WOODS BAGOT
SUSTAINABILITY

CLIMATE PLAYBOOK

WOODS BAGOT
GLOBAL IMPACT

APRIL 2023
"The Playbook is not only a way to account for our impact, it is also a way to celebrate our creative talents, the people whose passion for sustainability inform our projects, and to spotlight transformative work that is changing design culture globally."

RUSSELL FORTMEYER

Cover image: Melbourne Connect, Melbourne, Australia
Photographer: Trevor Mein
Since I joined Woods Bagot in January 2022, we have completed one of the world’s only LEED Platinum-certified airport terminals in San Francisco and the first carbon-neutral-certified building in South Australia, started construction on the landmark zero-carbon MC2 campus at Masdar City in Abu Dhabi, and won acclaim for our net zero carbon high-rise proposal, “Avatar,” in Hong Kong. We are busy architects and designers, with a passion for advancing a sustainable development agenda through the lens of an enviable design culture and an innovative Global Studio structure.

I have spent the months since then getting to know our members, clients, projects, and history, while taking stock of what we have accomplished toward our sustainability commitments.

The Climate Playbook represents our collective commitment across the design work we do, our operations as an organization, and our role in our industry and society to progress climate action.

Many organizations publish annual sustainability reports or what is now known as Environmental, Social, and Governance (ESG) reporting, but at Woods Bagot, of course we have to do things differently.

The Playbook is not only a way to account for our impact, it is also a way to celebrate our creative talents, the people whose passion for sustainability inform our projects, and to spotlight transformative work that is changing design culture globally. This Playbook is also a how-to guide, of sorts, so we can easily identify our shared responsibilities and interests to form a culture where we can collectively work together toward sustainable outcomes.

So many of our clients, whether public or private, share our values, so the Playbook is also an opportunity for us to share our processes and commitments with people outside of Woods Bagot. Not only is sharing knowledge a part of how we work as a Global Studio already, it is also increasingly demanded by clients who search for design partners who understand how to embed ESG goals into the work.

I am grateful to work with so many passionate colleagues, many of whom informed this inaugural edition of our Playbook. I especially want to acknowledge the design work of Lydia Borrillo, who developed the look and feel of it, making it accessible and enjoyable in light of how much ground it covers. We commit to updating our Playbook every year, recognizing that we are on a long journey as a planet, but also to ensure our Global Impact continues to deliver on our sustainable vision.

Cheers,

RUSSELL FORTMEYER
GLOBAL SUSTAINABILITY LEADER, WOODS BAGOT
INTRODUCTION
BUILDING SECTOR CO₂ EMISSIONS

- New construction: 2015-2050

- 30% Industry
- 28% Building Operations
- 22% Transportation
- 11% Building Materials
- 9% Other

GLOBAL CO₂ EMISSIONS BY SECTOR

90% Building Materials

15% Building Operations
Woods Bagot’s Climate Playbook is our global studio’s sustainability action plan, which forms the basis for our Global Impact commitment to taking climate action in our design practices and operations.

At a basic level, the Playbook summarizes the work many people across the Global Studio have been doing for several years to move our sustainability approach forward. Several of the initiatives and policies in this Playbook have been core to Woods Bagot’s operations, which provides a strong foundation for advancing our climate action further as we face new challenges and uncertainty in our industry.

The Playbook outlines our sustainability commitments to projects and our operations, how we manage sustainability across our business, and how each one of us contributes through our work and studio culture to address the climate crisis.

While an annual report is voluntary for Woods Bagot, where we can align with international reporting standards, we have used the Global Reporting Initiative (GRI) methodology to do so. The GRI approach to reporting enables us to consistently measure our impact and work toward improving our design and operations every year.

According to the United Nations Intergovernmental Panel on Climate Change (UN IPCC), the building sector represents nearly 40 percent of annual global greenhouse gas emissions. As architects, designers, and consultants, we are in a position to influence these emissions through the recommendations and decisions we make for our clients every day—this is our Global Impact.

We have developed the Playbook primarily to communicate our intentions to one another, since achieving sustainability within the built environment requires diligence and consistent performance, but most importantly, collaboration. We hope you find this guide useful as a simple, clear resource. And we also expect to update this as we move forward and learn together. The Playbook is split between five sections, including this introduction and our leadership calls to action. The second section focuses on our commitments, or how we intend to measure our success. The third, fourth, and fifth sections respectively lay out our sustainable approach to design, our own operations, and our advocacy and leadership in our industry.
Our CREDO defines our core principles as an organization, with 10 actions and behaviors that define our contribution to architecture and how we collaborate with one another. We also share five core values, with two that are specifically focused on our Global Impact—Uncompromising Design and Rigorous Curiosity.

Uncompromising Design reflects our process of using evidence and building science to inform design, viewing nature as a partner, and centering an understanding of climate risk and action as vital to architecture’s role in our world. To meet new challenges brought on by the climate crisis, we adopt a Rigorous Curiosity to develop innovative design responses that fundamentally shift architecture’s contribution to sustainable development. These values coalesce within our CREDO of People Architecture to consider the planet and its citizens as equal beneficiaries of design.
CREDO

1. FIND YOUR VOICE
2. BECOME A MULTI-LINGUAL THINKER
3. HAVE A CLIENT SERVICE MENTALITY LIKE THE CONCIERGE AT A 6-STAR HOTEL
4. LISTEN WITH INTENT
5. CONSIDER THE SAFETY AND WELLBEING OF THE PLANET AND ITS CITIZENS
6. WORK ACROSS ALL SCALES
7. NONE OF US ARE AS SMART AS ALL OF US
8. LET IDEAS BREATHE
9. DIVE DEEP INTO PROBLEM SOLVING
10. PACKAGE EVERY IDEA WITH A PURPOSE

VALUES

1. UNCOMPROMISING DESIGN
2. RIGOROUS CURiosity
3. EFFECTIVE COMMUNICATION
4. COLLECTIVE INTELLIGENCE
5. DYNAMIC CAREERS

GLOBAL IMPACT

1. OUR COMMITMENTS
2. DESIGN
3. OPERATIONS
4. ADVOCACY

FIND YOUR VOICE
BECOME A MULTI-LINGUAL THINKER
HAVE A CLIENT SERVICE MENTALITY LIKE THE CONCIERGE AT A 6-STAR HOTEL
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UNCOMPROMISING DESIGN
RIGOROUS CURiosity
EFFECTIVE COMMUNICATION
COLLECTIVE INTELLIGENCE
DYNAMIC CAREERS

OUR COMMITMENTS
DESIGN
OPERATIONS
ADVOCACY
↑ 83 Pirie Street, Adelaide
THE PLAYBOOK

01.1
People Architecture is a celebration of diversity across cultures, propelled by a shared sense of empathy, where the values of end users and the values of design are one and the same.
"Our CREDO of People Architecture speaks both to the people in Woods Bagot who are contributing to our ambitious sustainability plans, as well as the people who experience the buildings, places, and cities we design and see built."

NIK KARALIS
Our Global impact is how we come together as a Global Studio to address the most pressing issues of our day, from planning for climate change to reducing carbon footprints to delivering safe, humane, and equitable spaces for people. Our Credo of People Architecture speaks both to the people in Woods Bagot who are contributing to our ambitious sustainability plans, as well as the people who experience the buildings, places, and cities we design and see built.

In our first Climate Playbook, we capture the breadth of activities happening across the Global Studio to move sustainability forward.

We have invested this year in re-energizing our Global Impact strategy, with new leadership at every level of the organization and commitments to track and improve the performance of our projects using our own Global Impact Assessment tool within our Design Intelligence Portal (DI Portal), our internal project management and collaboration system. We also took an important step forward in Australia and the UK by achieving ISO 14001 certification of our environmental management systems. In addition, we have committed to offsetting the operational carbon emissions associated with our studios and business travel, which can be found in the Playbook.

We are delighted to share our progress with our colleagues, but also with our clients and wider community as we seek to take climate action through architecture.

NIK KARALIS
CEO, WOODS BAGOT
Our commitments are the shared goals, policies, and initiatives we have embedded in our culture to achieve sustainable outcomes in our design practices and operations. Goals push us to perform, policies ensure compliance and consistency across the Global Studio, and initiatives transform our practices, culture, and perception in our industry around how Woods Bagot is taking climate action.

We also share many of our commitments publicly so we can be transparent about the successes and challenges that color our journey, benchmark our performance, and contribute to progress in our industry.
How do we define sustainability?

In 1987, the United Nations Brundtland Commission defined sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.”
Te Pāe Christchurch Convention Centre, Christchurch
COMPANY ENVIRONMENT & ENERGY POLICY

Woods Bagot is committed to the pursuit and integration of environmentally sustainable principles throughout our work. We aim to lead the industry in the pursuit of sustainable design practices. Our objective is to provide our clients with products of high performance standards which respond appropriately to their needs, while reducing the impact on the environment.

This commitment begins within our workplace and extends to the design and construction phases of development, as well as the intended use. We desire to minimise any significant adverse environmental impacts of our business by pursuing low emissions solutions for our workplaces. We also pursue solutions to minimise adverse environmental impacts of our developments, taking into account continued improvement for prevention of pollution and unsustainable practices.

Accordingly, we work within the statutory and regulatory requirements related to environmental and energy management and protection in our industry within each of the regions in which we carry out our business.

Furthermore, we seek to develop innovative design solutions through further research in the field of environmentally sustainable design and development.

Our commitment to assist in the negation of environmental impacts is followed throughout the running of our business including energy efficiency. We strive to ensure that our environmental and energy management is appropriate to the nature, scale and environmental impacts of our activities, services and products.

An objective of our management system is continually improving the effectiveness of the system including energy efficiency.

The implementation and ongoing development of our system is the responsibility of all principals, managers and staff.
## ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) INITIATIVES

<table>
<thead>
<tr>
<th>GRI DISCLOSURE</th>
<th>WOODS BAGOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>302-1 Energy consumption within the organization</td>
<td>1,303,864 kWh (2021)</td>
</tr>
<tr>
<td>302-3 Energy intensity</td>
<td>1,510 kWh / person (2021)</td>
</tr>
<tr>
<td>305-1 Direct (Scope 1) GHG emissions</td>
<td>No emissions</td>
</tr>
<tr>
<td>305-2 Energy indirect (Scope 2) GHG emissions</td>
<td>414,426 kg CO2e (913,395 lbs.)</td>
</tr>
<tr>
<td>305-3 Other indirect (Scope 3) GHG emissions</td>
<td>219,508 kg CO2e (483,934 lbs.)</td>
</tr>
<tr>
<td>305-4 GHG emissions intensity</td>
<td>503 kg CO2e / person</td>
</tr>
</tbody>
</table>
ESG Reporting

The Climate Playbook incorporates our Environmental, Social, and Governance (ESG) initiatives into a single document that we update on an annual basis. As a sustainability management plan, the Playbook provides a consistent and measurable way to assess our performance against our goals, but to also align with other organizations in our industry and our clients. Like many of the clients we work with, we have used criteria based on the Global Reporting Initiative (GRI) to report our performance.

Many aspects of our general disclosures, such as how our business is organized and managed, can be found in other documents and on our website. We have not repeated that information in the Playbook, but have instead focused on the metrics that specifically relate to ESG criteria found in our Global Impact strategy. These are summarized in the chart here, with references to where data can be found otherwise. We anticipate adding other metrics to this annual list as we understand more about our material impacts and further make progress toward implementation of our Global Impact strategy.

General disclosures

Woods Bagot’s operations are part of the Woods Bagot Holdings (WBH) group, which includes ERA-co and Customs Bureau. The metrics included in this annual report include all businesses within WBH. While the Playbook speaks to the activities of Woods Bagot as an architecture practice, our operations and advocacy goals and initiatives reflect these other businesses within WBH. Our design initiatives speak solely to Woods Bagot. This report is updated annually to cover our operational year, ending June 30, and is by our Global Sustainability Leader, Russell Fortmeyer. Our annual reporting is voluntary and is not independently reviewed prior to publication.

Material topics

Our ESG performance is reviewed by our Global Impact Group (GIG) Leadership team as part of its regular agenda. Material topics for reporting are assigned by the GIG Leadership working in collaboration with the WBH Board and the Global Studio Executive (GSE).
02.1

WOODS BAGOT’S SUSTAINABILITY COMMITMENTS

Our sustainability principles are defined in our Company Environment and Energy Policy, which kicks off this section. However, Woods Bagot also aligns its design practices and operations with public protocols for sustainable development, including the following:

- **United Nations Sustainable Development Goals**
  These 17 goals were adopted by the U.N. in 2012 and provide a strategic framework for W-B to align its sustainability goals with those of the planet.

- **Greenhouse Gas Protocol**
  W-B has adopted this internationally-accepted methodology for calculating greenhouse gas emissions for Scopes 1, 2, and 3 emissions.

- **Architects Declare**
  W-B became a signatory in 2020 to this independent, non-profit voluntary global compact among architecture and design companies for sustainable development.

- **Architecture 2030 / AIA 2030 Challenge**
  W-B became a signatory in 2021 to this US-based, non-profit voluntary compact among architects to achieve zero emissions buildings by 2030.
United Nations Sustainable Design Goals

In 2012, members of the United Nations enacted 17 Sustainable Development Goals (SDGs) that seek to tackle humanity’s most pressing challenges by 2030. As architects, designers, and consultants working in the built environment, we influence progress toward achieving specific goals that align with our industry, but contribute to each of the 17 goals through the diversity of our projects.
Greenhouse Gas Protocol

The World Resources Institute (WRI, wri.org) has established the most widely accepted definitions of greenhouse gas emissions (GHG), including carbon, generally called the Greenhouse Gas Protocol (GHG Protocol). The WRI’s methodology has been formally recognized by the United Nations Intergovernmental Panel on Climate Change (IPCC). Because of the international acceptance of the IPCC as the foremost authority on global climate change and greenhouse gas emissions, Woods Bagot employs the GHG Protocol in assessing its own carbon footprint and those of our clients. The methodology divides greenhouse gas emissions into three scopes, defined as the following:

**Scope 1:**
Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment. Direct CO2 emissions from the combustion of biomass shall not be included in scope 1 but reported separately.

**Scope 2:**
Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.

**Scope 3:**
Scope 3 is an optional reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company but occur from sources not owned or controlled by the company. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; water consumption; and use of sold products and services.

The GHG emissions included in the WRI methodology include all emissions as defined by the Kyoto Protocol, which encompasses other things like methane and nitrous oxide. We base calculations for all scopes on CO2 only, with the single exception of scope 2 for purchased electricity, which often includes methane and nitrous oxide. However, these emissions are not separately reported and have been transformed into CO2-equivalent intensities so that a single carbon footprint can be adequately developed and reported. This CO2-equivalent approach in reporting on the carbon footprint is preferable since it can be easily communicated as a single figure.
02.1.3 Architecture 2030 /
AIA 2030 Challenge

The 2030 Challenge was established in 2006 as a road map for transforming the design of buildings to be net zero energy by 2030. The program is stepped as a series of percentage improvement over the baseline year, so that each year the design of new buildings continuously improves until stepping down to zero by 2030.

Since the program began, it has been revised to not only focus on energy efficiency, but on decarbonization through all-electric buildings and embodied carbon reduction through alternative material use. Architecture 2030 is a non-profit organization that developed the program, while it has been adopted by the American Institute of Architects (AIA) as a 2030 Challenge for architects who voluntarily participate.

Our commitment to the 2030 Challenge asks two things from our members—understand and advocate for reduced carbon footprints in our design practices and then report on our performance as a Global Studio according to key metrics.

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Architects Declare

Established in 2019, Architects Declare is a non-profit organization operating in several countries to advocate for a more urgent transformation of architectural practices in the face of the climate crisis. As a voluntary signatory:

01 Raise awareness of the climate and biodiversity emergencies and the urgent need for action amongst our clients and supply chains.
02 Advocate for faster change in our industry towards regenerative design practices and a higher Governmental funding priority to support this.
03 Establish climate and biodiversity mitigation principles as the key measure of our industry’s success: demonstrated through awards, prizes and listings.
04 Share knowledge and research to that end on an open source basis.
05 Evaluate all new projects against the aspiration to contribute positively to mitigating climate breakdown, and encourage our clients to adopt this approach.
06 Upgrade existing buildings for extended use as a more carbon efficient alternative to demolition and new build whenever there is a viable choice.
07 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.
08 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.
09 Collaborate with engineers, contractors and clients to further reduce construction waste.
10 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.
02.2
GLOBAL IMPACT GOALS
Our projects are the heart of our business and represent the way we collaborate. Projects are also our greatest environmental contribution and, therefore, the imperative for minimizing and even reversing the consumption of resources through design is urgent. Our Global Impact strategy informs how we sustainably deliver our projects, as well as the clients and opportunities we pursue in our diverse markets. While the Climate Playbook lays out our sustainability process in more detail in Section 3, we have committed to achieving the following specific goals for our projects:

01 All projects reporting mandatory sustainability performance in the DI Portal by 2023

02 Post-occupancy evaluations for 25% of built projects by 2025, 100% by 2030

03 All projects designed to be zero carbon for Scopes 1 and 2 emissions by 2030

04 Adopt sustainable material strategies for every project by 2025 to reduce embodied carbon and eliminate hazardous materials

05 Climate risk assessments for all projects by 2023.
After projects, our own business operations represent the next largest environmental impact. Our Global Impact strategy includes a governance model through our Global Impact Group, including its studio leaders and advocates, that is tasked with implementing our strategy in each studio. Like most organizations, we have seen significant disruption in our physical and social business models owing to the pandemic, which has resulted in unanticipated reductions in business travel and procurement (such as printing) that has resulted in carbon emissions reductions. Our operations also include the support and benefits we share as employees, including our commitments to equality, diversity and inclusion and career development. While the extent of our operational approach to Global Impact is described in more detail in Section 4 of the Playbook, we have committed to achieving the following specific goals for our operations:

01 Zero operational carbon company by 2023

02 Annual sustainability reporting through the Climate Playbook

03 Implement our GIG Activist program to recognize emerging sustainability advocates

04 Implement a sustainability center of excellence within Woods Bagot

05 Achieve GIG staff accreditation goals for green building certification programs

06 Develop and implement sustainable design guidelines for studio relocation and renovation projects
ADVOCACY

As one of the world’s leading design organizations, we have a responsibility to help shape the world by sharing our global experience. Our advocacy includes organizations we support through member participation, events we sponsor, and through our project and operational commitments. We also invest in research that expands our understanding of design’s role in the world, sharing those ideas through the Journal, our sustainability newsletter, Not so much, and special publications and reports. Our Advocacy is explained in more detail in Section 5 of the Playbook.

01 Update our Corporate Social Responsibility (CSR) strategy and activate CSR champions within each GIG studio team

02 Publish our renewed Diversity and Inclusion strategy and activate key employee resource groups to support our members

03 Align our organizational memberships and representation with our Global Impact strategy in all regions

04 Advance our Australian Reconciliation Action Plan (RAP) commitments following on our Year One accomplishments and target expansion to at least one other operational region
The Global Impact Dashboard tracks our progress against our goals and commitments on an annual basis. It summarizes our activities and achievements so we can compare our performance year-over-year.

2030
All projects designed to be zero carbon for Scopes 1 and 2 emissions.

2023
In 2021, our carbon footprint was approximately 16% less than 2020 owing to significant reductions in business travel.

2023
ZERO OPERATIONAL CARBON COMPANY BY

2025
CLIMATE PLAYBOOK

2023
Implementation our GIG Activist program to recognise emerging sustainability advocates

Update our Corporate Social Responsibility (CSR) strategy

BY 2023
CLIMATE RISK ASSESSMENTS FOR ALL PROJECTS

2023

All projects reporting mandatory sustainability performance in the Design Intelligence Portal.

30%
of Global Studio projects

2023

Australian Reconciliation Action Plan (RAP) commitments:
Target expansion to at least one other operational region.

Annual sustainability reporting through the Climate Playbook

RED LIST MATERIALS REDUCTION STRATEGIES FOR EVERY PROJECT.

Woods Bagot

Achieve GIG staff accreditation goals for green building certification programs
03.1
OUR APPROACH TO SUSTAINABLE DESIGN

Global Impact at Woods Bagot is an integral part of our design process. A design-led approach to sustainable architecture asks fundamental questions of where we site a building, how we put it together, define space, and occupy it.

Leading with design in response to climate change does not neglect the research and analysis that informs the sustainable performance of architecture, however we choose to define that—zero emissions, low embodied energy, water positive—but it understands the value of that analysis only in as much as it is useful for informing a design decision.

We have developed a robust Project RoadMap that enables our teams to consistently address Global Impact concerns throughout a project’s lifecycle. Each project develops a Global Impact Assessment plan that tracks sustainable performance and informs gateway reviews to ensure accountability and a standard approach to reporting and measuring our impact.

In this section, we highlight our RoadMap and Global Impact Assessment approach, as well as our design tools, emerging focus on climate risk, and our use of post-occupancy evaluation tools to understand how well our projects perform in operation. We also include a selection of recent and forthcoming iconic sustainable projects that inspire us and demonstrate our commitments in practice.
03.2 PROJECT ROADMAP

Our Project Roadmap lays out a comprehensive and consistent approach to delivering design excellence across the Global Studio. Our Global Impact strategy is layered into the Roadmap to deliver on the goals we have collectively made to achieve the greatest level of sustainable performance for our clients and to advance climate action in design.

Global Impact requirements are identified at four key stages of the Roadmap, from Project Establishment, where teams identify the goals and opportunities for the project and client, to Concept and Detailed Design stages where strategies are assessed and implemented in design documentation with client acceptance and budget conformance. Finally, in the post-site phase, project teams are asked to review sustainable performance and conduct Post-Occupancy Evaluation (POE) surveys. These requirements are documented using the Global Impact Assessment tool, explained later in this report, and assessed during gateway Design Reviews.

At other key design stages, including the Schematic Design phase, project teams are expected to review sustainability performance to identify opportunities to improve sustainability objectives or track progress toward achieving project goals. These reviews are either formal workshops with invited reviewers from the Global Impact Group or can be undertaken informally within the project team.
03.3

GIG TOOLKIT: ENVIRONMENTAL PERFORMANCE TOOLKIT (EPT)

We are continuously developing new cutting-edge methods to design and test ideas against real-world parameters that link our work to the future needs of our clients and communities.

The complexity of achieving low-carbon design requires a shift in methodology and approach. We identify and develop unique and innovative solutions to meet targets and expectations, with a strong focus on collaborative systems.

Our Environmental Performance Toolkit provides essential data on site and climate, and enables prototyping and iteration of energy models. Metrics and parameters are tracked through the use of a set of tools aimed at providing a live analysis of the building design in terms of sustainable systems and targets compliance.

Collaborating with the right partners further enhances the possibility of evaluating design solutions as they get developed, optimising quality and time required for delivery.
03.4 GLOBAL IMPACT ASSESSMENT

Central to establishing a sustainability strategy for a project is the implementation of W-B’s Global Impact Assessment (GIA), which is an online sustainability project plan required for every project beginning with the establishment phase. GIA can be accessed through the DI Portal page for every project by clicking on the Global Impact icon at the top.

GIA is an opportunity for the project leadership and team to come together to review mandatory and aspirational sustainability goals for every project, establish procedures to manage sustainable performance through the life of the project, and to identify the potential for innovation or technology requirements to deliver the sustainability strategy. Critically, the GIA process ensures we identify the design and performance data that we must collect as part of our commitment to transparency toward achieving our broader climate action goals as a Global Studio.

GIA asks project teams to identify goals associated with the client, our own internal aspirations, and those of our consultants or collaborators. We also track over 35 sustainability metrics as part of our voluntary reporting commitment, including 29 metrics for design phase assessments and six metrics associated with post-occupancy measurement. Identifying these metrics as part of the GIA process is critical to ensuring our teams track necessary data. This data includes key inputs for the following:

<table>
<thead>
<tr>
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<th>Project certifications and mandatory energy code compliance</th>
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<tr>
<td>2</td>
<td>Carbon reduction targets and footprints</td>
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<tr>
<td>3</td>
<td>Energy efficiency targets and measured energy demands</td>
</tr>
<tr>
<td>4</td>
<td>Water efficiency targets</td>
</tr>
<tr>
<td>5</td>
<td>Construction waste and demolition landfill diversion</td>
</tr>
</tbody>
</table>
"The Global Impact Assessment tool is an incredible opportunity for Woods Bagot to transform our practice quite dramatically, which is exactly what the climate crisis we collectively face demands."

John Bradbury
Associate, London
Our Global Impact strategy is our primary response to the climate crisis, but assessing climate risk associated with our projects necessitates new perspectives on established design processes. Climate risk accounts for warming average temperatures, increased rainfall or periods of drought, sea-level rise, wildfire exposure, and the accompanying public health, social, and economic impacts of these environmental changes.

Our Global Impact Assessment tool lays the foundation for embedding strategies to address the climate crisis in our work, but we have also committed to developing tools that specifically provide the analysis and evidence we need to engage our clients on these issues. In 2022, we invested in the largest bulk purchase of future weather data from the UNIPCC-aligned WeatherShift tool, which generates future weather files based on climate change scenarios for 2060 and 2090 time horizons.

These future weather files will inform a new climate risk module for our Environmental Performance Toolkit to allow project teams to assess future performance of buildings during early design phases to better address climate risk.

Future climate data has been incorporated into the climate risk assessments included in the Climate Playbook for each studio.
In 2022, we developed a climate risk analysis option within a new application called the Pre-design Analysis. This web-based tool allows users to access “future” weather data based on UNIPCC climate change scenarios for all 17 of our studio locations. Comparing historical weather data, which is the current basis of design for our industry, to predicted weather conditions under a climate change scenario is an effective way to assess the climate risk a project may experience in the lifecycle of the building. This new application is our first step in integrating climate risk into our workflow and we will seek to expand this in 2023 and beyond.
Our commitment to People
Architecture centers our design practices on human experience. Post-Occupancy Evaluations (POE) survey people who work and live in our buildings to gauge their experience with the indoor environment, including thermal comfort, access to daylight, acoustic privacy, views and visual comfort, cleanliness, and productivity.

Undertaking POE surveys of our projects after several months of occupancy informs our own design process, but also identifies operational considerations for building owners and occupants to improve indoor environments and potentially reduce energy consumption.

We have set a goal of undertaking POE surveys for 25 percent of our projects by 2025 and for every project by 2030.

In 2022, we are piloting the use of an online / app-based tool called ROAST (https://roastsurvey.com) on a select set of key sustainable projects.

The tool is based on industry-accepted standards, such as ASHRAE 55, *Thermal Environmental Conditions for Human Occupancy*, among others. ROAST provides occupants an opportunity to register feedback on thermal comfort, air flow, humidity, acoustics, environmental considerations such as daylighting and glare, as well as other design aspects that may contribute to their perception of comfort.
Our portfolio of sustainability projects includes some of the most significant achievements in architecture in the last ten years. In the last year, we have developed publications focused on emerging sustainability design principles including net zero carbon and energy and mass timber structures, façades, and interior architecture.

We have also developed a strategy to expand our services to incorporate a series of sustainability offerings to meet growing demands from our clients to assist them deliver on their own sustainability goals. Woods Bagot’s initial sustainability offering is focused on delivering resilient placemaking for our clients.

Our consulting services include environmental management planning, sustainability vision and goal-setting, carbon footprint and zero emissions strategy, climate risk assessments, and design and implementation of communications plans. We differentiate ourselves by connecting planning and strategy to the built environment.

Environmental, Social, and Governance (ESG) programs, which many of our clients have adopted, identify commitments an organization may make toward sustainability and climate action. While sustainability commitments within organizations are nothing new – Global Impact is our own form of ESG program – the uptake of ESG programs within organizations in the last five years has responded in large part to demand from investors and financial institutions to better understand the management of climate-related risks to organizations in light of the exposure of assets, operations, and markets to the climate crisis.

Woods Bagot, along with our consulting partner, ERA-co, are in a unique position to address this market demand owing to the experience and reputation working in the built environment and effectively communicating value in the places we design and influence.

"In the last year, we have introduced publications for our emerging portfolios in Net Zero design and Mass Timber projects – these represent how our Global Studio is significantly contributing to moving the needle on sustainable design in important markets."

Stefano Tronci
Associate Principal, Hong Kong
01 CARBON
- Project energy strategy and planning
- Carbon analysis, including operational and embodied carbon
- Energy benchmarking and baseline performance
- Renewable generation and storage feasibility
- Measurement and verification planning for systems
- Lifecycle cost assessments of systems

02 PASSIVE DESIGN
- Natural ventilation feasibility
- Daylighting and glare analysis
- Thermal comfort assessment
- Outdoor microclimate analysis

03 CERTIFICATIONS
- Sustainability reporting and planning
- ESG frameworks and reporting
- Green Star, Fitwel, WELL, Leesman Index, and LEED consulting
- Regulatory compliance, energy code assessment, development approvals support

04 WELLNESS
- Healthy materials strategy and procurement framework
- Site and project environmental hazards study
- Post-occupancy evaluation strategy

05 RESILIENCE
- Site climate risk assessment
- Site water balance analysis
- Business operational continuity strategy
- Regulatory and technology risk review
As one of the world’s leading design studios, our impact truly is global in the way our members advance sustainability on some of the most significant design projects in our industry. Each year, we will include projects that merit special attention because of the achievement they represent for changing the game in their market or community or both. These projects are our shared language and are at the heart of our Global Impact strategy.
While our greatest impact as a practice will always be the projects we design and implement for our clients, our own operations as a business have similar environmental, social, and economic effects.

Our operations include each of our 17 studios, the energy and water consumed by members and visitors in the studio; furniture, electronics, and supplies we procure; food we may cater for events and meetings; and our travel on behalf of our clients. These are all examples of impacts that can be measured within the system boundary of our operations, but we also have external impacts such as how our members commute to our studios or how many days they may work from home in a given calendar year.

In this section, we identify the material impacts our operations have on the environment, the communities in which we operate, and the changing context of our business. To manage these issues, we have established an internal governance structure called the Global Impact Group that advises our leadership, influences projects and operations, and mentors the next generation of leadership to implement the Global Impact strategy within our business.

We also measure our impact where practical and report that as carbon emissions in this section. We have set a goal to offset our operational carbon emissions in 2023. We are also assessing our emissions associated with travel and procurement, which we are working to reduce and ultimately offset as we work toward becoming a zero emissions organization by 2030.
Woods Bagot and its associated businesses operate with approximately 1,000 members across 17 studios in seven countries. We are divided into six regions—Australia/New Zealand, China, Southeast Asia, North America, the United Kingdom and the Middle East. Therefore, our environmental footprint and the factors that contribute to our operational impacts vary wildly based on geographic, climatic, and historical circumstances.

In 2022, we undertook climate risk assessments for each of our 17 studio locations. We analyzed climate change trends and future weather data, emerging policies and the design regulatory setting, and the context of our own carbon footprint and its regional implications. These assessments not only enable us to better understand and track our own environmental impacts, but are also part of a broad strategy to layer climate risk into our project work given the implications of the climate crisis on our clients and communities.
04.2 GLOBAL IMPACT GROUPS AND GOVERNANCE

Managing the sustainability program will rely on a renewed energy within the existing GIG framework.

We have approached this with both a top-down and bottom-up view, reconfiguring the GIG Steering Committee as the Leadership team, accompanied by a GIG Activist group consisting of those just beginning their careers in architecture. The leadership will work with regional leaders and studio GIG leaders and groups to implement, manage, and evolve our sustainability program.

GIG LEADERSHIP

Formerly called the “steering committee,” our GIG Leadership acts as the main governance arm for implementing our sustainability strategy across our operations. This includes facilitating sustainability initiatives within each stream, as well as managing the GIG framework from global to regional to studio scales. Leadership meets monthly at a minimum with a focus on reporting out by region, sharing progress and ideas for evolving our strategy, and working with GIG Studio Leaders and Activists.

Our leadership team members also advise our Global Studio Executive regularly, while also providing guidance to each of our streams to ensure they are informed by Global Impact goals.
The leadership team consists of three groups—regional leaders, subject matter experts, and advocates.

Regional design representatives

HAZEL PORTER
AU—Regional Lead

IAN LOMAS
NA—Regional Lead

STEFANO TRONCI
Asia-China—Regional Lead

RICHARD FENNE
UK-ME—Regional Lead

Subject matter experts

TESS DOLAN
Global Insights

SHANE BURGER
Technical

DEVANG CHAUMAN
Technical

KYLE PAINE
Practice Management

ALEX BAUM
ERA-co

BENJI WILLIAMS
Communications

VIRGINA O’FARRELL
P&C

KRUPA PAI
Sustainability
GIG Studio Leaders

MADELEINE HUG
Perth

JOERG LONKWITZ
Shanghai

CHRIS SAVVA
Sydney

ETHAN WANG
Beijing

PHOEBE SETTLE
Melbourne

JOHN BRADBURY
London

SAMEE SULTANI
Adelaide

KEIKO BOUZIRI
Dubai / Abu Dhabi

CHRIS FIELD
Brisbane

MITHCH BENNETT
San Francisco / Los Angeles

JIHWAN JEON
Auckland

ENES LIBOHOVA
New York

VERONICA CHIA
Singapore

MARIA GUTIERREZ
New York

STEFANO TRONCI
Hong Kong & Shenzhen
Regional design representatives represent leadership at the core of what we do.

They participate in project design reviews to advocate for sustainable outcomes, work with studio GIG leaders on program implementation, and advance sustainability through our Project Road Map.

Subject matter experts (SME) represent unique contributions to the leadership team, helping foster thought leadership, research, design tools and technology uptake, manage inter-relationships with other W-B groups, like ERA-co, and support the social equity and EDI agenda of the global studio. Each SME will develop an individual KPI for the year related to their area of expertise; for example, one KPI will focus on W-B’s carbon footprint implementation.

Advocates are experienced leaders from across the global studio who have been fearless in their commitments to sustainability.
04.3 CARBON FOOTPRINT
We have tracked our carbon emissions associated with Scope 2 emissions for purchase energy for our studios, as well as Scope 3 emissions for staff travel, since 2015.

We have also committed to achieving zero carbon in operations by 2023 for our Global Studio. This report reflects our most recent annual data from the 2021 calendar year for both emissions scopes based on the Greenhouse Gas Protocol described previously. As many organizations have also experienced, our carbon footprint has significantly declined in the last three years owing to disruptions from the pandemic. We are currently in the process of updating our footprint to reflect 2022 data.

We have generally used less energy in our studios, while our travel footprint has decreased by over 90 percent since 2019. We expect to see our operational carbon continue to decrease given we operate in locations where local utilities have committed to decarbonizing the grid, so the carbon intensity of every kWh we use each year will continue to decrease. While we expect travel to increase for staff in 2023, we also continue to see a reliance on Microsoft Teams, Zoom, and other digital communication tools make travel less critical to our business.
METHODOLOGY

Our Scope 2 emissions are based on actual meter readings for 11 of our 17 studio locations as of 2021; from that dataset, we calculated an average energy use per person based on the studio headcount for those 11 studios as of December 2021. Using this average energy use per W-B person, we then estimated the energy use for the remaining six studios in order to obtain a global energy demand.

The carbon intensity of the energy supplies in each studio location is determined through accessing either utility-specific data or using average data from country and state databases, accessed through the www.carbonfootprint.com dataset. The online dataset collects carbon factors for country energy supplies from UNIPCC-accepted sources, usually reported annually by national energy agencies.

For Australia, we relied on state-specific data sources reported by the Federal Government for national greenhouse gas emissions reporting. While more localized datasets may be accessible in the future, we believe using these broader carbon metrics represents a more conservative approach to calculating our footprint in most instances.

We will also continue to work with our leasing agents and landlords to ensure our studios can be metered or our energy demands can be reported annually going forward.

Travel emissions data for each studio is collected through our travel agency based on emissions data supplied by airlines, car rental agencies, and estimates for hotels.

W-B also owns vehicles for staff use for project travel, which would be Scope 1 emissions. It is our intention to include this in our overall footprint offset as we finalize our accounting in 2023.
2021
SCOPE 2 CARBON EMISSIONS (kg of CO2e)

82,559.69
677.352
51,590.37
100,715.35
20,346.73
4,211.27
0.00+
0.00+
0.00+

Adelaide
Auckland
Beijing
Brisbane
Dubai
Hong Kong
London
Los Angeles
Melbourne
New York
Perth
San Francisco
Shanghai
Shenzhen
Singapore
Sydney
Abu Dhabi*

*Data not recorded
+Green Power Purchase Agreement in place
REDUCING OUR OWN FOOTPRINT: OUR NEW DUBAI STUDIO
Measuring our carbon footprint informs a more comprehensive strategy to address the sustainable performance of our studios through the design and construction of our workplace, procurement policies we have in place, and initiatives that support the health and well-being of our staff.

In 2022, we completed the fit-out of our newest studio in the LEED Gold-certified Dubai World Trade Centre according to practices based on the WELL Building Standard. As the first new Woods Bagot studio design since the global pandemic, we focused on right-sizing the space to accommodate our flexible working schedule and the fact our studios are not fully occupied every day of the week. The WELL criteria, which many of our commercial workplace interiors clients have adopted globally, provides a framework for implementing a comprehensive sustainable workplace strategy.

Key features of the space include ensuring most seats are within six meters of a window to afford daylighting and views, while all furniture is designed with ergonomic principles. Printers and IT technology are isolated from the open office to avoid indoor air quality impacts. Taking a biophilic approach to design, we incorporated plants and natural materials into the studio to provide connections to nature. Materials also incorporate local cultural elements, such as weaving, and recycled content, while also avoiding materials with Volatile Organic Compounds (VOCs) that would impact indoor air quality. Our team is tracking a WELL Silver certification level, which would be a first for W-B globally.
As one of the world’s largest architectural practices, Woods Bagot plays a key role in influencing the markets in which we work. Advocacy represents the initiatives our members take on that engage external stakeholders, industry bodies, regulatory agencies, and communities to advance our Global Impact agenda.

It also embodies internal programs, such as our Corporate Social Responsibility (CSR) strategy, that align our operations to positively affect external outcomes, such as adopting voluntary initiatives for ethical procurement or community engagement on project work or improving metrics associated with workplace diversity and inclusion, both internally and in our industry.

We have also adopted a Modern Slavery statement in accordance with the reporting requirements of Australia’s Modern Slavery Act 2018, the United Kingdom’s Modern Slavery Act 2015 and associated guidelines. This statement accompanies established policies for Human Rights, which includes provisions for workplace safety and health, diversity and inclusion, working conditions, and freedom of speech, as well as policies for Anti-Bribery and Corruption, Whistleblowers, and Fair Call employee support in line with global standards. We intend to incorporate these more fully into our 2023 update of the Playbook.
05.1 CORPORATE SOCIAL RESPONSIBILITY

"Corporate Social Responsibility (CSR) is the continuing commitment by businesses to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large."

– WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT

We see corporate social responsibility (CSR) as part of our roles as designers, not separate from what we do. As a practice, a profession and as individuals, we have a responsibility to our global communities. Our cultural values are our vehicle to serving this space. We launched our CSR strategy in 2017 and continue to build on its six key themes:

– Housing the majority
– Environmental and sustainable stewardship
– Resilient cities
– Community values
– Empowering youth and associated educational institutions
– Alliances for diversity and inclusiveness (ADI)

Our CSR launch document can be found on our intranet. In 2023, we plan to renew our focus on CSR by aligning the strategy with our GIG structure to provide support in each studio and acknowledge current staff contributions. We are also working with our communications and P&C teams to compile stories and initiatives across our studios to expand on our CSR focus within the Climate Playbook.

Many of our studios have appointed CSR leaders to propose and implement initiatives aligned with our global strategy. Our goal for 2023 is to ensure representation within GIG teams in every studio to champion CSR.
"Our REFLECT Reconciliation Action Plan, has expanded the community of Woods Bagot to build deeper relationships with Aboriginal and Torres Strait Islander stakeholders, whose voices and culture enrich our design process and projects. To me, this represents true Global Impact, challenging us to make inclusion and respect of our First Nations cultures a priority since, ultimately, we are all connected on this planet."

ROSINA DI MARIA
W-B Principal and RAP Chair + Champion, Adelaide Studio Leader
Among our significant achievements, in 2020 we embarked on developing a Reconciliation Action Plan, or RAP, for our Australian practice. Released in 2021, REFLECT, our first RAP, is currently in progress and has been incorporated into a number of projects. Our RAP is available to anyone on our global internet page and follows Reconciliation Australia’s framework.

At its core, the RAP is an engagement framework for building relationships and collaborating with Aboriginal and Torres Strait Islander stakeholders in the communities in which we work. The RAP not only addresses the design projects, but also social and economic outcomes related to suppliers and our procurement strategies, as well as our own hiring practices.

With an internal governance structure including the RAP Steering Committee (RSC) and RAP Working Group (RWG), we have committed to accountability and transparency in our progress toward full implementation.

We also believe that success in our Australian studios will empower us to expand our RAP toward engagement with indigenous communities in other regions where Woods Bagot works.
05.3
CHAMPIONS OF CHANGE

Social equity, diversity, and inclusion

We continue to advance our commitments to social equity, diversity and inclusion across our studios. Since 2010, we have supported the Champions of Change initiative in Australia to address gender equality in our studios and leadership. We have moved closer to our gender equality goals since starting this process and rank above the industry average for 2021, the latest year for which we have data.

In 2022, we began the process of updating our Diversity and Inclusion strategy and anticipate releasing it in 2023. The update reflects the evolving culture of our studios, as well as a recognition of the role Employee Resource Groups (ERGs) can play in empowering staff as we continue to diversify our membership.

GENDER BALANCE IN LEADERSHIP, RECRUITMENT, GRADUATES, PROMOTIONS AND EXITS

<table>
<thead>
<tr>
<th>Woods Bagot Women's Representation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall employees</td>
</tr>
<tr>
<td>48.9</td>
</tr>
<tr>
<td>Other Managers</td>
</tr>
<tr>
<td>42.6</td>
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</tbody>
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- Gender balance achieved (40%-60% women's representation)
- Unchanged since 2020
- Not applicable