

Design of the Workplace Report

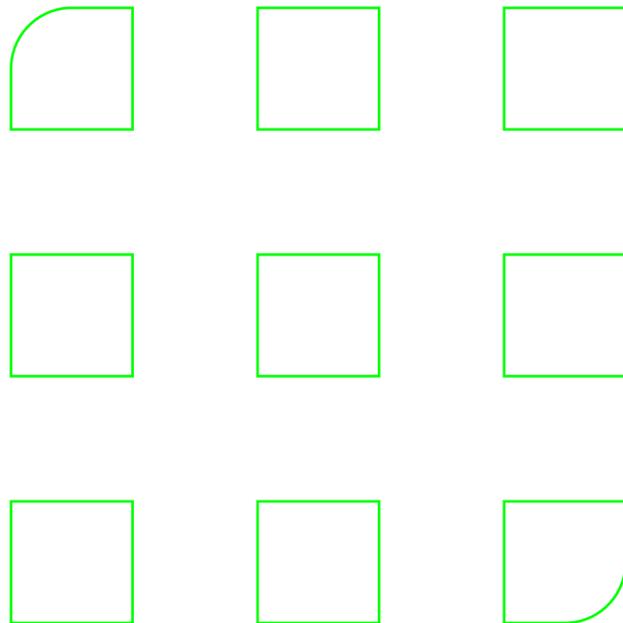
Spotlight on the current and
future sustainability of the
office environment

Brookfield
Properties

Foster + Partners



**ECOCITY
WORLD SUMMIT
LONDON**



Introduction



Dan Scanlon
*Executive Vice President
and Head of U.K.,
Brookfield Properties*

As a leading global developer and operator, Brookfield Properties is committed to sustainable property development and refurbishment through the creation of inspiring, efficient, resilient and future-fit spaces that support the needs of our tenants and wider communities – today and tomorrow.

The benefits of sustainable design within the workplace go far beyond the positive environmental impact – offering deeper benefits to the working culture, job satisfaction and the health and wellbeing of employees.

What's clear is that this way of thinking resonates with the findings of this year's *Design of the Workplace* report, which we are delighted to have commissioned with our long-standing partner Foster + Partners – the pioneering architecture and design studio rooted in sustainability.

Launched at the Ecocity World Summit¹ in June 2023, this is the first report in the U.K. to give a voice to today's workers on what they want from their office environment, putting a particular focus on younger employees. As the future of the workforce, there's a strong case for everyone involved in office design to take notice.

Informed by the findings, we are also proud to put into action our own pioneering ESG initiative.

Representing an investment in science-based expertise, Accelerate ESG is a collaborative approach to help our occupiers achieve their ESG goals by tracking data, upskilling their teams and connecting with other ambitious organisations to share knowledge and achieve more together. This aligns with our commitment to meet our own near-term, science-based target of reducing 50 percent of Scope 1, 2 and 3 emissions² by 2030 through greater tenant, supply chain and community engagement.



Our objectives

With this report, we wanted to explore the psychological impact of well- and poorly designed workplaces through a people-first lens, while also understanding the importance of a thoughtful, sustainable workplace and spatial design when it comes to building communities and enhancing working culture.

Developed in partnership between Brookfield Properties and Foster + Partners, *Design of the Workplace* and its findings carry importance for all business decision makers, design professionals and sustainability experts – as well as anyone who works in an office.

Our methodology

Perspectus Global polled 3,451 office workers who work at least two days per week in their company office, comprising 1,155 respondents from London and at least 200 each from key cities including Manchester, Birmingham, Leeds, Bristol, Sheffield, Newcastle, Glasgow, Nottingham, Cardiff and Leicester. Of the total number, 3,250 respondents came via the Perspectus Global panel and 201 came via the Brookfield Properties' tenants survey outreach.

Segmentation

We identified three types of office space based on their sustainability and design, and segmented the data by the respondents who chose each type.



Environmentally friendly

A well-designed sustainable space combined with a company ethos that cares for the environment



41% of those polled said this described their office space



Environmentally neutral

Good features but still with room for improvement and no real focus on sustainability



52% of those polled said this described their office space



Environmentally unfriendly

An uncomfortable place to work that doesn't feel sustainable for employees or the planet



7% of those polled said this described their office space



The Gilbert, Finsbury Square



More and more, we are seeing that workers want to be engaged in finding and implementing sustainable practices when it comes to the buildings they work in.

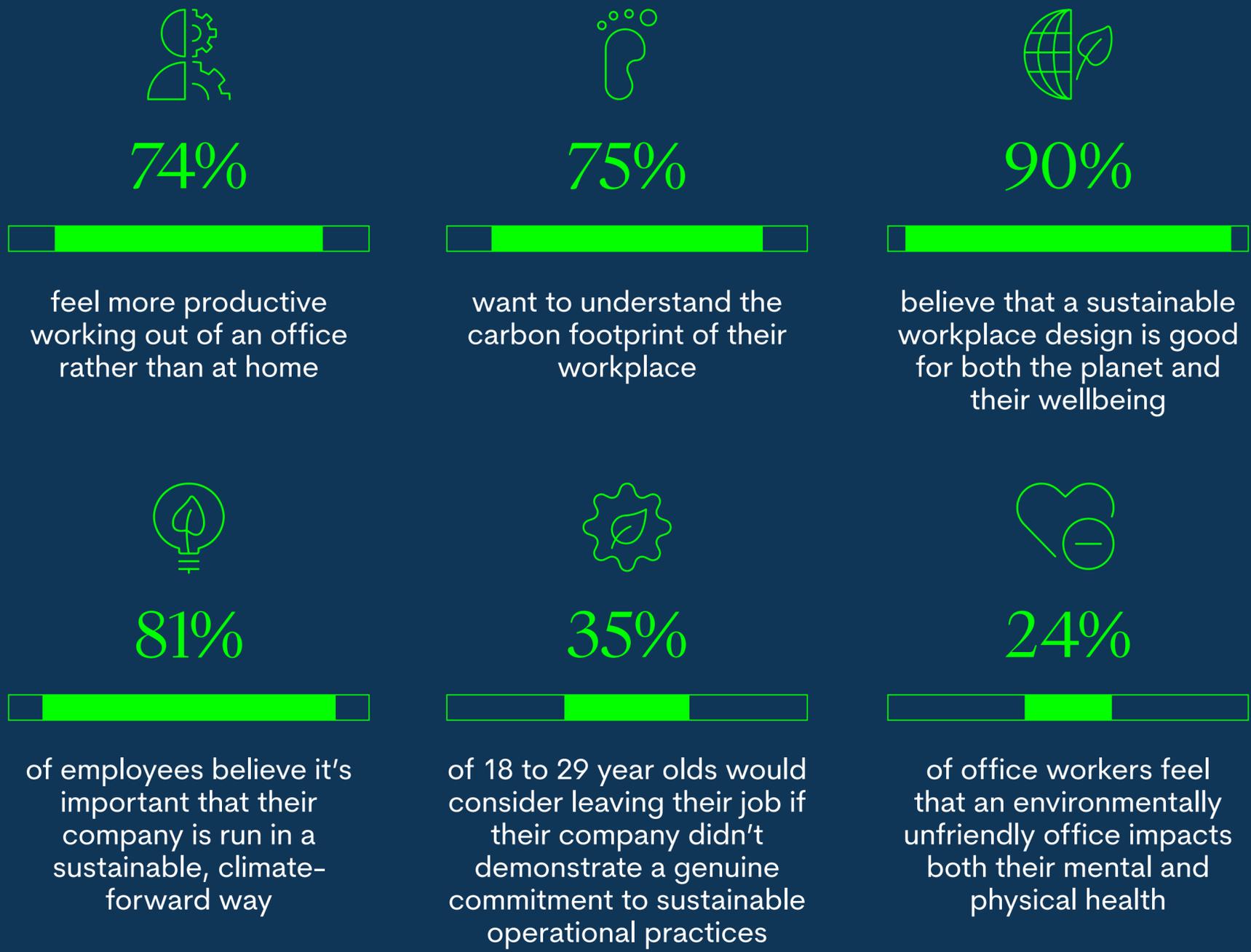
Foster + Partners

Our findings

We found that the wellbeing benefits of an office show clear gains in productivity, contentment and calm. Sustainability carries increasing importance to each new generation, something that brings with it opportunities and challenges. Data showed that office workers, and younger employees in particular, are demanding more from their employers – findings that have the potential to help business leaders in what's currently a tight labour market³.

Alongside Foster + Partners, we also looked to the future, considering a world of flexible office spaces built around communities, with an ability to change their mission to greet whatever new technology or crisis might come to pass. All of this is linked to the wider idea of fostering sustainable communities: a building never exists in isolation but is instead part of the urban milieu that surrounds it, and so must respond to the needs of its users and the wider public.

Design of the Workplace findings from 3,451 U.K. office workers



PART ONE

Modern
must-haves –
younger workers
demand more



'The Spell & The Promise', Lexi Kiddo

“

Every new generation that is entering the workforce is more purpose and values-led than the last.

Natalie Pearce
Co-founder and culture designer of The Future Kind Collective

Part One: Modern must-haves – younger workers demand more

Figures show that younger generations are liable to feel even more environmentally conscious than other groups. A recent Pew research survey found that it was the top political priority for around 70 percent of millennials and Gen Zs⁴, compared to just 50 percent of older generations, making it inevitable that this concern, allied with a drive to combat climate change, will impact the workplace.

Against the backdrop of a very tight labour market, within which employees have unprecedented power, we wanted to explore what this generation demands from their office – and where sustainability meets design.



With 83 percent of 18 to 29 year olds saying it was important to them that their company is run in a sustainable manner, it's clear that young people in particular are both demanding and purpose-driven when it comes to their workplace.



Meanwhile, 76 percent of the youngest demographic say that a company's environmental policies would have an impact on whether they would choose to work for a business or not.

Most essential job must-haves for modern employees

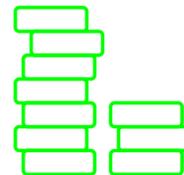
34%

Having a sustainable workplace



29%

Receiving an annual bonus



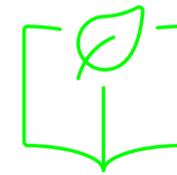
27%

A genuine commitment to reaching net zero



27%

A clear policy on its environmental commitments



20%

Would consider leaving a role if the office space was not sustainable



25%

Would consider leaving a role if the office space was not well designed



35%

Of 18 to 29 year olds said they would consider leaving a job if the company didn't have a genuine commitment to be environmentally friendly in all aspects of its operations



In order to recruit and retain the next generation of workers, employees must keep these statistics in mind.

A sustainable workplace – one that you can comfortably work in and doesn't have a negative effect on the planet – proved a strong priority for modern employees, with 34 percent placing it within the top ten list of essential job must-haves – ranking even higher than an annual bonus (29 percent). Another priority was working for a company with a genuine commitment to reaching net zero (27 percent) and working for a company with a clear policy on its environmental commitments (also 27 percent).

Perhaps surprisingly, a fifth (20 percent) of those polled would consider leaving a role if the office space was not sustainable and 25 percent if the office space was not well designed. And more than a third (35 percent) of 18 to 29 year olds said they'd consider leaving a job if the company didn't have a genuine commitment to be environmentally friendly in all aspects of its operations.



An appetite for awareness

Office sustainability is undoubtedly a central issue for the modern workforce, yet findings show that there's a thirst for more information. The majority of those polled – 65 percent – were unaware of the carbon footprint of their offices, with three quarters (75 percent) saying they'd be interested in knowing more about the sustainability credentials of their offices.

Meanwhile, more than eight out of ten (81 percent) office workers voiced that it was important that their company is run in a sustainable, climate-forward way – from office design through to supply chain management. This trend is gradually being driven by younger workers, with this figure rising to 82 percent among those respondents aged 18 to 44 but falling to 71 percent of those aged over 45.



We know that millennials and Gen Z are actually ranking work culture above salary these days. Glassdoor did a study that found that 60 percent of millennials now rank culture above salary when making decisions on the jobs that they're going to choose. And in our work, we see that increasing, too.

Similarly, it's validated in the *Design of the Workplace* study where you can see within the top ten list of essential job must-haves having a sustainable workplace came in as a higher priority than receiving an annual bonus. Younger generations are rightly more demanding and I think that will continue to be the case.



Natalie Pearce
Co-founder and culture designer of *The Future Kind Collective*

PART TWO

Charting the
benefits of the
environmentally
friendly office

ALDGATE TOWER

AECOM
Ince
Risk First
China Life
Puppet
Groupon
Essensys
WeWork
Huddle

Part Two: Charting the benefits of the environmentally friendly office



A workplace that makes you feel like you are making a positive contribution to the world, makes you happier, less siloed and more integrated with society and community.

Foster + Partners

What's becoming clear is that working in an environmentally friendly office makes people happier, feel more productive, calmer and more physically comfortable. In a world full of uncertainty, defined by a frightening pace of change and ongoing post-pandemic mental health problems, data from *Design of the Workplace* revealed a strong correlation between happiness and well-designed sustainable office space.



93 percent of those working in an environmentally friendly office agreed with the statement 'I am happy in my job'



This compares with just 55 percent of those working in environmentally unfriendly offices

An environmentally friendly office and company ethos results in employees that are almost twice as likely to be happy in their job than those who work in uncomfortable workplace conditions that don't feel sustainable for them or the planet – a significant difference.

While making employees happy should naturally be desirable, a study by the University of Warwick⁵ also found that happier workers were at least 12 percent more productive – providing a clear business rationale for creating a sustainably designed office.

In addition, 48 percent of people in an environmentally friendly office strongly agreed that they were productive workers, compared to just a third (33 percent) of those in an environmentally neutral office.

This difference becomes even more marked when asked how productive they are when working in their office rather than somewhere else. 40 percent of those in environmentally friendly offices strongly agree that they are most productive in an office, compared to just 12 percent of people in environmentally unfriendly offices.

The data found that those working in environmentally friendly offices were almost ten times as likely to strongly agree (38 percent) that their workspaces provided areas of calm, compared to those in environmentally unfriendly offices (4 percent).

Beyond bricks and mortar: The advantages of sustainable design on wider worker wellbeing

Those savvy employers who put sustainability first in an environmentally friendly office environment can impact a whole range of factors, including how well employees feel listened to, opportunities for their career development and how well they feel diversity is promoted within the organisation. It even dictates how secure workers feel in their role, with 92 percent of people in environmentally friendly offices agreeing that they felt safe in their jobs – compared to 67 percent of those in environmentally unfriendly offices.

In addition, those working in environmentally friendly offices were more likely to say that their employer took staff wellbeing seriously (48 percent), compared to 26 percent of those in environmentally unfriendly offices.

Respondents who worked in environmentally friendly offices were also more likely to feel that their company:

Gave focus and attention to staff training



40%
environmentally friendly, vs
26%
environmentally unfriendly

Promoted diversity and inclusion



38%
environmentally friendly, vs
27%
environmentally unfriendly

Listened and responded to the needs of staff



40%
environmentally friendly, vs
26%
environmentally unfriendly

Those working in environmentally friendly offices were almost twice as likely (38 percent as opposed to 21 percent) to say that they felt their employer took career progression seriously compared to those working in environmentally unfriendly offices.

When it comes to believing that their employer takes a genuine and active role in enriching the communities in which the business operates, again it was those who worked in environmentally friendly offices who were most convinced of this – 27 percent of those who worked in environmentally friendly offices, compared to 7 percent in environmentally unfriendly spaces.

49 percent of those who said their office space was environmentally friendly believed their employer takes work/life balance seriously, compared to 31 percent of those in environmentally unfriendly offices. Overall, an overwhelming 90 percent of office workers agreed that environmentally sustainable office design is good for both the planet and worker wellbeing.



The workplace becomes emblematic and symbolic of company culture – a built reality of the ethics of a company.

Foster + Partners

Why office design matters

On the flipside, the downsides to a poorly designed office are equally clear. Worryingly, more than one in ten (13 percent) of those polled said *their office was so badly designed it made them feel physically and mentally unwell* – and that rises to 16 percent of 18 to 29 year olds, who are particularly attuned to this topic. In fact, almost a quarter (24 percent) of those working in environmentally unfriendly offices claimed their office makes them feel unwell.

While 34 percent of office workers claimed there were no design or sustainability issues with their current workplace, a list of common office gripes emerged from the remaining 66 percent. Of those, 28 percent said that the most uncomfortable aspect of the design of their office was that it was too hot in the summer and too cold in the winter. This can even have a negative impact on a business's bottom line, with research of young adults in Harvard⁶ finding that every 1°F deviation from an optimal indoor temperature came with a 2 percent decrease in output. This is more evidence that if employers get their office design right, they will see a return on investment.



The importance of air quality

Many experts we interviewed referenced air quality as an increasingly key factor for office design and workers. A 2020 study in Harvard Business Review⁷, which analysed sick leave data for more than 3,000 workers across 40 buildings, found that 57 percent of all sick leave was attributable to poor ventilation.

This startling statistic is backed up by data from *Design of the Workplace*, which revealed a vast gulf in air quality between environmentally friendly offices and neutral or unfriendly offices: 91 percent of those working in environmentally friendly offices agreed that their office air quality was good, compared to just 32 percent of those in unfriendly offices.

With a recent study published in the International Journal of Ventilation⁸ finding that students take on more, feel more relaxed and have longer attention spans in well ventilated areas, it should come as no surprise that workers in similarly well ventilated spaces are happier and feel more productive.

When refurb fails

However, it's one thing to know about these issues and another to put them right. Three in ten (29 percent) of those polled had experienced an unsuccessful office refurbishment where the result was worse than the original design.

The main reasons given for these refurbishment failures were a lack of proper planning (38 percent) and staff not being consulted (28 percent).

The cost of fitting out an office multiple times is not just financially wasteful, it has the wider impact of increased carbon emissions

All of which makes findings from this report, with 87 percent of office workers believing that offices being evaluated for sustainability robustness is as important as similar evaluations for health and safety, even more compelling.





Conor Storkey
Director of
Sustainability,
Brookfield Properties



It's exciting to see that sustainability is pivotal to our tenants, with the survey results clearly demonstrating that environmentally friendly offices lead to improved levels of happiness, enjoyment and well-being for employees.

Sustainability within the workplace can be achieved in many ways, including the introduction of policies and smart controls to reduce energy use, improving fresh air supply & ventilation, and maximizing the use of biophila, ergonomic furniture and recycling facilities. A focus on reducing carbon emissions during refurbishment of tenant fit-outs is also important, including the imaginative re-purposing and upcycling of existing elements, such as the re-use of raised access flooring or upgrading existing light fittings rather than replacing them entirely.

Our Accelerate ESG initiative provides the platform for enhanced tenant collaboration, including education and the sharing of best practice to help reduce carbon emissions, achieve our mutual ESG goals and maximise the benefits for their employees and the wider community.

Spotlight on Brookfield Properties' tenants

The *Design of the Workplace* study ran a comparison between data compiled from Brookfield Properties' tenant app, Axiis, with those from other locations, which showed that our organisation is ahead of the game in many key areas.

Figures revealed that Brookfield Properties tenants were more likely to say they feel happy in their jobs



95 percent agree and strongly agree



compared to 86 percent of the general panel

Elsewhere, Brookfield Properties' tenants were also more likely to strongly agree or agree that they enjoy working in their office



94 percent agree and strongly agree



compared to 85 percent of the general panel

And a higher proportion of Brookfield Properties' tenants agreed that their employer cares about their wellbeing than non-tenants



91 percent agree and strongly agree



compared to 80 percent of the general panel

PART THREE

Where does
office design
go from here?





Principal Place, Shoreditch



The workplace of the future goes beyond meeting the basic needs of their employees, looking after their physical and mental wellbeing and fuelling their sense of belonging. We find that inclusive companies are 1.7 times more innovative.

Foster + Partners

Part Three: Where does office design go from here?

When the conditions are right, the data clearly shows that the company office will continue to be a very important part of working life. When asked if they felt more productive working in the office than anywhere else, a total of almost three quarters (74 percent) of office workers agreed with the statement, of which 29 percent strongly agreed.

In the future, younger staff members will not settle for an office without good sustainability credentials.

According to the data, the top elements that modern young workers (aged 18 to 29) believe help create a well-designed workplace are:



42%
Good ventilation



41%
Plenty of natural light



40%
Fast internet connection



38%
Clever lighting



35%
Effective heating control



33%
Natural ventilation



33%
Adaptable desks and chairs



31%
Plentiful recycling facilities

It's little surprise to see lighting feature so highly, given that academic research has linked it to enhanced workers' wellbeing. An example is a study by Cornell University⁹, which found that successfully utilising natural light helped to reduce eyestrain and headaches by 84 percent.

Other factors featuring highly for respondents included:

-  28%
Plants and living matter
-  28%
Good acoustics
-  27%
A sustainable office building
-  26%
Smart lighting and heating
-  24%
Ergonomic desks and chairs

When choosing an office space for their staff, there are a raft of other elements that employers should consider. A fifth (20 percent) of young office workers said that having a carbon neutral office space was a sign of good sustainable design, and the same number said environmentally sound building materials were key. Plus, more than one in ten (12 percent) of those polled said that locally sourced building materials were important when planning a refurbishment in order to make a workspace more sustainable.

Getting the conditions right is critical. A recent report from Savill's¹⁰ suggests that occupiers are undertaking more rigorous analysis of their occupational strategies and focusing on what they want out of their office space – which usually means the best quality with the highest sustainability credentials.



The *Design of the Workplace* survey's list of predictions for the office of the future



Healthy and hygienic spaces

49%



Maximise natural light and fresh air

48%



Improved focus on employee wellness

42%



Variety of spaces

40%



Offices that encourage movement

33%



Inclusive design

27%



Personalisation and control

26%



Biophilic design and outdoor access

22%



Contactless and automated

20%

The *Design of the Workplace* survey asked workers how they envisaged the office of the future, with 40 percent predicting a variety of space options within offices, 42 percent seeking more focus on employee wellness and 22 percent referencing biophilic design and outdoor access.

These choices tally with a wider societal shift, with international workspace consultancy Bureau publishing a trend report in January 2023¹¹ that predicted more community spaces for wellness activities like yoga, sensory zoning for inclusion purposes and a return to nature, to help ease stress.





Principal Place, Shoreditch



The workplace of the future is about creating spaces that support a greater range of activities and diverse working practices, while focusing on wellbeing and offering people a sense of community. Allied to this is a thorough analysis of the building's carbon footprint – both operational and embodied carbon. Research data shows that the fit-out of a typical building has far greater carbon emissions than its structure. Using technology, we can isolate components to see how those choices impact the carbon footprint of the project. We have developed the idea of a 'timeless fit-out' that can change over time and adapt to the evolving nature of the workplace, using higher quality materials that last longer. The result is a sustainable, human-centric workplace, that is equipped to face the challenges of the future.



Dan Sibert
Senior Partner,
Foster + Partners

Data-led decisions

Foster + Partners has long believed in design being holistic and respectful of the need of peoples and planet.

The process of designing a workplace is complex and nuanced. As part of their design process, Foster + Partners take a long-term view of a building's lifespan, look at the data, consider the cycles of redevelopment and refurbishment.

Foster + Partners analysis has identified that a significant portion of a building's carbon emissions can arise from the initial and future fitout of tenant spaces, leading to their interest in the idea of a 'timeless fit-out' – a fitout that can change over time and adapt to the evolving nature of the workplace, using higher quality materials that last longer and that can be carbon neutral or negative.

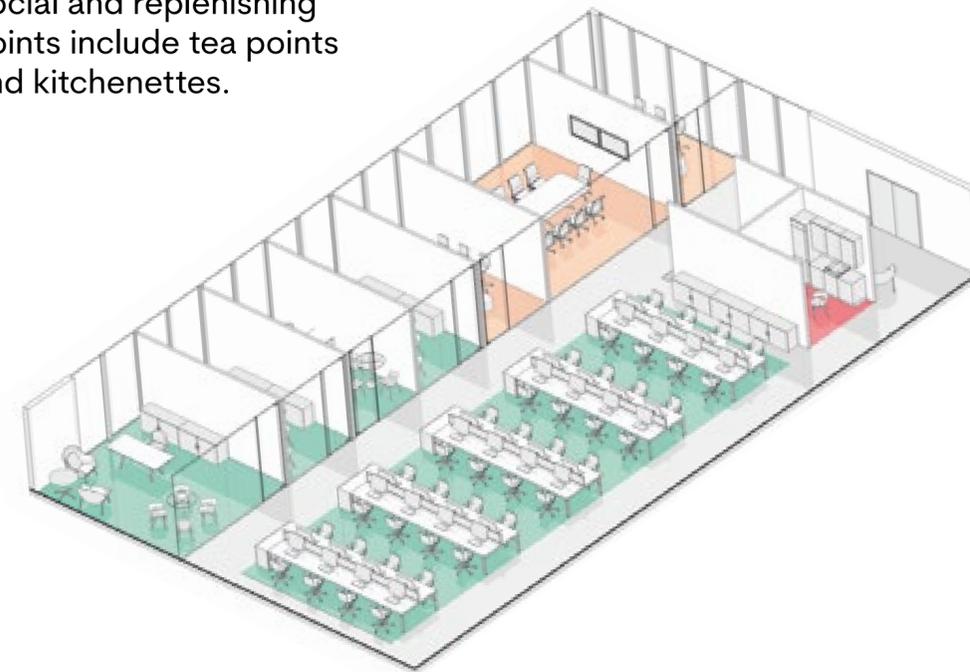
This ties into the idea of activity based working, which is an aspect of the workplace of the future to create spaces that support a range of different activities within a workplace – no longer just a desk – with a mix of different furniture types and diverse working practices that allow for choice and flexibility over an extended period.

The future is collaborative

Employees choose the best space for their task

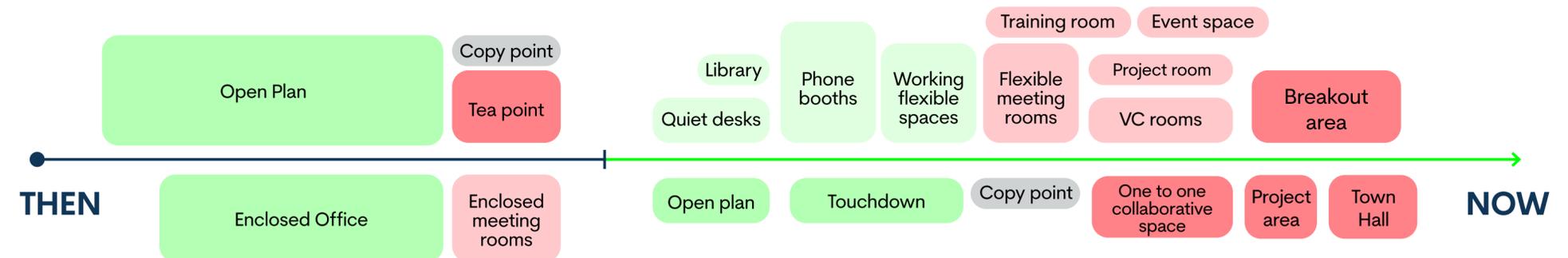
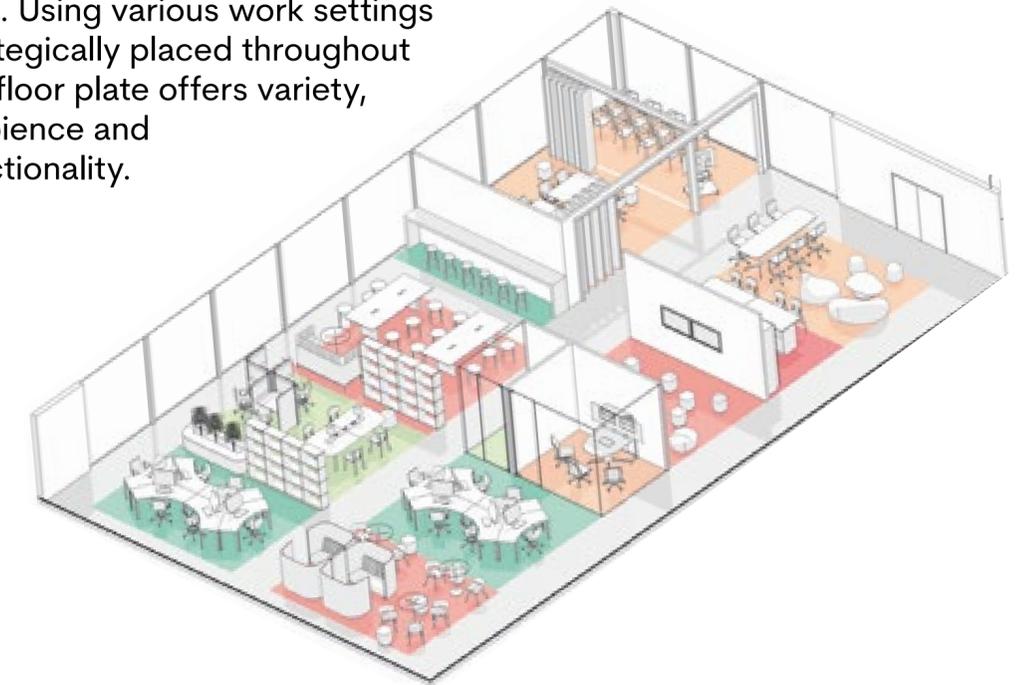
Typical

Regardless of the company, some version of the open vs enclosed office is a standard model. Social and replenishing points include tea points and kitchenettes.



Collaborative working

Here, the focus is on individual employees, offering them choice to work in the best setting for a specific task. Using various work settings strategically placed throughout the floor plate offers variety, ambience and functionality.



The future is collaborative

Activity based working has the ability to foster employees' wellness - mentally, physically and socially



The Community

The future of the workplace has many facets. A building is not an island, it is part of a living, breathing city as well as the community around it. Understanding that is critical both to sustainable practices and in the engagement of people in the process of making that happen.



Social Health

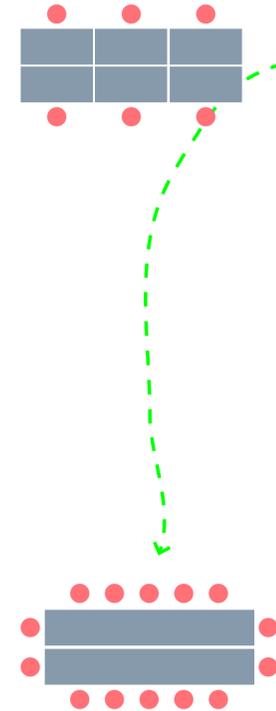
The most resilient communities are those that are connected and engaged with each other and their cities. In the business of innovation, the workplace is a place for collaboration, where people can meet and be engaged in the work that they are doing.



Purpose

The freedom collaborative working confers on employees to choose their environment – be it through switching rooms or just by manipulating multi-purpose furniture – has been linked to positive feelings of agency and control. Increasing the amount of gathering spaces can lead to a 50 percent increase in collaboration.

50% INCREASED COLLABORATION



The Visual Workplace

Visual communication is the most effective. In fact, the human brain processes images 60,000 times faster than text and 90 percent of information transmitted to the brain is visual.



90%

Culture

The workplace becomes emblematic and symbolic of company culture – a built reality of the ethics of a company through the communities it forges. This is becoming increasingly important when people ask themselves why they work for a certain company versus another.



Restorative Spaces

A sustainable workplace often results in more efficient work rates, better air quality and daylight, which all become cogs that feed into the idea of wellbeing. Spaces that provide these restorative elements have been shown to improve subsequent productivity by up to 40 percent.



40%

Mental Health

A workplace, if designed in the right way, will make you feel like you are making a positive contribution to the world, while helping you feel happier, less siloed and more integrated with society and community.





Grant Kanik
*Global Deputy
Head of Workspace,
Foster + Partners*



There's the inherent sustainability of a building – the embodied carbon, the design and the energy consumption – that goes into our design parameters as a matter of course now. But I think real sustainability goes beyond that, it's about longevity.

For us, we're modelling the different futures for these spaces and making sure that they're adaptable, they're scalable, they're flexible and convertible.

We're ensuring that the spaces are future-proofed and then ensuring that the design is of high enough quality that there's no need to refurbish it every five years. For example, we are working on lab buildings in California at the moment, but we're modelling a future where technology means wet labs disappear and then, they're replaced by dry labs and then these spaces are managed remotely by robots and very few humans will actually ever go into those spaces.

You have to imagine where this organisation is going to be in 20 years, and then what their space needs are going to be on the basis of that. And it's probably going to be quite different to their space needs in five years. That's what sustainable buildings must have now.





Courtyard, The Gilbert, Finsbury Square

Conclusion

According to Nobel prize-winning environmentalist Wangari Maathai, *"The environment and the economy are really both two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves."*

With offices sure to remain a key force in the economy, *Design of the Workplace* is an optimistic study, showing how much demand there is for sustainable design in offices, how important offices are to workers and just how much a thoughtfully conceived and utilised environmentally friendly office can benefit employees and – by extension – companies and communities at large.

This report gives a voice to the future generation of office workers and provides an invaluable new blueprint for employers, architects, and designers so that all can seek to contribute more to retaining a happier, productive workforce and, of course, a healthier planet.

APPENDIX



'Hybycozo', IlluminoCity, Principal Place

Appendix

- 1 The Ecocity World Summit 2023 is being hosted in London on 6-8 June
<https://www.ecocity-summit.com/>
- 2 Scope 1 and 2 are those emissions that are owned or controlled by a company.
Scope 3 emissions are a consequence of the activities of the company but occur from sources not owned or controlled by it.
- 3 The ONS reports that there are 1,1m vacancies in the U.K. in April 2023# - leading to what they describe as "a historically tight labour market":
<https://www.ons.gov.uk/releases/uklabourmarketapril2023>
- 4 Pew research Centre Report on Climate emergency
<https://www.pewresearch.org/science/2021/05/26/gen-z-millennials-stand-out-for-climate-change-activism-social-media-engagement-with-issue/>
- 5 Research from University of Warwick
https://www.researchgate.net/publication/46442857_Happiness_and_Productivity/link/5cb0f19392851c8d22e7a681/download
- 6 Harvard University's 9 Foundations for a Healthy Building
https://9foundations.forhealth.org/wp-content/uploads/2020/02/9_Foundations_of_a_Healthy_Building_February_2017_R1.8.pdf
- 7 Harvard Business Review finding on healthy buildings
<https://hbr.org/2020/04/what-makes-an-office-building-healthy>
- 8 The effect of low ventilation rates on School Children in 2016
<https://www.tandfonline.com/doi/abs/10.1080/14733315.2007.11683770>
- 9 Cornell University research from 2018 into office lighting
<https://medwinpublishers.com/EOIJ/EOIJ16000166.pdf>
- 10 Reported in the Evening Standard on 11 April 2023
<https://www.standard.co.uk/business/central-london-office-lettings-tumble-deals-taking-longer-b1073315.html>
- 11 Reported in the Scotsman on 5 January 2023
<https://www.scotsman.com/business/sustainable-office-and-furniture-specialist-outlines-predicted-workplace-trends-for-2023-3974634>



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