exploring the responsibility of the architect beyond the process of ‘adding to the world’s built fabric’ – exploring the architect’s responsibility in the circular economy (clearly supporting goal 12 – responsible consumption and production, goal 7 – affordable and clean energy, as well as Goals 13, 14 and 15, by advocating a more responsible use of available resources).

In addition to and through these units, the AA seeks to develop 5 key areas of expertise in students, including: environmental, theoretical and professional. The AA has also developed

‘speculative studies’ as part of their programmes, incorporating a foray into philosophy and ethics.

With these themes running through, connecting Foundation to PhD, and with a newly formed Ethics Committee (to support robust and ethical decision-making), it is clear that the AA itself and its architectural education programme – implicitly perhaps – are addressing and advancing the SDGs.

This drive and development emanates not only from tutors and staff, but also from the students themselves. A clear example of this is ‘AAction’, a student-led initiative which includes a Climate Group which met for the first time in October 2019 to raise awareness and to ‘endeavour to introduce a pedagogical and cultural shift at the core of the architectural institutions in the face of climate crisis’. AAction has already seen some results of its Climate Summit, with tutors encouraging further dialogue to improve environmental and technical studies at the AA.

Not only is this happening through the content of the learning on offer but also through the method of learning and the organisation’s own infrastructure – the AA is literally and metaphorically taking down walls to encourage interaction, discussion and cross-fertilisation of ideas to support their aim of being an organisation which ‘...enables and empowers students to become the architects of tomorrow, meaningfully contributing to the betterment of life.’

# School of Architecture, Sheffield Hallam University

## An ecological approach to architecture

Dr Cristina Cerulli, Professional Practice and Employability Lead

The School of Architecture at Sheffield Hallam University was set up with an explicit environmental agenda, framed within wider social and political discourses. As a young School of Architecture, firmly rooted within the multidisciplinary department of Natural and Built Environment, we embody the ambition of Hallam University to be an outstanding applied university that ‘changes lives’. We are particularly concerned with the ethics of the Architecture profession and are committed to critiquing inadequate norms, whilst proposing alternative approaches. A long standing concern for the intersection between professionalism, ethics and sustainability led to our direct involvement within the RIBA Commission for Ethics and Sustainable Development, explicitly set up “to assert the fundamental importance of public interest, social purpose and sustainability as core values within the Profession” and “engage with the UN’s 2030 Sustainable Development Goals”. The Commission called for improved professional standards in a way that is unequivocally committed to “working in the public interest and following the principles of sustainable development”.

We have developed a ‘deep green’ approach to understanding sustainability, rooted in ecological thinking. Whilst teaching and learning about sustainability within schools of Architecture is often limited to environmental design – from a

functionalist perspective, where sustainability is framed as a technical problem – we focus on creating a shift in the profession towards a more integrated view of sustainability that looks holistically at the environment, including society, and challenges established professional norms and praxes. To achieve this, ‘deep learning’ needs to occur through an active, transformative process where values are lived out and debated, combining theory and practice. To understand the interconnectedness and the interdependence of networks of both the subject they are studying and the systems they are part of themselves, students need skills and learning strategies that are interpretive. At the time of writing we are in a lock-down in response to the Covid19 pandemic, a global emergency highlighting the interdependence, fragility and vulnerability of our society as well as (despite the indiscriminate nature of the virus) how inequalities are exacerbated and amplified by this situation.

The UN Sustainable Development Goals (SDGs), with their associated objectives, provide an ideal overarching framework to respond to and to interrogate our curricula, briefs and student work. Our approach to embedding SDGs within our architecture courses is both structural – systematically featuring SDGs in the syllabus of core modules dealing with cultural context, environmental



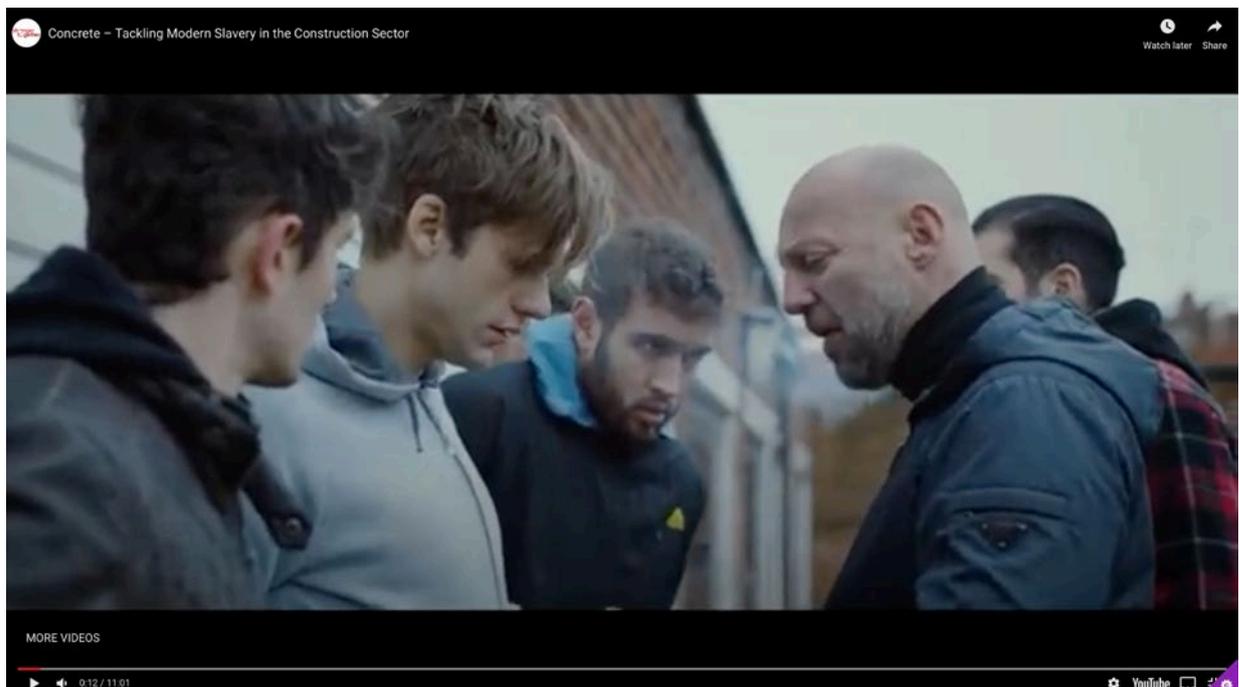
‘Michael Ghyoot of Belgian practice and warehouse Rotor DC discussing specification of reclaimed materials – MArch filed trip, Brussels 2019’  
© Cristina Cerulli

design and professional practice – and thematic – addressing within design studio, dissertations and staff student research projects the key themes underpinning the SDGs such as climate emergency, infrastructure, water, health, food security, gender equality, social justice and ‘sustainable communities’. For instance SDGs, alongside their genesis, objectives and limitations, explicitly feature in sessions within our history and theory, professional practice and environmental design modules (structural), but they are also addressed through encouraging critical thinking around cross-cutting themes of health, environment, ethics, resources within history and theory, professional practice and design studio (thematic).

Our MArch programme is structured around three strands: Praxis of Architecture, Social and Political Design and Ecologies of Architecture, exploring architecture as a complex, interdisciplinary and dynamic ecology. Our design briefs focus on key societal challenges and issues, in line with the SDGs – for instance recent design studio themes include Infrastructures, Community Led Development and Water – and ecological thinking also underpins technical and professional aspects of design. Through the Construction Ecologies strand of design studios, students consider how interventions are designed, made and maintained. By applying ecological thinking to construction and technology, the construction ecology strand frames technical questions as situated social, economic and material processes that need to be designed, rather than simple problem-solving. Similarly

the Praxis strand within MArch complements and contributes to the design studio by framing professional practice in a critical way through a suite of three modules dedicated to critically explore understanding, interrogate and develop architectural praxes rooted in theory, existing practices and students own personal values and professional agendas. Within the Integrated Practice, a final year MArch core module, practice is conceptualised both in theoretical and applied terms, integrating knowledges, reflections and prototypes within students’ design thesis projects. Explicit reference to the SDGs and to the context of the work of the RIBA Commission for Ethics and Sustainable Development is made while discussing statutory frameworks, but throughout the course values and professional ethics are debated, and current practice is critiqued to design future practice. A session on specification, for instance, is not simply concerned with the ‘mechanics’ of producing a specification document, but with the ethics of prescribing particular materials or processes. The discussion expands to critique work cultures and ethics, including exploitative labour practices and modern slavery (SDG8) which are still prevalent within the construction industry.

At every step students are encouraged to ask and try to answer the following questions: Who does what and with what resources? Who gains, who loses out? Who pays the highest price? Who is excluded? And, crucially, how could projects and processes be radically improved to make them more fair and inclusive?



Professional practice module session on understanding specifications more broadly – Screenshot from the film ‘Concrete – tackling modern slavery in the Construction Sector’ © Cristina Cerulli  
Available at <https://www.gla.gov.uk/publications/resources/glaa-partner-videos/concrete-tackling-modern-slavery-in-the-construction-sector>

# The SDGs in Architectural Projects and Research

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Examples of advancing the SDGs through completed projects and architectural research



## Central Somers Town

Tina Frost, RIBA Client Adviser



© London Borough of Camden

RIBA Client Adviser Tina Frost provided strategic design leadership and oversight of this complex regeneration project, co-ordinating the input of five separate design teams and delivering high quality design outcomes. Central Somers Town is part of Camden's Community Investment Programme and comprises a school, nursery, community facilities, housing and a park.

<https://www.architecture.com/working-with-an-architect/client-adviser/client-adviser-case-study-central-somers-town>



## Crossrail, London

George Stowell, RIBA Client Adviser



© Crossrail

Crossrail involves the simultaneous completion of ten new stations in central London, each twice the spatial scale of existing Underground stations.

<https://www.architecture.com/working-with-an-architect/client-adviser/client-adviser-case-study-crossrail>



## Exhibition Mews

Juliet Bidgood, RIBA Client Adviser



© Gareth Gardner

Exhibition Mews is one of a series of demonstration projects devised by the Whitehill & Bordon Eco Town to test approaches to low energy buildings. A design competition was used to identify a design team who could innovatively deliver a sustainable, liveable and affordable carbon neutral housing exemplar.

<https://www.architecture.com/working-with-an-architect/client-adviser/client-adviser-case-study-exhibition-mews>



## Goldsmith Street

Mikhail Riches



© Tim Crocker

The project for Norwich City Council is made up of almost 100 highly energy-efficient homes. Rows of two-storey houses are bookended by three-storey flats, each with their own front door, generous lobby space for prams and bikes, and a private balcony. The back gardens of the central terraces share a secure 'ginnel' (alleyway) for children to play together, and a wide landscaped walkway for the community runs directly through the middle of the estate.

<https://www.architecture.com/awards-and-competitions-landing-page/awards/riba-stirling-prize>



## One Angel Square

Liz Pickard, RIBA Client Adviser



© Andrew Hatfield

The new building, designed by BDP, provides agile workspace for over 2,000 NCC / LGSS employees, brought together from a number of sites, saving the council about £51 million over the next 20 years.

<https://www.architecture.com/working-with-an-architect/client-adviser/2019/client-adviser-case-study-one-angel-square>



## Outdoor Learning Project, St John's School

Ruth Butler, RIBA Client Adviser



© Peter Langdown Photography

St John's School is a small primary school in Hampshire, built in the 1960s by Hampshire County Council as part of their SCOLA build programme. The school grounds include three tarmac playgrounds, a field and small woodland.

<https://www.architecture.com/working-with-an-architect/client-adviser/client-adviser-case-study-outdoor-learning-project>



## ProxyAddress: Using Location Data to Reconnect Those Facing Homelessness with Support Services

Chris Hildrey



© Hildrey Studio

The ProxyAddress project set out to tackle homelessness through research and real-world application. The programme created a system to use the address data of long-term empty properties to serve as a consistent 'proxy' addresses to be used throughout periods of instability.

<https://www.architecture.com/awards-and-competitions-landing-page/awards/riba-presidents-awards-for-research/2018/proxyaddress>



## Somers Town Community for Women

Paula Pocol



© Paula Pocol

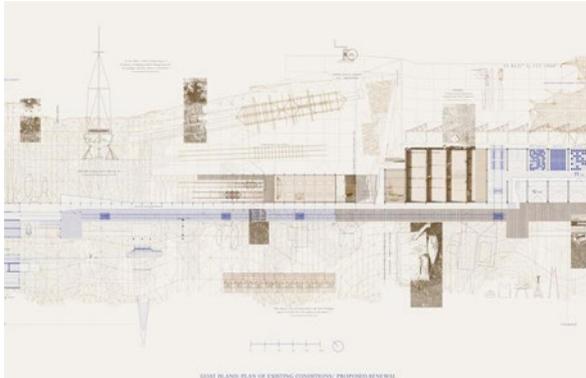
Somers Town Community For Women is an architectural exploration...elevating female independence while coexisting in today's world. It provides life-long private homes for elderly women, creating a community that keeps the residents engaged with all aspects of society.

<http://www.presidentsmedals.com/Entry-49571>



## Surface Tension: Blueprints for Observing Contamination in the Sydney Harbour Estuary

Victoria King



© Victoria King

A set of blueprints emerge from this survey, exploring instances where contamination may open opportunity for renewal within the Estuary.

<http://www.presidentsmedals.com/Entry-48831>



## The Hide Group Ginger



© David Lindsey

A new space, 4 miles down a single track road, past Tophill Water Treatment works where 370 million gallons of water in two reservoirs ('D' and 'O' named after their shape) supply Hull. It is one of Yorkshire's best locations for bird watching, claiming over 265 species of birds since 1959 with an extensive resident bird population and many migrants attracted to use the coast and River Humber as flight way to and from Europe and further afield. The reservoir and nature reserve are recognised as a site of special scientific interest (SSSI) and they now have improved visitor facilities, with space for interpretation and education.

<https://www.architecture.com/awards-and-competitions-landing-page/awards/riba-regional-awards/riba-yorkshire-award-winners/2018/the-hide>



## Towards Effective Architectural Practice: Lessons from the Elthorne Housing Estate

Naomi Rubbra



© Naomi Rubbra

Based on a specific kind of situated practice with residents on the Elthorne Housing Estate, this work re-examines the Parker Morris Report (1961) that was influential in shaping the architects' 'standardised' image of the occupiers as young, nuclear families, raising questions about those who did not fit the mould. It also draws on the contemporaneous work of social scientist Jane Darke (1975), who explored the dichotomy between architects and users, and users and their estates, and augments this with fresh insights drawn from new interviews.

<http://www.presidentsmedals.com/Entry-16290>



## Velindre Cancer Centre

Neil Orpwood, RIBA Client Adviser



© HLM

Looking at Velindre Cancer Centre (a centre of excellence in the non-surgical treatment of cancer) and its plans to relocate to purpose built facilities to improve this nationally acclaimed service, whilst at the same time delivering a better environment for the community.

<https://www.architecture.com/working-with-an-architect/client-adviser/client-adviser-case-study-velindre-cancer-centre>



# The SDGs in Business

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Measures, frameworks, policies and approaches to embed the principles of the SDGs operationally



# Collective Architecture

## Jude Barber, Architect-Director

Contributors: Catriona Liggat, Jo McCrae, David Perez, Sarah Russell, Chris Stewart, Tom Warren, Neal Whitaker

As a studio, we sometimes reference and apply the UN Sustainable Development Goals (SDGs) within our projects and discussions with clients. Until recently, we hadn't considered these directly in relation to our own business strategy – or framework for practice. However, as an employee-owned and controlled practice (since 2007) working with socially minded clients we were conscious that the work of our business may have aligned with some of the aims and principles outlined within the SDGs.

So, when we were invited to reflect on the concept of the SDGs as a business strategy, we saw an opportunity to put our minds firmly towards this matter and consider what more we could do to address the SDGs in practice – or how we might need to re-focus and prioritise our actions going forward.

To fully understand the task in hand, we held a focused, team workshop to review the SDGs, the work of the RIBA Ethics and Sustainable Development Commission and how these influenced or applied to our studio and our work. We were fortunate that our director Chris Stewart

had been part of the Commission and could assist in sharing and guiding us through the discussion.

We found it helpful that the Ten SDG Principles had been broken down into four key headings 'Human Rights', 'Labour', 'Environment' and 'Anti-Corruption'. This allowed us to focus our discussion. It also led us to think about how the SDGs could be better tailored to architectural practice under the following strands:

- Education, Innovation and Growth
- Ethical issues
- Sustainable issues
- Equality, Diversity and Inclusion

When reviewing the focused themes, we felt that 'Labour' and 'Equality, Diversity and Inclusion' were issues that we had already embedded into our strategy and ethos. Collective Architecture works on the principle of sharing wealth and opportunity in an equitable way for all. We are also in the process of becoming a Certified B-Corp, which provides an holistic recognition of how we are financed and how we collaborate and approach projects. We also discussed how most of our project work is local



UN SDG Workshop © Collective Architecture



Vision and Values © Collective Architecture

and regional with clients particularly committed to fair work practices and inclusive growth. This addressed themes such as ‘Ethical issues’ and ‘Human Rights’ at a local level. Within our own business we recently committed to buying supplies and materials from social enterprises and ethical businesses wherever possible. We also carry out pro-bono work for charities and trusts. The next steps to take this further need to include more scrutiny of our financial providers and investments.

In terms of ‘Environment’ and ‘Sustainability’ we also considered these as issues we had embedded into our practice’s focus in the past and going forward. However, we all agreed these should go further and we should continue to work with and support the Scottish Ecological Design Association (SEDA) and the RIAS Sustainability Working Group. We also feel that as a practice – and as an industry – we could be more productive in terms of our specifications and seek ethical supply chains for materials, labour and methods. Concepts such as ‘material passports’, for example, arising out of the wider discussion around circular economies, require more robust systems for both specification and construction, so that architects can readily act and make informed decisions.

Some Goals such as ‘Clean Water and Sanitation’ were discussed as being a challenge in areas where utility infrastructure was not in place. It did make us think, however, that we could do more to support international work and projects addressing such challenges.

Other goals seemed rather far from our direct influence within our everyday practice as architects, such as ‘Protecting Marine Life’ or ‘No Poverty’. Nevertheless, after discussion we realised that many of these goals raised ‘prompts’ that allowed us to think more deeply about our day to day work and broader influence. For example, we undertook strategies with Glasgow and Clyde Valley Green Network Partnership which promote green-blue infrastructure, biodiversity and ecosystems. When implemented, these projects will improve water quality within our urban environment, water courses – and subsequently marine life. Equally, many of our clients and their projects seek to address homelessness and provide access to support, facilities and opportunities for many of Scotland’s poorest communities. There is poverty within our own country and as architects, we can work proactively with agencies to eradicate it.

When considering where we could do more as a practice and an industry, we agreed that impact was key. This included reflections on where we are as an industry and where we might want to be. We concluded that we should use our collective voice to influence and affect policy and behaviour with a shift in focus from market-led development to holistic social concerns. We ended our discussion by agreeing that wider socio-political change was required to fully address the SDGs and their aims. This has come acutely into focus with the impact of COVID-19. In the meantime, at Collective Architecture, we will do our best to apply them in a micro, local way.

## Grant Sellars, Architectural Director Contributors: Ruth French, Dr Oliver Jones

Our vision, Everything architecture, declares “Our goal is simple – to improve the quality of the world around us and, in doing so, improve people’s lives ... It defines a responsibility to an inclusive society and to the future of our planet”.

This vision is a touchstone for all that we do in the operation of the practice and the delivery of our architecture. Historically the practice’s sustainability goals were captured in our Environmental Management System which over time was enhanced and expanded to include our One Planet Living and Giving Back goals, aligning with several SDGs.

In 2018 we initiated a leadership programme, L18, to develop existing and emerging leaders in Ryder, equipping them with skills required to lead a growing practice with an expanding international footprint. That year we also appointed a research director to consolidate our extensive research activities, adding greater structure and strategic direction to research across the business. The outcomes from each have resulted in a renewed focus on the principles of the SDGs with an elevation of their importance in practice decision making and direction.

The L18 group identified key internal and external challenges facing the practice and wider industry,

which included the rapid pace of social change and the increasing influence of global environmental challenges on design, construction and the use of buildings. These themes resulted in new social and environmental strategies being developed that also informed the focus of our research strategy.

To maximise awareness and engagement from all parts of the practice, each strategy was developed by a dedicated task and finish group. These were made up of people from across the practice, at different stages of their career. The outcomes from each have been refined through consultation with the leadership team and at wider practice forums.

The Social, Environmental and Research strategies tackle many of the SDGs over which the practice has influence. They provide a framework which embeds measurable and deliverable targets and actions into our operation, which can be recorded, monitored and reviewed regularly and built upon over time.

The strategies are the focus of Ryder’s Blueprint 2020, our annual festival rooted in Everything architecture, where we celebrate the past 12 months and set out our goals and ambitions for the year ahead.



Student design competition

© Chris Lishman



Schools workshops hosted by Ryder for the Great Exhibition of the North

© Ryder

The delivery of these strategies is broad and diverse; below we outline how we are practically supporting the SDGs through three specific operational examples:

## 1. Research



A core focus of our research strategy is improving environmental quality and performance. We have developed software to help us close the performance gap between predicted and operational energy use in schools and are underway with a sensor integration project to monitor environment quality for health and wellbeing. We have funded doctoral researchers who are embedding and retrofitting sensor technology within buildings to monitor environmental quality and provide actionable health and wellbeing improvements.

This research is also being applied to our own workplaces where we are exploring and learning from changes that we make through the introduction of simple building monitors. Providing data on our buildings' environmental performance allows us to understand the impact of changes that we make. This proves valuable both in terms of reducing our operational impact and supporting existing clients in the fine-tuning of their use of existing buildings.

## 2. Social



Ryder has a strong heritage of supporting the education of people from a diverse range of backgrounds to pursue a rewarding career in construction. This includes work placements, career fairs, university tutoring and professional mentoring.

We founded and launched PlanBEE, bringing together a collaborative partnership of built environment professionals and Gateshead College, shaking up the traditional routes to train for skilled roles within the sector.

PlanBEE adopts a higher apprenticeship programme rooted firmly in the entrepreneurial and multidisciplinary approach taken by Ryder and their co-founding partners. Through quarterly rotations between partners, PlanBEE provides hands on training across all disciplines during a two-year programme to equip students with the essential skills and broader collaborative outlook the industry desperately needs.

The programme rewards students with a fast track professional qualification, guaranteed job on graduation and a debt free degree in architectural engineering and management. It provides an innovative pathway for participants that might have otherwise been excluded from entry to the sector at this level.

## 3. Environmental



Building on historic energy reduction targets we have set the practice goal to be net zero in our business operations by 2025 and be delivering net zero whole life carbon projects by 2030. In order to reduce consumption and carbon emissions we have developed our carbon reduction process. Setting out the sequential steps we should take to reduce the impact of our operations and projects.

A roadmap has been developed which sets out the sequence in which we will address four key action areas (operational carbon, embodied carbon, internal environment and performance) ensuring we maintain focus and act rapidly to effect meaningful change. Tools and methodologies are being developed to reduce our carbon impact with targets set, measured and reported regularly across the practice.

# Bennetts Associates

## Ben Hopkins, Associate

*“Bennetts Associates is an example of integration of sustainability and climate action in business, through their commitment to set a science-based target, procure sustainable energy, and include sustainability considerations in their designs. Their work contributes to moving us closer, faster to global climate neutrality.” United Nations Framework Convention on Climate Change*

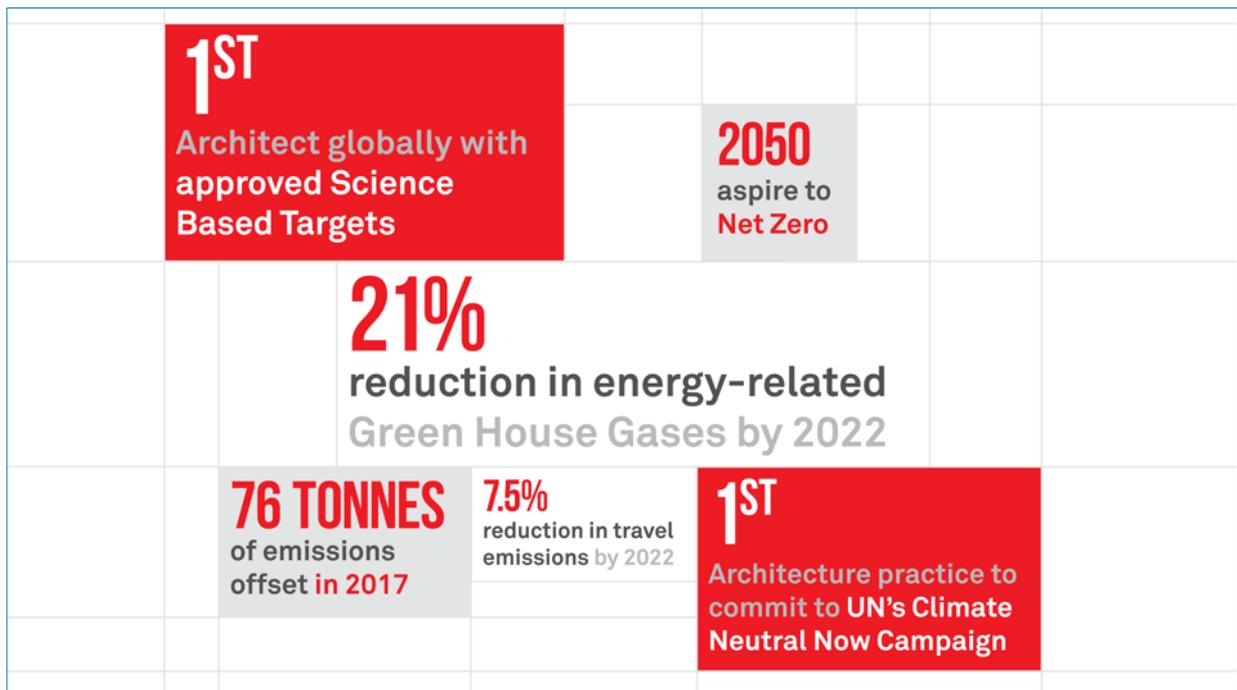
Bennetts Associates has had sustainability at the heart of our business since we were founded in 1987, pioneering low energy office design in the 90s and helping to found the UK Green Building Council in 2007.

Throughout this time sustainability was integrated within the business as well as our architecture, exemplified by Bennetts Associates being the first architectural practice in the world to report annually using the Global Reporting Initiative framework in 2012. In 2017, thirty years after being founded and following the change to an Employee-owned Trust, Bennetts Associates decided that we would completely re-write our sustainability strategy. We took the decision to format our strategy in the form of a simple document with twenty targets that we report against publicly, partly to form a template for other organisations to copy.

In putting together the sustainability strategy we were keen to focus on the three core parts of our business plan: *Business, Design and People*. “Business” relates to our operational impact which is predominantly built around our ambitious science-based climate change targets. “People” relates to not only our staff health and wellbeing, but also the wider community of the areas in which we work. “Design” relates to how we embed sustainability within our designs, which is often related to climate change targets but now frequently includes references to the UN Sustainable Development Goals. The strategy was published as our 20 targets for 2022, and since 2018 we have been reporting our progress against it.

While developing the twenty targets we wanted to make sure that it was covering a wide range of activities, and so mapped our final 20 targets against the sustainable development goals, expanding and contracting sections to make sure a broad spread was achieved.

As would be expected from a business that is often seen as a leader in the Climate Emergency, a large number of our targets relate to SDGs relating to *Climate Action, Affordable and Clean Energy, Responsible Consumption and Production* and other climate change related targets.



Sustainability Targets © Bennetts Associates

## Bennetts Associates Targets Mapped Against UN Sustainable Development Goals



UN Goals Infographic © Bennetts Associates

As part of the strategy we also became the first architectural practice in the world to commit to the United Nations Climate Neutral Now programme, which commits signatories to measure, reduce and offset greenhouse gas emissions. Since 2017 we have measured and reported our business' carbon footprint, measuring everything from the energy used to power our offices right down to the coffee that we drink, and our staff's commute. We have ambitious reduction targets that have been approved by the Science Based Targets institute as aligned with 1.5 degrees of warming, again the only architectural practice in the world to do so. Finally, we offset all emissions using Gold Standard certified offsets, via the UN Climate Neutral Now marketplace, which also support development projects worldwide supporting a variety of other SDGs.

Less well known is our strong commitments to social sustainability, which is the focus of our "People" targets. These align with various SDGs including *Reduced Inequalities*, *Gender Equality*, *Education* and *Good Health and Wellbeing*

amongst others. Many of these targets relate to the provision of mentoring, teaching or work-experience opportunities for local students, partnering with local schemes in Edinburgh, Manchester, Camden and Islington as well as the Stephen Lawrence Trust and the RIBA to connect us with those who most benefit from our activities.

Lastly, much of what we do connects with the goal of *Partnering for the Goals*, through our work with the UK Green Building Council, RIBA, LETI and local business groups Islington Sustainable Energy Partnership.

Though the Sustainable Development Goals on their own can be weak and hark back to the old days where sustainability was mostly kind words with little result, we feel that coupling these with performance metrics which are publicly reported on they can help form the spine of any sustainability strategy alongside stricter schemes such as science-based targets or the UN-Climate Neutral Now scheme.

# Key RIBA Resources – tools for action

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**RIBA 2030 Climate Challenge:**

<https://www.architecture.com/2030challenge>

**RIBA Sustainable Outcomes Guide 2019:**

<https://www.architecture.com/sustainable-outcomes>

**RIBA Plan of Work 2020:**

<https://www.architecture.com/riba-plan-of-work>

**RIBA Gender Pay Gap Guidance:**

<http://architecture.com/gender-pay-gap>

**The Compact:**

<https://www.architecture.com/the-compact>

**Ethics and Sustainable Development Commission Report:**

<http://architecture.com/ethics-and-sustainable-development>

**RIBA Code of Professional Conduct:**

<http://architecture.com/professional-conduct>

**UN Sustainable Development Goals in Practice**



**Ethics in Architectural Practice**



# UN Global Compact 10 Principles

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## Human Rights

- 1 Businesses should support and respect the protection of internationally proclaimed human rights; and
  - 2 make sure that they are not complicit in human rights abuses.
- 



## Labour

- 3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
  - 4 the elimination of all forms of forced and compulsory labour;
  - 5 the effective abolition of child labour; and
  - 6 the elimination of discrimination in respect of employment and occupation.
- 



## Environment

- 7 Businesses should support a precautionary approach to environmental challenges;
  - 8 undertake initiatives to promote greater environmental responsibility; and
  - 9 encourage the development and diffusion of environmentally friendly technologies.
- 



## Anti-Corruption

- 10 Businesses should work against corruption in all its forms, including extortion and bribery.
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