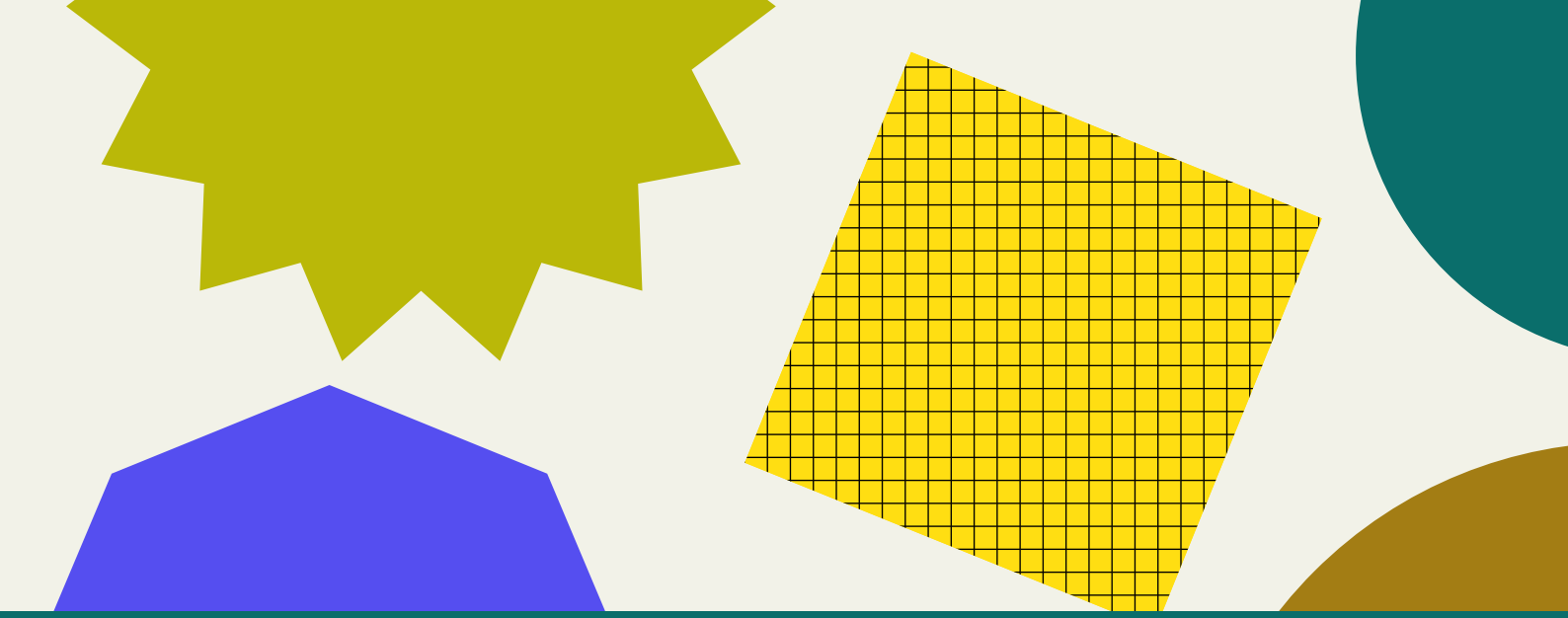


Design Economy

The Environmental and Social Value of Design

2025


Design
Council

Foreword

Minnie Moll
CEO, Design Council

This report marks a turning point for our Design Economy research. Once again, we have highlighted the vital role of design in the UK economy—driving growth, exports, and productivity—in our 2022 People, Places, and Economic Value report. In addition, as the Design Council celebrates its 80th year, we here take an unprecedented step forward. For the first time, we elevate the environmental and social value of design as an equal pillar alongside its economic contributions.

Why? Because design is critical to the green transition. To deliver on our Design for Planet mission, we must understand what designers are already doing, the barriers they face, and the skills they need to overcome them. This is urgent. Over the past decade, enrolments in Design and Technology at GCSE level have fallen by 68%, leaving a skills pipeline that cannot keep pace with demand. Without action, the gap between need and capability will grow.

The findings in this report are clear. Designers are creating real environmental and social value, yet barriers such as lacking capabilities in measuring impact and limited training and support within organisations hold them back. Businesses that embrace sustainable design are gaining advantages—reducing emissions, innovating with new materials, and building resilience in their markets. Their stories showcase the transformative power of design when it leads the charge for change.

Hosting the World Design Congress London 2025 will mark a milestone in our upskilling journey, spotlighting the UK's leadership in sustainable design, convening experts, educators, and policymakers to galvanise action and create tangible pathways for upskilling designers worldwide. As a legacy mission, the Design Council has set an ambitious target to upskill 1 million designers across the UK by 2030. The Skills Mission is at the heart of our efforts to embed sustainable practices into every stage of the design process. By working with businesses, education providers, and policymakers, we can ensure design becomes a powerful driver of environmental, social, and economic resilience.

This is a call to action. We invite every reader to join this mission and become an advocate for change. Together, we can unlock the full potential of design to shape a better tomorrow.

How to *read* this report

This report is an interactive pdf. This means you can click through to relevant sections of the report based on what you want to find out, rather than scrolling all the way through.

- Use the page headers to navigate to different chapters and to click through the pages.
- Click on this ☰ to go back to the contents page.
- Click on this ◯ to go to another relevant section of the report.
- For more information, please visit the design economy webpage.

Please cite as: Design Council (2025). Design Economy: The Environmental and Social Value of Design. Available online: Design Economy – Design Council.

Contents

Executive *summary*

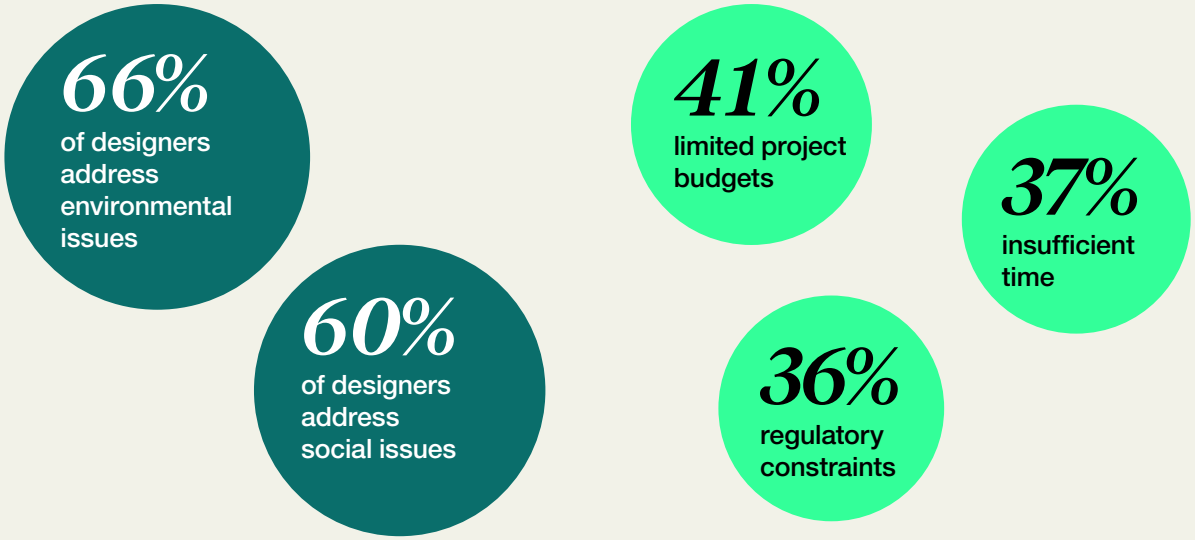
This report, part of the latest Design Economy research programme, explores the critical role of design in addressing pressing environmental and social challenges. It evaluates design's contributions beyond economic value, focusing on its environmental and social impacts. Using data from a survey of over 1,000 designers as well as stakeholder co-design workshops and business case studies, it examines how designers create value, the barriers they face, and the opportunities for increasing impactful practices. Our key findings are:

01. Designers actively work towards environmental and social value

A significant proportion of designers are addressing environmental (66%) and social (60%) issues through their work, with architecture and service design sectors leading the way. 64% of designers report an increase in client demand for environmentally focused design over the past three years.

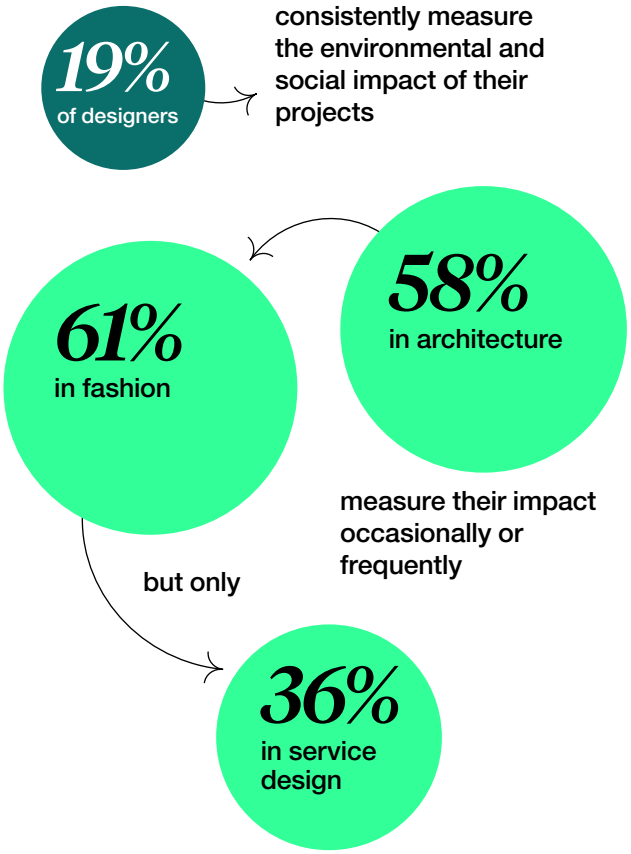
02. Designers are motivated to 'design for planet' but face significant barriers

Despite their motivation, designers face hurdles such as limited project budgets (41%), insufficient time (37%), and regulatory constraints (36%). Confidence-related barriers, like fear of reputational risk, are also prevalent in sectors such as craft and fashion.



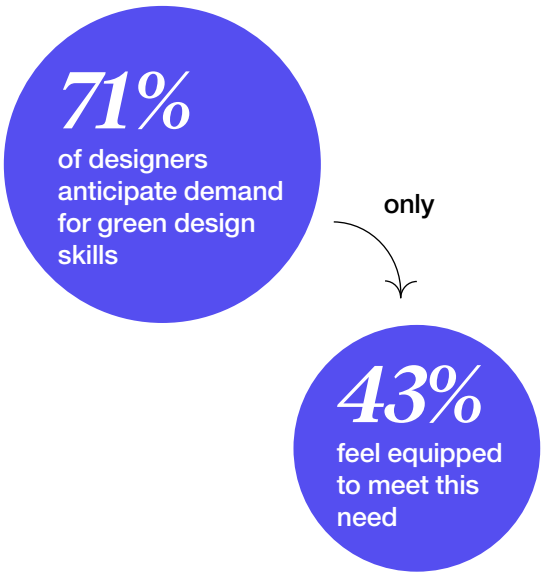
03. Measuring and demonstrating environmental and social impact is a particular challenge for designers

Only 19% of designers consistently measure the environmental and social impact of their projects, leaving significant value uncaptured. Sectors such as fashion and architecture are more likely to measure impact: 61% and 58%, respectively, do so frequently or at least occasionally. For service design, in contrast, this figure is only 36%. The profileration of complex and costly tools further limits measurement efforts, particularly for freelancers and small businesses.



04. There is a green design skills gap

While 71% of designers anticipate growing demand for green design skills in the next three years, only 43% feel equipped to meet this need. Confidence in applying environmental design practices is highest in architecture (62%) but drops significantly in emerging fields like service and strategic design. Entry-level designers and freelancers report the lowest confidence levels, underscoring the urgent need for targeted upskilling.



Opportunities for Businesses

The report highlights how businesses can use design to create and benefit from environmental and social value. Companies that strategically embed sustainability into their operations gain several advantages:

01. Reducing costs and emissions:

Sustainable design practices, such as process optimisation and material innovation, help lower emissions and operational costs.

02. Driving innovation and market success:

User-centred design enables businesses to develop solutions that meet customer needs, enhancing market success while reducing risk.

03. Creating new revenue streams:

Circular business models, including product-as-a-service and upcycling, generate additional income while promoting resource efficiency.

04. Enhancing business resilience:

Sustainable practices improve reputation, strengthen customer relationships, and open new business opportunities, especially in sectors where environmental performance is a key differentiator.

Case studies in the report demonstrate how businesses across diverse sectors have successfully leveraged design for environmental and social value, showcasing its potential to transform operations and drive long-term success.

Recommendations

The report offers key recommendations for designers and commissioners on how to unlock design's full potential for creating environmental and social value. In summary, these are:

01. Empower designers with training and resources

- Implement subsidised sustainability literacy programmes.
- Develop flexible, accredited continuing professional development (CPD) courses focused on environmental and social design.
- Provide access to business skills training and tools for measuring impact.

02. Enhance organisational support and data accessibility

- Provide early-stage guidance and ensure designers have access to up-to-date data and affordable tools.
- Foster a culture where sustainability and social value are prioritised at all organisational levels.

03. Promote collaborative learning and best practices

- Establish platforms for designers to share experiences and collaborate across disciplines.
- Highlight case studies that showcase successful integration of environmental and social value in design projects.

04. Equip future designers through education

- Revise design curricula to incorporate sustainability and business skills.
- Facilitate hands-on learning opportunities through partnerships with industry stakeholders.

05. Support commissioners with standards and guidance

- Develop standards and registries to define good design for environmental and social value.
- Provide benchmarking tools and case studies that demonstrate the co-benefits of sustainable design, including financial gains and enhanced customer relationships.

Future Research Avenues

The report identifies key areas for further research, including the development of economic incentives, improved impact metrics, strategies to address the green skills gap, longitudinal studies on design's long-term effects, and the role of emerging technologies in advancing sustainability.

01 Introduction

Design plays a pivotal role in shaping our world, influencing everything from the products and services we rely on daily to the spaces and systems that define how we live. As the UK faces pressing challenges, including climate and biodiversity emergencies, social inequality, and economic transformation, the need for innovative and sustainable design has never been greater. **Design Economy**, the Design Council's flagship research programme, offers a comprehensive assessment of the current and future value of design to the UK. Extending from 2021 to 2024, this research initiative (referred to in short as 'DE21') builds upon its 2015 and 2018 predecessors, expanding its scope to evaluate not only the economic contributions of design but also, for the first time, its social and environmental impact and value.

DE21 recognises that today's challenges call for a more inclusive and forward-thinking framework for assessing design's role in shaping a fair, regenerative, and prosperous future.

This report, the fourth in the DE21 series, focuses on the Environmental and Social Value of Design. It follows the publication of the 2021 Design Value Framework, a draft tool for holistically assessing the impacts and value of design, the 2022 Design Economy: People, Places and Economic Value report, and the brief 2024 Green Design Skills Gap report which extracts some of this report's key findings.

Understanding the Design Economy

The term design economy encompasses a wide array of sectors and roles, from architects and product designers to digital creatives in healthcare and finance. It also includes workers who apply design skills in non-design industries. In 2020, this dynamic workforce comprised 1.97 million people, accounting for one in every 20 UK workers. Despite its significant contribution to economic growth and innovation, the design economy faces several challenges: regional disparities, declining design education uptake, and underrepresentation of marginalised groups.

Designing for Planet

Central to this report is the exploration of green design skills or 'design for planet' skills—the practical design skills needed to reduce resource consumption and greenhouse gas emissions, minimise waste, and enhance biodiversity as well as the 'heart and mind' design skills to make sustainable, equitable products, services, and places the easy and attractive choice for everyone. While the term 'design for planet skills' is not yet mainstream, 'design for environmental and social value' is a proxy in this research. Building on the Design Value Framework, the report differentiates between impact and value. **Impact** refers to the measurable size of change resulting from design interventions—such as reduced carbon emissions or improved social inclusion. In contrast, **value** encompasses the significance of these changes to various stakeholders. Impact captures the tangible outcomes of design; value reflects their broader meaning and importance.

Structure of the Report

This report builds on data from a large-scale survey with designers, co-design stakeholder workshops, and in-depth business case studies to offer a comprehensive view of how designers are contributing to environmental and social value. Following an overview of the research **methodology** in the next section, the **findings** section explores how and why designers engage in 'design for planet' as well as the barriers they encounter in the process. The **opportunities** section draws on case studies from 19 UK businesses, examining how companies can generate environmental and social value, and how, in turn, environmental and social design can drive value for their business. The **recommendations** section synthesises these insights, providing actionable recommendations for unlocking design's full potential in creating a just, regenerative, and prosperous future. The report concludes with an **outlook** section that suggests potential avenues for future research.

02 Research methodology

Three interlinked research methods generated the data and insights of this report: an online survey of 1,068 designers, three online co-design workshops with a total of 45 stakeholders, and 19 qualitative case studies of UK companies that deploy environmental and social design. The research methodology is underpinned by the Theory of Change model for social and environmental impact developed by the Design Council with University of the Arts London.[1]

The survey covered three overarching themes: design practices (motivations, skills, tools); organisational practices and policies; and future trends. A purposive sampling approach was used to select designers from different regions of the UK, working across the design economy. Quotas were set for the different design sectors (advertising, architecture and built environment, craft, fashion, service, digital and strategic, product and industrial design) and regions, based on the relative sector sizes and regional spread identified in 2022 *Design Economy: People, Places and Economic Value* report. An online survey was conducted in October and November 2023 with the help of Centiment, a market research organisation. Statistical weightings were applied to the survey data to ensure that the responses were representative of the UK design economy.

Following the survey, four online workshops were conducted with 45 designers from across the design economy. These provided a more in-depth picture of barriers, enablers, and needs of designers, particularly in relation to skills and impact measurement.

Finally, to highlight examples of good practice in creating environmental and social value across the design economy, 19 case studies of UK businesses – including 34 qualitative interviews – were conducted. A call for companies who represented the various design segments (advertising, architecture and built environment, craft, fashion, service, digital and strategic, product and industrial design) was issued through the Design Economy Steering Group. From this, a shortlist of companies was created and contacted. Further details on the methodology can be found in the Appendix.

1 Design Council & University of the Arts London (2021). *Design Economy 2021: Scoping Project - Environmental and Social Value of Design*. Available online at https://www.designcouncil.org.uk/fileadmin/uploads/dc/Documents/DE21/Design_Economy_2021_Papers_Paper_1.pdf [Last accessed 29 Jun 2024].

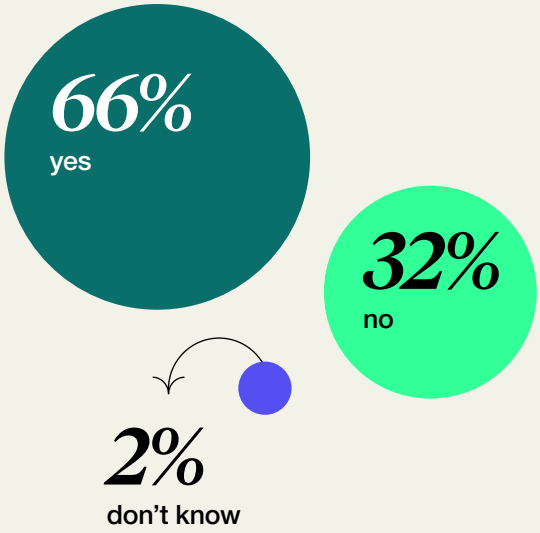
03 Findings

Finding 1: Designers actively work towards environmental and social value

Designers are addressing environmental and social issues through their work, with 66% of survey respondents having worked on an explicitly environmental project, and 60% on a social project in the last year.

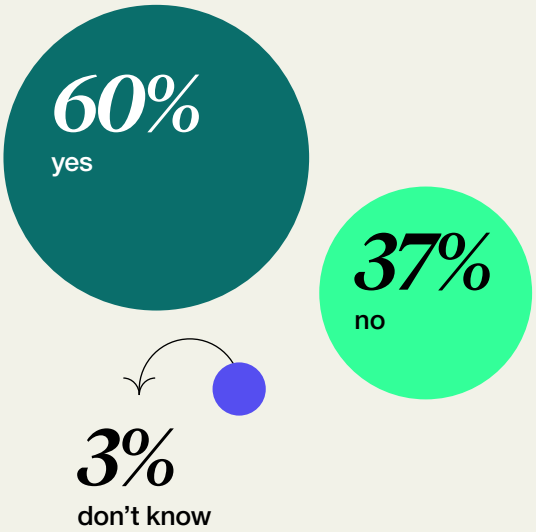
The architecture, interior, urban and landscape sector is the most active, with 82% of respondents having addressed environmental issues in the last year. Overall, more than half of respondents from every sector of the design economy have applied their knowledge and skills to the climate and environmental emergency in the last year.

Figure 1: Have designers' projects in the last 12 months addressed environmental issues?



Architecture, interior, urban and landscape designers also lead the way in addressing social issues (66%), alongside strategic, organisational, system and policy design (66%), and service and experience design (65%).

Figure 2: Have designers' projects in the last 12 months addressed social issues?



Clients' appetite for design that addresses environmental issues is on the rise, with 64% of respondents reporting that demand for design with environmental impact has increased over the last three years. Designers working in clothing, fashion, footwear and textiles (76%); product (76%); and service and experience design (76%) were most likely to report an increase in demand.

Looking ahead, the percentage of respondents expecting a 'significant increase' over the next three years nearly doubles from 17% to 30%, bringing the total of designers who expect an increase to 71%.

Figure 3: Over the last three years, client demand for green design has...

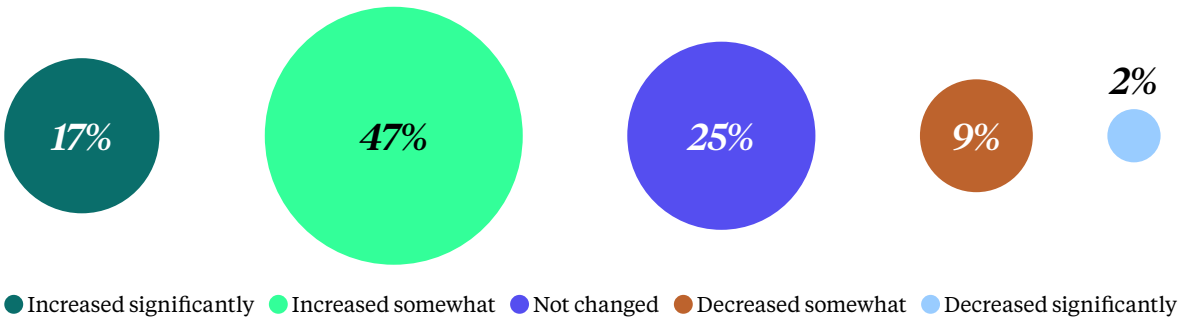
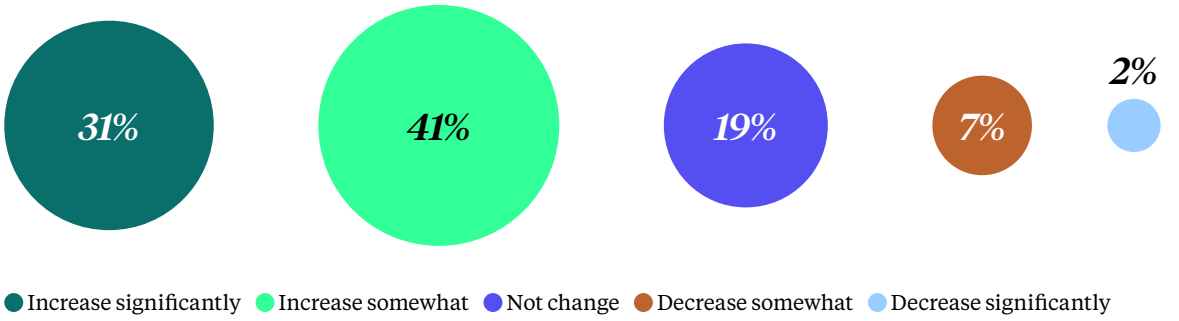


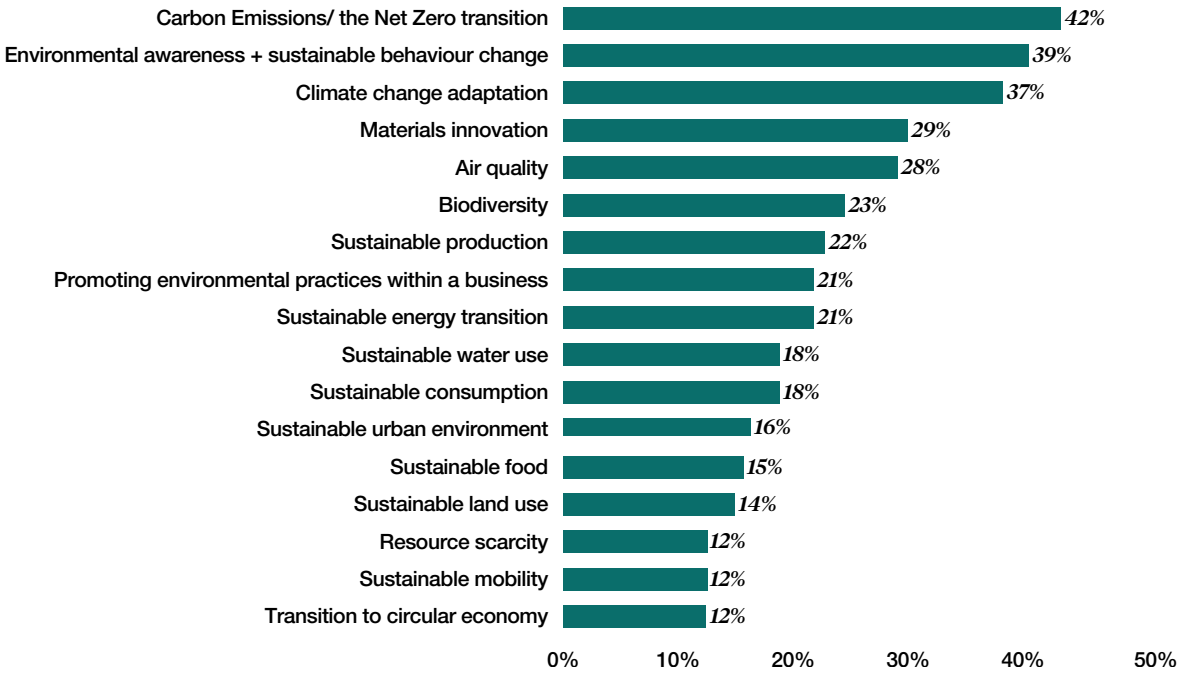
Figure 4: Over the next three years, client demand for green design is expected to...



Designers are working across a range of environmental and social issues. Carbon emissions and the net zero transition (42%), environmental awareness and sustainable behaviour change (39%), and climate change adaptation (37%) were the most addressed issues in the last year.

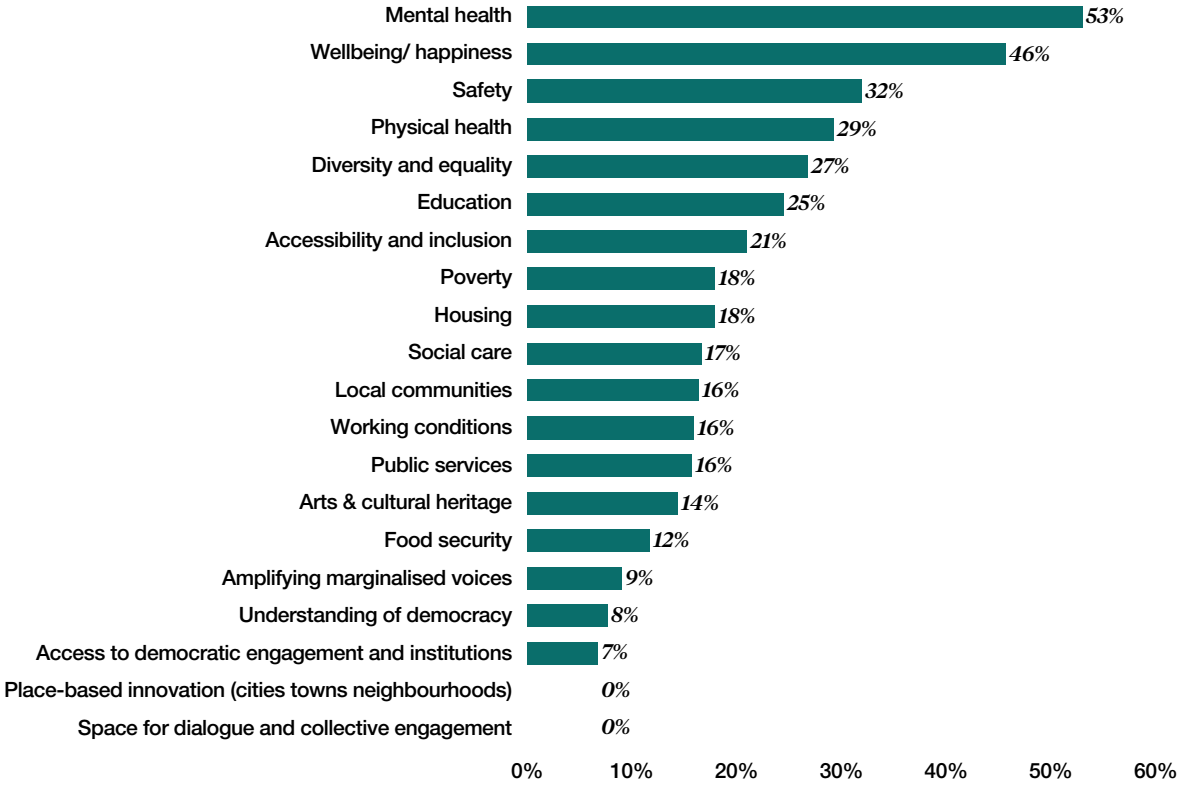
Material innovation (29%) and biodiversity (24%) – both of which are Design for Planet priorities2 – are being addressed by fewer designers. The most addressed social issues are mental health (53%), and wellbeing and happiness (46%).

Figure 5: Environmental issues addressed



2 Waste and resources are also priorities for Design for Planet. In the survey, this was split across different categories including sustainable production (22%), sustainable consumption (18%), resource scarcity (12%) and the transition to a circular economy (12%).

Figure 6: Social issues addressed



“We live and breathe sustainability because we are designers, so designing for planet is going to be a massive part of what we do going forward”

(Service Design Lead for Big Motive).

Finding 2: Designers are motivated to 'design for planet' but face significant barriers

An ambition to increase their understanding and awareness is the most influential factor motivating designers to apply their work to environmental and social issues (named by 54% of respondents as strongly or very strongly influential). When enabled, they are willing to invest time and effort into learning how to do it well.

Figure 7: Motivating factors to design for planet

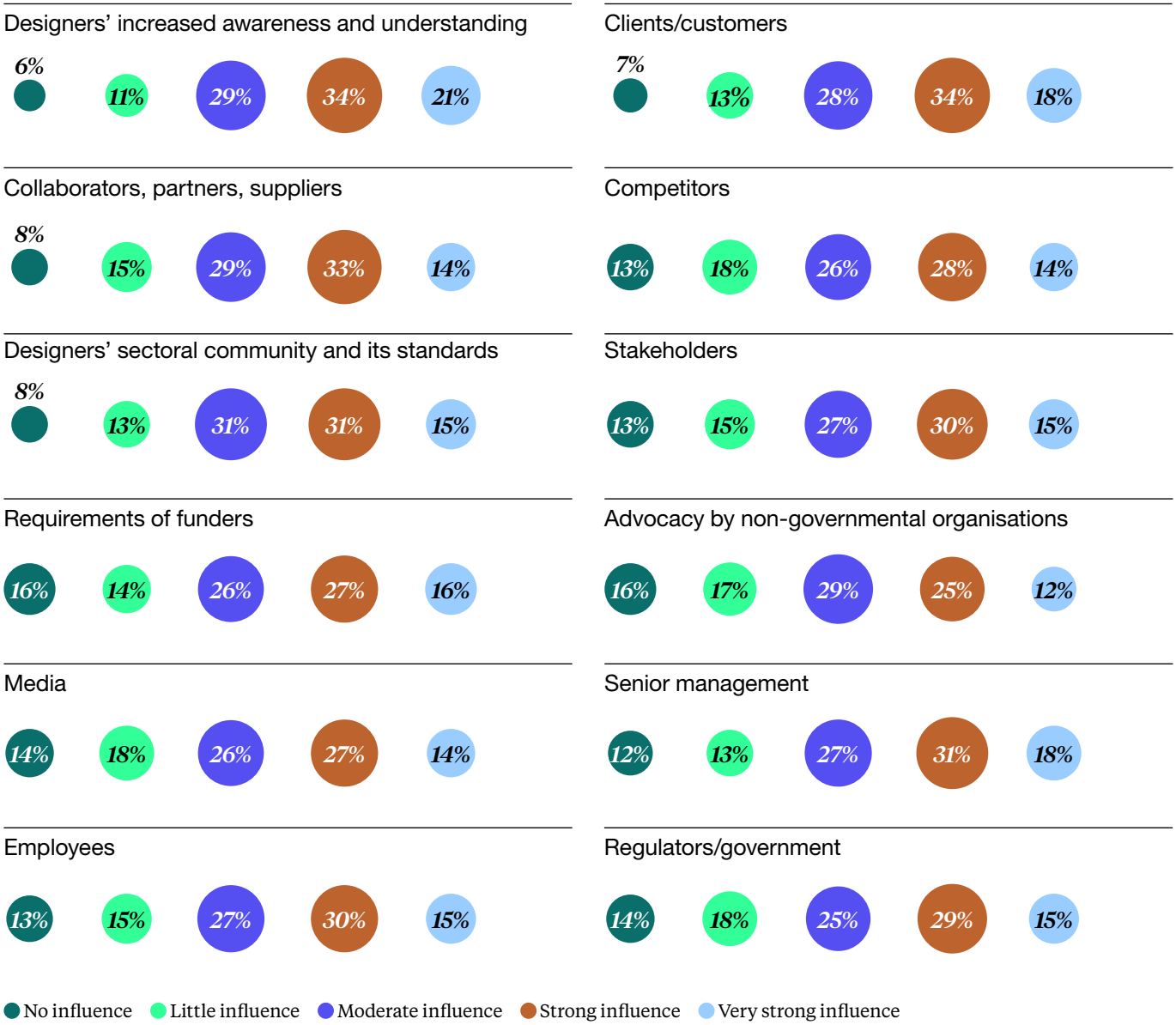
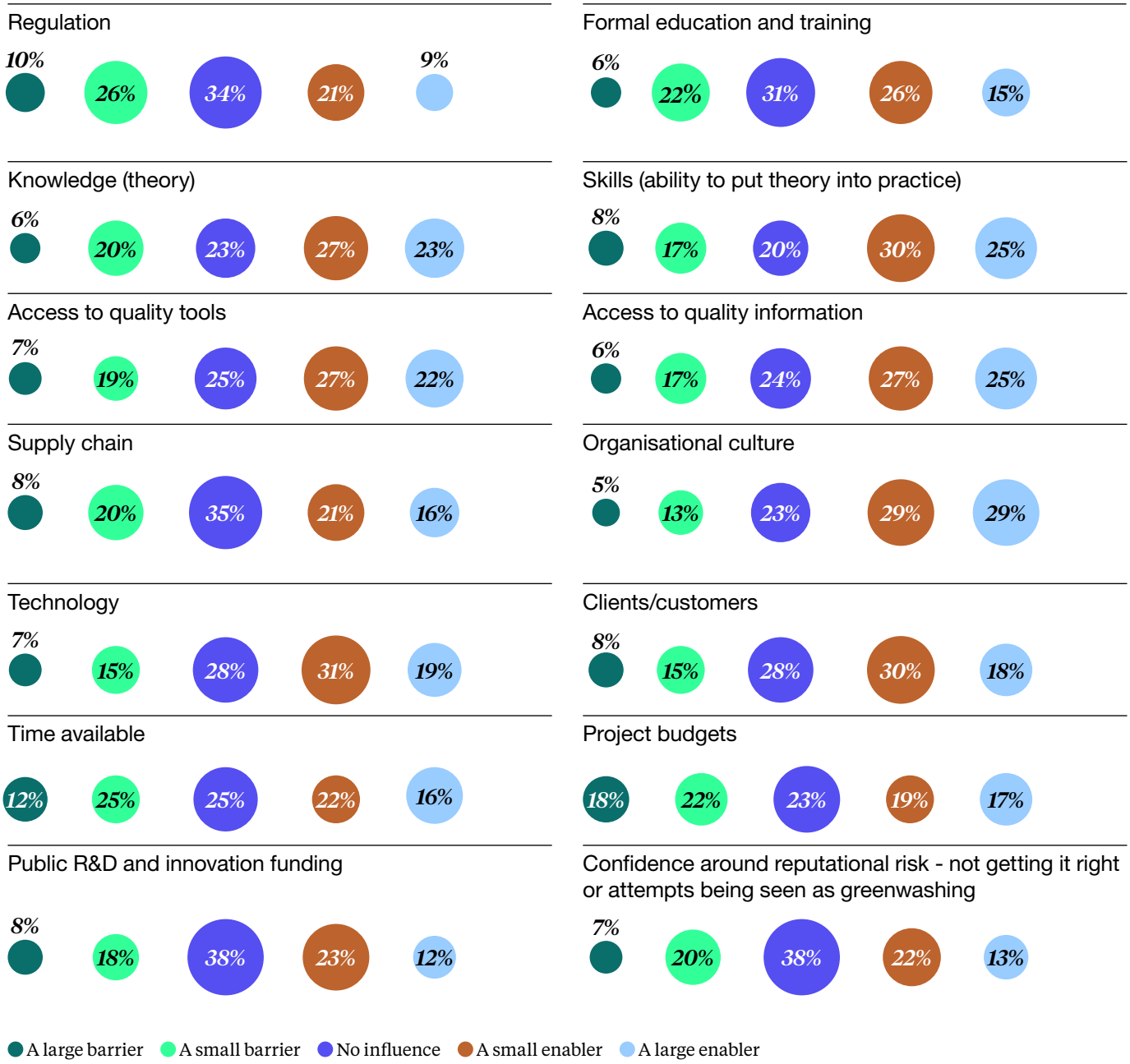


Figure 8: Factors posing a barrier or enabler to design for environmental impact



However, designers face a range of barriers. Project budgets (41%), time (37%), and regulations (36%) are most frequently cited. The latter was cited by 52% within the advertising sector – the only sector to place this barrier at the top of the list.

In the craft sector, confidence around reputational risk is a significant barrier, with 43% of participants concerned that they may get it wrong or be accused of greenwashing. This barrier also features in the top three for clothing, fashion, textile and footwear, with 33% of respondents identifying it as a barrier. This sector is also the only one to include access to quality tools in its top three barriers. Recent high-profile news stories regarding environmental and social issues arising in fashion companies and controversies surrounding the Higg Materials Sustainability Index (MSI)3 may be influencing factors.

Measuring and demonstrating design's impact is a particular barrier across all sectors and was explored in depth in the study's workshops.

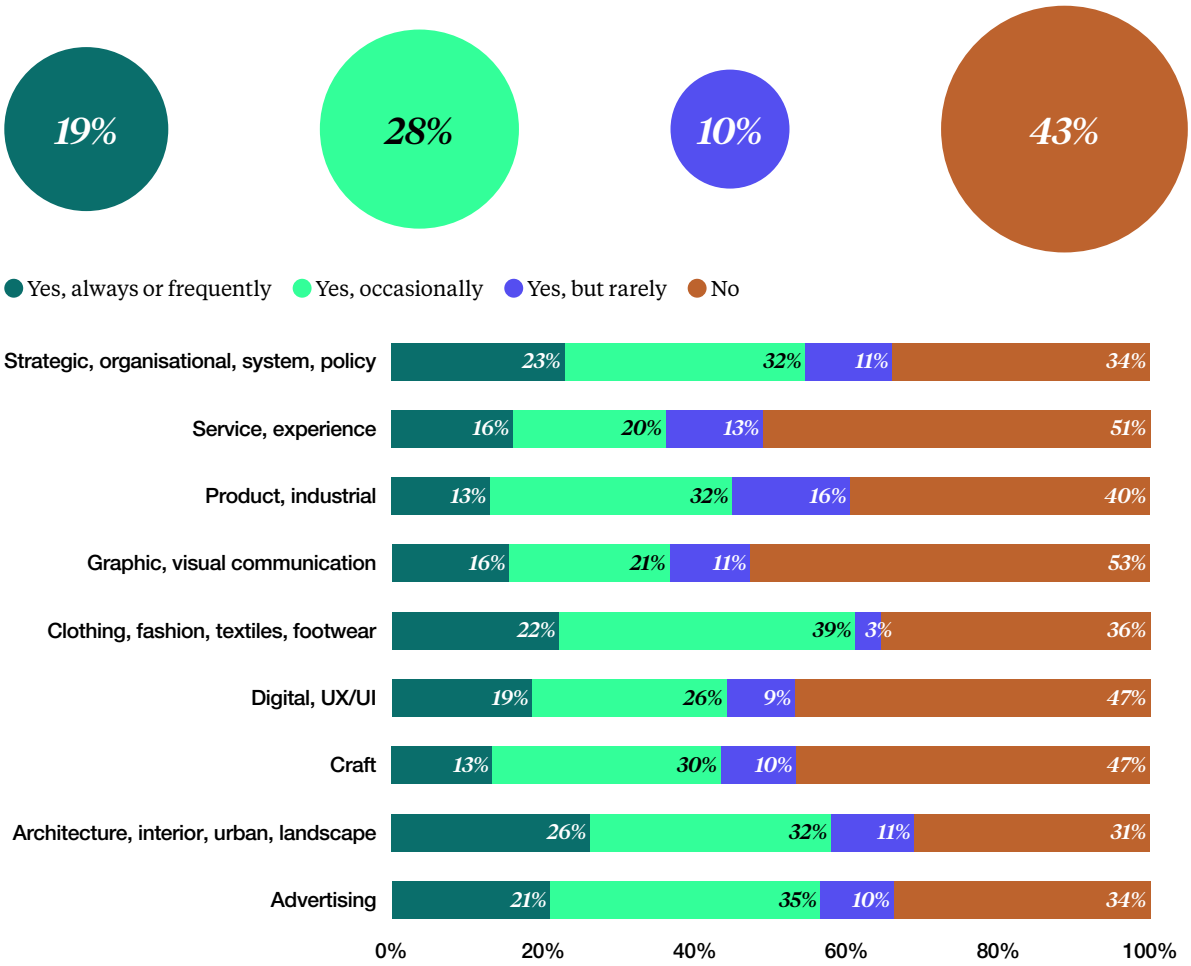
Finding 3: Measuring and demonstrating environmental and social impact is a particular challenge for designers

The impact of environmental and social design is not fully captured, with 43% of respondents revealing they never measure the environmental and social impact of their projects. Notably, 35% and 36% of those designers who have, in the last year, addressed environmental and social issues respectively, did not measure the impact of these projects. This suggests that more than a third of the value of recent activity has not been captured.

Respondents from the clothing, fashion, textiles, and footwear sector are most likely to measure their work's impact, with 61% responding 'yes, always, or frequently', and 'yes, occasionally'. This is followed by respondents from the architecture, interior, urban and landscape sector (58%) and advertising (56%). Increased scrutiny and a greater demand for transparency in these sectors, leading to more widely available tools and resources for impact measurement, might be a reason. In contrast, respondents from the service and experience sector are least likely to measure their work's impact (36%).

3 The Guardian, 2022. *"Fashion brands pause use of sustainability index tool over greenwashing claims.* Available online at: https://www.theguardian.com/fashion/2022/jun/28/fashion-brands-pause-use-of-sustainability-index-tool-over-greenwashing-claims [Last Accessed, 27 June 2024].

Figure 9: Do designers measure the environmental and social impact of their work?

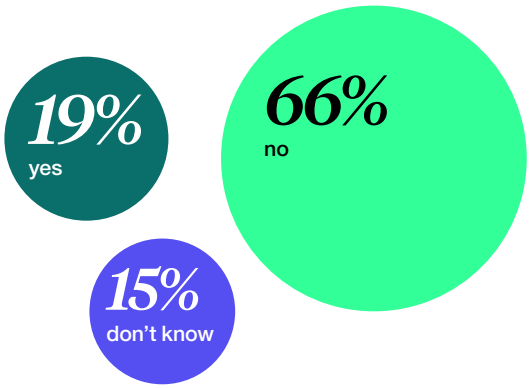


In terms of professional roles, freelancers are least likely to measure the impact of their work, with 68% of freelance respondents never doing so.

An unsupportive organisational culture, with a lack of leadership buy-in and training opportunities, is a key barrier to impact measurement. Adequate understanding of sustainability issues at the senior level of businesses is considered necessary – not least, to support the upskilling required for impact measurement – but often lacking.

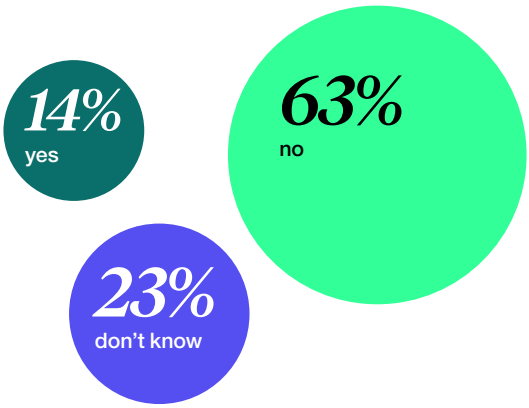
Only 19% of designers work in organisations with a dedicated role for sustainability issues. These roles are a mixture of sustainable design specialists, who may not have a seat at the senior management table, and of sustainability management specialists who are usually concerned with a business' operational sustainability performance rather than its activities.

Figure 10: Do organisations have a dedicated role for sustainability?



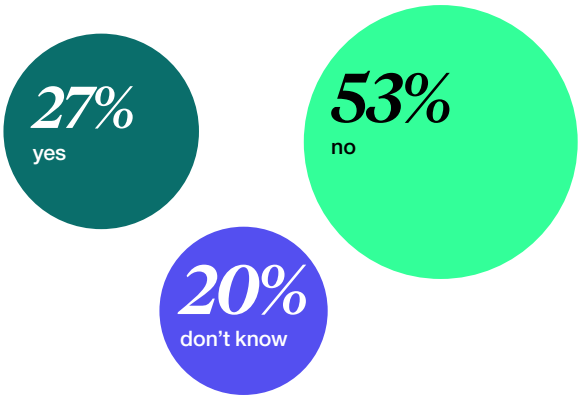
Even fewer designers (14%, rising only slightly to 18% and 17% for those who have undertaken work addressing environmental and social issues respectively), state that their organisations have an accreditation associated with environmental or social value (such as ISO 14001 or B-Corp status) while 24% do not know whether such a standard exists in their workplace. This suggests that even when processes that support continuous environmental and social improvement are in place, they have a negligible impact on designers' day-to-day work.

Figure 11: Do organisations have sustainability accreditation?



Only 27% of designers confirm that training, support, and mentoring for environmental and social issues is available to staff within their organisations. Again, this rises only very slightly for those people who have addressed environmental (31%) and social (32%) issues in the last year.

Figure 12: Do organisations offer environmental and social upskilling programmes for staff?



The increasingly complex role of design and the time lag in impact realisation are further barriers to its measurement. Designers across all sectors are increasingly working on systems at multiple scales, from products, services, and business models in circular economy ecosystems to regional and national interventions. Designers play distinct roles in these projects and are engaged at different points to achieve different outcomes.

"I would like to use [Sustainable Return on Investment] and carbon metrics more, but I often don't have scope to do this for the full life of the project - I don't have access to data, or the impact of the project can't be measured in the timeline of the funding" (survey respondent).

If designers cannot accurately measure the impact of their sustainable design practices over a project's lifetime, it becomes more difficult to demonstrate the value of these practices and make a compelling business case for their continued use. Designers' involvement often ends before the impact of a project is evaluated – if it is evaluated at all.

Designers struggle with the variety and complexity of tools and metrics for impact measurement. Workshop participants expressed being overwhelmed by the breadth of information and guidance available on conducting and assessing projects that deliver environmental and social value, leading to a lack of confidence in choosing approaches. Moreover, quantitative tools can be difficult and time-intensive for designers to use and interpret.

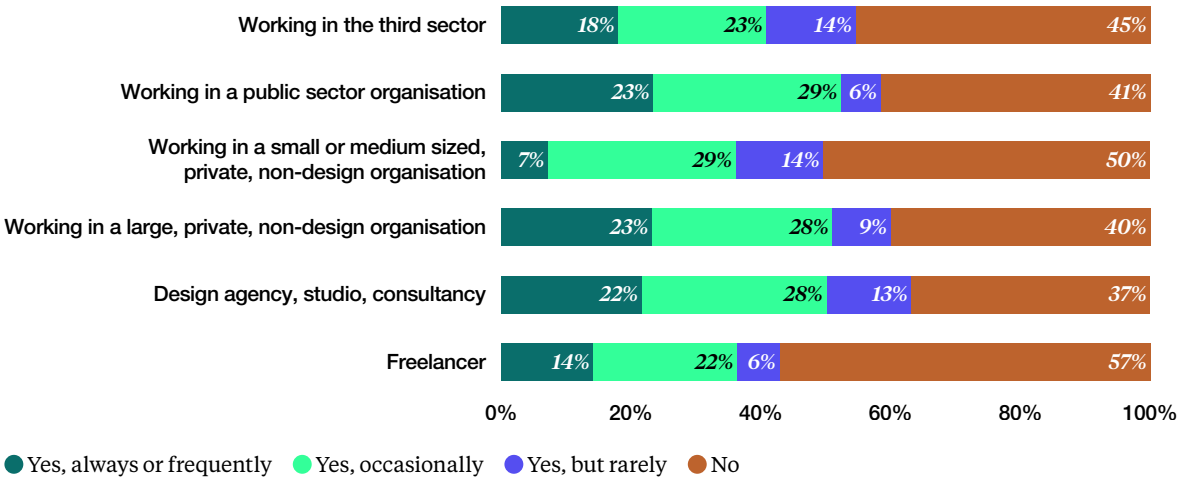
"There's so much advice out there that it's really difficult to home in on it - and then you've got the pressures of cost and time… it's tricky" (Survey respondent).

Appendix 3 provides an overview of available tools as identified by respondents and participants.

Access to quantitative impact measurement tools is expensive and – combined with the challenge of selecting the most appropriate tool – might mean that companies choose not to invest. There are some open-access tools (e.g. OpenLCA and associated databases) but overall, the provision of free or low-cost tools is limited.

Freelancers, non-profit, and small businesses are disproportionately affected by the cost of proprietary software. Only 36% of freelancers and designers working in small or medium private non-design organisations, and 41% of designers working in the third sector measure the environmental or social impact of their projects 'always or frequently' or 'occasionally', compared to 50% or greater of designers working in design agencies, the public sector, and large organisations.

Figure 13: Do designers in different workplace situations measure their environmental and social impact?



Some respondents and workshop participants – particularly in architecture, interiors, landscape and urban; digital, service and experience; and strategic design sectors – report using in-house tools developed to measure environmental and social value. The two main reasons given for developing internal tools are (1) being bespoke to the strategic sustainability mission of an organisation, allowing designers to effectively communicate with commissioners, and (2) an ability to simplify and streamline measurement.

The proliferation of tools and uneven access and use, creates a challenge of consistency across the sector, making it difficult for designers to benchmark themselves against peers and for commissioners to understand the potential value of design.

"There's no consistency. There's no common language across professions and regions. Different people pick up different metrics and apply them to a project at a point in time and it doesn't feel very satisfactory." (workshop participant)

To support decision-making in the design process, impact needs to be measured throughout. However, there is no consensus about how this should be done, and finding the right tool for different phases of the design process can be challenging.

"The key way that we would look to measure the impact of a product would be… life cycle assessment… but that is slow, expensive, data intensive, involves a lot of people - and it just doesn't play well with a design process that is fast and iterative… In the early design process… you don't need that…level of data. You need a steer so that you can make informed decisions" (workshop participant).

A streamlined life cycle assessment with a defined scope and conducted at the beginning of a project, can give sufficient direction for a designer who has the skills to interpret its output. However, streamlined assessments

are not robust enough for external reporting purposes. Their application in the evaluation stages of a design project runs the risk of unintentional greenwashing. This is demonstrated by the recent controversy surrounding the life cycle-based Higg Materials Sustainability Index (MSI), a tool developed by the Sustainable Apparel Coalition to support fashion and textile designers to choose more sustainable materials. The Higg MSI does not cover the whole product lifecycle and has been called misleading as a result.3

Qualitative frameworks – such as circularity checklists or ecodesign – can be applied at the beginning of the process for product-focused disciplines to provide an initial steer. While quantitative impact assessment tools can give a robust measurement at end of life. However, few tools are available that support decision-making in the concept and development stages of a project.

"[We need] tools and frameworks that fall in the middle…so they don't need to be as robust as something that's for external factoring communication but are more robust than a scaled 'good' to 'bad' qualitative thing, something that's a bit more actionable" (workshop participant).

The quality of data and metrics often cannot keep up with a rapidly evolving landscape. Designers can struggle to find up-to-date information, and to critically evaluate its quality, as our understanding of environmental and social issues evolves. Databases – although created in good faith – can become dated and incomplete. Access to good quality data becomes even more challenging when designers try to quantify impact using primary data from their often untransparent and complex supply chains.

Social value is even harder to capture than environmental value. While design for environmental value shares common objectives around positive impacts on climate and biodiversity across disciplines, design for social value is more open to interpretation. Frameworks that support social value in design are therefore high-level and generic and can be hard to embed in any training.

"I think it can be difficult for people to get their head around [social value]. Confidence is increasing a little bit, but there are still huge barriers, as it's kind of nebulous… Design practitioners tend to default to the things they can count" (workshop participant).

Workshop participants mentioned several frameworks for quantifying social value, including tools developed for government procurement4 and the UN Sustainable Development Goals (SDGs). However, they expressed concern about objectives getting "watered down and diluted" by applying high-level frameworks that often simply "tick the box for procurement" or are used to misrepresent the true social value of an organisation.

"…we see a lot of businesses citing the SDGs and sadly, instead of greenwashing it's like social washing. I rarely see people actually demonstrating that they are making some practical contribution… they're just using it as another flag to demonstrate how fantastic a business is when really all they're doing is just using the assets straight off the website".

4 These include UK Government's Social Value Model, Welsh Government's Wellbeing of Future Generations Indicators, and Social Return on Investment tools.

In addition, some forms of social value are not easily quantified. One participant explained:

"I've found it profoundly unhelpful, establishing proxies for some things that put a pound, shillings and pence value against things… I'm not going to say they were arbitrary, but effectively they were trying to justify why a certain number would go against something".

Simple methods are needed that combine quantitative and qualitative measurements for social value and communicate impact clearly and effectively.

Finding 4: There is a green design skills gap

While 71% of designers (and 82% of product designers) expect demand for green design skills to increase over the next three years, only 43% feel 'moderately' or 'fully' equipped to meet this demand. Only survey respondents from the architecture, landscape, urban and interior design sector have higher than 50% confidence in their ability to meet the emerging needs of clients. Meanwhile, strategic, organisational, system and policy designers have the lowest level of confidence (27%).

Workshop participants suggested this lack of confidence could be because service and strategy sectors are young in comparison to other disciplines, and practices are still emerging. While a considerable amount of academic work exists on how service and strategic design can address the climate and environmental crisis, there is a gap between theory and practice. Service design usually deals with systemic change and includes a multitude of stakeholders. As a result, it is unclear where within the design process environmental issues should be addressed and who is ultimately responsible.

Confidence seems to be slightly higher to design for social than for environmental value with 51% of survey respondents stating they are 'proficient' or 'expert' in designing for social value, compared to 45% for designing for environmental value. Respondents from the service and experience design sector are the most confident in their social design skills (60% considering themselves to be 'expert' or 'proficient'), followed by digital and UX designers (55%) and architecture, interior, urban and landscape design (52%) – all of which are characteristically human-centred design approaches. The craft (30%), product and industrial (41%) and clothing, fashion, textiles, and footwear sectors (46%) have lower levels of confidence in their social design skills.

Figure 14: How equipped do designers feel to meet the demand for green design?

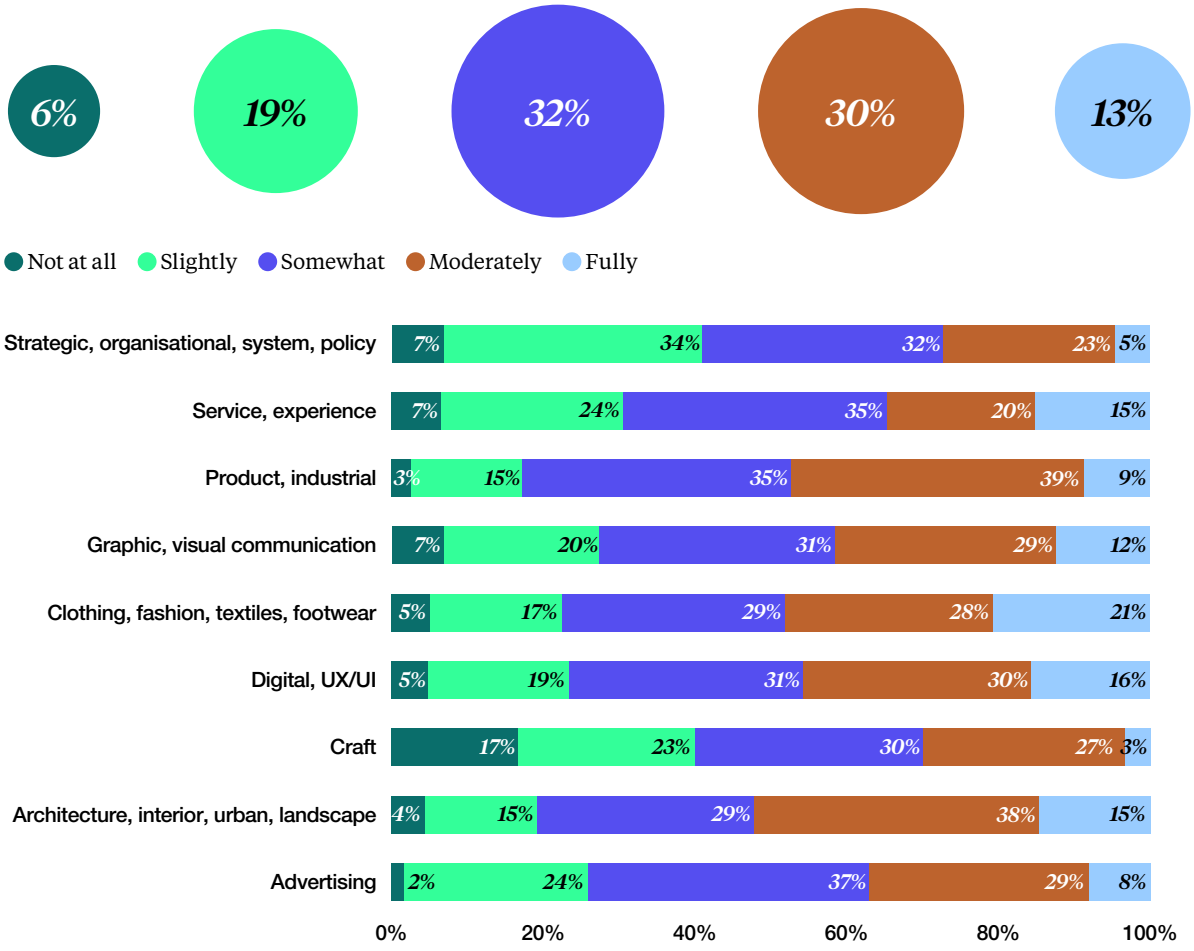


Figure 15: Designers' self-assessment of their environmental design skills (% respondents)

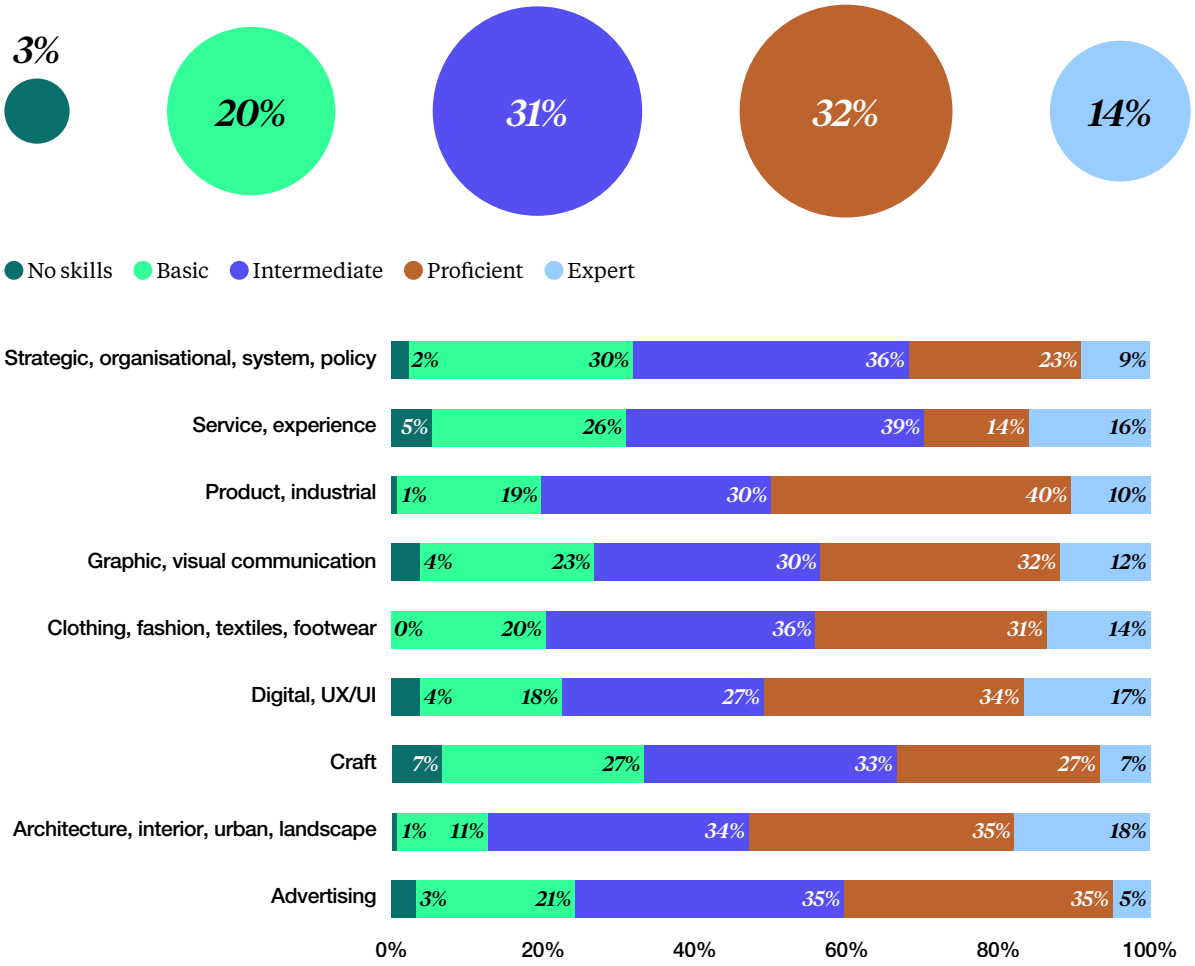
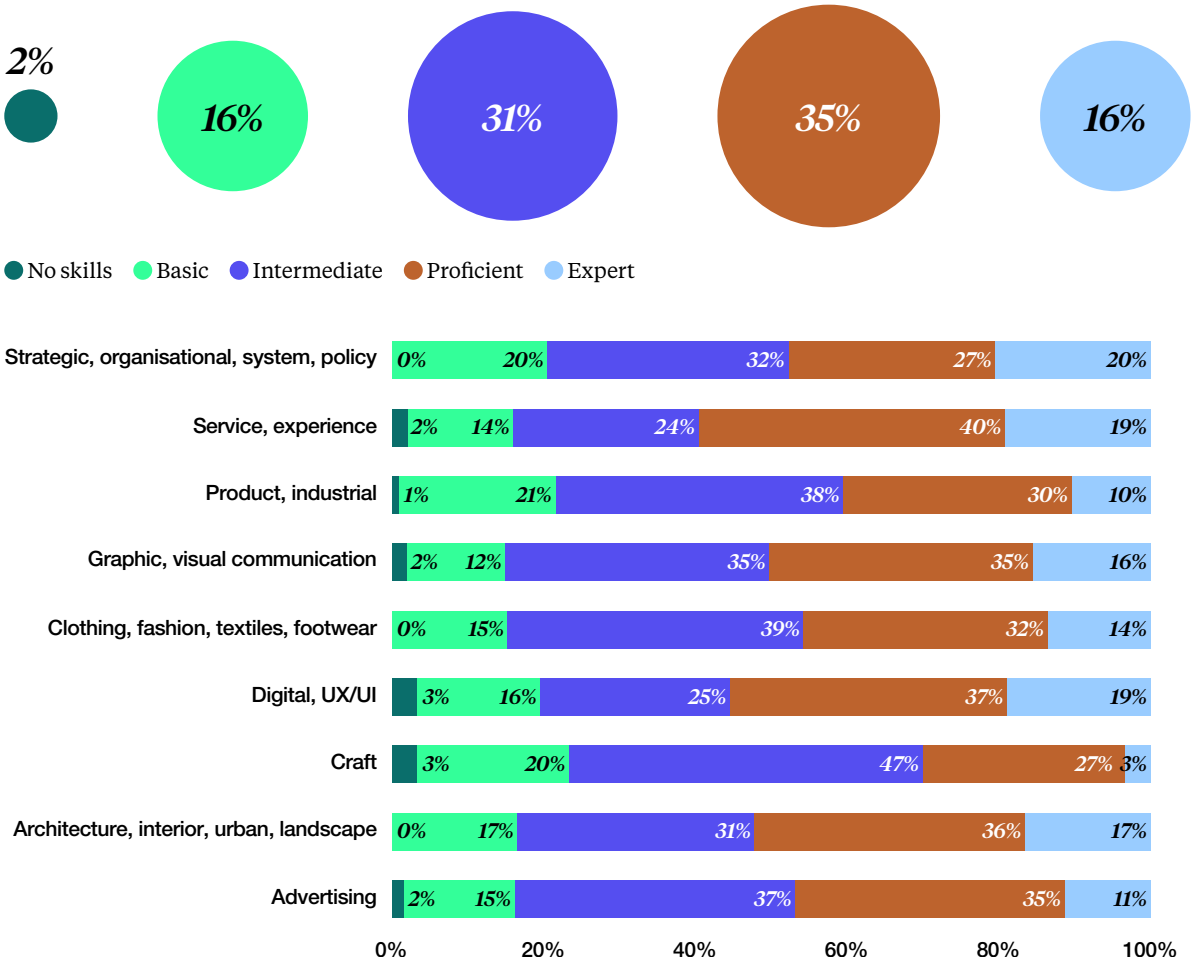


Figure 16: Designers' self-assessment of their social design skills (% respondents)



The lowest confidence levels for both environmental and social design skills are found amongst entry level designers and freelancers. While this is not surprising for entry level designers, the situation for freelancers is more complex. Freelancers move from project to project, often with little time to acquire new skills, and there is no incentive for employers to support their contractors in developing their skills, even if this benefits the business.

This may also explain the craft sector's low levels of confidence (30%) – a sector made up largely of micro-businesses, sole workers, and freelancers.

Formal education is not enabling designers to 'design for planet', with only 50% of designers feeling that their education provided them to a moderate or large extent with the skills needed.

Figure 17: Designers' self-assessment of their environmental design skills (by professional role)

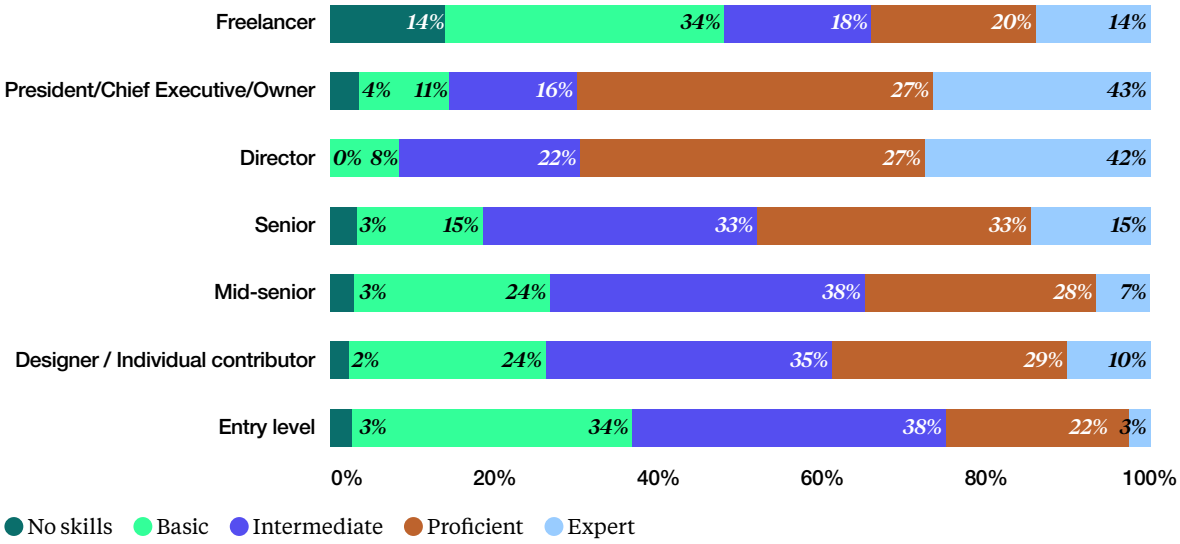


Figure 18: Designers' self-assessment of their social design skills (by professional role)

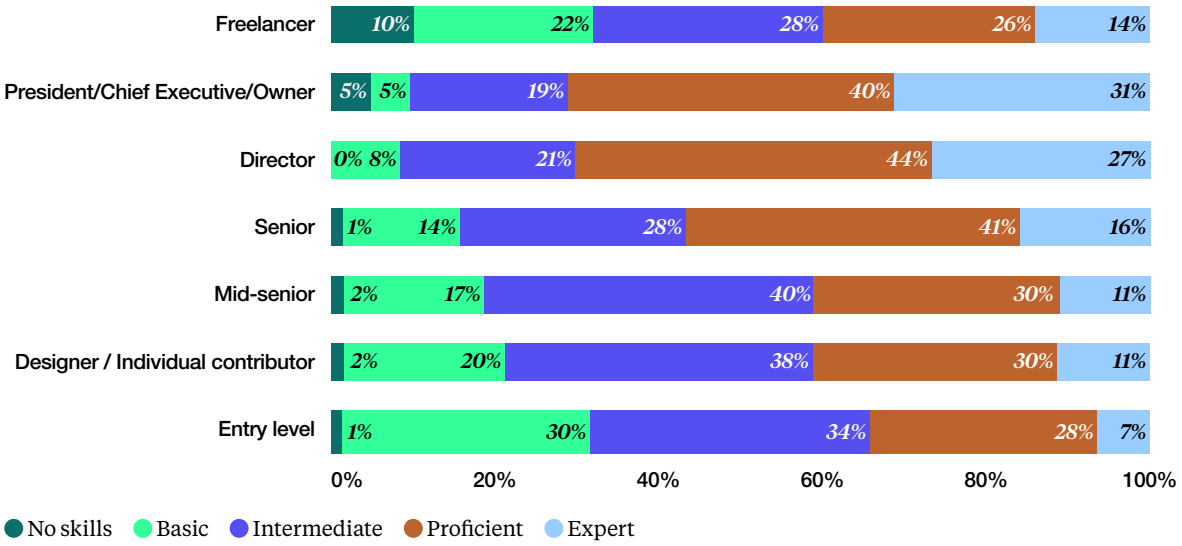
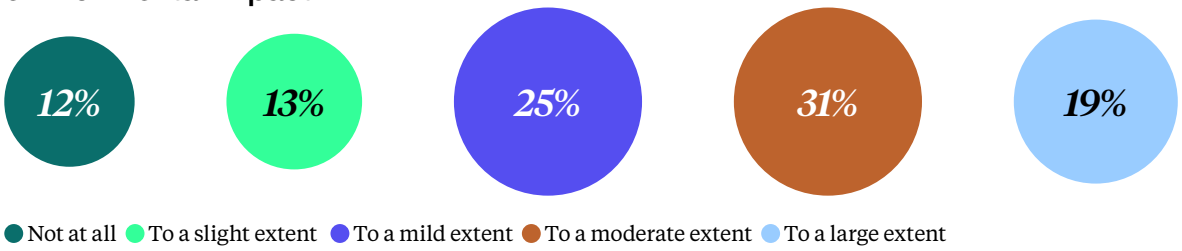


Figure 19: To what extend has designers' education enabled them to design for environmental impact?



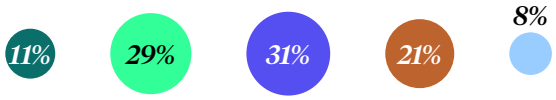
Respondents from the architecture, landscape, urban or interior design sector are more likely to feel that their education has equipped them to a moderate or large extent (62%). Respondents from the clothing, fashion, textiles, and footwear sector – where in recent years, academic programmes have begun to focus more on sustainability and circularity – also feel better prepared by their education (59%) than other sectors.

Survey respondents were asked what types of skills designers might require for environmental and social design, and how confident they are in applying those. They were less likely to report being 'expert' or 'proficient' in skills and knowledge associated with sustainability and business processes, including understanding the fundamentals of sustainability (44%) and business governance (41%), than they were with skills associated with the design process, including, for example, analytical thinking (62%) or prototyping and problem resolution (57%).

Figure 20: Designers' self-assessment of their specific skill sets to design for environmental impact (% respondents)

Long-term outlook, future thinking

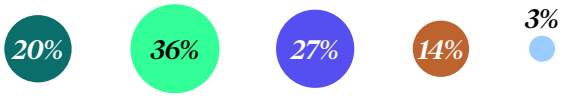
Business governance



Technological skills (incl. AI)

Collaboration

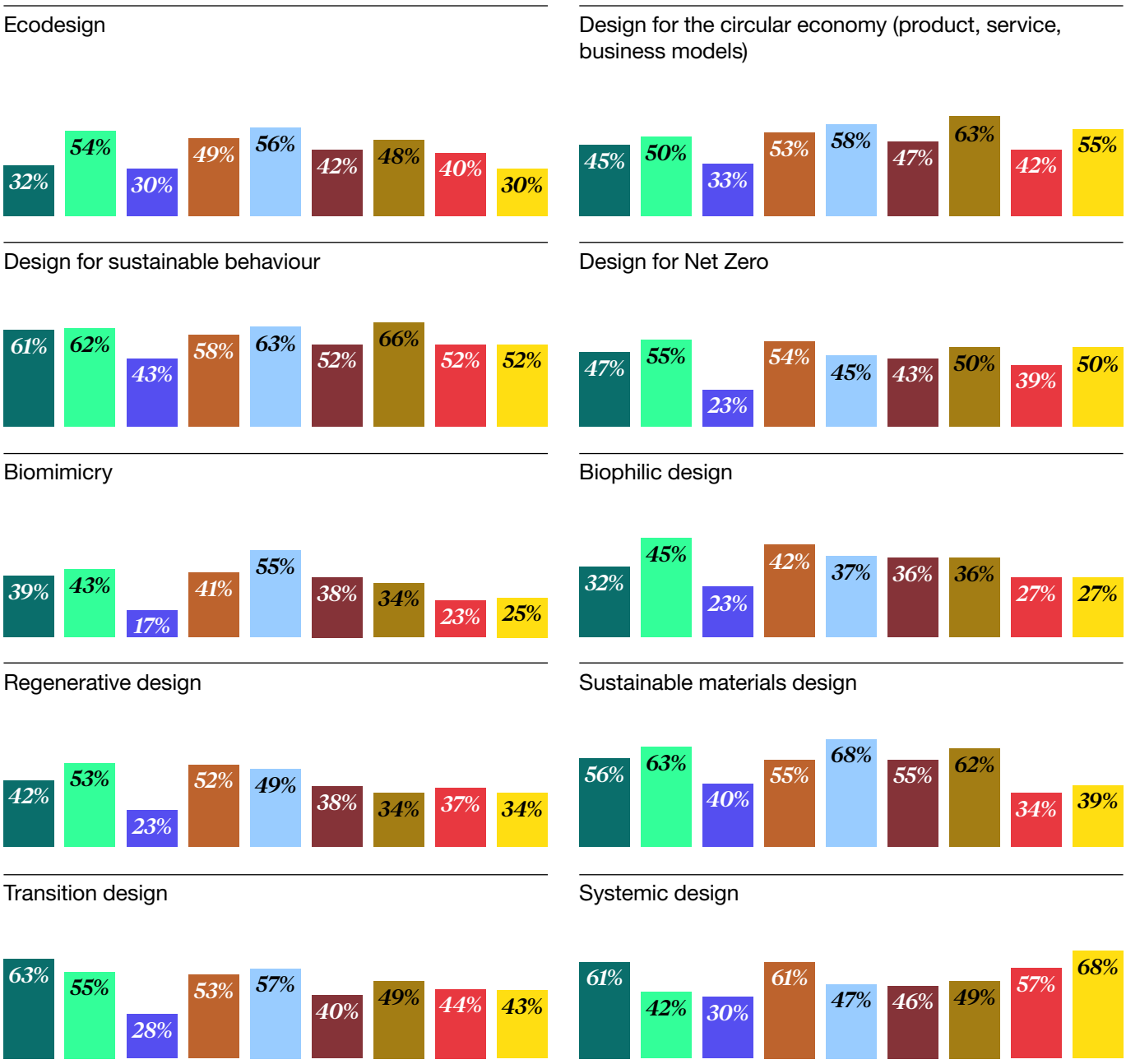
Innovation



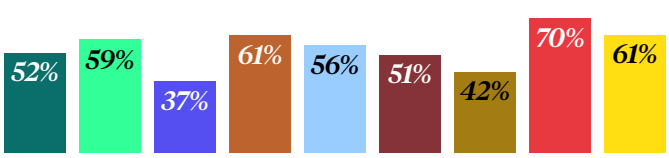
Value management & value assessment

Expert Proficient Intermediate Basic No skills

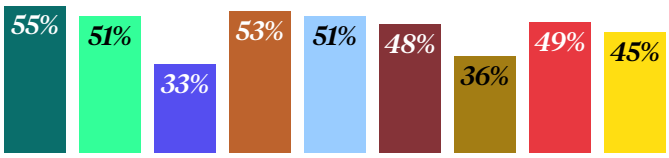
Figure 21: Designers' self-assessment of their competence in using green design approaches? (% respondents across industries)



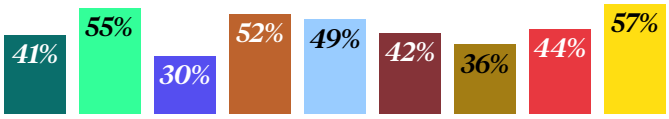
Social design



Design activism



Policy design



Other

- Advertising
- Architecture, interior, urban, landscape
- Craft
- Digital, UX/UI
- Clothing, fashion, textiles, footwear
- Graphic, visual communication skills
- Product, industrial
- Service, experience
- Strategic, organisational, system, policy

Designers were also asked how competent they felt in applying different environmental design approaches.

There is a lack of confidence across all sectors in learning from and engaging with nature. Only the clothing, fashion, textiles and footwear sector had greater than 50% confidence in applying biomimicry, (a structured approach to learning from nature to solve human design challenges)5 while the digital/UX and architecture, interior, urban and landscape design sectors were the only ones to have greater than 50% confidence in regenerative design. Regenerative design aims to design 'things' that create life and have a net positive impact on natural systems. No discipline had greater than 50% confidence in applying biophilic design,6 not even architecture, where biophilic design has received considerable academic attention. Product-focused disciplines (craft; fashion and textile; product and industrial; graphic and visual communication) are more comfortable with materials-focused approaches, while designers who work on less tangible solutions (service and experience, strategic design) have greater levels of confidence in systemic design and policy design.

Workshop participants also identified a lack of confidence in business skills amongst designers. Yet, these skills are critical for creating the enabling conditions and mindsets amongst employers and clients. Whilst design for environmental value might provide significant return on investment in the long-term, it requires employers and clients to move away from business-as-usual in the short-term. Skills in negotiating, relationship management, and demonstrating business value can empower designers to talk to clients and employers.

"The thing a lot of us share is a lack of knowledge and skill about being influential within our businesses… I can be the cleverest person when it comes to sustainable design, but if I fail to influence our senior team, the C-Suite, then I'm wasting my time" (workshop participant).

Empathy skills, not only towards end users but also towards the broader value network, including nature itself, are also identified as key skills. Workshop participants discussed the need for 'humility' and recognising and synthesising multiple viewpoints. Designing for environmental and social value can become emotive – designers want to do the 'right thing', and this may conflict with the priorities of other stakeholders.

Simultaneously, designers feel confident in their ability to collaborate with others – another critical skill.

"I think designers have always been good at pulling people together from different disciplines and making sense of lots of different stakeholders… there are new stakeholders that we're bringing in and we need to be able to work with supply chain, and procurement, and marketing to make sure they're not greenwashing, and bringing in different disciplines like life cycle assessment or other forms of impact assessment… I think there are new kinds of cross-disciplinary relationship we need to form, which we've always been good at - but I think we need to find those new people to be able to build the systems".

Most participants develop their knowledge and skills around designing for environmental and social value through their own experimentation. For example, when Planit built its new studio, the company used the opportunity to learn by doing, making the space a regenerative design prototype.

5 https://biomimicry.org/what-is-biomimicry/ [last accessed 01 July 2024]
6 https://biophilicdesigninstitute.com/ [last accessed 01 July 20244]

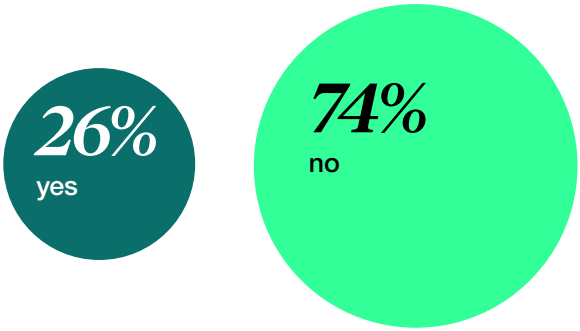
Designers' high levels of motivation to learn is also leading to the formation of informal communities of practice, enabled by online platforms such as LinkedIn.

A change in attitudes towards sharing information is noticeable, as well as a recognition of the value of learning across sectors. Workshops revealed that designers feel they can learn from climate scientists, policy and social specialists, and financial and business specialists.

"There's an enormous amount of collaboration and open-source information being made available, particularly in the architectural world…I'm amazed by how collaborative and open people are in an industry that used to be quite guarded" (workshop participant).

In terms of formal training programmes, only 26% of designers had actively engaged in continuous professional development (CPD) on designing for environmental and social impact in the last three years. Architectural, interior, urban and landscape designers were most likely to have undertaken training (39%).

Figure 22: Have designers undertaken any CPD on sustainable design in the past 3 years?



Architecture is a regulated sector that has a formal process for CPD in place; the Architectural Registration Board has a legal responsibility through the 2022 Building Safety Act to monitor CPD engagement amongst architects, recommending that architects engage in eight CPD activities a year.

"As a landscape architect and urban designer, much of our CPD is focused on these [social and environmental] issues, through formal and informal providers" (survey respondent).

Across the rest of the design economy, there is little formal CPD demand. High costs and a lack of available courses that address environmental and social issues from a design perspective were common themes across all workshops.

04 Opportunities

This part of the report is based on 19 case studies of UK businesses. Building on the findings presented in the previous section, it explores how businesses can create environmental and social value and, conversely, how environmental and social design can create value for businesses. A full list of case studies can be found in the Appendix.

Overall, the case studies demonstrate that businesses realise the greatest environmental and social value when they adopt a strategic approach to sustainability, embedding it in values and purpose, and/or when focusing on social and environmental value in public procurement. Businesses that are not in this position often take an approach to environmental and social issues best described as 'compliance' - managing and mitigating the impacts of business-as-usual – and perceive taking action to address these issues as a cost. The cost-of-living crisis has amplified businesses' desire to achieve short-term financial goals over long-term investment. Taking a more strategic approach to design for environmental and social value might provide significant returns on investments in the long-term by opening new revenue streams, saving costs, improving relationships with customers and suppliers, and making businesses more resilient. However, in the short-term it requires employers and clients to move away from business-as-usual and to bear the cost of the initial investment.

Making the business case for investing in environmental and social design is particularly challenging for freelance designers or those working in design agencies, given that they are not the recipients of their practice's financial benefits. In a classic 'chicken-and egg' situation, greater client demand for sustainable design would make the business case for a design agency to invest in upskilling its designers or for freelancers to undertake training; and more evidence of the environmental and social value of design could increase client interest. Indeed, support from both employers and clients was key for respondents when asked what would help them to better 'design for planet'.

Based on the insights from the business case studies, a series of five proposition statements have been developed by the Design Council to articulate how environmental and social design positively impacts businesses.

Table 1: Exploring the environmental and social value of design, Design Council

Impact for businesses	Role of design	Case study examples
1. Reduce emissions Design can save money by reducing carbon and helping to reduce scope 1-3 emissions.	Lightweighting products, frugal innovation, bio-materials; business and process efficiency.	Orangebox, Pd-m, Material Cultures
2. Increase commerciality Design can increase commerciality of sustainable products, de-risking innovation by testing with users and ensuring solutions are desirable.	User research, co-designing with users, prototyping, testing, branding and marketing.	Celsa, Dream Networks, Mourne Textiles, Faith in Nature, Studio Amos
3. Increase circularity Design can create value out of waste (or bio-material innovation) and helps keep more value in play.	Circular product design, circular business models, service design, regenerative design, bio-materials, design for longevity, modular design.	Orangebox, Celsa, Suez, Toast, Studio Frostwood, John Lewis
4. Strategic outlook Design helps businesses meet wider ESG and fiduciary responsibilities including reducing climate risks, saving customers money and winning more business.	Strategic design, user-experience design, interaction and digital design, service design, systems design, designing for behaviour change.	Planit, Big Motive, Nesta, Peabody, Magnetic, Panasonic
5. Future focus Design can help businesses stay ahead of the market (creating new markets and ways of doing business).	Imagining future possibilities, speculative design, gamification.	Dark Matter Labs, Magnetic

Design can save money by reducing carbon and helping to reduce scope 1-3 emissions

Design plays a crucial role in reducing scope 1-3 emissions by influencing the lifecycle of products, systems, and services through lightweighting products, process efficiencies, and use of bio-materials.

Scope 1 direct emissions are those that come from sources controlled by a business. Designers can support businesses by using materials with low emissions during production and reconfiguring processes to minimise energy consumption and waste. Designers and architects can support businesses in implementing green building standards to reduce energy and water use. Designing products that consume less energy during their use phase can contribute to carbon reductions. Where product and industrial designers can perhaps add most value is through lightweighting products, frugal innovation, and designing products that consume less energy during their use phase.

Scope 2 indirect emissions are emissions from the purchased electricity consumed by a business. Designers and architects can help to reduce them by designing facilities with smart systems, bio-based materials, renewable energy sources, and natural or energy efficient lighting to optimise energy usage.

Example: Pd-m
Health-Tech design, innovation and sustainability consultancy Pd-m adopted frugal innovation methodology to redesign the equipment required to perform keyhole abdominal surgery. Such surgery usually involves inflating the stomach which involves the use of heavy and expensive gas cylinders. The specially redesigned device is more easily transportable and lifts rather than inflates the abdominal wall, meaning gas cylinders are no longer required, saving a projected £78,000 per year in costs and 107.3 tonnes of CO2/year.

Example: Material Cultures
Material Cultures is a London based architecture firm founded on the premise of making the built environment more sustainable. It calculated that using bio-based materials to build the 500,000 new homes needed in the Northeast in the next 17 years could save 2.88 megatons of carbon and generate £14.8 billion in GVA. The firm's wider work demonstrates that low carbon, locally sourced materials can be more affordable and durable than conventional manufacturing materials, often outperforming industry standards.

Scope 3 indirect emissions are those which can occur in a business's value chain, up and downstream, and over which the business has limited direct control. Designers can help to reduce them through work that optimises supply chains by selecting materials with lower embodied carbon and working with suppliers who follow sustainable practices. As well as creating durable products that reduce the need for frequent replacement, designing lightweight packaging, prioritising local suppliers to cut down transportation distances, and creating products that can be easily disassembled for reuse or recycling.

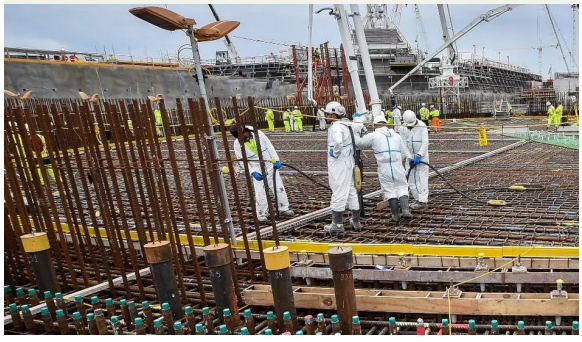
Example: Orangebox
Welsh furniture manufacturer Orangebox has set ambitious targets to reduce 50% of its emissions from operational energy by 2030 and achieve net-zero by 2050. All Orangebox products are designed and built in the UK, with around a third of component parts sourced from within Wales, allowing the firm to accurately measure the impact of its products. All Orangebox chairs are delivered by its own fleets, enabling Orangebox to accurately measure and optimise load utilisation, routes and fuel economy.

Design can make sustainable solutions more desirable to businesses

Design can increase commercialisation and de-risk delivery in new sustainable markets through iterative phases of user research, concept development, prototyping, and branding. This allows companies to refine new product and service offers and reduce the risks associated with scalability.

The starting point of a good design process, whether designing products, services, systems or strategies, is understanding the needs and behaviours of users, customers and stakeholders. User research and the subsequent inductive insights enable designers to develop or co-design solutions that resonate with customers, therefore increasing adoption and market success.

Example: Celsa
Celsa is the largest producer of recycled steel in Europe, producing 1.2 million tonnes annually for UK and Irish markets. Bringing a designer on board encouraged Celsa to talk to customers and stakeholders, allowing it to understand diverse opportunities. User research has resulted in prototyping new offers such as registering customers as suppliers, enabling Celsa to purchase their scrap steel, reprocess it and deliver it back to the same site as a new product. By understanding its customers and building a community of stakeholders, Celsa can effectively close the loop and see scrap providers as strategic partners. The current price of scrap steel is £120-235 per tonne, meaning companies can make a profit by closing the loop. For companies such as supermarket chains that recycle 4.5km of steel shelving every three years with Celsa, recycling steel is seen as a service that generates profit and allows for resource transparency and traceability.



As well as understanding user needs, designers can jointly create new concepts using creative engagement approaches with users. This can generate outcomes that are more desirable, feasible, and viable. By involving users in the research and concept development phase, designers can develop solutions that correspond to user requirements and subsequently, prototype, test, and iterate concepts with consumers.

By jointly creating or co-designing solutions with customers, designers can push the boundaries of the concept development phase while also exploring how to use more sustainable and lower cost materials.

Example: Dream Networks
Dream Networks' play spaces are co-designed with children and made from 75% natural or reused materials, reducing the cost of the play spaces by 30-50% compared to off the shelf options. Dream Networks facilitate collaborative workshops between communities, educational institutions and businesses. Children are guided through a design thinking process to create their ideal playground using inclusive and creative techniques including drawing, modelling and CAD software whilst incorporating STEM education, sustainability principles and knowledge of technology. When the children's final designs are selected, Dream Networks works with local businesses to construct the play space to the children's specifications with a special focus on inclusion, sustainable construction and regenerative materials. Since its launch in 2016, over 40,000 children have been provided with safe play spaces.

There is a growing market segment focused on ethical, sustainable products that are designed for longevity, using quality, local materials. This trend is particularly evident in the craft sector with handmade, heritage products lending themselves to low volume, high value production.

Branding, packaging, and communication design build awareness and educate consumers about the environmental and ethical credentials of companies. They shape consumer perceptions, drive demand and differentiate products and services in a crowded marketplace. Effective branding tells a story about the product's journey – from sourcing to production, emphasising sustainability at each step. This narrative helps consumers understand and appreciate the product's value and builds loyalty and trust. Brands that are perceived as genuinely committed to sustainability can foster deep connections with their audience. Increasingly, sustainable and ethical practices are becoming a unique selling proposition for companies. Highlighting organic materials, fair trade practice and carbon-neutral processes supports premium pricing.

Example: Mourne Textiles
Example: Nestled in the Mourne Mountains in Northern Ireland, Mourne Textiles is a family business that uses traditional weaving techniques to produce interior furnishings and clothing. It has seen an approximately 25% increase in demand per year for the last two years, with a fivefold increase in demand from luxury interior design clients such as five-star hotels, designer brands and public authorities seeking products with a connection to heritage and sustainability.

Example: Faith in Nature
Launched in Scotland in the 70s, Faith in Nature is a B Corp certified, hair and skincare company with 99% natural ingredients, 100% recycled packaging and bills itself as the first company in the world to 'give nature a voice and vote on the board'. Its 2017 rebrand sought to connect with the ethical consumer mindset, highlighting that the company had reduced its scope 1 emissions by 14%, moved to entirely renewable energy sources and increased use of recycled plastic by 11%. In 2024, its research project funded by Innovate UK explored how it can prompt behaviour change and encourage customers to choose solid rather than liquid products, which use significantly less water to produce.

Design can create value out of waste

By reimagining waste materials as resources, design can create value from waste, diverting materials from landfill and reducing the extraction of virgin materials from nature. This not only helps conserve natural resources but also mitigates greenhouse gas emissions. In nature, everything is reused or regenerated as part of the ecosystem – a process that the circular economy approach aims to replicate. By mimicking nature's regenerative processes, the circular economy transforms waste into new resources, keeping more value in play and creating opportunities for green jobs. Some organisations have reported that while recycling does not necessarily save costs it may allow for economic gain through new product lines.

Example: Studio Frostwood
Studio Frostwood is a multi-disciplinary ceramics studio in Edinburgh that incorporates sustainability practices into the creative process. Conventionally, around 20% of materials are wasted during the ceramic making process. Through a UK Research and Innovation funded project, the studio was able to assess which materials and minerals could be retained and how they could be reused to create new product lines such as 'sludge' vases. From 2022 to 2023, Studio Frostwood diverted a total of 111kg of material waste from landfill to its new product lines.

Example: Toast Brewing
Since 2016, Toast Brewing has used over 3.3 million slices of surplus bread to make 3.1 million pints of beer, creating £106,000 profit. Toast Brewing uses 25% less malted barley than other brewing companies and its use of surplus bread has freed up 71 acres of land, avoiding the production of 70 tonnes of CO2 and use of 420,000 litres of water. Certified as a B Corp organisation in 2018, it has set a wider goal to impact the brewing industry by providing its beer recipe as open source and collaborating with breweries across the world, including a research and development partnership with Heineken.

Holistic design approaches such as considering the end-to-end lifecycle of a product, sustainable materials selection, and designing for durability and reparability are effective strategies for reducing waste in the production process and even creating value from waste. Research has demonstrated that 80% of the environmental impacts of products are determined at the design phase. Designers are supporting companies to conduct lifecycle assessments and replace materials within the production process with bio-material.

Example: Suez Recycling and Recovery UK
Suez Recycling and Recovery UK is a resource management company that handles approximately 11 million tonnes of waste material annually through its 30 reuse shops across the UK. Since 2021, the Renew Hub, the largest reuse hub based in Manchester, has sold 260,000 items back to communities, generating an estimated £13,750 of social, environmental, and economic impact per tonne of goods diverted. It has also created over 20 new green jobs. In 2023, the company's shops diverted more than 500,000 items from being disposed or recycled and was able to provide placements for over 60 trainees and 100 ex-offenders.

Example: Orangebox's 'Do Chair'
Orangebox's 'Do Chair' is its best-selling product, with 800,000 sales over ten years. Relaunched in 2023, the updated model has the same look and function but with a completely re-engineered material palette consisting of 58% recycled materials, 98% recyclable materials and 64% polymer materials, reducing the embodied carbon of previous chairs by 40%. The recycled materials used in the new chair are sourced from three main waste streams, pre-consumer waste, post-consumer waste, and domestic recycling and landfill waste. Reusing these fibres reduces the use of virgin materials and mitigates potential methane emissions.

Designers are also using circular economy principles in business models, such as product-as-a-service, upcycling, rental and take-back schemes and sharing platforms. In the transition to product-as-a-service business models, companies lease products while retaining ownership so they can be maintained, upgraded, and recycled at the end of their lifecycle. Upcycling, refurbishing, rental and take-back schemes have become particularly prevalent in the fashion and textiles industry.

Example: John Lewis Partnership
As a co-owned business, John Lewis Partnership has always focused on giving back to communities and protecting the environment. Since 2022, it has launched three circular fashion initiatives including fashion rental, takeback and preloved schemes to help customers adopt more sustainable attitudes towards their wardrobes. The John Lewis Fashion Rental scheme enables parents to rent children's clothes. In two years, 6,000 people have signed up and 40% of these had never shopped at John Lewis before, attracting a new generation of shoppers.

Design helps businesses meet wider Environmental, Social and Governance (ESG) responsibilities

By implementing sustainable design practices, businesses can reduce climate risks, enhance customer satisfaction through cost savings, and ultimately gain a competitive advantage in the market.

Increasingly, designers report that their customers seek to use design for meeting sustainability targets and are required to measure the impact of their changes. Those designers that have been able to quantifiably measure the impact of their material choices, can demonstrate the added value of regenerative design and support organisations to meet sustainability goals. Organisations are even combining co-design with co-production, with local stakeholders not only creatively involved in developing solutions to local challenges, but also helping to deliver and manage the outcomes.

Example: Planit
Planit is an interdisciplinary design practice of landscape architects, urban designers, digital artists and engagement specialists with around 60% public sector clients. It has adopted the Climate Positive Design Tool to measure how much carbon is emitted or sequestered as a result of the materials selection in urban design projects. By demonstrating the impact of different design choices, Planit can support public authorities to make informed decisions during the design and build phase to reduce carbon footprints and sequester more carbon. Through iteratively refining the material selection for The City River Park project in Manchester, there is potential for nearly 600 metric tonnes of carbon to be sequestered over the 50-year life span of seven green spaces. Measuring and in turn demonstrating the impact of regenerative design directly led to Planit winning five new public sector contracts worth over £300,000 within a year.

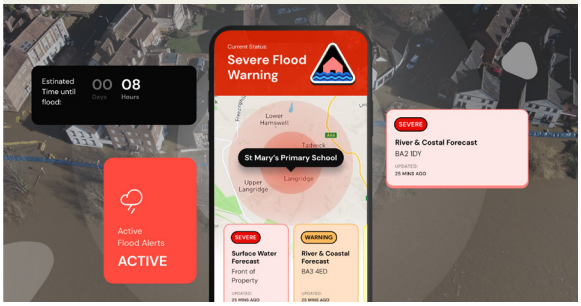
Example: Peabody

Peabody is a UK housing association with over 107,000 homes, 220,000 residents, and a turnover of £1.1bn, and is an example of a large organisation using design to achieve positive environmental and social impacts alongside financial outcomes. Its current three-year environmental sustainability strategy states the organisation's aim is to become net zero in its day-to-day business by 2030 through its use of technology in new build homes and retrofitting old homes. Peabody's ongoing Thamesmead project is home to 47,000 people and is projected to develop into a town housing 100,000 people, in which all rented homes will achieve net zero by 2050. The Thamesmead estate is large and complex including homes, commercial properties, 240 hectares of green space, five lakes, canals, 5km of river frontage, 15 community buildings and 53,000 trees. Peabody has been pioneering a co-design approach, enlisting a panel of residents to take part in the tender process, design reviews, and all project meetings.

By combining user perspective with the wider system context, design can develop strategic solutions that enable businesses to comply with regulations, reduce risk, and ensure that ESG efforts are transparent and credible. Service design, strategic design, UX, and system design are increasingly being applied to the challenges of climate change.

Example: Big Motive

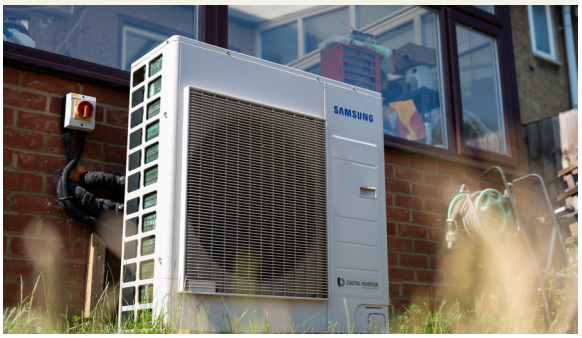
Big Motive, based in Belfast, provides digital services and products using its design capabilities to envision and enable sustainable, equitable, and healthy futures. Working with Resilient Planit, Big Motive designed and developed Resilico, a suite of digital products to aid people and organisations in flood preparedness and mainstream Property Flood Resilience. Resilico is projected to support more than 50,000 homeowners by 2026, in partnership with Aviva and Flood Re. It has been rolled out to 100 schools in England and Wales by the Department for Education since 2023.



Businesses also use their experience of sustainable and user-centred design to create blueprints for international best practice and engage with government. Design is being combined with other disciplines, such as behavioural economics, to instigate a mindset shift and behaviour change.

Example: Panasonic's Flux
Panasonic Design London (PDL), Panasonic's strategic design team helps to translate Panasonics vision for sustainable business into operational impacts. Using strategic design approaches to achieve business and ecological goals the PDL team has been involved on several innovative projects.
The PDL team were involved in rethinking packaging and its ecological impact, contributing to global packaging guidelines that will be implemented in European region from this year with the intention of going global. They have also worked with the division that developed the firm's RE100 hydrogen fuel cell, to fully translate it into a brand Panasonic HX, a user-facing solution.

Example: Nesta
Nesta is an innovation agency for social good, using design and research to interrogate solutions to societal challenges such as the school readiness gap, health inequalities and decarbonising UK homes. Nesta launched the Money Saving Boiler Challenge in 2022, challenging people to turn down the flow temperature of their combi boiler to 60°c or below. Approximately 3.1 million households did so over the course of the campaign, reducing an estimated 500,000 tonnes of CO2, and nearly £300 million in savings for households and £157m for HM Treasury.



Design can help businesses stay ahead of the market

Designers are usually required to create solutions to immediate challenges. However, emerging design practices can also be applied to entrenched challenges to reimagine sustainable, equitable futures.

Speculative design is a niche design practice that imagines possible futures by creating concepts and scenarios to spark debate about the potential repercussions of emerging technologies, social changes or environmental issues. Rather than focusing on solving immediate problems or creating market-ready products, speculative design is concerned with "what if?" questions, allowing designers and audiences to explore alternative realities and the implications of different choices.

Speculative design can challenge the status quo and enable designers to explore new concepts and systems.

Example: Magnetic
Magnetic is a leading independent innovation business using design as a force for good. It is working with Mars to improve the lives of 350,000 cocoa farmers over the next 28 years and re-envision the cocoa supply chain to meet Mars' goal for 100% of its cocoa to be responsibly sourced and traceable by 2025. Magnetic was brought in to reimagine future scenarios and embed design into the processes. It pushed radical thinking with Mars to expand its projected cocoa timeline from 5-10 years to 30 years, focusing on long term development to produce a strategic vision for the sustainable cocoa supply chain.

Example: Dark Matter Labs
Dark Matter Labs is a not-for-profit working to design and build options for the next economies and envisioning a future where diverse civic economies are community-driven, regenerative by design and based on interconnected relationships. Dark Matter Labs' ongoing project FreeHouse, offers low carbon housing with innovative financial agreements that require no rental payments and can save residents upwards of £12,384 (per house of 8) on commuting costs due to green charging facilities. FreeHouse addresses the notion of property as a systemic cause of the housing crisis and explores complex factors of power dynamics, accrued wealth, unequal societal structures and concepts of ownership. It also challenges the traditional notion of property ownership by looking to alternative examples, such as Indigenous practices, that model harmonious house-to-inhabitant relationships.

05 Recommendations

This section distils key recommendations, based on the research findings and propositions presented in the report. The recommendations are focused on current designers, future designers, and commissioners.

To effectively empower the **current generation of designers** with the knowledge, skills, and support necessary to integrate environmental and social value into their practices, we propose the following three integrated recommendations:

01. Establish comprehensive training and resources:

Implement a subsidised sustainability literacy programme and develop an accredited, flexible continuing professional development (CPD) programme that enhances designers' skills in creating and measuring environmental and social value. This should include business skills training and access to resources that clarify impact metrics and design approaches aligned with the Design Value Framework.

02. Facilitate access to support and data:

Provide designers with independent guidance in the early stages of projects to foster the creation and measurement of environmental and social value. Ensure access to a common source of up-to-date data and affordable, robust tools that aid the design process, as well as resources for critically evaluating existing tools and their applications.

03. Create collaborative learning spaces and showcase best practices:

Establish platforms for designers to share experiences and learn from one another about emerging best practices, while also facilitating discussions with professionals from other sectors on effective impact measurement. Include case studies that highlight not only the environmental and social value achieved by projects but also the processes and tools that enabled these outcomes, demonstrating how businesses can strategically structure their operations to support sustainable design initiatives.

To effectively prepare and empower the **next generation of designers**, we propose the following three integrated recommendations:

04. Revise curriculum to integrate sustainability and business skills:

Develop a design education framework that prioritises environmental and social value while incorporating essential business skills to address the complexities of modern design challenges.

05. Enhance collaborative learning opportunities:

Facilitate partnerships with diverse stakeholders, including business leaders and supply chain partners, to provide students with hands-on experience and real-world insights, fostering interdisciplinary collaboration. Sector advisory boards should guide design education programmes to ensure alignment with industry standards and best practices in sustainable design.

06. Promote critical engagement with evolving knowledge:

Equip students with a solid foundation in environmental and social issues, encouraging them to seek, critically evaluate, and adapt to evolving information and evidence.

To effectively equip **commissioners** with the knowledge, tools, and resources needed to embrace and promote sustainable design practices, we propose the following integrated recommendations:

07. Establish standards and showcase benefits:

Develop sector standards and registries to define and demonstrate what constitutes 'good' design for social and environmental value. Accompany this with a diverse range of case studies that highlight the co-benefits of such design, including cost savings, new revenue opportunities, enhanced customer relationships, and improved business resilience.

08. Provide benchmarking and guidance:

Create tools for commissioners to assess their current maturity in implementing design for environmental and social value, along with clear strategies for transitioning to more sustainable business practices.

09. Advocate for improved measurement and support:

Lobby for better approaches to measuring carbon emissions, that focus on environmental value creation rather than just impact management. Additionally, implement a business support programme that promotes model change by providing financing for projects that champion social and environmental value.

06 Conclusion

This report underscores the growing importance of design in addressing pressing environmental and social challenges. By analysing data from surveys, workshops, and case studies, it highlights how designers are already creating significant value in these areas. However, the report also identifies barriers that hinder broader adoption of sustainable and socially equitable practices, such as limited measurement tools, skills gaps, and systemic constraints within organisations.

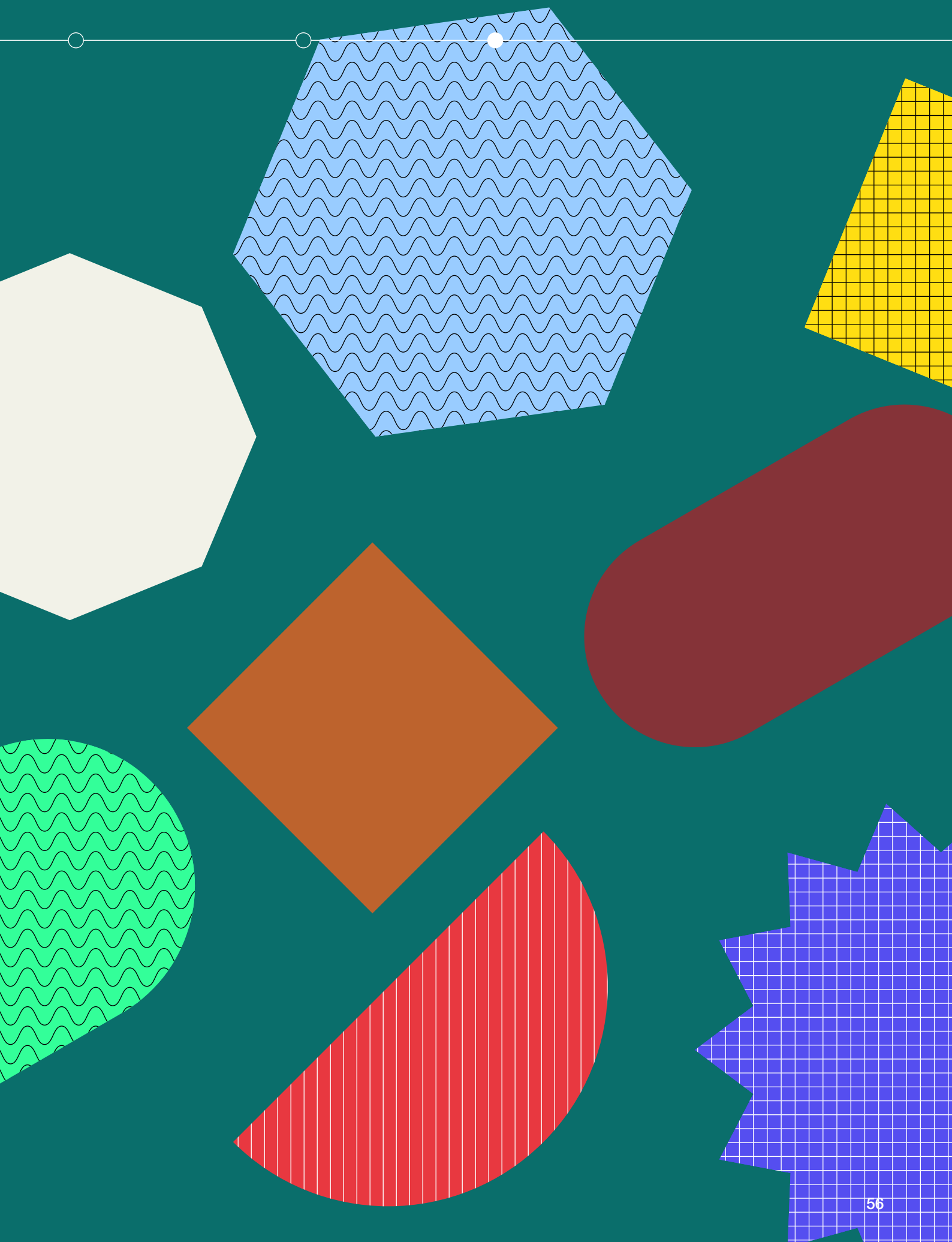
A key aspect to this report is its focus on green design skills and the broader concept of Design for Planet. These skills are crucial for developing solutions that reduce emissions, minimise waste, and enhance biodiversity while delivering social and economic benefits. Through case studies, the report demonstrates the dual value of design: generating environmental and social benefits for society while creating competitive advantages for businesses.

The findings make clear that while design is already delivering positive outcomes, there is untapped potential that future efforts must address. To guide these efforts, the report proposes several avenues for further research:

- **Economic incentives and business models for sustainable design:** Investigate how subsidies, tax benefits, and new business models can encourage widespread adoption of sustainable design practices.
- **Standardised metrics for impact measurement:** Develop improved frameworks to quantify design's environmental and social value, enabling better comparison and integration into policy and procurement.
- **Addressing the green skills gap:** Identify effective strategies for bridging the green skills gap; explore the integration of sustainability into formal education curricula; examine the effectiveness of targeted training, professional development mentorship, and peer-learning networks.
- **Longitudinal studies:** Evaluate the long-term impacts of design interventions to better understand their sustainability and equity benefits over time.
- **Impact of emerging technologies:** Assess how digital and emerging technologies can enhance sustainability while mitigating risks like digital divides and ethical concerns.

These research avenues offer a path for advancing Design for Planet practices, helping to unlock design's full potential in addressing global challenges and creating value across social, environmental, and economic domains.

07 Appendix



Appendix 1. Methodology

Research questions

The research set out to answer the following overarching questions around intent, action, impact, value, and future, based on the Theory of Change model for social and environmental impact and value of design, developed by the Design Council with University of the Arts, London7. Survey and interview questions for the case studies were distilled from these.

Intent

- What are the key enabling conditions that support the generation of social and environmental value through design?
- What are the attitudes, motivations and intentions of designers, design organisations and their clients, in relation to social and environmental issues?

Action

- What design mindsets, practices and skills are used to address social and environmental issues?
- What other organisational practices do organisations use to address social and environmental issues?
- What proportion of designers directly address, or indirectly consider, social and environmental challenges?

Impact

- What sorts of positive social and environmental impacts are designers/ design organisations responsible for?
- What are the significant barriers to achieving positive social and environmental impact through design?

Value

- What social and environmental value is produced through design work?
- How do designers create social and environmental value?

The Future

- What is the potential of design to generate social and environmental value?
- How can we unlock this potential?

7 Design Council & University of the Arts London (2021). Design Economy 2021: Scoping Project - Environmental and Social Value of Design. Available online at https://www.designcouncil.org.uk/fileadmin/uploads/dc/Documents/DE21/Design_Economy_2021_Papers_Paper_1.pdf [Last accessed 29 Jun 2024].

Limitations and considerations

The survey data is based on the responses of a self-selected sample. While most of the sector and regional quotas could be met, the demographic data was found to be skewed toward gender parity (56% of respondents were male whilst across the UK, 77% of designers are male)8 and 45% of respondents were in senior level occupations (compared to 10% across the UK)9. Self-selecting surveys run the risk of attracting respondents who are particularly invested in the research topic. As this is the first large-scale survey of its type, no benchmark was available to compare findings against.

Working with quotas based on the ONS' (Office for National Statistics) SOC (Standard Occupational Classification) codes proved difficult as designers often struggled to identify the sector that best described them. Respondents from the digital sector were underrepresented, while respondents from the graphic and visual communications sector were overrepresented.

Appendix 2: Full list of business case studies

SECTOR	ORGANISATION/ BUSINESS	REGION	BUSINESS SIZE
Built Environment	Peabody	London	Large
	Planit	Studios in Greater Manchester, Leeds, Liverpool, London and Gloucestershire	Large
	Dream Networks	London	Small/Micro
	Material Cultures	London	Small
Service/ Strategic	Big Motive	Northern Ireland	Medium
	Dark Matter Labs	London	Medium
	Nesta	London	Medium
	SUEZ	Bristol	Large
	Magnetic	London	Medium
Product/ Industrial	Orangebox	Wales	Medium
	Panasonic	London	Large
	Celsa	Wales	Large
Fashion	John Lewis Partners	London	Large
Advertising/ Branding	Bros&Co	London	Small/Medium
	Hey Low	London	Micro
Craft	Studio Frostwood	Scotland	Micro
	Mourne Textiles	Northern Ireland	Small
	Studio Amos	East Sussex	Micro

Appendix 3: Impact measurement tools

In the survey and workshops, designers described a range of approaches they use to measure the impact of their work, summarised below.

SECTOR	ENVIRONMENTAL IMPACT METHODS	SOCIAL IMPACT METHODS
Advertising		Social value frameworks
Architecture, interior, urban, landscape	Passivhaus standards Carbon calculators Operational energy monitoring Biodiversity net gain In-house carbon emissions tools based on GHG (greenhouse gas) Protocols BREEAM guidance and assessment tools One-Click Whole Life Carbon Assessment Climate-positive design tools	Health impact assessments Wellbeing assessments Social Impact Assessment tools National TOMs
	Theory of Change models Equator Principles Post-occupancy surveys and data collection Reporting against UN Sustainable Development Goals Sustainable Development Growth Index Doughnut Economics Measures Community Capital Framework	
Clothing, fashion, textiles, footwear	Higg Index Guidelines Life Cycle Assessment Circular economy metrics (e.g. amount of material diverted from landfill)	
Craft	Carbon emissions Energy measurement	

SECTOR	ENVIRONMENTAL IMPACT METHODS	SOCIAL IMPACT METHODS
Digital, UX/UI	Digital environmental impact software (e.g. Digital Beacon, Website Carbon) Carbon emissions per project as a contribution to an overall carbon budget Energy use Environmental impact of hosting provider Carbon footprint measurement Life cycle assessment Plastic consumption Carbon Disclosure Project tools	Usability testing Digital accessibility tools (e.g. Google Lighthouse, 'Who can use?') Social Impact Analysis tools Accessibility risk assessment Sustainable Return on Investment (e.g. using Social Value UK's guidelines) Social Compatibility Analysis
	Performance against company Environmental, Social and Governance (ESG) goals Performance against UN Sustainable Development Goals WC3 sustainability guidelines B-Corp sustainability criteria Government Digital Service Standards New Ecological Paradigm	
Graphic, visual communication	Circular economy measures (e.g. amount of material diverted from landfill, recycled material content) Energy monitoring Carbon foot printing	Social Return on Investment
	B-Corp annual impact reporting Monitoring of the percentage of projects that provide environmental and social benefits	

SECTOR	ENVIRONMENTAL IMPACT METHODS	SOCIAL IMPACT METHODS
Product, industrial	Lifecycle assessment software for full and streamlined assessment (e.g. Eco-It, EduPak, EcoLizer, SimaPro) Carbon footprint (e.g. 2030 Calculator) Solidworks Sustainability LiDS wheel Ecodesign Checklists Material mass comparisons Circular economy metrics (e.g. % reuse, % recycled) Energy consumption Water pH assessment Streamlined Energy and Carbon Reporting Energy Saving Opportunity Scheme reporting Number of products with environmental goals completed	Social value proposition assessment Usability scales Social value frameworks Global Reporting Index Standards
	Doughnut Economics Action Lab tools B Corp reporting UN Sustainable Development Goals Reporting	

SECTOR	ENVIRONMENTAL IMPACT METHODS	SOCIAL IMPACT METHODS
Service, experience	Energy use Carbon consumption per user	Health metrics Child poverty metrics Social Value Frameworks Child Development Outcomes Quality Adjusted Life Years
	In-house 'integrity matrix' measuring the impact of concepts and components against a pre-defined prioritised list of UN Sustainable Development Goals B-Corp Impact assessment Theory of Change Models Gender analysis reporting	
Strategic, organisational, system, policy	Lifecycle assessment Circularity Assessment Albert Certification	Social Life Cycle Assessment National TOMs (social value) Social Return on Investment
	Wellbeing of Future Generations Indicators	

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- Panasonic Design London (page 47).
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- Speculative image of FreeHouse. Credit: Dark Matter Labs (page 48).
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