

CUNDALL

SUSTAINABILITY REPORT

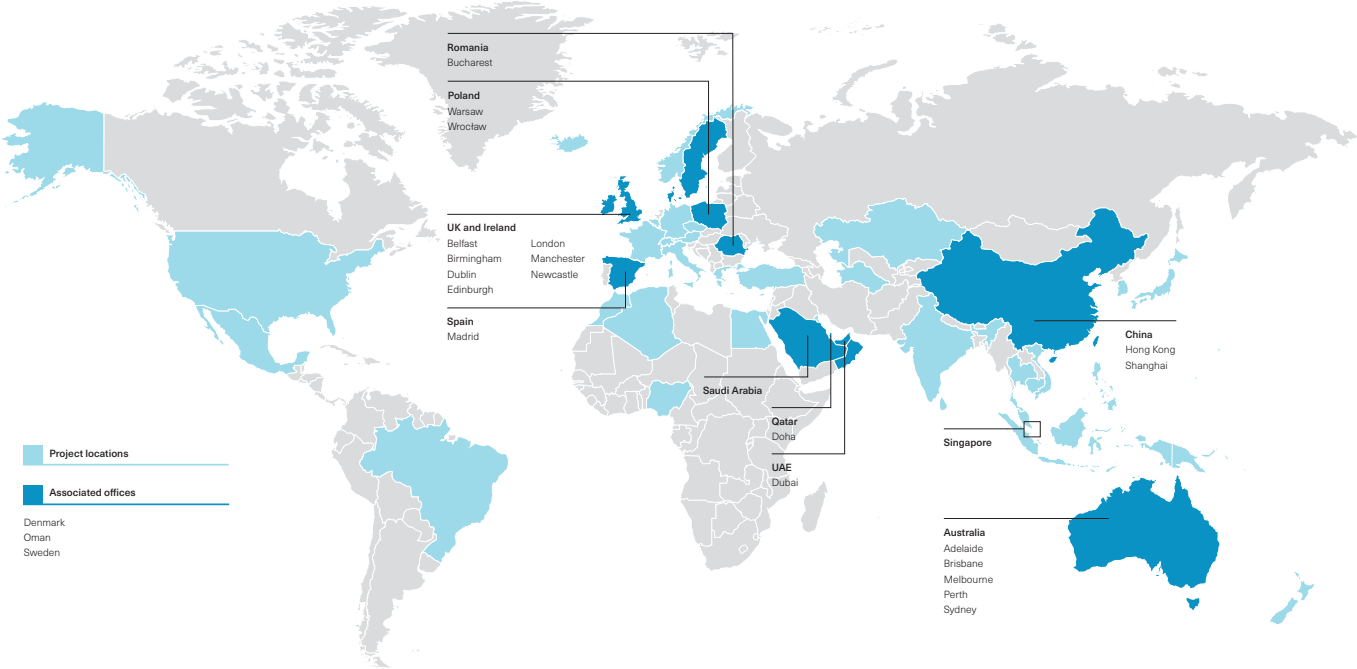
2020-2021

Cundall at glance

Cundall is a global, independent, multi-disciplinary consultancy delivering sustainable engineering and design solutions across the built environment.

We have 21 offices with almost 850 consulting engineers and designers who are empowered to act with flexibility and agility in response to both global and local market conditions and practices. We are 100% owned by Partners working in the practice.


[Find out 'What makes us Cundall?'](#)



Services:



Acoustics



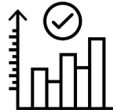
Air quality and odour



Audio Visual (AV)



Building automation



Building Performance Services (BPS)



Building services engineering



Civil engineering



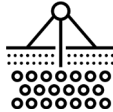
Construction design and management consultancy



Digital engineering



Fire engineering



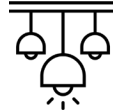
Geotechnical and geoenvironmental



Health, wellbeing and productivity



Information technology



Lighting design



Planning



Security



Smart buildings



Structural engineering



Sustainability



Transportation



Vertical transportation

Foreword

For 45 years, Cundall has continued to evolve to become agents of change for a sustainable world, thought-leaders in the built environment and the best place for talent to grow and flourish.



The COVID-19 pandemic severely impacted everyone's lives and created considerable instability and uncertainty. Cundall responded with clear priorities, adapting our processes and ways of working to provide care for our people, communities and clients. Throughout this challenging time, each of our people has shone brightly with our values of creativity, excellence, collaboration and integrity. It was a time to pause and reflect on a new reality, and quickly adapt.

Health & Wellbeing

The health and wellbeing of all our people remains our top priority. During this reporting period, our culture ensured that we were able to quickly adapt to new ways of working to mitigate against the risk of COVID-19, allowing us to protect our employees and livelihoods and continue to provide essential services to our communities. Working from home has not stopped the office socials.

From Zoom pilates and yoga at lunchtime to mindfulness courses and online quiz nights, we have seen creative initiatives being implemented across all our offices.

Climate Positive Action

While the global lockdown has produced a dip in global carbon emissions, it is likely to be a very temporary dip unless governments and businesses rebuild out of the coronavirus crisis with reducing emissions as a focus. There is a historic opportunity to tackle the climate crisis. At Cundall, we are committed to reducing our carbon emissions throughout our business and within our projects. We have joined the Climate Pledge as an organisation and launched our project Zero Carbon Design 2030. It implies that we will collaborate with our clients and industry to deliver energy and carbon solutions necessary to keep global heating below 1.5°C. After 2030, Cundall will only work on design projects that are zero carbon.

Ethics & Equity

This year marks the second year of the Alex Dryden Award, created in honour of Alex Dryden who passed away in 2019. The award is presented annually to a member of staff who has gone the extra mile to help others and make their lives better. This year we heard about our 'lockdown heroes' from across the globe as well as some impressive sporting achievements in aid of local charities and general moral boosters when times were tough for most.

Alongside the Alex Dryden Award, we launched two affinity networks; Mosaic and GAIN.

Towards a more sustainable future

Adapting to a post COVID-19 world has created room for creativity and collaboration. We are committed to playing a leading role in collaborating for change and aim to contribute throughout our four cornerstones. We are looking forward to the year ahead with a renewed sense of energy and optimism, in the belief that we can deliver ongoing sustainable value for everyone. Finally, I would like to thank everyone for their hard work and resilience throughout what has been a very demanding year.

A handwritten signature in black ink that reads "Tomás Neeson".

Tomás Neeson, Partner

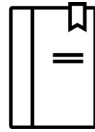
2020/21 Key achievements

We are proud of the work we have done this year to embrace health and wellbeing, strengthen our inclusive and diverse culture and reduce our environmental impacts.



Signed

the Climate Pledge
launched by Amazon and
Global Optimism



Launch

of the Affinity Network
Charter 2021



CIBSE 2021

Building Performance
Awards: Productivity
Mapping; Making the
business case for wellbeing



10

internal sustainability
webinars



Winning

the WGBC Asia Pacific
Leadership Awards



+60

new sustainability
roles globally



Winning

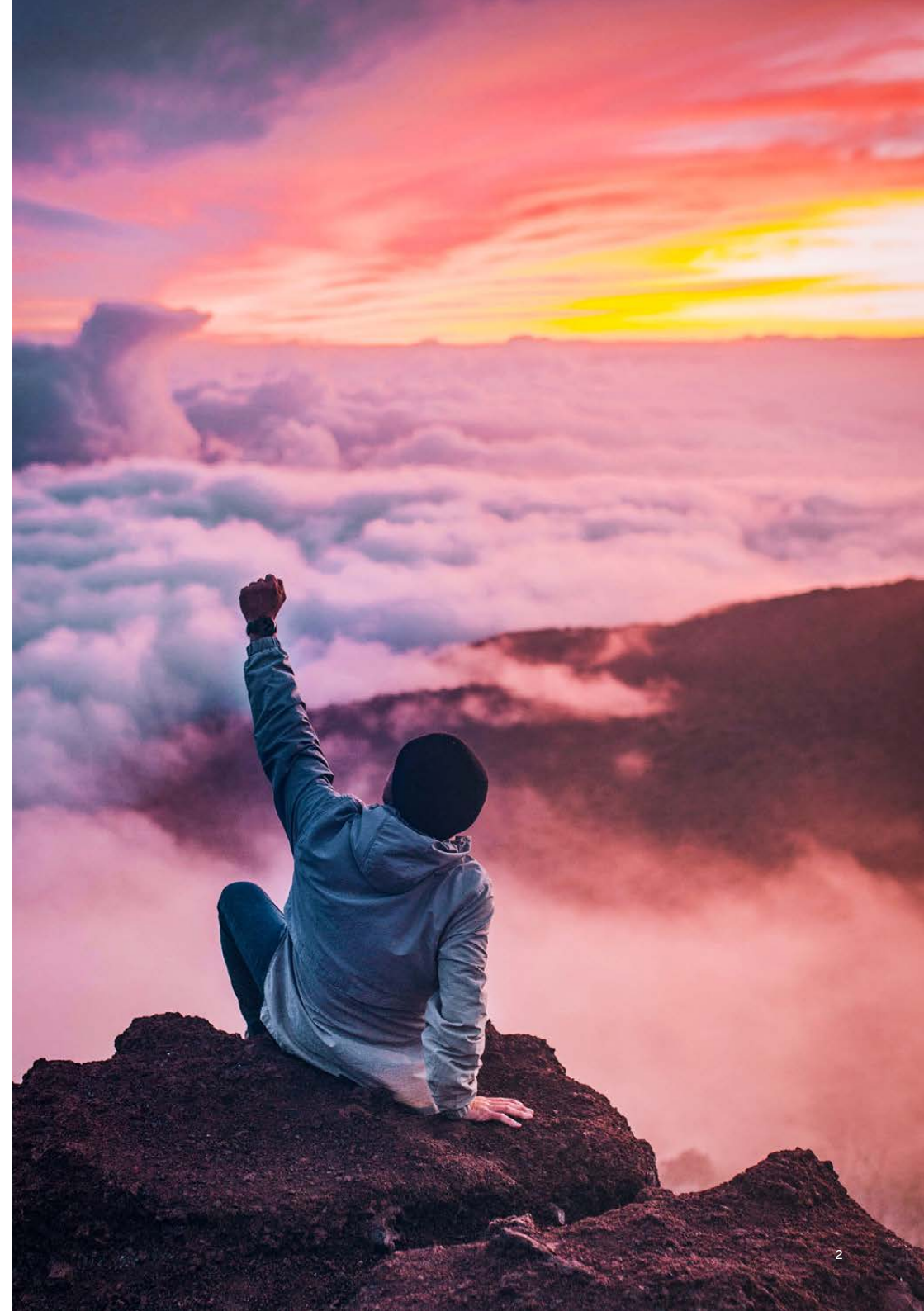
The National Partnership
of the year 2020
CitySwitch



-80% reduction

of tCO₂e/FTE compared
to 2018/2019

Scope 1 2 and 3 including business travel, commuting, water, paper,
food & beverage, waste, energy.
FTE 2018/2019 - 834, 2020/2021 - 835



OPL Progress



**Sue Riddlestone OBE,
CEO and Co-founder, Bioregional**

It is heartening to see the ways in which Cundall has continued to care for its people, communities, and clients as the COVID-19 pandemic brought further global challenges over the last 12 months.

Cundall responded with creativity and collaboration, quickly adapting to its new reality, and ensuring that in developing new ways of working it seized the opportunity to respond to the climate crisis and reduce its own environmental impacts.

This report highlights the progress that Cundall has made over the last year, from supporting the health and wellbeing of its people in a new hybrid working environment, to taking climate positive action to reduce its emissions.



Cundall has monitored and reported its carbon footprint since 2012, when it became endorsed as a One Planet Company. We have been proud to support Cundall on this journey, which has seen its carbon footprint fall dramatically in recent years.

This impact will be accelerated as Cundall continues to collaborate with its clients and industry to deliver energy and carbon solutions necessary to keep global heating below 1.5°C. In the last year they have joined the Climate Pledge and launched Zero Carbon Design 2030, committing to work only on projects that are zero-carbon from this crucial date.

Cundall is now laying the foundations for a new sustainability strategy with new governance structures and key targets, including a commitment to align its net zero strategy with science-based targets, and a new data-driven approach that will allow it to better understand its impacts and drive further change.

This focus will be essential to meet the greatest challenge we face, to respond to the climate and ecological emergency with pace and ambition, and we look forward to seeing the results of this work over the years to come.

What we have learnt from the COVID-19 pandemic

July 2020-July 2021 has been a rollercoaster year and brought with it many global challenges. It has impacted how we live, work and design. Adapting our processes and ways of working has been fundamental in all areas of our business.

Hybrid virtual culture

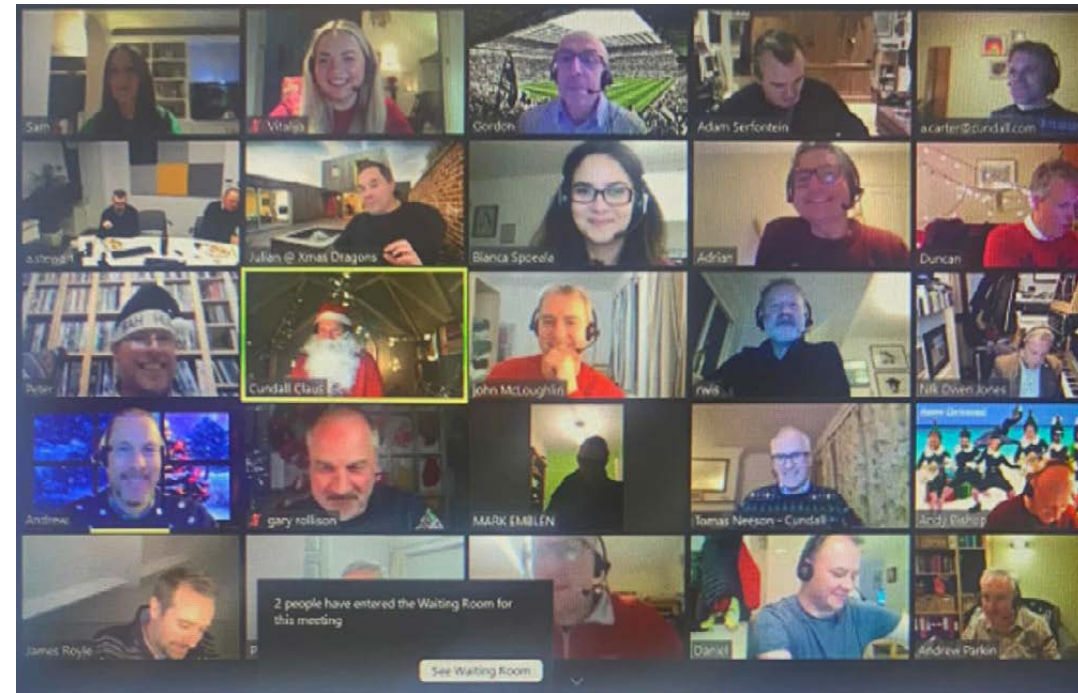
Most of us have missed the social aspects of work, as well as the opportunity to collaborate in person with our colleagues. As COVID-19 restrictions ease across the world, we want to give our staff the freedom to decide when they would work in our offices. To ensure brainstorming, innovation and social cohesiveness, all our meetings and events are now hybrid. Our IT team successfully prepared us for this transition by installing new VPN technology, optimising our network infrastructure and offering agile desks as well as modern remote desktops.

By offering a flexible work environment to our staff, we want to provide a better work/life balance and the freedom to work according to the needs of the individual.

Sustainable business travel

Whilst COVID-19 had thrown business travel into disarray, we managed to deliver excellent services and projects to our clients. It highlighted deeper questions on the true benefits of all those air miles. Our carbon footprint per person has plummeted from 822 kg CO₂e in FYI 2019 to 87 kg CO₂e in FYI 2020.

Before the pandemic, meetings, conferences and trade shows in another country or convening in-person to sign deals was the norm. But after nearly two years of restrictions, we have shown that we can do our work effectively with significantly less travel. We will look to curb travel-related emissions by limiting trip frequency, drawing on lessons learned during the pandemic. Keeping internal meetings online, encouraging trains and optimising schedules to reduce the number of flights taken are extremely effective ways to reduce carbon emissions in line with what is needed to reach the Paris agreement goals.



Cundall Christmas zoom quiz

Health and wellbeing

During these unprecedented times, our aim has been to maintain our focus on the wellbeing of our people and the commitments we made in our Health & Wellbeing Strategy last year. We have further developed our programme of wellness promotions including webinars on a wide range of physical and mental wellbeing topics such as nutrition, cancer in the workplace and staying physically well whilst working from home. We have continued to raise awareness of wellness days, such as 'World Mental Health Day' and continue to take every opportunity to keep the conversation going about mental

health. We have also piloted a workshop to help our people managers develop a deeper understanding of mental wellbeing and enable them to open up a conversation with their team, spot the signs of mental ill health and provide appropriate support. Now that many of us are working from home on a more regular basis, our Health and Safety team provide workstation assessments upon request for UK staff to meet our ISO45001 accreditation.

Our Sustainability roadmap

OUR VISION

Our philosophy hasn't changed, and we hold true to the ethos espoused by the founding partners in 1976.



AGENTS OF CHANGE FOR A SUSTAINABLE WORLD
THE BEST PLACE FOR TALENT TO GROW AND FLOURISH
CONSTRUCTION INDUSTRY THOUGHT-LEADERS
EVERYONE'S FAVOURITE CONSULTANTS.



OUR VALUES

In striving to deliver this vision, we hold true to the values that have always underpinned our success.



CREATIVITY



EXCELLENCE



COLLABORATION



INTEGRITY

CORNERSTONES

Our environmental and social impacts apply across the four key areas of influence of our business - our sustainability cornerstones.

INDUSTRY LEADERSHIP



OUR PROJECTS



OUR WORKPLACE



OUR HOMES AND COMMUNITY



SUSTAINABILITY PRIORITIES

Following a detailed materiality review of our business in 2017, we have identified six sustainability priorities to focus on.



Climate Positive
Action



Zero Carbon
Energy



Materials and
Supply Chain



Health and
Wellbeing



Ethics and
Equity



Climate Change
Adaptation

Industry leadership



Knowledge sharing – Our partnerships and networks

To create a better, healthier more sustainable built environment we have collaborated with the wider industry on a range of sustainability programmes and initiatives, including local and national governments as well as industry and governing bodies.



What is it?

Originally 'The London Energy Transformation Initiative', LETI was established in 2017 to support the transition of the London's built environment to meet Net Zero Carbon.

How did we contribute from July 2020 to July 2021?

We produced the **Embodied Carbon Target Alignment** document. This document has been produced to provide alignment in Embodied Carbon measurement and comparisons.



We also supported the creation of the document **Improving Consistency in Whole Life Carbon Assessment and Reporting** providing a common set of definitions for any terminology used to achieve net zero carbon.



Green Building
Council Australia

What is it?

Green Building Council of Australia (GBCA) leads the sustainable transformation of the built environment through its four key pillars: rate, educate, advocate and collaborate.

How did we contribute from July 2020 to July 2021?

David Clark is on the GBCA's technical committee which is responsible for the upgrade of the new **Green Star Buildings tool**. The new tool has a requirement to be net zero carbon for the 6-star rating. Cundall also has several people on the GBCA's various Expert Reference Panels.



Knowledge sharing – Our partnerships and networks

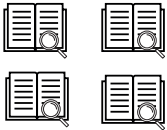


What is it?

The Chartered Institution of Building Services Engineers is the professional body that exists to support the Science, Art and Practice of building services engineering.

How did we contribute from July 2020 to July 2021?

We contributed to the publication of the new **air cleaning guidance** for reducing COVID-19 spread.



We also contributed to the creation of the document TM65.1 Embodied carbon in building services: residential heating.



What is it?

Amazon co-founded The Climate Pledge with Global Optimism in 2019. The two agreed to join forces by launching The Climate Pledge, a platform for signatories to work together on ambitious actions to achieve net zero carbon emissions by 2040, 10 years ahead of the Paris Agreement.

How did we contribute from July 2020 to July 2021?

By signing [The Climate Pledge](#), we have committed to following these three principles:

1. Measure and report greenhouse gas emissions on a regular basis;
2. Implement decarbonisation strategies in line with the Paris Agreement through real business changes and innovations, including efficiency improvements, renewable energy, materials reductions, and other carbon emission elimination strategies;
3. Neutralize any remaining emissions with additional, quantifiable, real, permanent, and socially-beneficial offsets to achieve net zero annual carbon emissions by 2040.

Combined, the three principles are a transformative direction for signatories to decarbonise their businesses at the scale necessary to get to net-zero in 2040.

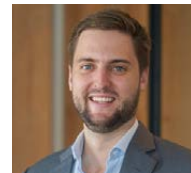


What is it?

ALEC Engineering and Contracting LLC part of the Investment Corporation of Dubai (ICD) is a large construction company.

How did we contribute from July 2020 to July 2021?

Through a collaborative event, ALEC, and Cundall, came together in July 2020 to launch 'The Project of the Future' initiative. As part of it, innovation solutions tackling challenges in the industry were brainstormed. The winning group came up with an innovative solution called BRAINS - the Built Environment Ranking Artificial Intelligence Network System.



"The model evaluates everything from the cradle of procurement to the design as well as compares other designs and passes on information about delivering improved designs to the society. While thinking of what could be the 'project of the future', we decided to go beyond the emerging technologies in the built environment such as artificial intelligence and 3D printing and combine it together to better serve the society."

Callum Perey, Senior Engineer
Dubai



What is it?

It is a multi-disciplinary network of committed organisations believing in a better built environment and collective action to address the climate crisis.

How did we contribute from July 2020 to July 2021?

We define targets, strategies and transition plans in the **Whole Life Carbon Roadmap**.



Cundall Excellence Awards



The Cundall Excellence Awards celebrate and reward excellence at a project or initiative level.

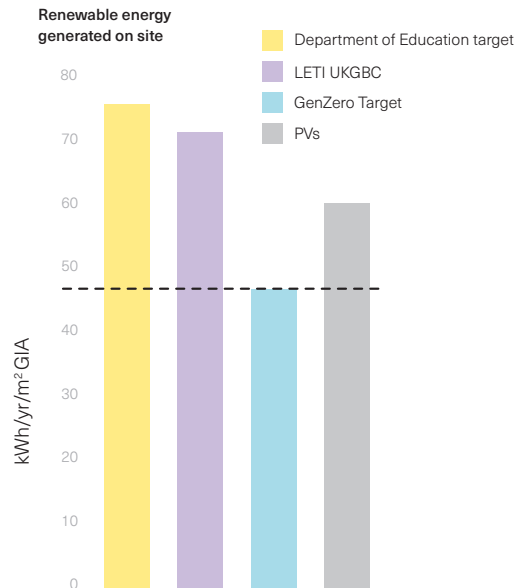
The awards are open to all staff across every office and every team. Entries can relate to an entire piece of work, to a small part of one, or a cross project initiative or service. The primary judging criterion is that the entry should demonstrate how the activity has gone beyond the norm such that it can be described as "excellent".

Our judges enjoy entries that communicate originality and innovation, how any barriers or constraints were overcome, and how the activity has added value to our business and/or to a client's business.

For July 2020 - July 2021, these four projects won different awards for the category "sustainable impacts".

Cundall Excellence Awards

GenZero Prototype School Winner



Energy

The energy target of 74 kWh/m²/annum was set by the Department for Education. The pilot project showed an energy intensity of 42 kWh/m²/annum. To minimise this operational energy use, heating will use ground source heat pumps whilst cooling will be ensured via heat recovery. Solar panels will be installed on-site and will produce extra energy.



Biophilia

The integration of the landscaping around the building has several advantages; enhanced biodiversity, enhanced biophilia, SUDS, shading to people and the buildings, enhanced cooling effect.

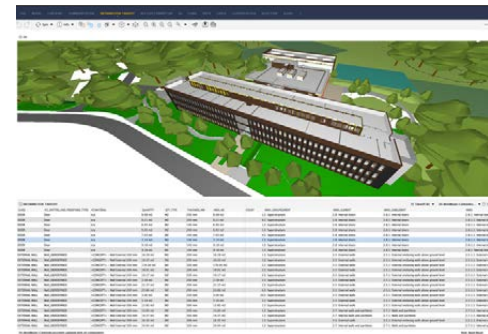
The key objective of the Gen Zero project was to develop two zero carbon school prototypes, one for a compact urban site (Birmingham) and the other a more suburban location (Crawley). It was essential for the design to guarantee occupant comfort for 2°C and 4°C global warming scenarios and maintain the educational quality of the environment. Both concept schools were designed to be net zero carbon in operation at day one delivered a schools which is future proofed against the risks of climate change and a healthy and productive whole school setting (these were the brief goals).



Alan Fogarty
Partner,
London

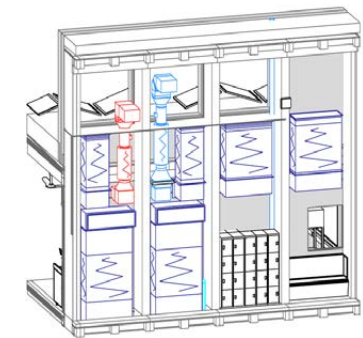


Peter Hazzard
Associate Director,
Birmingham



Digital delivery

GenZero's digital project delivery used OpenBIM IFC format for BIM model and asset information exchange, thus making access to the data platform independent. The data was also used in costing and embodied carbon models reducing the time required to complete both assessments. Working together with architects and digital engineers, we embedded typical for school projects Area Data that was exchanged and updated via IFC format.



Modular design

Modular design for offsite fabrication was a key outcome for the Department for Education. It includes spine wall structural system, modular plantrooms and corridor services modules which allowed a reconfigurable services strategy to be applied to different building zones.

All of our knowledge of this project has been condensed down into a 22-pages design guide which the Cundall team produced for internal use.

Cundall Excellence Awards

Circular Economy Shortlisted

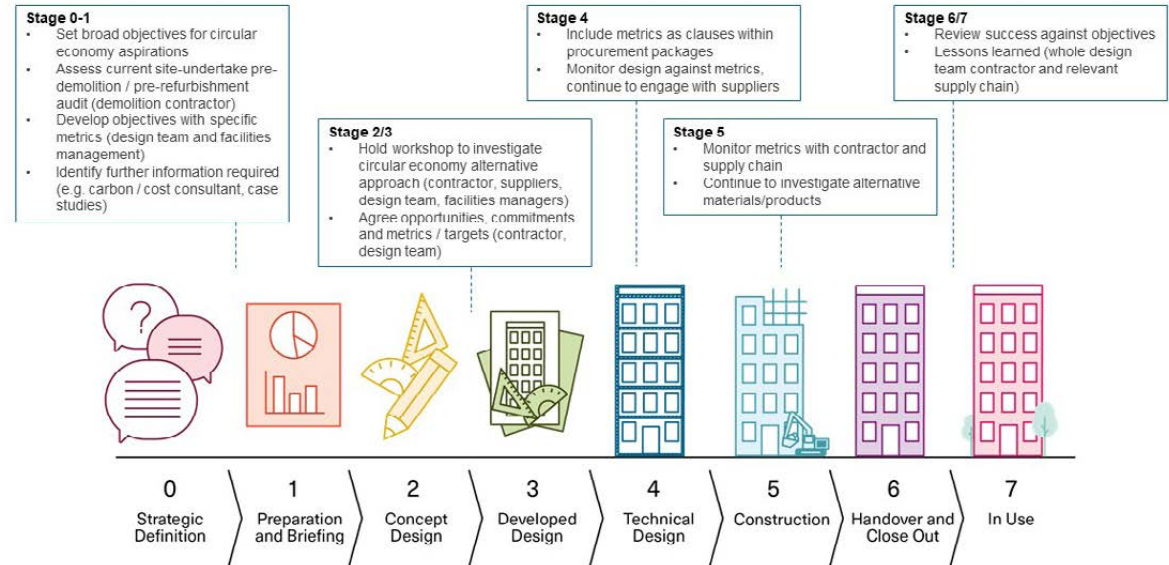
In response to the increased demand for guidance on fulfilling the various circular economy requirements, the Sustainability's Whole Life Carbon team developed a suite of tools including workshops, pdf guides and illustrations to satisfy the new London Plan policy "SI 7 Reducing waste and supporting the circular economy". The series of presentation decks shine a light on the details of the key circular economy principles, the various requirements and the expected outputs.



Kim Gault,
Whole Life Carbon and
Sustainability Consultant
Birmingham

Through the projects we have worked on we have already engaged closely with other disciplines within Cundall, such as the mechanical and structures teams, to discuss how they approach circular economy principles. We aim to take this further through knowledge sharing and supporting other disciplines improve the integration of circular economy principles into their day-to-day work. We are also looking at liaising with other Cundall sustainability teams in other regions, to discuss how they currently respond to the circular economy requirements they face to learn how we can build upon each other's experience to aid one another.

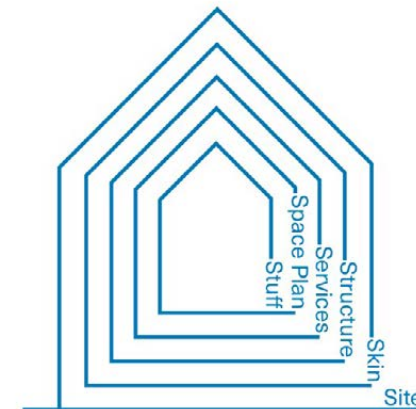
Incorporate Circular Economy principles into each RIBA stage



Design for End-of-Life

Ensure materials can be recovered in their highest value

- Design layers with autonomy
- Easy disassembly/ deconstruction of parts / materials
- Understand life span of products and layers
- Specify products with certification such as cradle to cradle and natureplus
- Use exposed and reversible connections
- Use minimal adhesives
- Enable accessibility of material information



Cundall Excellence Awards

Embodied carbon summary sheet generator Highly commended

With the growing emphasis on tackling climate change and reducing carbon emissions associated with construction, the main objective for structural engineers going forward is to reduce the embodied carbon within their designs.

To allow the embodied carbon within our designs to be assessed, structural Revit templates have been updated to include a database of renamed 'CDL' structural materials which have embodied carbon data associated with them, such as material embodied carbon, sequestered carbon and transport distance values.

Formulas have been set up within Revit to calculate the embodied carbon data based on user-assigned 'CDL' materials and material volumes generated within Revit. The calculations are carried out as per the methodology outlined in the Institution of Structural Engineers publication 'How to Calculate Embodied Carbon.'

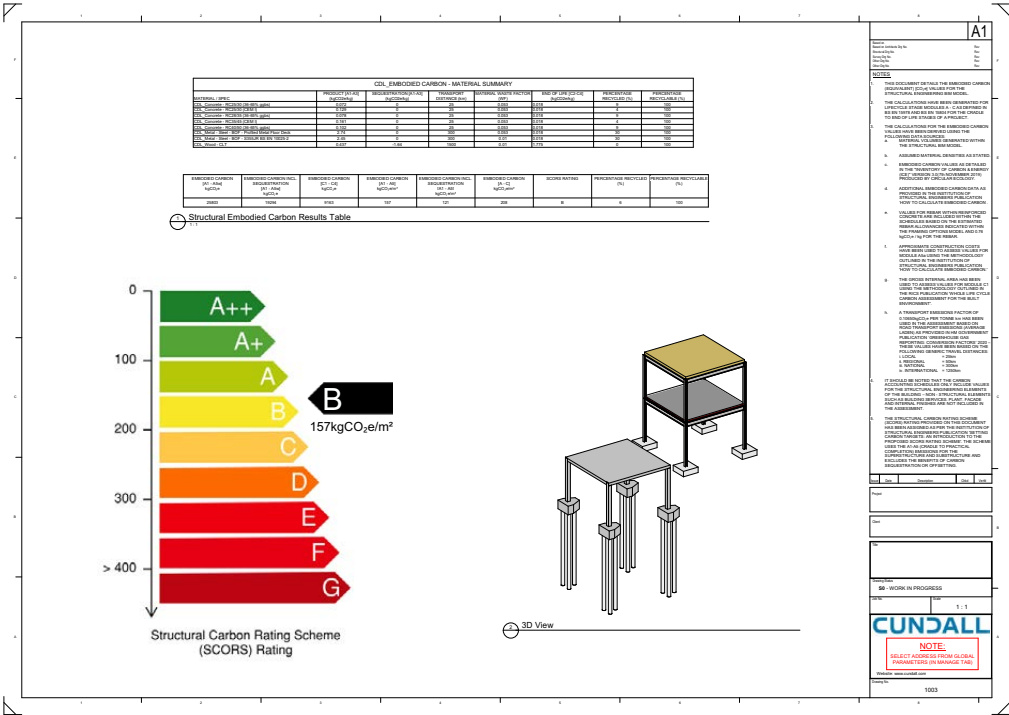
The Embodied Carbon Summary sheet originally started as a way to calculate the embodied carbon within a structure to create a visual output for our clients and has become a standardised built-in tool that still does this, but also generates this output automatically whilst also keeping up to date with the project.



James Ilesley,
BIM Developer
London



Nicholas Karakoullis,
Engineer
Birmingham



Cundall Excellence Awards

Passivhaus optimising design tool

Grand Prize Winner

Finally, the Grand Prize Winner was awarded to Jonathan Handley for his early stage Passivhaus optimising design tool. This tool falls under the category “Engineering Excellence”, rewarding tools optimizing project delivery.

The Passivhaus optimisation tool aims to influence the early-stage design of a project through real time energy analysis, it is designed for use on any project to assess the impact of the envelope on the energy demand. The tool incorporates a User Control panel, this makes energy results more accessible during the building design and allows users to have simultaneous control over geometrical building elements such as the glazing ratio and shading through parametric modelling.

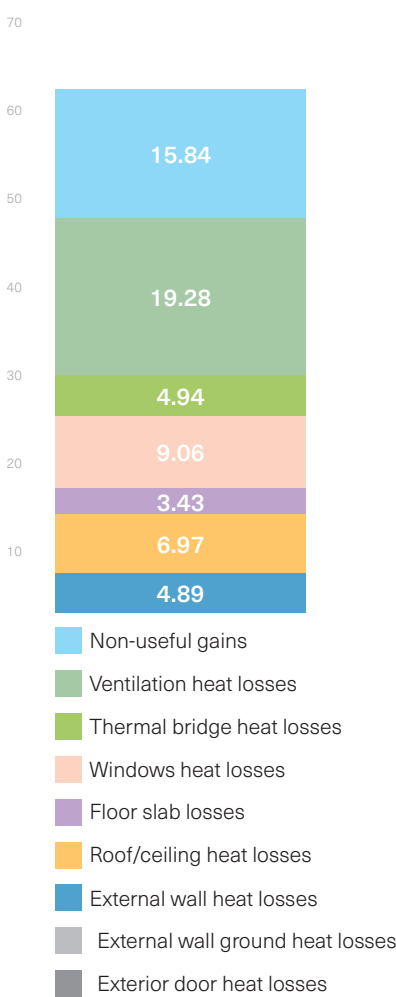
The user can run an energy analysis through the control panel, results are shown and can be used to help inform energy conscience façade design decisions. The process takes into account other key features such as the frequency of overheating and the form factor of the building.

This can be used by the design team to run rapid iterations to find a compromise between the level of daylight, operational energy and embodied carbon in a building.

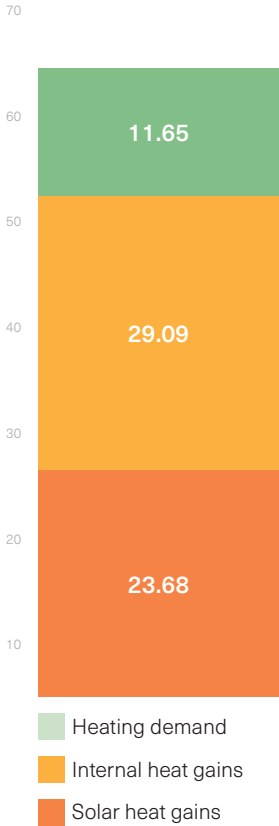


Jonny Handley,
Graduate Engineer
London

Heating losses (kWh/m²a)



Heating gains (kWh/m²a)



Our projects



Our projects

We delivered over 1200 projects globally during this year. This is where we can make the biggest long-term impact. We want all our engineers and consultants thinking about and delivering sustainable solutions on every single project we work on.

Zero Carbon Design 2030

This year, we launched the Zero Carbon Design 2030.

Zero Carbon Design 2030 is a global initiative that engages everyone in Cundall -every office, every discipline and every level – to deliver zero carbon solutions.

We will develop training programs, tools and guidance for our teams, and will share our knowledge with industry.

We will collaborate with our clients and industry to deliver energy and carbon solutions necessary to keep global heating below 1.5°C.

After 2030 Cundall will only work on design projects that are zero carbon.

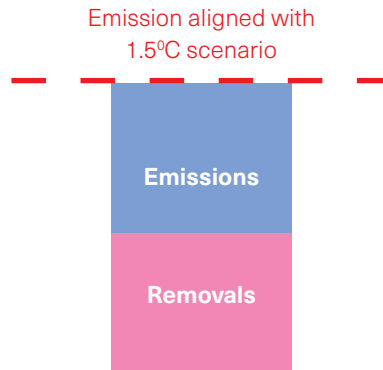


Zero Carbon Design 2030

Carbon Neutral



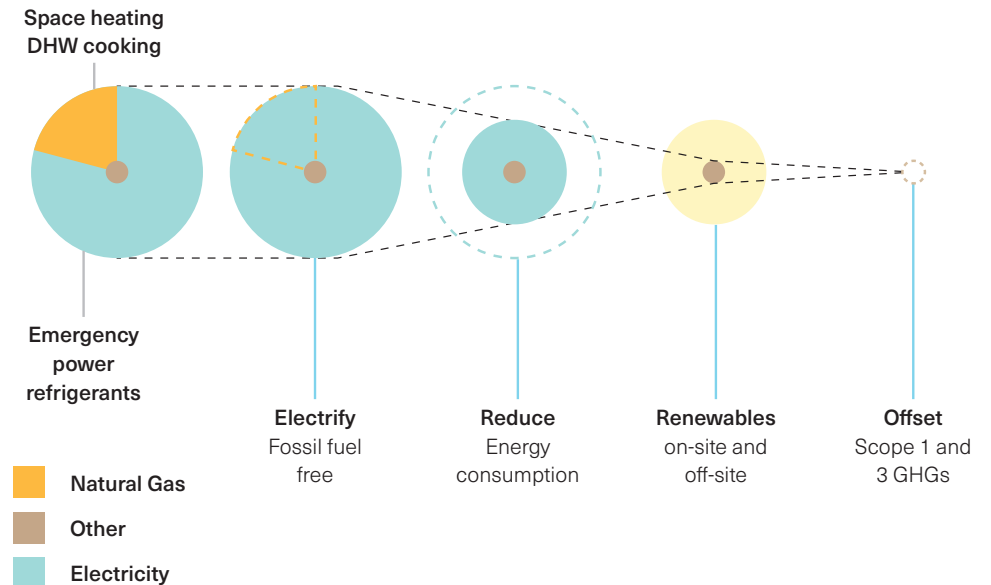
Zero Carbon



Absolute Zero Carbon



How to achieve net zero operational carbon?



A 'Net Zero Operational Carbon – Energy' asset is one where no fossil fuels are used, all energy use (Module B6) has been minimized, meets the local energy use target (e.g. kWh/m²/a) and all energy use is generated on- or off- site using renewables that demonstrate additionality. Direct emissions from renewables and any upstream emissions are 'offset'.

What's the difference between carbon neutral and zero carbon?

- Carbon Neutral allows the use of carbon offsets to match the total greenhouse gas emissions. The scope of GHG emissions depends on the nature of the project and the rules of the certification scheme. Fossil fuels are permitted in the definition of carbon neutral.

- Cundall's business is carbon neutral certified. This covers our energy consumption, company cars, refrigerants and business travel. It does not currently cover the embodied carbon of our fitouts.

What does Zero Carbon mean?

- Challenging targets to reduce embodied carbon (kgCO₂e per m²) and operational energy intensity (kWh(electricity) per m²).
- No fossil fuels for space heating, hot water and cooking.
- Minimising other GHG emissions (e.g. diesel for generators, Global Warming Potential of refrigerants, waste, water).

- Supporting low carbon transport solutions (e.g., EV charging, cycling) All electricity to be supplied from 100% renewable sources (Scope 2).
- Procuring nature-based carbon offsets for Scope 1 and 3 GHG emissions.
- The zero carbon definition is consistent with the World Green Building Council's framework for Net Zero Carbon Buildings but adopts the higher standard used by the Green Building Council of Australia for fossil fuels and nature based offsets.

Zero Carbon Design 2030

What are we doing to drive zero carbon in our industry?



We developed an embodied carbon tools for the Hong Kong Construction Industry Council and the Greater London Authority.



We have written scripts to rapidly test the embodied carbon of structural options.

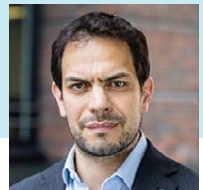


We are preparing Electrification Guides for Buildings in Australia with Green Building Council of Australia, Clean Energy Finance Corporation and NSW Government.



"It is clear is that we cannot wait for this government to solve the problem, the industry needs to step up, capitalise on momentum and take a lead. We need to create new standards to align with the latest climate science."

Simon Wyatt
Partner, London



Our project highlights

GenZero

UK



Sustainability features



Low operational energy use



Biophilia



Modular design

The Gen Zero project focused on developing the design of two prototypes of net zero schools. These prototypes lead the schools to be sustainable, enable offsite construction, and help meet the UK's ambitious 2050 net zero carbon targets. Cundall has played a major role in reviewing their standard school design and develop these to achieve the net zero targets defined by the Department for Education.

Facebook/Meta Odense Data Centre

Denmark



Sustainability features



Heat pump
Recycled heat

One of the key features of the Data Centre is its ability to inject waste heat into the City's district heating system, providing a low carbon heat source. The heat provided is predicted to reduce the cities need for carbon-based heating by up to 25%. The system will enable the recovery of 165,000 MWh of energy per year, enough to warm over 11,000 homes in the City of Odense. The combination of heat pumps and recycled heat from the data centre will contribute to Odense' planned phase out of coal in 2022. It is estimated that the data centre will reduce the city's demand for coal by 20%.

Our project highlights

Kangaroo Island Airport Upgrade

Australia



Sustainability features



Solar PV



Natural light and ventilation



Local sustainable materials

Located off the coast of South Australia, Kangaroo Island is renowned for its wilderness and ecotourism experiences. Cundall developed sustainability guidelines, performance reporting and energy, thermal and water efficiency benchmarking requirements for the project. Our team was responsible for driving sustainable outcomes across all design and delivery disciplines. Sustainability initiatives include on-site solar PV, operable façades to enable the building to make maximum use of natural light and ventilation and a focus on locally sourced sustainable materials.

Upper House by Aria

Australia



Sustainability features



Solar PV



Natural ventilation



Life cycle assessment

Located in Brisbane's Southbank cultural precinct, the 30-storey residential tower features architectural flourishes inspired by natural forms. A natural ventilation strategy was developed to take advantage of Brisbane's climate conditions. We also undertook a Life Cycle Assessment for materials and building systems. Sustainability benchmarks were established before works commenced, embedding high performance into the project specifications and construction program.

Our project highlights

Eden, New Bailey

UK



Sustainability features



Net zero carbon target - UKGBC
5.5 star rating - NABERS
Outstanding - BREEAM
Platinum - WiredScore

Eden is a speculative, 12-storey office development on the English Cities Fund's (ECF) New Bailey, Salford Central scheme. ECF has a vision for the project to be as sustainable, energy and carbon efficient as possible, increasing biodiversity and creating a positive impact on society. The scheme is targeting net zero carbon in operation and has been designed in line with the UKGBC Net Zero Carbon Framework Definition. The building will be one of the first in the UK to have its operational performance verified using the NABERS UK scheme, targeting a 5.5 star rating and is also set to be BREEAM Outstanding and WiredScore Platinum.

Greater Curtin University Masterplan

Australia



Sustainability features



Onsite renewable energies
5.5 star rating - NABERS
Outstanding - BREEAM
Platinum - WiredScore

With approximately 51,000 students, Curtin University is the largest University in Western Australia. Sustainability is a key part of this initiative to create not only urban spaces of high quality but also integrating contemporary design with future trends and technologies such as renewable energies, biophilic design and innovations in public transport.

Our workplace



Our workplace

We practice what we preach.
We aim to create the most productive and rewarding working environment possible. Our workplace culture is rooted in wellness, equity, diversity and inclusion.

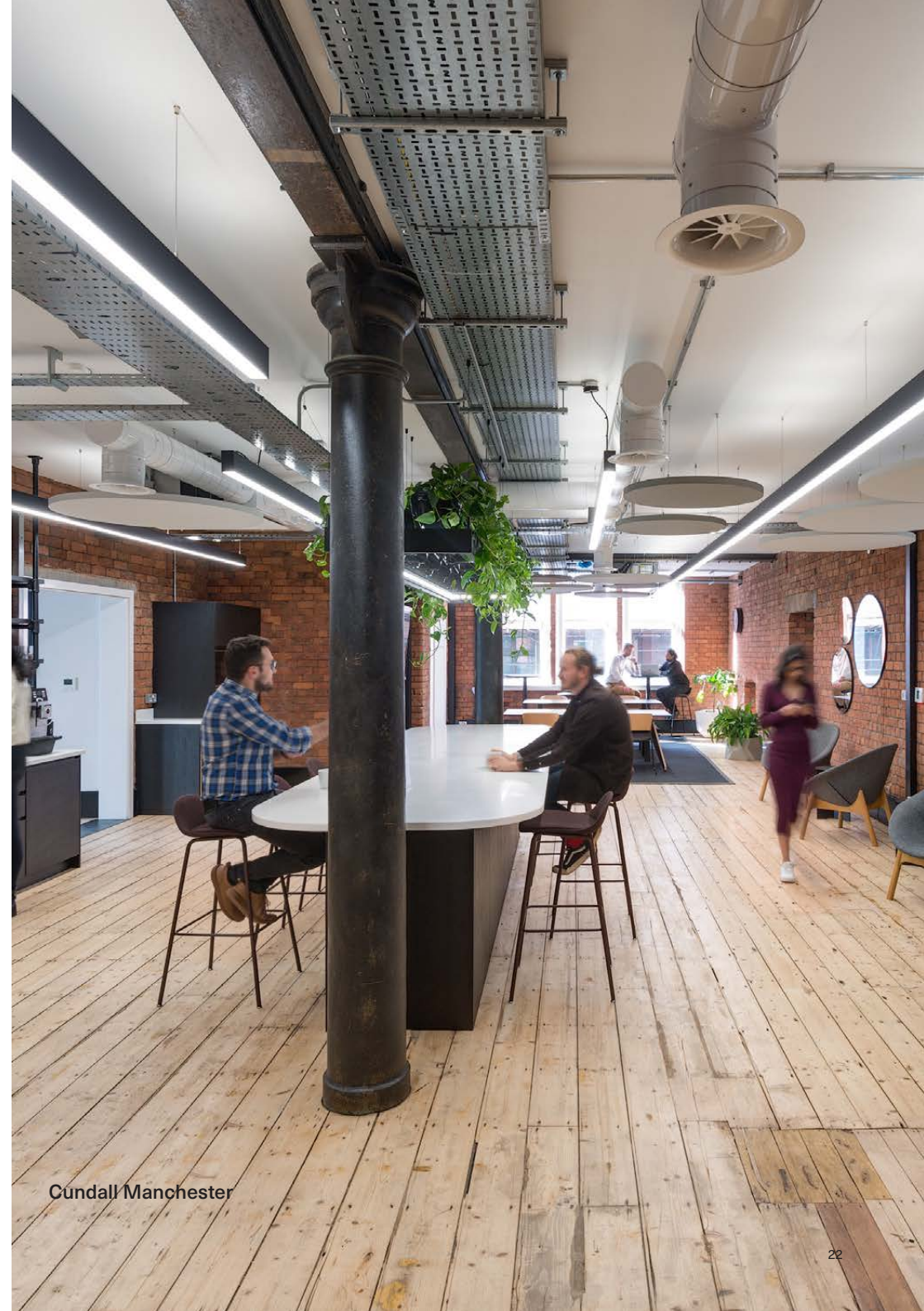
Ethics & Equity

Cundall are working hard to take a proactive lead on building a diverse and inclusive industry, starting from within.

We offer here at Cundall, a workplace culture that offers dignity and respect to all, that encourages the sharing of ideas and perspectives, and that values difference.

Since publishing our first global diversity and inclusion strategy in January 2020, a lot has changed at Cundall, and much for the better.

Over the last 12 months, we have implemented a variety of initiatives aimed at making Cundall the most inclusive consultancy in our industry.



Cundall Manchester

Ethics & Equity - Affinity networks - Mosaic



New Affinity Networks

In February 2021, we launch two new affinity networks, Mosaic, GAIN.

Mosaic is Cundall's Ethnicity & Culture network and provides a forum for people of minority and underrepresented ethnicities and cultures to connect and share experiences and ideas. Mosaic is influential in promoting ethnic diversity, representation and inclusion at Cundall.

The Mosaic network aims to facilitate discussion among colleagues around the business who are of a minority or underrepresented ethnicity or culture, to celebrate cultural diversity, and to eradicate workplace inequalities.



Network Chair

Victoria Olawoyin

Business Development
and Marketing Manager

The network is inclusive, and as such welcomes participation from any colleagues (regardless of ethnicity) who would like to learn about and support diversity and inclusion on the basis of ethnicity and culture.

What are our plans for 2021 2022?

Black history month: This event will be the occasion to celebrate the contributions and achievements of Black and Brown people throughout history. We aim to offer some handy and entertaining resources.

What did we do from July 2020 to July 2021?

Anti-racism sources

We stand in solidarity with our black siblings in the UK, USA & around the world – today, and every day. We recommit to active anti-racism & intersectional feminism as we continue to fight sexual violence & abuse and support survivors. As part of this, and as a majority-white workplace, we believe education is imperative, so our staff team has collated some resources for each other and anyone else who would find it beneficial.

Partner & Director – Lunch & Learn

We organised one hour screening of an interview with John Amaechi OBE, followed by a Q&A. An event aimed at generating thought and discussion among our leadership team around racism, meritocracy, bias, and allyship.

Creation of a Glossary of Terms

At Cundall, we use the term 'minoritised ethnicities' in much of our corporate diversity literature, acknowledging that minoritisation is 'active' and that a minority is not something that a person IS, but a set of geographical, social and political realities that they encounter. The language we use in this area is always evolving, and terms such as 'BAME' can be useful when interpreting and communicating (for example) large samples of survey data. However, the temptation to use such labels in every-day language should be resisted to avoid grossly oversimplifying diverse religious, ethnic, racial, national, and cultural experiences. We defined these terms: BAME, BME, POC, BIPOC, culture, ethnicity, Intersectionality, privilege, race, Systemic Racism.

Ethics & Equity - Affinity networks - Gain



GAIN is Cundall's Gender, Affinity and Inclusion Network. GAIN provides a supportive network for women and gender minorities; and works to influence greater gender diversity, representation, and inclusion across the practice.

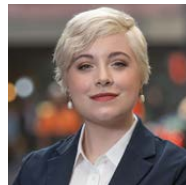
The GAIN network aims to facilitate discussion among colleagues around the practice who are of a minority or underrepresented gender, to raise awareness of gender inequality, and to further gender equality at Cundall. The network is inclusive, and as such welcomes participation from men as allies who wish to play an active role in challenging gender inequality in our business and our industry.



UK Chair

Gemma Christian

Associate



APAC Chair

Meghan Hadley

Marketing Executive



MENA Chair

Olga Litkovets

Director of Business Development and Marketing

What are our plans for 2021 2022?

- The launch of the Menopause at Work Guidance and the Menopause Matters staff support network.
- We will be celebrating in March 2022 Women's History Month by introducing 23 women who have inspired us at Cundall, one for each weekday in March. GAIN asked Kaleidoscope, Mosaic, and the Diversity and Inclusion leadership advocates to provide the names of women throughout history who have inspired them personally. Each week, we will post the names of the women from each respective group on Yammer with an explanation of why and how they have inspired us.

What did we do from July 2020 to July 2021?

Renaming meeting rooms

As part of International Women in Engineering Day, GAIN proposed renaming the meeting rooms in Newcastle after a more diverse group of people who better reflect the variety of people who work for Cundall. Engineering heroes were selected, such as Dorothy Buchanan and Alan Turing. The same initiative has been implemented in Australia in our office in Sydney, Melbourne and Perth, including inspiring figures as Evelyn Scott and Margaret Feilman.

Speed mentoring

Women are generally less likely to reach out to a potential mentor especially in a predominantly male environment and may be less likely to partake in events where relationships are created and strengthened.

As part of International Women in Engineering Day, GAIN hold a speed mentoring event on 23rd June to provide women across the UK and Ireland offices (up to and including Principal level) the opportunity to meet senior leaders around the business whom they might not otherwise have a chance to, with the goal to build relationships to aid their career progression. It was a great success with some connections made during the event carried beyond it into mentoring relationships.



"I was delighted to have the opportunity to take part in our internal Speed Mentoring event. It gave me the opportunity to give back some of the good advice I was given in the early days of my own career, & share knowledge I've picked up as I progressed from Engineer through to Partner. It is also a good opportunity for me to see first-hand, the talent we have in our other offices that are progressing through the company. So many people have contributed to my development over the years, both as an engineer & as a person. I would like to do the same for others."

Belinda Morgan, Mentor



"Thank you to Cundall for organising the Speed Mentoring event. It was really interesting to hear personal stories from a variety of colleagues around the business, and be able to ask questions under such a welcoming environment. This experience has challenged me to re-asses my own goals and provided a pathway to make connections with colleagues from around the business on a more personal level"

Ola Young, Mentee

Ethics & Equity - Affinity networks - Kaleidoscope



Kaleidoscope is Cundall's LGBTQ+ network and is almost 3 years old! Kaleidoscope offer a dedicated forum for Cundall employees who identify within the LGBTQ+ umbrella to connect. Kaleidoscope also works to promote LGBTQ+ inclusion at Cundall.

What are our plans for 2021 2022?

LGBT+ History Month focuses its activities on a different theme each year - the theme for 2022 is 'The arc is long' which is paraphrased from Dr Martin Luther King Jr, who said "The arc of the moral universe is long, but it bends towards justice" This theme feels particularly poignant today.



Co-Chair

Maciej Krezolek

Digital Automation and Analytics Lead



Co-Chair

Maria Knowles

Administrator



Secretary

Sasha Brewer

Engineer



Executive Sponser

Belinda Morgan

Partner

What did we do from July 2020 to July 2021?

Every year in the UK, February marks LGBT+ History Month, and this year to celebrate, Kaleidoscope have created an informative campaign to raise awareness. Their campaign includes:

- An information booklet on LGBT+ History
- A lunchtime documentary-watching session - Queer Britain: Out On The Streets, the 3rd episode of a 6-part series that can be found on BBC iPlayer or YouTube.
- To conclude the celebration of this month they will be holding a lunchtime 'pub' quiz.

Ethics & Equity - Other initiatives

Alongside our affinity networks, we have also implemented several inspiring initiatives.



New recruiting policy

The new policy ensures that all recruitment decisions at Cundall are made via open, competitive campaigns that encourage applications from the widest pool of talent. We also proactively approach candidates with suitable experience from underrepresented backgrounds and identities to apply for opportunities, ensuring we are 'casting the net' as widely as possible, and reaching traditionally overlooked communities.



Rooney Rule

The same policy has also committed us to adopting the Rooney Rule as a method to proactively increase the representation of women, gender minorities, and people of Black and minoritised ethnicities - particularly within leadership roles. This bold step requires us to interview at least one ethnic minority candidate and one WIN (woman/intersex/non-binary) candidate for all Partner, Director, and Head of Service roles.



Email signature

We added the possibility of adding our own pronouns to our email signature: she/her, he/him, they/them, ze/zir. Now many staff of all genders are choosing to include their pronouns not only to prevent being misgendered themselves, but also as a visible act of solidarity with trans, non-binary, and intersex people.



Alex Dryden Award

This year marks the first year of the Alex Dryden Award, created in honour of Alex Dryden who passed away in 2019. The award will be presented annually to a member of staff who has gone the extra mile to help others and make their lives better.

Julie raised **£4,000** for **St Oswald's Charity**. She has always shown selfless approach and kind nature. She is very good at bringing light into the darkest of days.



Julie Verrill
Engineer
Transportation,
Newcastle

What to expect for 2021 in the space of ethics & equity?

We should take pride in the positive trajectory demonstrated last year, not least given the significant challenges presented by the global pandemic during this period.

“Workplace policies and practices shaped over time by and for a narrow section of society can perpetuate discriminatory outcomes. Like so much of what needs to be discussed to address workplace inequalities in all organisations, this can feel like a deeply uncomfortable truth.

However, it is truths like these that we are now discussing more widely at Cundall, and these conversations are leading to increased awareness, and positive changes to how we do things to build a business that works for all. Overall, we should take pride in the positive trajectory demonstrated last year, not least given the significant challenges presented by the global pandemic during this period. To continue this progress, we now need to see proactive leadership engagement, advocacy and accountability.

If the burden for driving change is left to those colleagues who are for now overwhelmingly absent from positions of power, and most exposed to workplace inequalities, these individuals and our wider strategy will be set up to fail. Having laid the foundations, it is now time for Cundall's leadership team to convert expressions of support and good will into tangible action.

On that note, following on from the success of our pilot Inclusive Leadership programme with a group of 6 UK Partners, we are now rolling the programme out globally. I am delighted to have received 20 new volunteers among our Partners and Directors to participate in the next phase of the 12 month programme that will cover a range of subjects including self-reflection, embracing discomfort, and taking action to drive inclusion.”



Kieran Thompson
Head of Talent, Diversity & Inclusion
Newcastle

Health & Wellbeing

At Cundall, health and wellbeing are integral part of our priorities. We want to support every person through a varied range of activities resonating with their own experiences.

For the second year, we have launched our global health and wellbeing survey. It provided us with valuable insight into the health and wellbeing of our people during these unprecedented times. It was an opportunity to compare the results with those of our first survey back in December 2019 and use this data to really focus the wellbeing support we offer over the next 12 months and beyond.

Though there are some clear regional differences - social events, healthy food/snack initiatives, flexible working opportunities and additional annual leave are the most favoured initiatives related to wellbeing. These were also the most popular initiatives last year. Looking forward, staff are most interested in further opportunities for flexible working, physical activity and stretching/yoga sessions, subsidised gym membership and activities that focus on promoting good mental health.

Crucially, 75% of staff perceive being too busy/lacking available time as the key barrier to accessing such activities (this is an increase on 60% in 2019). In the future, we will ensure their participation is both encouraged and facilitated.

Discover more about our strategy for health and wellbeing by reading our latest reports .



Health & Wellbeing

Working from home has not stopped the office socials. From Zoom pilates and yoga at lunchtime to a 'painting and prosecco masterclass', wine tasting and a Bingo night, our offices across the world have shown creativity to keep our teams connected.



Social interactions during lockdown

There has been an increase in communication to the global business via the Health and Wellbeing Yammer group, our intranet. We have taken the opportunity to use this tool to reach out to our people during the pandemic, talk about how we can support ourselves and each other and share useful resources. For example, we shared an article showing how some of our Partners are coping with lockdowns and what tips they have for managing their mental health.



Mindfulness Course

In spring, our people have enjoyed 7 live mindfulness sessions with Alan Muskett from Right Mindfulness. From guided meditations to positive growth mindset, we learnt techniques to build mindfulness into life. Mindfulness is the practice of paying deliberate attention to the present moment – with acceptance and without judgement. The act of being mindful switches off the fight or flight response and triggers the relaxation response, which has huge benefits on our nervous system and neural connections.



Men's Health Week 2021

As part of Men's Health Week 2021, we partnered with UNUM to organise a webinar. Developed to increase understanding about common gender-specific health conditions. This webinar will explore why gender health inequality remains and how we can all work on creating a workplace where we can all be our best selves.

Learning & Development

Learning & Development is a key enabler for us to achieve our vision of being 'agents of change for a sustainable world'. We provide opportunities for all of our employees to learn and develop current and new skills through our wide range of learning interventions.

In 2020, when our global workforce commenced working from home, our Learning and Development team immediately looked at ways to modify and develop learning resources that could be delivered remotely or through online formats. Our employees were able to continue to access the LinkedIn Learning online content, with bespoke content curated into subject topics including software, technical and personal skills development. Continuing Professional Education (CPD) training was also moved from office based delivery to a virtual environment.

To ensure that our clients and industry also maintained their development whilst working remotely, Cundall developed a series of Thought Leadership webinars and podcasts.

In 2021, commenced our Cundall Leadership Series training programme. These modules provide our leaders with the necessary skills and tools to be able to effectively and confidently manage and lead their teams.

The programme comprises of 3 key areas:

- Leading yourself
- Leading others; and
- Navigating Cundall systems and processes.

Topics include how to provide feedback, managing your team, delegating effectively, building trust and resilience and communicating as a leader.

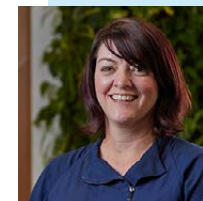


Finally, 2021 saw us welcome our largest intake of graduates and apprentices into our early careers structured programmes, with just over 100 starting their career with Cundall across our global offices. By focussing our development at all levels throughout the practice, this will ensure we do achieve our vision.

"The training has been well received by the practice with 150 leaders now signed up to attend modules which will be conducted both in person and virtually to accommodate preferred delivery style requests.

Feedback received has been positive with participants keen to apply their knowledge and new tools to their role.

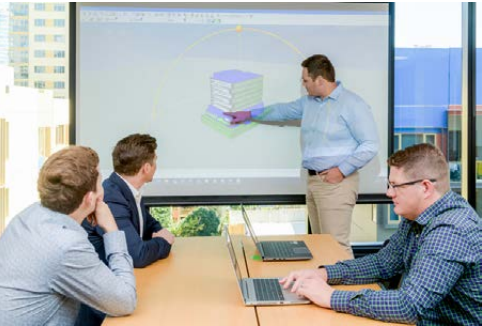
Ongoing coaching has also been provided to participants to support them."



Louise Worth, Learning & Development Manager, Newcastle

Materials & Supply Chain

At Cundall, we prioritise materials and products that reduce natural resource consumption, have low embodied impact, are non-toxic and can be easily repurposed or recycled at end of life. Throughout the year, we moved into two offices in Australia.



New office - Perth

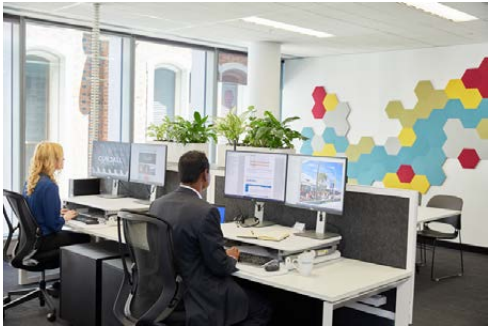
“Having a good indoor air environment with an appropriate ventilation strategy in place has a positive impact on human health and wellbeing as well as productivity.”



Jenny Carrington,
Principal Engineer, Air
Quality, Birmingham

Sustainability features

-  Indoor air quality monitor
-  Natural daylight
-  Energy efficiency technologies
-  Easy access to sustainable commuting



New office - Brisbane

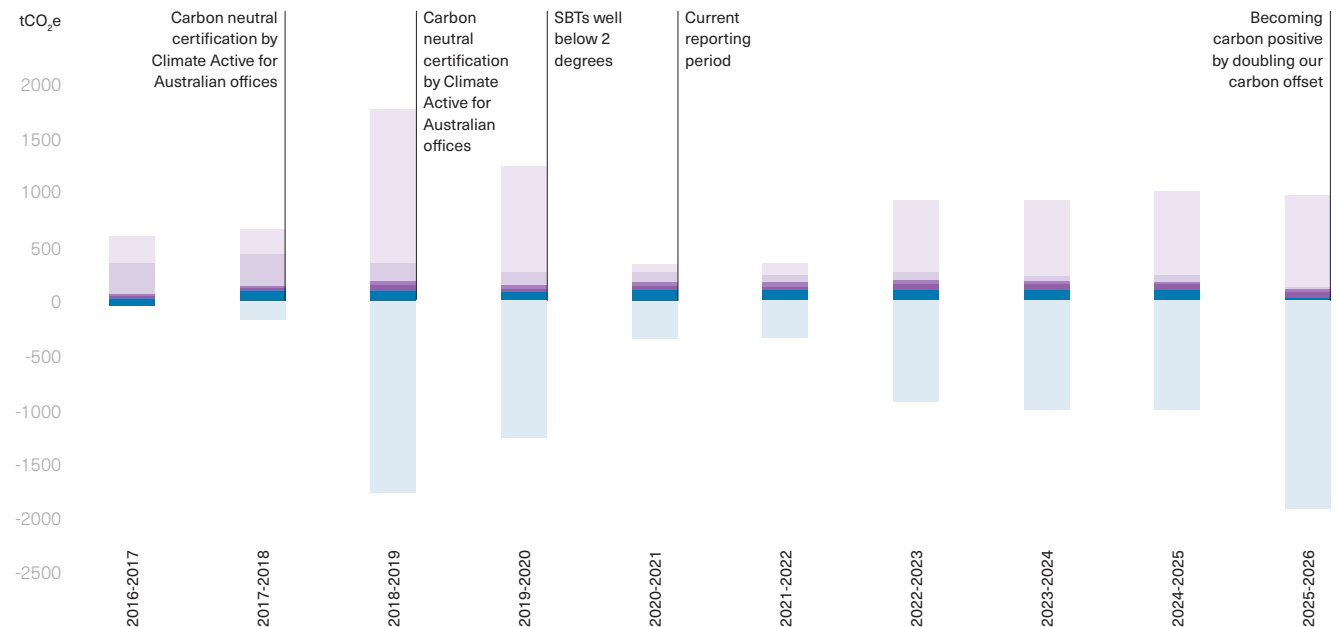
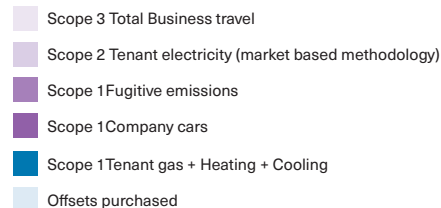
The embodied carbon of timber products is low relative to many other construction materials. Carbon is stored during tree growth and continues to be stored through its use as a building material. At the end of its life, carbon is released either through natural decomposition, returning other nutrients to the soil, or through the generation of heat/energy by burning it as a fuel.

Sustainability features

-  100% Cross-laminated timber
-  100% Recycled water for irrigation
-  Passive cooling design
-  Communal beer taps

Our journey to carbon positive

In 2012, Cundall committed to becoming carbon positive by FYI 2025.



Net zero pledges around the world and in the construction industry are expanding, and the potential for a green recovery from the COVID-19 pandemic presents an opportunity for the world to close the growing gap between existing commitments and what is needed to limit global warming to meet the Paris Agreement goals.

Achieving net zero carbon must be at the heart of our response to this crisis. As the built environment is responsible for up to 40% of global carbon emissions, it is imperative that we develop scalable solutions to meet this challenge.

We have been monitoring and reporting our carbon footprint since 2012, when we became the first consultancy to be endorsed as a One Planet Company. Our vision, “Agents of change for a sustainable world” and, “Construction industry thought leaders” led us to set the goal of becoming carbon positive by 2025.

We started our decarbonisation journey by obtaining carbon neutrality for our Australian offices in 2019, covering our carbon emissions for the 2017/18 reporting period. This was certified by the Climate Active Scheme, which is well established in the local market. We expanded and achieved carbon neutral certification across all our global business in September 2020, covering the 2018/19 reporting period. We feel it is important that this is independently certified therefore we decided to work with the Carbon Trust. In 2019/20, we also gained approval from the Science Based Targets initiative for our greenhouse gas emission reduction target. This is different to Carbon Trust and Climate Active that it is an absolute commitment and does not allow for carbon offsetting in meeting this.

We made the commitments to go beyond here. By 2025/26, we aim to become carbon positive. This means that the quantity of carbon offsets purchased will outweigh our carbon footprint.

Our journey to carbon positive

How do we plan to become carbon positive by FYI 2025/26?

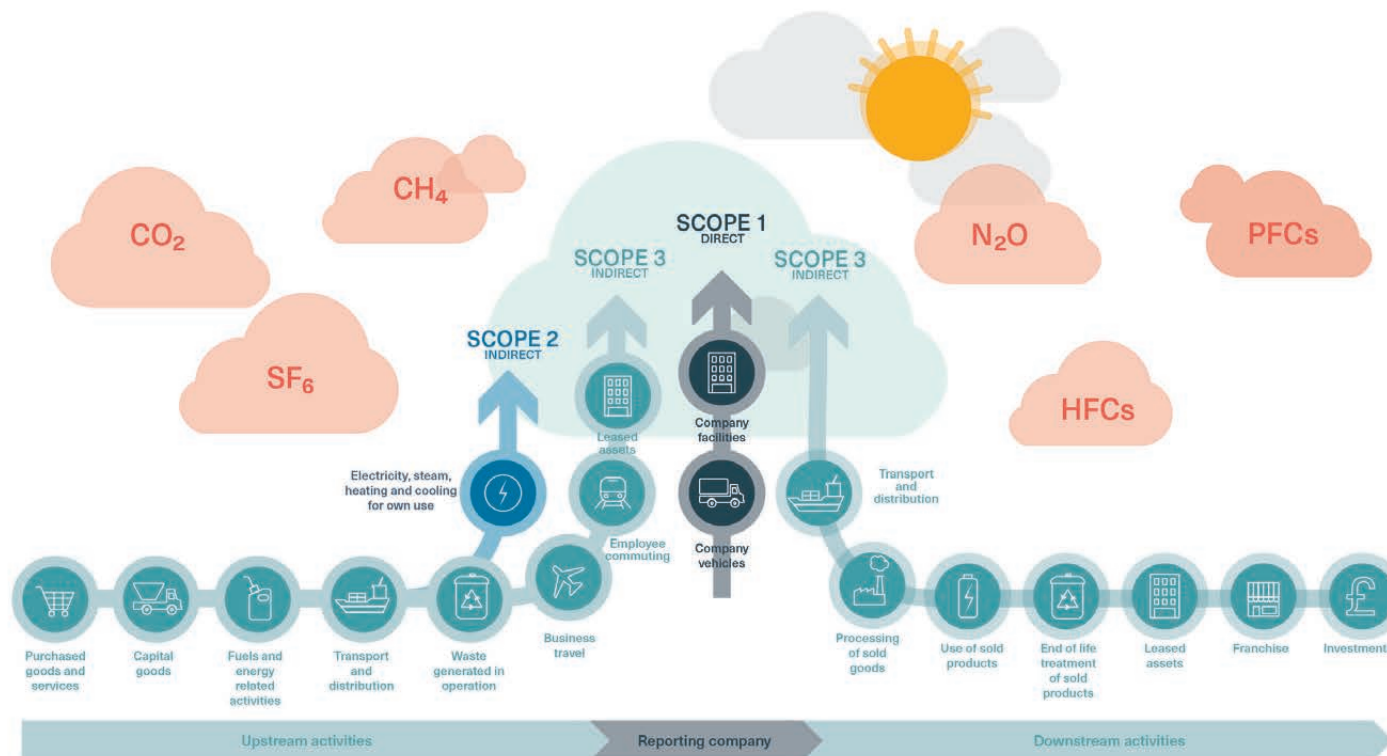
At Cundall, we developed a decarbonisation strategy for reducing our carbon footprint. Our scope 1, emissions resulting from our own emissions, is being reduced through energy efficiency initiatives and switching from gas to electricity heating systems.

To tackle our scope 2, emissions from electricity purchase, we conduct energy audits, implement energy efficiency initiatives, and purchase renewable energy.

Lastly, our scope 3, including business travel, commuting, waste, water and purchased goods and services requires cross-functional initiatives and policies. This set of tools includes our SusTeam in each office to drive local change, implement a local cycle to work scheme and encourage adherence to the office fitout guide. As an international organisation with projects and teams across the globe, business travel represents our most significant impact. We are committed to releasing a new sustainable travel policy, ensuring that when travel is necessary, the most sustainable option will be selected.

Finally, having taken steps to reduce our footprint as far as possible, we identify appropriate carbon offsets for our resultant emissions.

By 2025, we plan to offset 15% more than our own carbon footprint, leading to carbon positive.



Our journey to carbon positive

What did we deliver to achieve our carbon positive target throughout this reporting period?



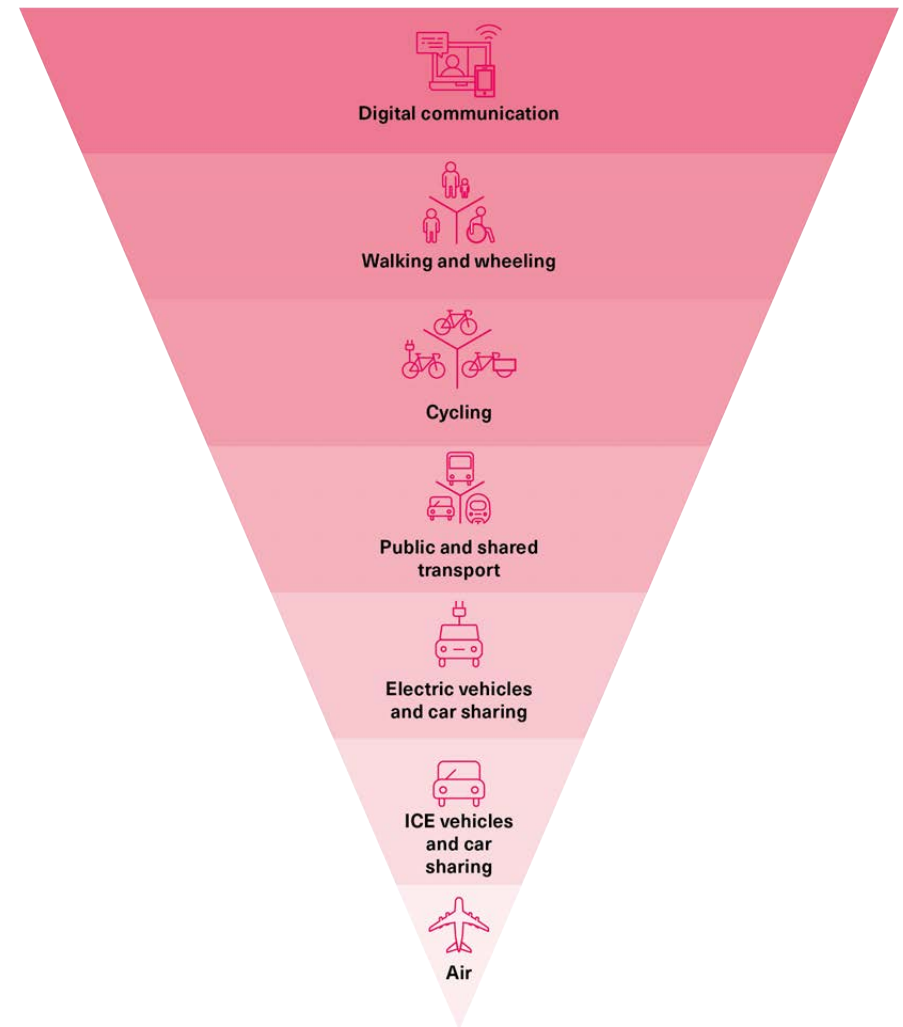
New corporate business travel booking system

In 2018, most of our offices based in the UK implemented different travel booking agencies. These collaborations allowed us to improve our business travel data quality. Analysing our carbon footprint was key to drawing up our internal decarbonisation strategy. In 2018/19, our carbon emissions from business travel consisted of 1,565 tCO₂e, with an intensity of 1.93 tonnes per person. In 2020/21, due to the COVID-19 pandemic, our emissions have plummeted by 95% to a total of 74.71 tCO₂e with an intensity of 0.09 tonnes per person.

Before the pandemic, attending meetings, conferences and trade shows in another country or convening in-person to sign deals was the norm.

The COVID-19-induced pause on travel, which prompted an estimated 75% drop (1) in aviation emissions at the peak of lockdowns in 2020, has shone a spotlight on the role that business travel plays in climate change. Even with the world shuttered and a record

drop in global emissions, we still added 39 gigatonnes of CO₂ (2) from all human activities to our atmosphere last year. 2020/21 served as a reset moment for us, forcing us to reassess how and why our people travel, and what our business trips will look like in the future. It confirmed our decision to incorporate a new travel booking agency called Corporate Traveller. Using its platform, business travel data across all offices is gathered and captured through the same process. Based on the booking and carbon monthly reports, we look to curb travel-related emissions by limiting trip frequency, drawing on lessons learned during the pandemic. Keeping internal meetings online, encouraging travel by train and optimising schedules to reduce the number of flights taken are extremely effective ways to reduce carbon emissions in line with what is needed to reach the Paris Agreement goals. For our next reporting period 2022/23, we will implement a new sustainable business travel policy emphasising a sustainable travel hierarchy.



(1) How much did COVID-19 lockdowns decrease emissions? ([fastcompany.com](https://www.fastcompany.com/90504440/covid-19-lockdowns-decrease-emissions))

(2) Global Carbon Project: Coronavirus causes 'record fall' in fossil-fuel emissions in 2020 - Carbon Brief

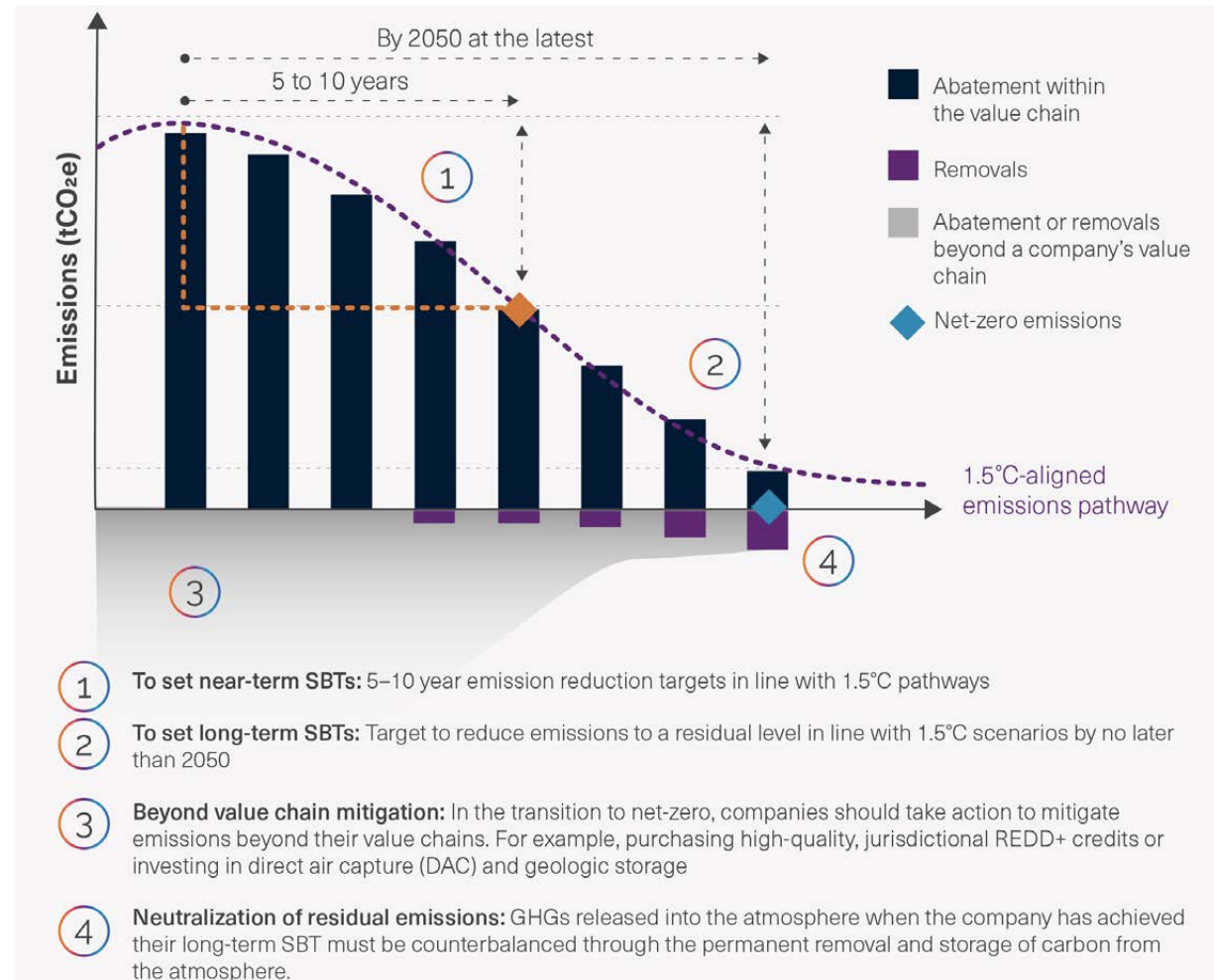
Our journey to carbon positive



New Science Based Targets

In 2018, we joined the Science Based Targets initiative (SBTi) by approving our targets across our three scopes aligned with well below 2 degrees. Under the approved targets, we have committed to reduce our Scope 1 and 2 GHG emissions by 63% percent per full time equivalent employee by 2025.

Considering the release of the latest **IPCC Reports**, we are currently updating our targets to align with the 1.5 degrees pathway, which is currently the most ambitious pathway suggested by climate scientists. We will also commit to set up long term targets aligned with the **The Net-Zero Standard**. This framework gives companies a clear blueprint on how to bring their net-zero plans in line with the science, which is non-negotiable in this decisive decade for climate action.



Our journey to carbon positive

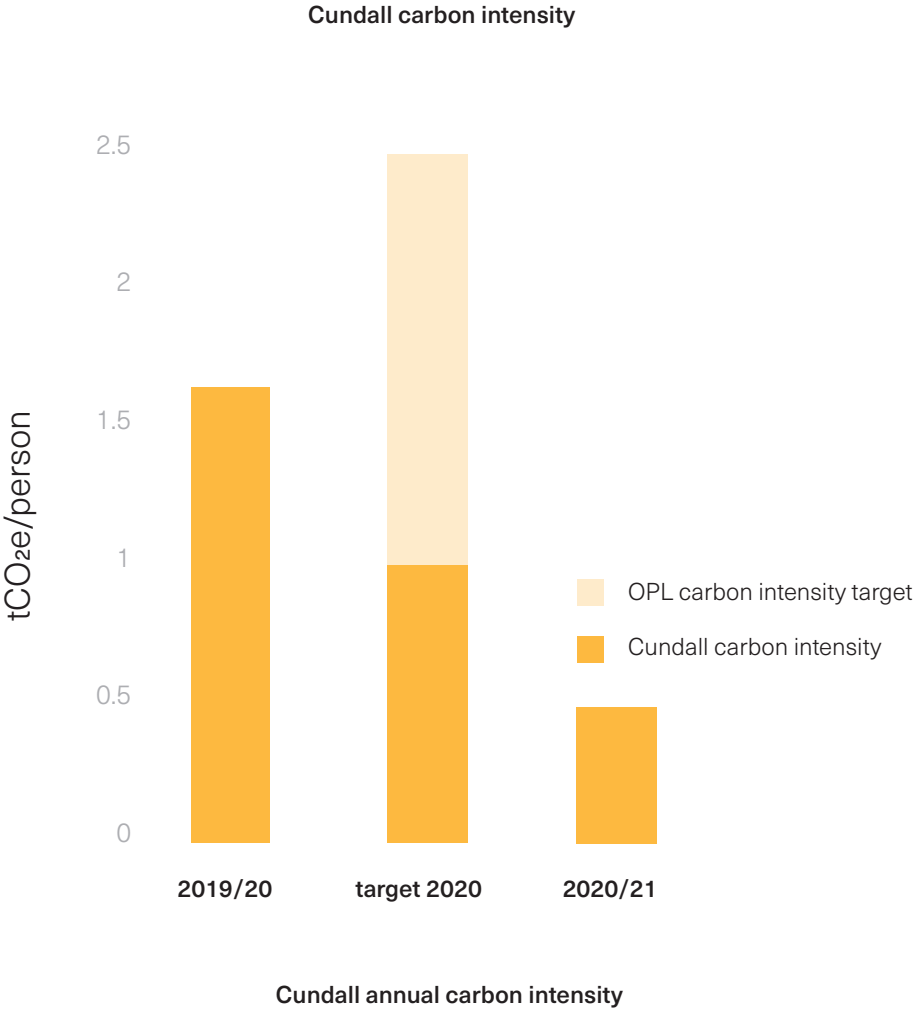


Our carbon neutral certification

We achieved carbon neutrality for our global corporate carbon footprint for the period commencing 1st July 2019 to 30th June 2021. Cundall committed to maintaining carbon neutrality for all global sites (Scope 1,2 and business travel) according to PAS 2060 for the period commencing 1st July 2019 to 30th June 2021. Through this certification, we work towards year on year reductions to meet a total annual carbon footprint target of 2.5 tCO₂e/per person/per annum in 2020 and 1.5 tCO₂e/per person/per annum in 2025. This carbon footprint includes Scope 1, Scope 2 and Scope 3 (business travel) prior to the purchase of renewable energy and carbon offsets.

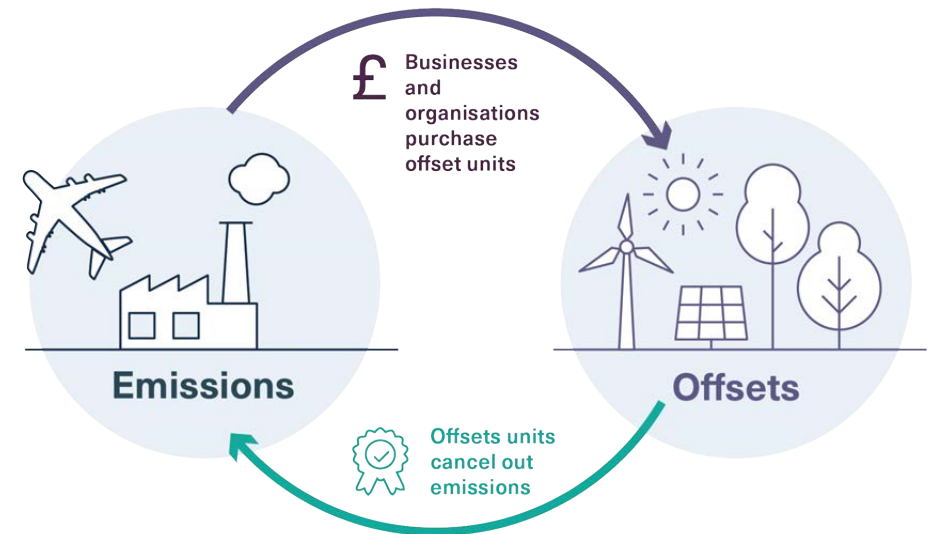
Our carbon emissions for FYI2019 and FYI2020

Our carbon emissions for 2019/20 and 2020/21 For the period commencing 1 July 2019 30 June 2020, our annual carbon intensity was 1.65 tCO₂e/person reaching our target of 2.5 tCO₂e/person for 2020. For the period 1 July 2020 30 June 2021, the carbon intensity was 0.41 tCO₂e/person



Our journey to carbon positive

When selecting our carbon offset projects, we want to optimise our positive impacts on the environmental and local community.

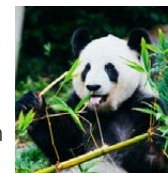


Our carbon offsets for 2019/20 and 2020/21

Our carbon offset strategy is one that prioritises energy efficiency of assets, the procurement of low carbon energy for operations and the reduction of all scope 3 emissions ahead of the acquisition of carbon offsets. We always select high-quality offsets using Verified Carbon Standards. The projects ensure additionality; they will be permanent sources of sequestration or carbon reduction, not temporary. Lastly, we support local, long term projects giving security to the communities in which we invest.

Clean Cookstoves for the Mamize Nature Reserve with WWF

- These projects were developed in villages around giant panda habitats to ease pressure on the bamboo forest and protect these iconic bears.
- Eight years on and 3,900+ installed stoves later, the project is working! 600+ hectares of forest has been saved each year.



Guangxi Waste-to-Energy

- This project installs specific waste collection stations, so locals can dispose of their organic waste safely.
- This is then compiled into a new biomass combustor which turns the waste into renewable energy, connected straight to the power grid.
- The clean biomass energy generates 216,000 MWh of power a year, providing efficient and reliable heating and electricity to 82,000 families in China.
- The project has also boosted the local economy by creating employment opportunities and business through the buying and selling of biomass.



SusTeam

In 2012, Cundall became formally endorsed as a One Planet Company by the charity Bioregional. From this endorsement, the SusTeam was born.

List of initiatives

- Photography contest
- 5km walk
- Challenge homemade jam and pickle
- Campaign about recycling
- Workshops and webinars to live a more sustainable lifestyle
- Christmas handmade crafts
- Raising funds for Blondie association charity



"We believe we all have the power within us to make an impact. We can all make a difference. Our SusTeams, present in all our offices, play a key role in creating local impacts."

Denisa Matei, Engineer
Romania

From July 2020 to July 2021

20 offices has its own SusTeam with a leader and other members. Our SusTeams actively engage our staff about sustainability and contribute to local communities.

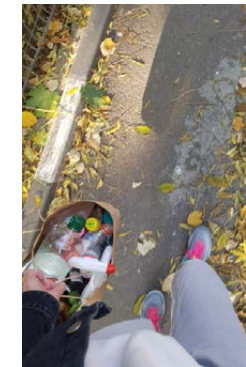
The Romanian government has imposed strict restrictions. Although our office remained closed, our SusTeam leader Denisa showed imagination with her team.



Christmas handmade crafting



Homemade jam and pickle challenge



Sustainable lifestyle initiatives

Our homes and community



Pro bono projects

CRASH delivers meaningful social impact to communities across the UK by helping homelessness charities and hospices with vital construction projects.



Thanks to Cundall, CRASH has helped **31** homelessness and hospice projects from April 2020 to March 2021.

In total, Cundall contributed £18,304



£9,304

Professional expertise donated.



£9,000

Grants made possible through Corporate Patron donations and fundraising..

Homelessness charities:

- Emmaus Coventry & Warwickshire
- Emmaus Glasgow
- Winchester Nightshelter
- Wintercomfort for the

Hospices:

- Halton Haven Hospice
- Rennie Grove Hospicecare

TED Talk

We have partnered with TED, a non-profit dedicated to researching and sharing knowledge that matters through short talks and presentations.



TEDxYouth@Perth will be the first TEDx event in Australia to be certified Carbon Neutral by Climate Active.



Emissions



Reduce emissions



Remaining emissions

+



Offset projects to eliminate remaining emissions

=

0

Zero emissions (the state of being carbon neutral)

We ensured the certification by reducing the energy demand and invested in WA's Yarra Yarra Biodiversity Corridor, a vital project that removes emissions from the atmosphere.

The emissions from TEDxYouth@ Perth will be neutral. This includes the journeys the audience must undertake to attend.



CUNDALL