

# SUSTAINABILITY STRATEGY

Allies and Morrison

# the only thing to do

**The climate emergency  
demands a paradigm shift in  
our everyday lives.**



Simon Fraser  
Partner



2019 marked an unprecedented acceleration of global climate action. The urgency of this action has become increasingly apparent with the impacts of climate change and ecosystem collapse generating global public concern. This demands a paradigm shift in our everyday lives.

We place sustainability at the heart of our work, as architects and urbanists, and in the operations of our practice. It is our ethical and professional responsibility. We have committed to delivering fundamental changes in our working process that goes beyond ‘doing less harm’ and more towards generating positive impacts and outcomes.

This is why we have developed our Sustainability Strategy. It is a progressive and results-oriented document that builds on an established Allies and Morrison approach which is guided by an eye on the long term, a respect for every context, and an appreciation for technical detail.

The Strategy sets out five principles. These underpin everything we do and inform how we design. We define quantifiable objectives that we commit to realising by 2026; how we design our projects, run our practice and nurture our people. And I anticipate that up to 2026 and beyond, we will monitor, refine and revisit these objectives and set yet more ambitious ones for us to achieve in future.

# PRINCIPLES

**Our sustainability principles outline the philosophical backbone that underpins our design approach.**

**Together, they form a clear position on sustainability which helps steer our work and evaluate our impact.**

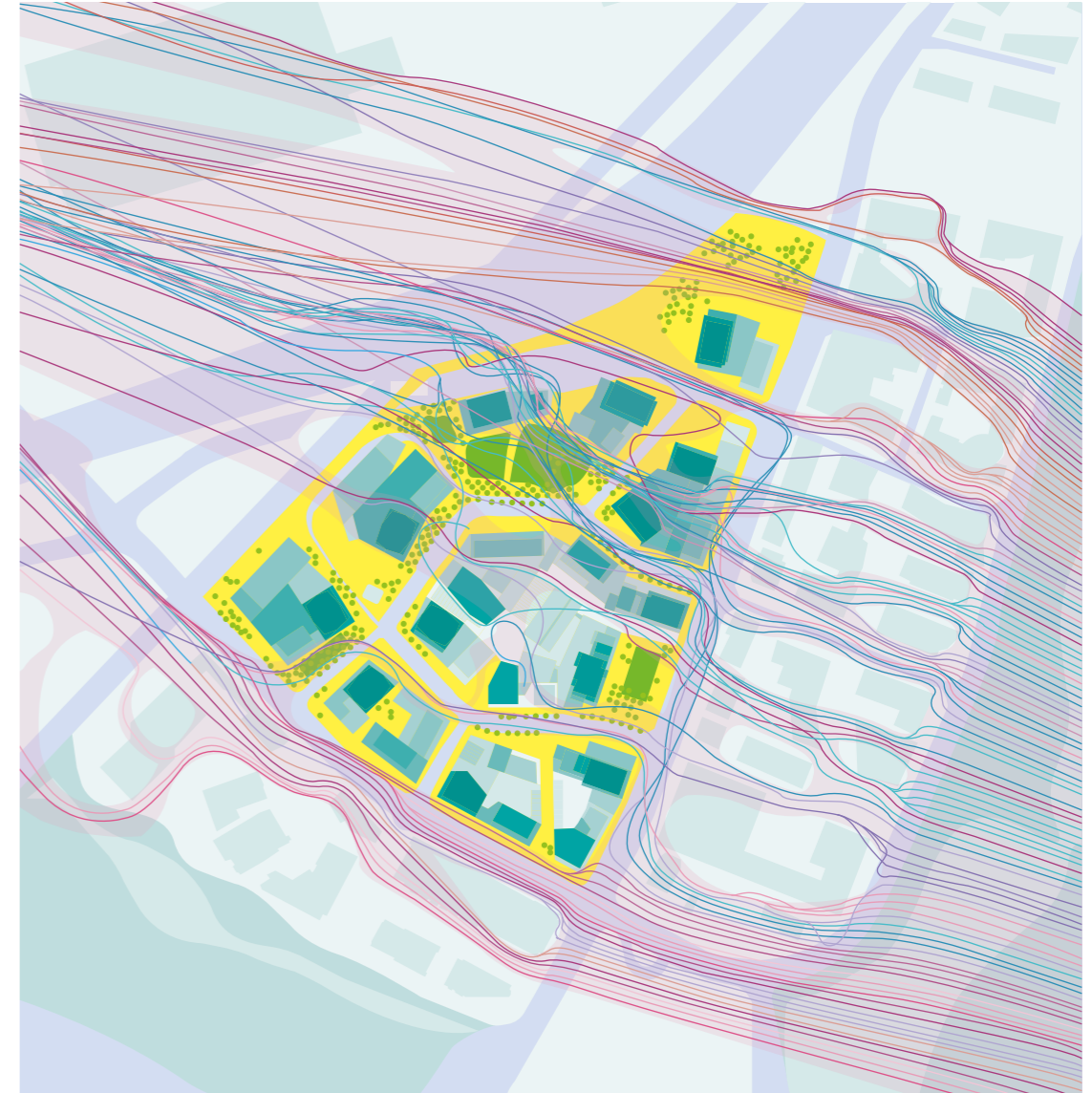
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## APPRECIATION OF THE PRE-EXISTING

The starting point of every design is an appreciation of the physical, sociocultural and microclimatic characteristics of each place. True sustainable development enhances the coherence and continuity of place. It should work in harmony with these characteristics to provide more contextually appropriate, low carbon and resilient interventions.

### 2150 LAKESHORE BOULEVARD, TORONTO

Our masterplan is designed in conjunction with the prevailing microclimate, using building form to shelter the public realm from high winds and extending the comfort of outdoor space.



# 2

## EVOLUTION AND REFINEMENT

Sustainable outcomes are not achieved through a single product or solution. This is an on-going process that evolves over time with an increase in knowledge and experience of sustainable solutions. This approach is enhanced through seeking continuous improvement as a result of feedback and the on-going exchange of ideas.



### COLLEGE BUILDINGS

Our experience with institutional college buildings spans two decades. Each project provides the opportunity to learn and refine our design approach whilst respecting the context of each.

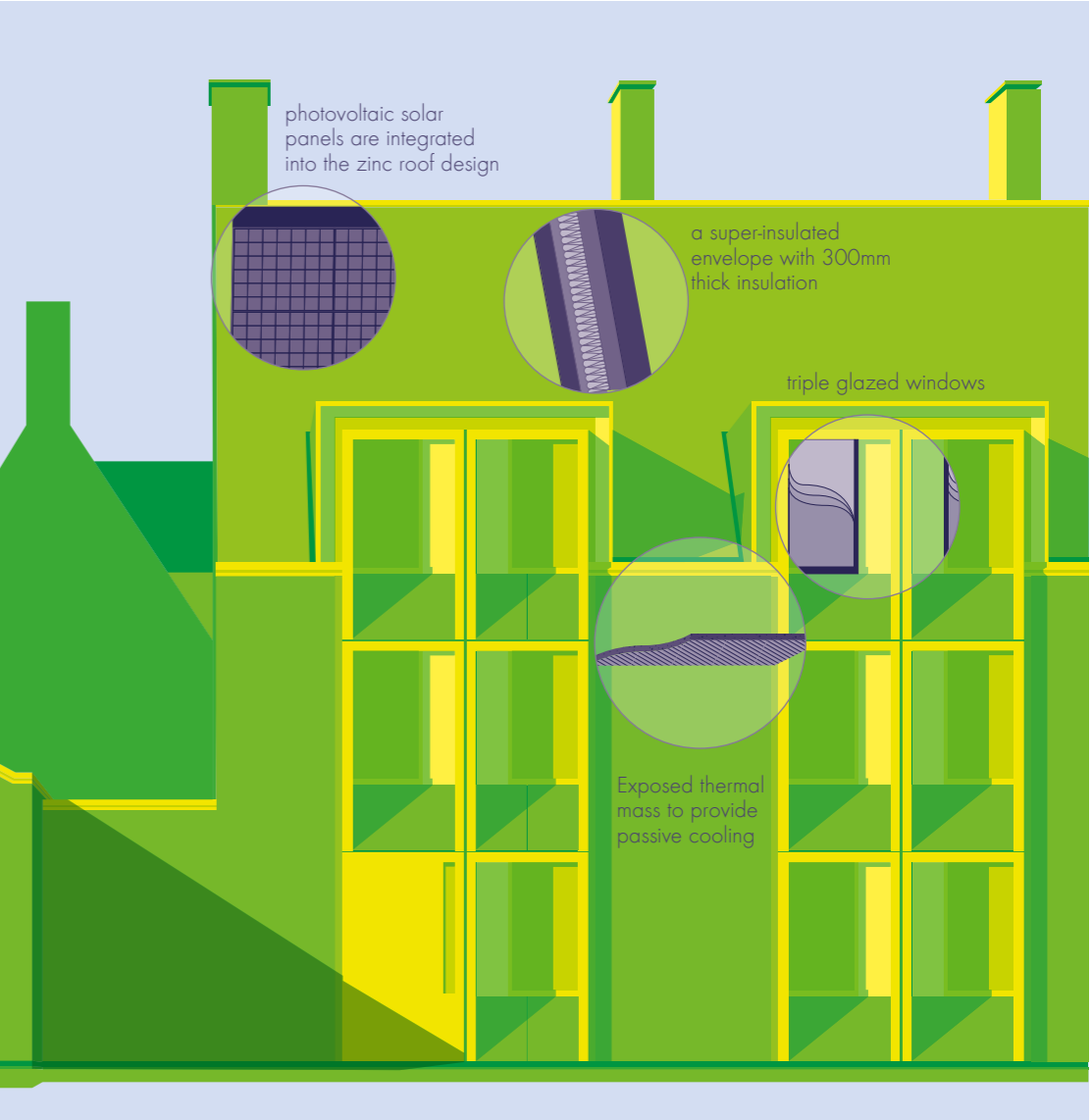
# 3

## PERFORMANCE, NOT STYLE

Sustainable design is a method, not a style. It is style agnostic, concerned with performance and not appearance. It should not prohibit how a building or place works. Ultimately, it should make places work more efficiently and responsibly.

### ASH COURT, GIRTON COLLEGE, CAMBRIDGE

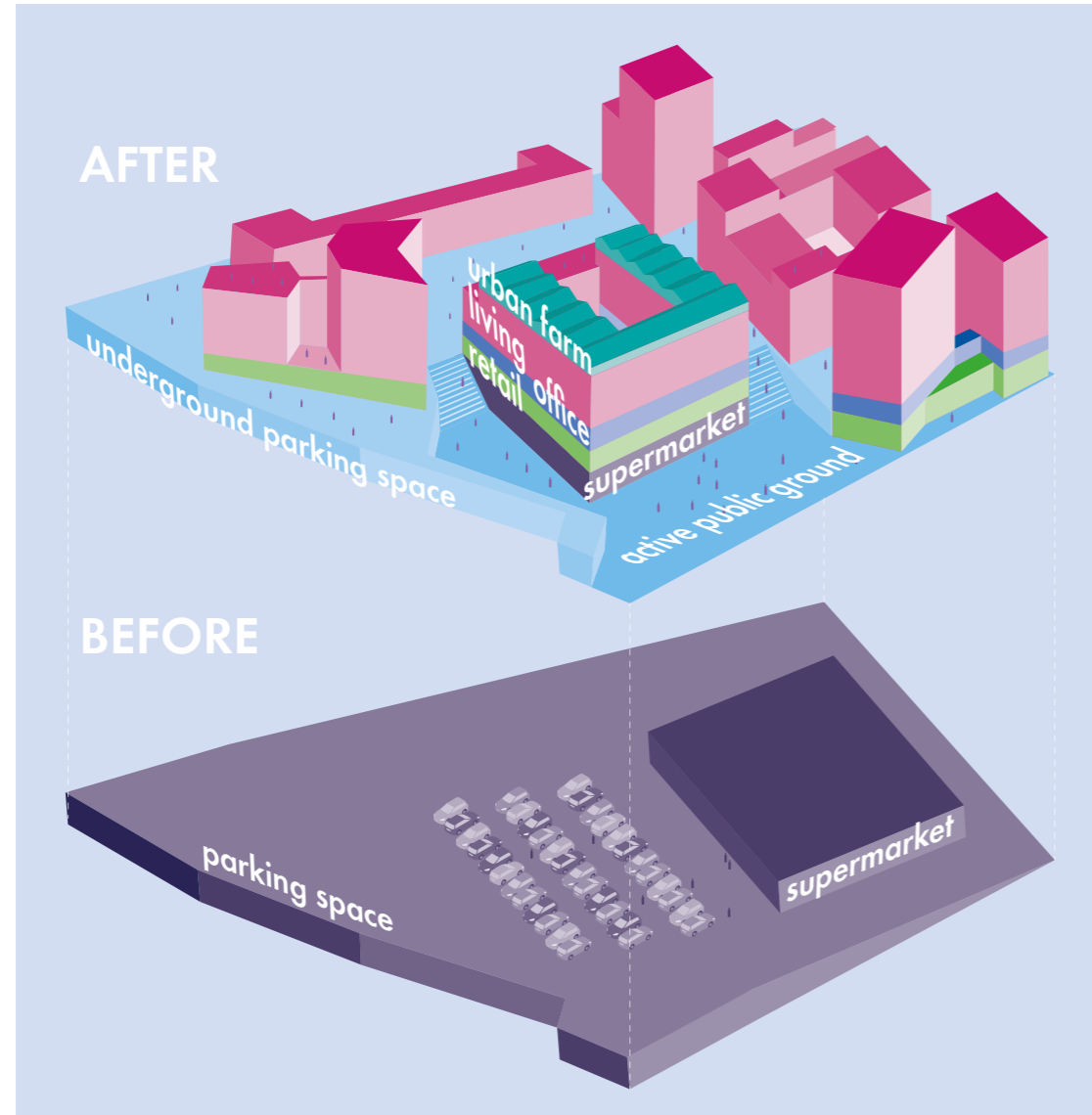
Designed to the Passivhaus approach, Ash Court provides a new residential wing to Girton College. A contemporary addition which is respectful to the listed Victorian setting, its high performance attributes do not take centre stage until you enter the building.



# 4

## VALUE CONSCIOUS

Sensibility is a critical aspect of successful sustainable development. A sustainable design solution will balance economic viability with the environmental impact of the project to achieve a solution which is socially inclusive.

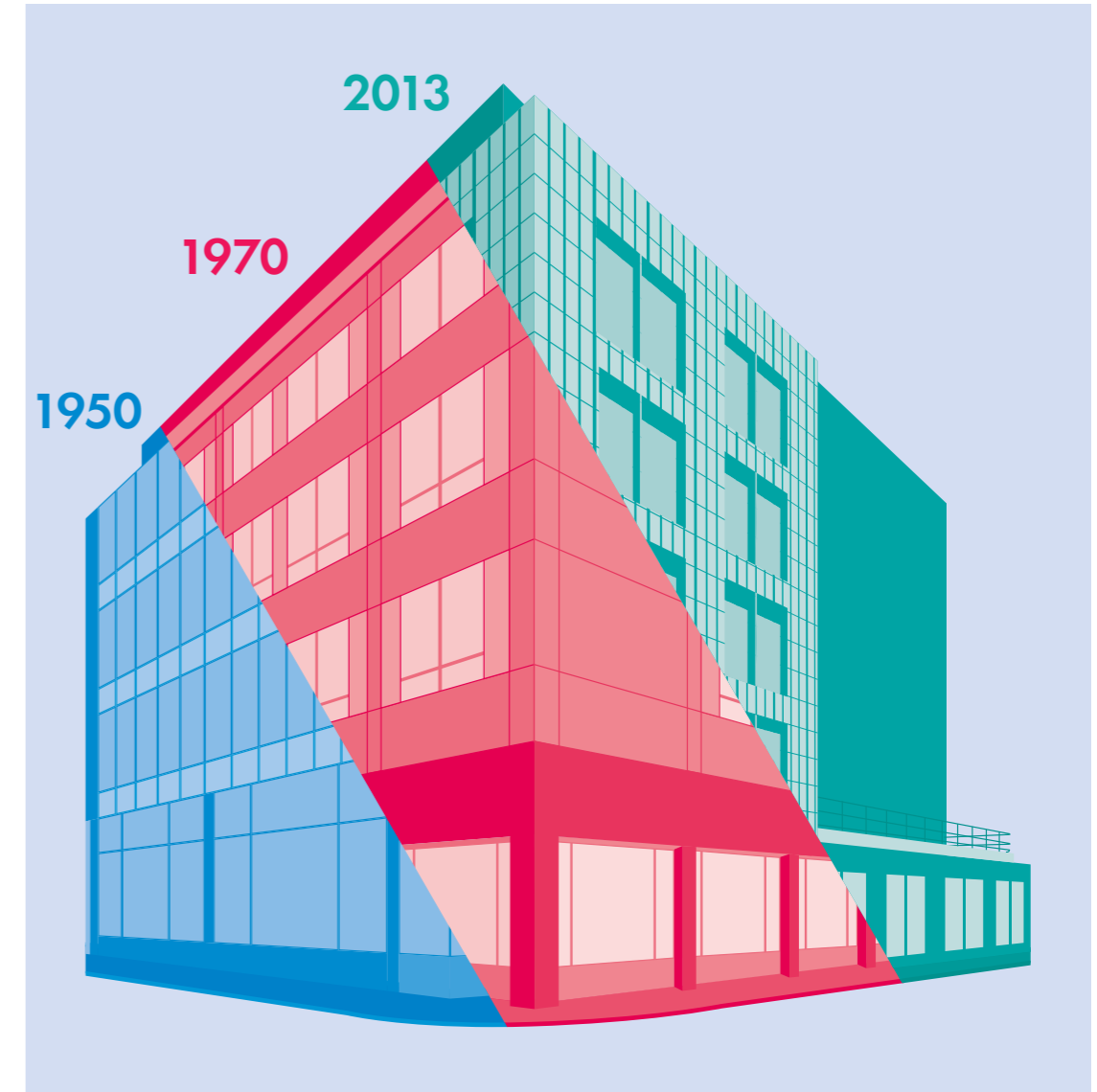


**CAMDEN GOODS YARD, LONDON**  
This scheme reimagines an inefficient and car dominant supermarket typology, and reintegrates it within a mixed-use development. Camden Goods Yard combines residential uses with affordable work space and a range of retail scales. It is a live-work development that residents can adopt and grow within.

# 5

## LONGEVITY

Longevity describes the ability of a place to extend the potential of itself and it's surroundings. Minimising the impact of both the construction process and building operation is no longer enough - we must consider how to safeguard the length of the lifespan and allow for dynamic change. Enhancing a building or place's capacity to adapt to change reduces the risk of carbon intensive redevelopment.



**CRANE BUILDING, LONDON**  
The Crane building is a building of many lives. Retaining the structure of a 1950s printworks not only offsets a significant amount of embodied carbon (otherwise incurred through demolition and rebuild) but also created a seemingly new building on the footprint of an existing one without additional land take.

## 2026 COMMITMENTS

We commit our practice to three actionable objectives which we aim to achieve by 2026.

In implementing these objectives, we will make a meaningful contribution to a sustainable future. These objectives will yield real benefits to our projects, people and practice.

# NET ZERO

PROJECT  
PERFORMANCE

design all projects  
to net-zero carbon  
ready performance

# CO<sub>2</sub>

CARBON NEUTRAL  
ORGANISATION

become a carbon  
neutral organisation



POST-OCCUPANCY  
EVALUATION

incorporate post-  
occupancy evaluation  
into projects

# IMPLEMENTATION

Our three objectives are supported by several supporting targets, split between our role as **practitioners, employer and organisation.**

The structure of this sustainability strategy sets out a clear methodology through which we will report and deliver on our commitments. It is formed of three key components, reflecting the different aspects and scales that our work is influenced by sustainability; as practitioners, an employer, and an organisation.

projects

people

practice

When considering impact, it is important that we consider the collective footprint of our work in context with our organisation and the personal decisions of our colleagues. Recognising the scale, influence and inter-dependence of these aspects is key to realising the potential in delivering substantial reductions in carbon emissions, but also the socio-cultural change that enables this.

We recognise that our highest environmental impact is incurred through the projects that we design and the resultant emissions (both embodied and operational). Consequently, the ways in which we influence our design approach is of great importance to our collective impact.

Whilst we do not have complete control over the emissions outside of our organisation, we are in a position to support to our colleagues to help inform decisions on project design work.

A collaborative process is important to deliver our goals. We commit to engaging with our clients, consultants and other stakeholders, being receptive to feedback and views received. And our strategic plan will provide opportunities to evolve in response to this feedback.

Our sustainability strategy is not static. In a dynamic and ever-evolving environment we must be adaptive to new advances in technology, market trends and conditions.

projects

Since our founding, Allies and Morrison has maintained a commitment to a genuine form of sustainable design. We are a participatory practice that engages discussion and diverse thinking, leading to architecture that is responsive to both climate and place.

AIM	INDICATOR	2026 TARGET
Adopt a consistent methodology for the incorporation of sustainability in project design and decision making	% projects following A&M sustainability toolkit	75%
Design projects to Net Zero operational carbon performance standards	% projects with performance in line with RIBA 2030 Challenge and LETI climate emergency design guide targets	100%
Increase understanding of the success of our work, and improve knowledge capture methods towards continual improvement	% projects conducting Post Occupancy Evaluation (POE) studies	50%
Enhance the capacity of projects to adapt to change, safeguarding operation ensuring longevity in use	% projects working to a projected climate change scenario	75%
Incorporate better understanding of our project embodied carbon impacts, with higher emphasis on existing building retrofit over new-build	% projects conducting Life Cycle Assessment (LCA)	75%

Our approach is evidence-based, using a range of sources to inform a design response that is contextually appropriate and specific to place. Our commitment is maintained through various practice-wide initiatives, all coordinated through our Sustainability Group.

SUSTAINABILITY TOOLKIT

The earliest stages of project conception represent the highest potential for impact when seeking to influence a building's delivered performance. Our practice sustainability toolkit provides teams with an easy to interpret guide to help inform when key tasks and considerations should be made along the project timeline. It enables design teams to adopt a data-driven design approach which engages creative ability, integrates sustainable design thinking and provides an effective evidence base for decision making.

PRINCIPLES FOR A SUSTAINABLE CITY

Strategic masterplanning sets the course for urban transformation many years into the future - a future that we know will be under the increasing shocks and stresses of climate change. Masterplanning outlines the immediate context of new buildings and can subsequently improve or impede sustainable development. In ‘Principles for a Sustainable City’ we have established ten guiding principles that reinforce and re-evaluate the delivery of a sustainable masterplan.

RESPONSIBLE SPECIFICATION

A single decision related to project specification can deliver a reduction in carbon emissions equivalent to that of our annual practice footprint. To support better understanding and decision-making on product specific environmental impacts and health risks, we are developing a material and product sustainability database.

POST OCCUPANCY EVALUATION

The greater the understanding that we have of buildings in use, the better equipped we become in meeting the complex needs of clients and occupants. Post Occupancy Evaluation provides the means to increase understanding of our work through structured feedback. In looking in more depth at our clients motives and ambitions, we can get to the core of occupant needs to help optimise delivered conditions. It also helps us to close the well documented performance gap between building design and measured performance in use.

people

We embrace our colleagues as our most valuable asset. Their commitment, knowledge and diversity form the basis which determines our success. Representing more than forty nationalities and speaking over twenty languages, we thrive on a friendly, collaborative and supportive atmosphere.

AIM	INDICATOR	2026 TARGET
Support a healthy and stimulating working environment for our colleagues	% of occupied hours that indoor environmental quality within best practice levels.	95%
Support a culture of equality, diversity and inclusion amongst our colleagues	% staff satisfied through annual wellbeing survey	90%
Provide an online learning resource with customised curriculum for continual development in sustainability	% of staff completed core learning resources	70%
Support sustainable modes of transport for colleagues commuting to work	CO2 emissions from staff commuting (tCO2e/person/annum)	TBC

We seek to provide a working environment that is both meaningful and inclusive. This leads to positive impact with the ability to inspire our clients and our colleagues, underpinned by a foundation of practice-informed research and partnerships.

ENGAGEMENT

Our practice regularly solicits input from colleagues at all levels through a variety of means, from informal focus groups through to intensive workshop activities. Ongoing engagement will feature prominently as we implement our sustainability strategy to obtain feedback on progress made. We will also engage more regularly with our clients and collaborators, to better understand their needs and intentions and identify the potential barriers to progression as we seek to deliver on our commitments.

LEARNING AND DEVELOPMENT

Our 2019 climate strike workshop identified that whilst colleagues generally have a good understanding of the climate emergency, they feel underequipped to advise clients and communicate strategic decisions with impact and influence. Our learning and development strategy will help empower colleagues to invest in their knowledge and skills through a mix of experiential and self-directed learning. A dedicated platform will link a range of learning resources into project workflows, such as our Sustainability Toolkit. This will be supported by workshop style events on a range of topics over the course of the year.

KNOWLEDGE SHARING

We recognise the collective responsibility we have to share knowledge, and providing a collegiate working environment that can facilitate this. Our ‘lessons learned’ presentations provide an excellent source of knowledge transfer between project teams, yet we recognise the limits of our impact without the shared commitment of wider stakeholders. We therefore commit to working with our peers, consultants and clients to help stimulate knowledge sharing across industry. Our recent contribution to both the UKGBC advancing net zero task group and LETI Climate Emergency Design Guide are examples of this commitment.

practice

We firmly believe that we must practice what we preach when advocating for sustainable outcomes. Our commitment begins with how we conduct ourselves as an organisation.

AIM	INDICATOR	2026 TARGET
Reduce energy consumption associated with our studio operations	Total energy consumption (kWh/m2/year)	TBC
AAM office premises with third party certification of Environmental Management System	% of EMS certified office space	100%
Zero waste to landfill associated with our practice operations	% waste diverted from landfill	100%
Reduce carbon emissions associated with business travel	tCO2e/per person/annum	TBC
Practice investment in Research and Development activities	% of annual turnover	2-3%

We use our own office as a ‘living lab’ to refine and develop confidence in the strategies and technologies we incorporate into our work. We also recognise the role that our organisation plays in its local communities, and actively engage with local community organisations to provide opportunities and increase our positive impact. Our strategy begins in a period of unprecedented times. Our business must therefore become increasingly resilient and agile to tackle ongoing stresses and shocks, both from climate change and beyond.

OUR FOOTPRINT

The operation of our studio premises should reflect our values and wider commitments. Since 2005, the practice has maintained a comprehensive management system, which now encompasses Quality (ISO 9001), Environment (ISO 14001), Energy (ISO 50001) and Health and Safety (ISO 45001). We have worked to integrate these systems fully with the practice culture and management processes. We now plan to expand the ambition and scope of this monitoring to include our Scope 3 emissions, including business travel and our wider supply chain activities.

STUDIO ENVIRONMENTAL QUALITY

In 2018 Allies and Morrison commenced a long term study of Indoor Environmental Quality (IEQ) in our own studio premises. Environmental sensors have been situated in a wide variety of studio spaces, recording a wide range of environmental quality data. The objective of this study is to further our understanding of the key parameters that form a healthy workplace, and the influence of various factors on these conditions. Observations have helped to inform strategic improvements to air quality over time, in addition to a more detailed understanding of environmental quality when developing our Post Occupancy Evaluation framework.

PARTNERSHIPS

In advocating for change, we recognise the increasing importance of forming partnerships with our clients, academia and industry. Not only does this help form collaborative links to learn from other disciplines, but also to inform our approach to projects and identify opportunities for further research. In encouraging our clients to establish climate change mitigation principles, we must work with them and support their aspirations to form a legacy of work.



# our work

**Designers are uniquely positioned in facilitating a sustainable future. We are motivated by the potential we hold to influence our surroundings, the impact each completed project has on society and the wider natural environment.**

Allies and Morrison is a practice of architects and urbanists. We strive to design beautiful buildings and places that have a long life and can adapt over the generations. We also shape enduring places whether new pieces of city or settlements at any scale. All of our projects are concerned with the crafting of every detail and an appreciation for the uniqueness of each context.

We consider sustainable design not as an extension or enhancement of design, but integral to good design practice. We believe in an application of sustainability that is implicit in expression, but explicit in its application. Our approach has always been informed through a combination of appreciation of the pre-existing and the potential of future innovation.



QUEEN ELIZABETH OLYMPIC PARK

urban strategies

# places for people



**QUEEN ELIZABETH OLYMPIC PARK**  
The 2012 Olympic and Legacy Masterplans have transformed a post-industrial backwater into a valuable ecological asset, the largest park created in London in 150 years.

**GUILDFORD TOWN CENTRE, SURREY**  
A comprehensive set of proposals covering movement within Guildford town centre; new homes and amenities; streets and spaces; townscape and heritage; the natural environment, and the town's future economy.



**GALWAY PUBLIC REALM STRATEGY, IRELAND**  
Our public realm strategy for Galway sets out steps to make the city accessible and inclusive; more flood resilient and greener; and easier to get around - all while retaining Galway's unique character.

**NORTHSTOWE, SOUTH CAMBRIDGESHIRE**  
One of the NHS Healthy New Town demonstrator projects, the masterplan embeds strong health themes such as outdoor play into the heart of the town centre.



# compact, walkable, memorable



**MSHEIREB, DOHA, QATAR**  
A dense, walkable neighbourhood knit together by naturally cooled streets built at human scale. Set in the heart of the city, there are more than 100 contemporary buildings, each distinct yet all expressing a shared architectural language rooted in the local culture and climate.

**CANADA WATER, LONDON**  
Guiding development of a new urban centre at the heart of south-east London's Rotherhithe peninsula, replacing a 1980's shopping centre with a legible network of streets, lanes and locally distinct public space. It offers the opportunity to create a characterful, well-connected London neighbourhood.



**KINGS CROSS, LONDON**  
Stitching a lost piece of London back into its fabric, bringing new life to one of the UK's most remarkable industrial heritage sites. The masterplan sets out a framework for incremental growth that is guiding the development of a distinctive range of uses from a new home for Central St Martins to a new HQ for Google.

**IRFAN, MUSCAT, OMAN**  
This masterplan framework for a new district for Muscat creates a catalyst for positive change. Taking inspiration from historic Omani settlements, its compact and walkable, place-specific and climate appropriate design offers a visionary yet implementable alternative to the resource-hungry urbanism of the last several decades.



# climate responsive design



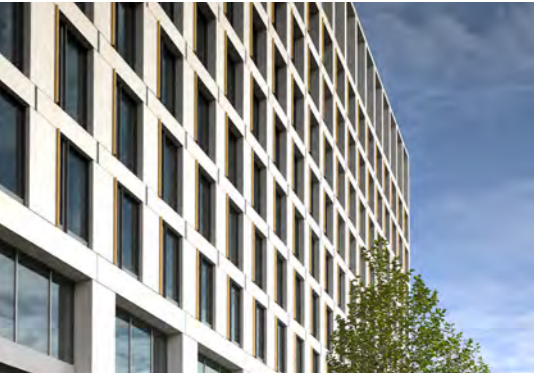
**UREN BUILDING, IMPERIAL COLLEGE LONDON**  
The new engineering research hub for Imperial College London houses research laboratories, an outpatient clinic, a 150-seat auditorium and a series of social spaces to encourage informal exchange of ideas. The dynamic solar shading reduces solar exposure whilst ensuring privacy and providing a distinctive image.

**CRANLEIGH SCHOOL, SURREY**  
Located within the established historic campus of this independent boarding school, the building utilises four disused squash courts as a central core, wrapping modular, flexible teaching accommodation over two floors around to create unique social spaces. The new build elements are constructed from lightweight steel and engineered timber, with fabric first construction used to minimise heat losses and natural ventilation throughout.



**CRANMER ROAD, KING'S COLLEGE, CAMBRIDGE**  
A new unified graduate campus for Kings College, Cambridge, bringing together all of King's graduate accommodation into a cohesive campus around a shared garden. Set to become the first major development in Cambridge to achieve Passivhaus certification.

**TWO PANCRAS SQUARE, KING'S CROSS, LONDON**  
This new office building employs an ingenious passive design response embedded within its facade expression. As the building rises, glazing levels increase whilst also receding into the building, reducing its solar exposure and maintaining excellent daylight and views out. This development has achieved BREEAM Outstanding certification.



retrofit

# extending the life of existing buildings



**HIGHBURY SQUARE, LONDON**  
The form and composition of this project carries the memory of the original home of the Arsenal Football Stadium, recycling it to develop a new residential typology that references the rich urban grain of the surrounding area.



**WESTWORKS, LONDON**  
The Westworks building, originally completed in the 1980s, has been retained and reimagined. A series of strategic interventions has improved the buildings functionality, increased lettable space and given it an overall aesthetic uplift.



**CRANE BUILDING, LONDON**  
Retention of the existing structure of a 1950s printworks not only offset a significant amount of embodied carbon (otherwise incurred through demolition and rebuild) but also created a seemingly new building on the footprint of an existing one without additional land take.



**89 SOUTHWARK STREET**  
A sensitive restoration of a Grade-II listed Victorian warehouse and new extension to the rear. The need for additional studio space led our practice to acquire and expand into the adjacent property at 89 Southwark Street. We have retained and celebrated the buildings industrial character, with a new addition in cross-laminated timber creating symmetry with the medieval street pattern on Farnham Place.

conservation

# giving the past a future



**ROYAL FESTIVAL HALL, LONDON**  
Transformed to be more like it is; our conservation approach helped us rediscover the clarity of circulation and environmental principles of the original design, and use them to reveal the character of this Grade I listed modernist icon.



**DARWIN COLLEGE, CAMBRIDGE**  
The first refurbishment in fifty years of the Grade II listed Old Granary; our scheme maximised the retention of historic fabric and carefully, invisibly, integrated energy-efficient new services.



**ST PETERS COLLEGE, OXFORD**  
Changing as little as possible but as much as necessary to revive historic buildings; here at St Peter's College, this meant repairing fabric, making two key connections, and transforming the setting.

**GERMAN GYMNASIUM, KINGS CROSS, LONDON**  
The German Gymnasium dates from 1865, and is one of many Victorian era buildings restored across Kings Cross. Restoration and repair the fabric of the building to enable a subsequent fit out for restaurant use.





**We are proud to be signatories to both the RIBA 2030 Climate Challenge and the Architects Declare pledge.**

**These declarations have informed and inspire our Sustainability Strategy.**

## RIBA 2030 CLIMATE CHALLENGE

**In November 2019, Allies and Morrison signed up to the RIBA 2030 Challenge, an ambitious target-based commitment for practices to achieve significant reductions in operational energy, embodied carbon and water use in projects.**

A series of incremental targets have been developed by RIBA that will ultimately deliver net zero carbon buildings by 2030. This target for 2030 is essential in mitigating the impacts of climate change and ultimately limiting global temperature rise to below 1.5°C. We have committed to embracing these performance targets within our work and disclosing the performance of our projects to reflect on progress.

The RIBA 2030 challenge has several commitments, summarised below:

### Operational energy

- Target < 55 kWh/m<sup>2</sup>/yr operational energy use for non-domestic buildings by 2030
- Target < 35 kWh/m<sup>2</sup>/yr operational energy use for domestic buildings by 2030

### Embodied carbon

- Target embodied carbon of 500 kgCO<sub>2</sub>e/m<sup>2</sup> for non-domestic buildings
- Target embodied carbon of 300 kgCO<sub>2</sub>e/m<sup>2</sup> for domestic buildings

### Water use

- Target 10 litres/person/day for non-domestic buildings
- Target 75 litres/person/day for domestic buildings

## ARCHITECTS DECLARE

**In May 2019, Allies and Morrison became a signatory to Architects Declare. This groundbreaking pledge has since expanded to almost 900 practices and replicated in many forms across the construction industry.**

Architects Declare is formed of eleven commitments, each of which is represented in our sustainability strategy.

- Raise awareness of the climate and biodiversity emergencies and the urgent need for action amongst our clients and supply chains.
- Advocate for faster change in our industry towards regenerative design practices and a higher governmental funding priority to support this.
- Establish climate and biodiversity mitigation principles as the key measure of our industry's success: demonstrated through awards, prizes and listings.
- Share knowledge and research to that end on an open source basis.
- Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach.
- Upgrade existing buildings for extended use as a more carbon efficient alternative to demolition and new build whenever there is a viable choice.
- Include life cycle costing, whole life carbon modelling and post occupancy evaluation as part of our basic scope of work, to reduce both embodied and operational resource use.
- Adopt more regenerative design principles in our studios, with the aim of designing architecture and urbanism that goes beyond the standard of net zero carbon in use.
- Collaborate with engineers, contractors and clients to further reduce construction waste.
- Accelerate the shift to low embodied carbon materials in all our work.
- Minimise wasteful use of resources in architecture and urban planning, both in quantum and in detail.

# RESEARCH PROGRAMME

**Targeted sustainability focus groups across the practice actively generate new ideas and share best practice.**

**Their conversations and explorations will continuously enrich our work.**

**Curiosity and inquiry are key to the realisation of our delivered projects. Our research is informed by practice, and we adopt a bottom-up approach where ideas stem from within project teams. Our research activity is underpinned by curiosity, collaboration and communication.**

We have formed six focus groups around key disciplines within sustainable design. The aims of these groups is to advance practice-wide understanding, enhance methods of knowledge sharing and dissemination, and explore opportunities for application of ideas developed.

## URBAN SUSTAINABILITY

Cities occupy only two percent of the world's landmass, but consume over two-thirds of the world's energy and account for more than 70% of global CO2 emissions. The Urban Sustainability focus group will research emerging ideas and themes considering sustainability implemented at community, district or city level. The group will provide an outlet for coordinated research work into a variety of topics, bridging social, economic and environmental aspects of urban systems.

## BUILDING PHYSICS

Performance analysis can help inform the design process at early stages of development and act as an effective feedback mechanism for client engagement. With emerging disciplines of parametric design, artificial intelligence and machine learning at the heart of rapid technological development, this focus group will research how these disciplines can be used to benefit our design process.

## CIRCULAR ECONOMY

Our experience with the retention and retrofit of existing buildings, and the associated embodied carbon reductions are one aspect of a wider theory known as the circular economy. A circular economy is conceived as a 'closed loop' regenerative system in which resource input and waste, emissions, and energy are minimised by slowing, closing, and narrowing energy and material loops. This focus group will maintain pace with emerging methods associated with the circular economy, and propose new initiatives to integrate into architectural workflows.

## **POST OCCUPANCY EVALUATION**

When considering a project's life-cycle, how do architects begin to quantify the success of previous work. How are the lessons from completed projects captured and interpreted to inform future work? The focus of this group will be in the development and implementation of a comprehensive Post Occupancy Evaluation (POE) framework. POE can become an effective feedback mechanism from our previous work, and help us deliver buildings that are more resilient to becoming prematurely obsolete.

## **HEALTH AND WELLBEING**

In recent years, the built environment has moved from an environmentally-centric definition of sustainability to one that recognises the influence that the urban environment has on people. The built environment plays a crucial role in maintaining the health and wellbeing of the places where we live, work and play. This focus group will concentrate efforts on increasing our understanding of the architectural impact on human health and wellbeing, and propose new initiatives to integrate into architectural workflows.

## **CERTIFICATION AND BENCHMARKING**

A prerequisite to implementing a transition to net zero targets is bridging the gap between design and actual energy performance. Legislating for better standards has no effect if the buildings that are produced do not perform in practice. This focus group will concentrate efforts on increasing our understanding and application of our sustainability toolkit to projects, and create methods to facilitate effective benchmarking of project performance.

**Allies and Morrison**

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