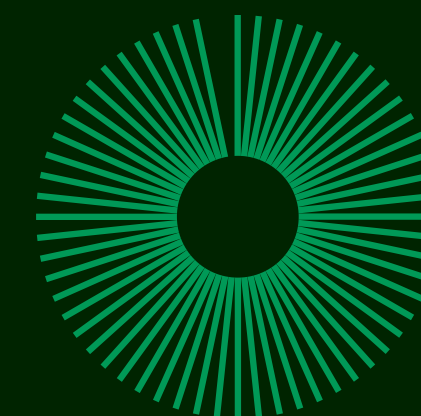
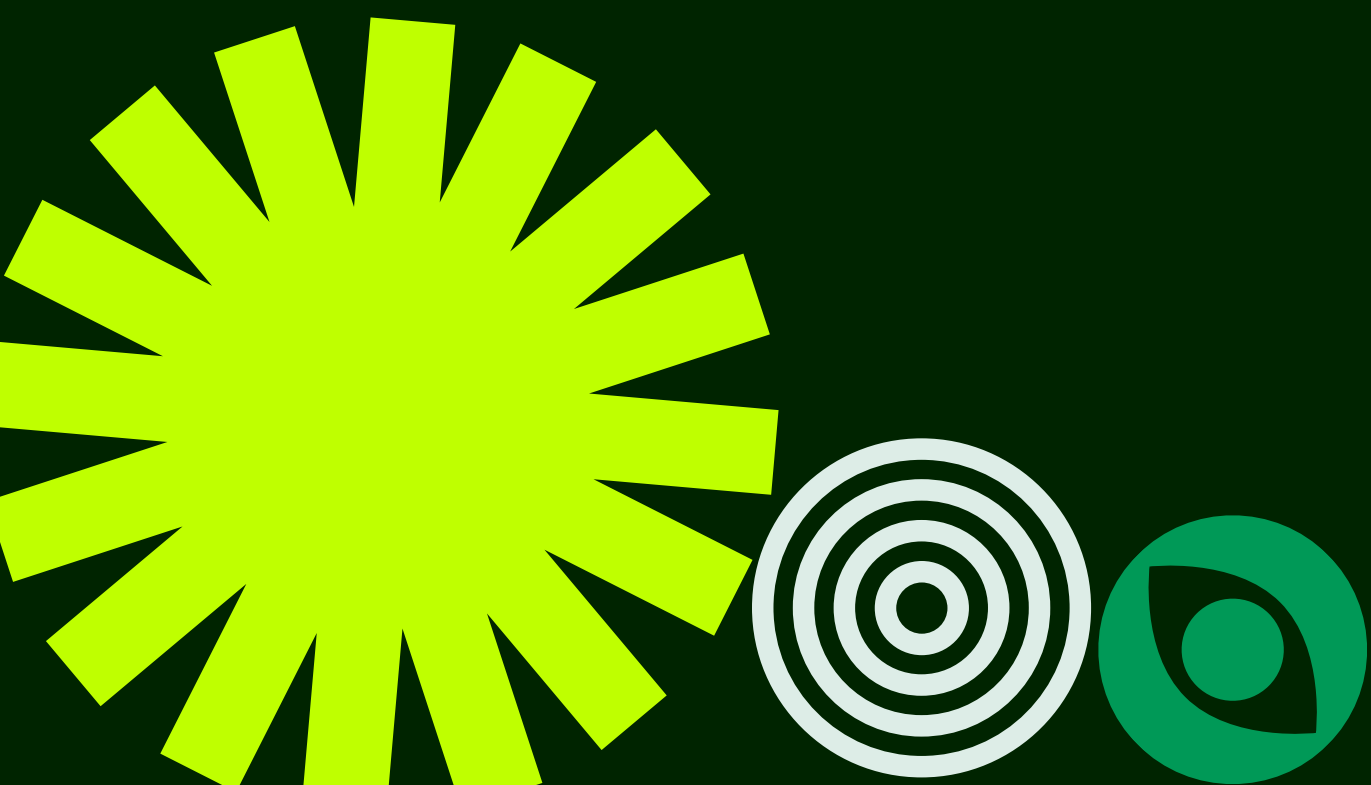
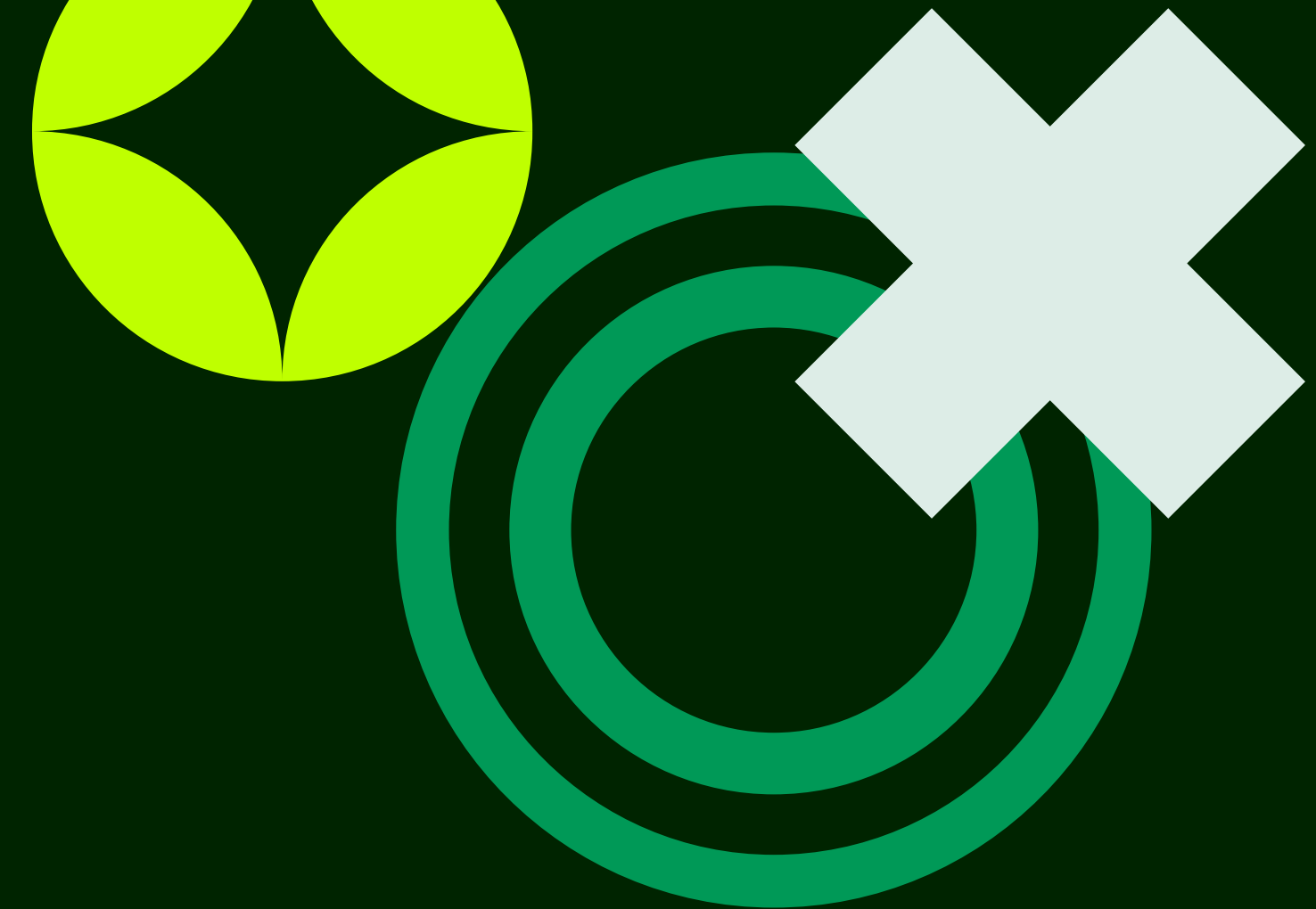


Skills for Planet Blueprint

The critical green skills
that all designers need



**Skills
for
Planet**

**Design
Council**

Everything that is not made by nature has been designed by someone. Design therefore holds immense power over how our world is shaped. While design has created life-advancing innovations for some, the way that we design – the materials and energy we use, the waste we create, the voices we marginalise – has formed part of the extractive system that has caused the climate and biodiversity crisis.^(1, 2)

So, we need to change the way that we design to regenerate life for all – people and planet.



‘Green design’ sees all life on the planet as the primary benefactor of design. It is not just about the natural world, but the people that are interconnected with it; its stewards and beneficiaries. Green design takes a systemic approach to achieving environmental impact alongside social, democratic and financial value.*

And it is not just about problem-solving to eradicate today’s bad things: reducing emissions, pollution and waste. It is about imagining and creating tomorrow’s great things: proposing and building bold, alternative ways of being, shifting systems, and inspiring **equity** and inclusion.

Our vision is that ‘green design’ becomes so interwoven into design practice that it simply becomes part of what we mean by ‘good design’.

Economics sits at the heart of this. The cost of inaction is felt environmentally and socially (disproportionally in the Global South), but also financially: climate-related disasters have caused \$3.6 trillion in damage since 2000 and unless immediate action is taken, global economic growth could plummet by 50% between 2070 and 2090.^(3, 4) Green design needs to be part of creating a new economy that respects our planetary boundaries and allows life on earth to thrive.

Design moves us beyond critique into action, offering pathways towards **regenerative** and equitable futures. It helps green technologies become adopted by all, it helps businesses create products and services for a green economy, it helps communities bring their ideas to life.

Without **designers**, a **just green transition** is not attainable. The Skills for Planet set out in this Blueprint are not nice-to-haves, they are fundamental to human survival and prosperity.

Cat Drew,
Chief Design Officer,
Design Council

* We acknowledge that the term ‘green design’ has different implications in different sectors. In academic spheres, ‘green design’ means avoiding harm and reducing negative impact, as opposed to doing good. For our purposes, ‘green design’ is an umbrella term that encompasses different approaches, including regenerating the world around us.

(1) AR6 Synthesis Report: Summary for Policymakers Headline Statements, IPCC
(2) Climate change is a matter of justice – here’s why, UNDP

(3) The Cost of Inaction: A CEO Guide to Navigating Climate Risk, World Economic Forum
(4) Planetary Solvency – finding our balance with nature, Institute and Faculty of Actuaries

The green design skills gap

The concept of considering the needs of the planet alongside the needs of people is not new – indigenous communities have been acting in this way for centuries.

And yet, indigenous wisdom has long been ignored and swept aside by an industrial, colonial mindset that has consumed without care. The design sector has woken up to this reality, and ‘green design’ in all its guises – sustainable design, life-centred design, regenerative design, or other practices – has become an emerging field of expertise, with 66% of designers having designed in this way in 2024.⁽¹⁾

Despite this, there is a green design skills gap: only 43% of designers feel that they have the capabilities to Design for Planet.⁽²⁾

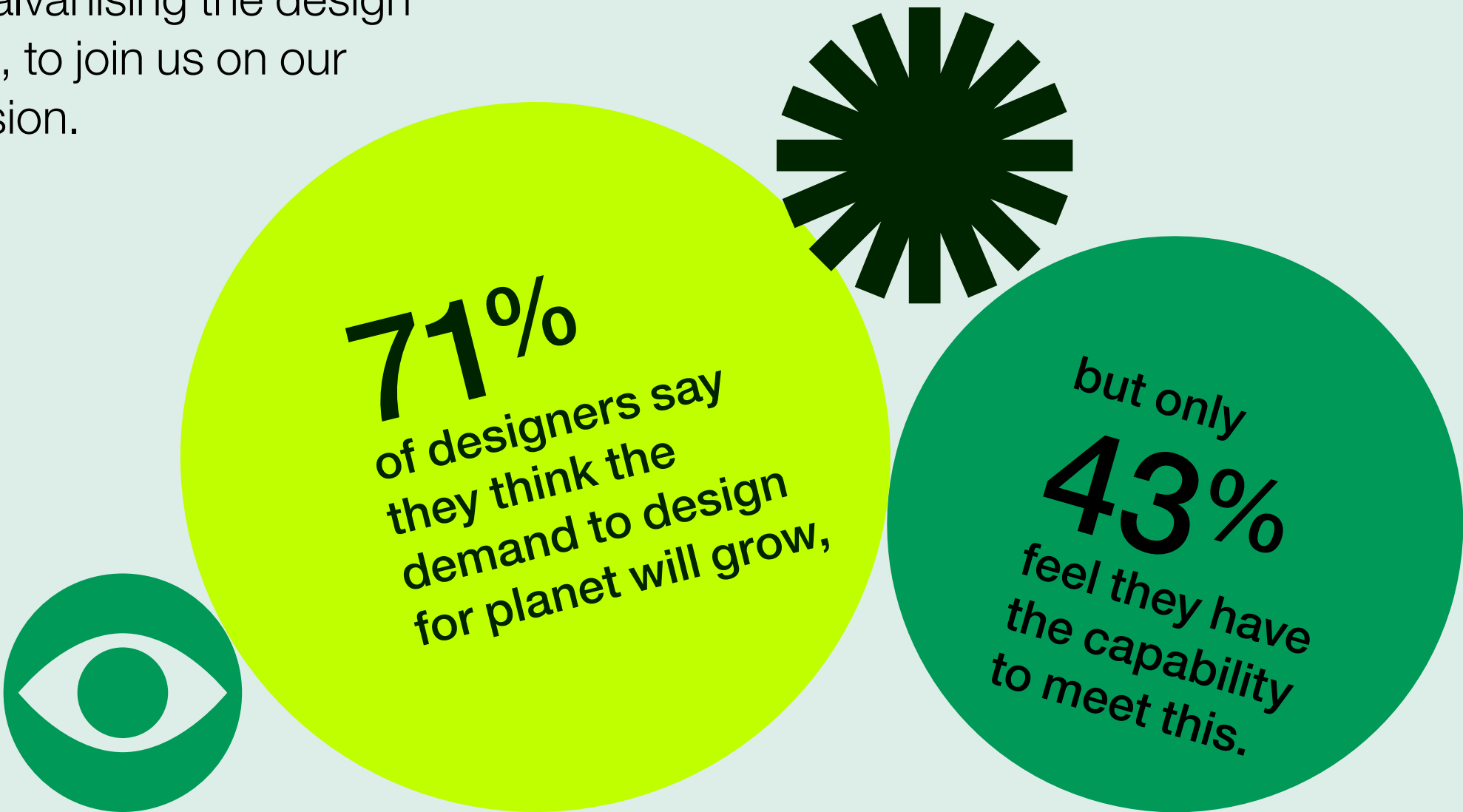
If designers do not possess green design skills, the designs that they create will fall short of delivering positive outcomes for the planet. Design Council therefore sees it as our imperative to support the 1.97 million people in the UK design economy in closing the green design skills gap, driving value for the economy, and moving closer to our ultimate vision: to create a regenerative world for all.⁽³⁾

This has led to our Skills for Planet Mission: to upskill 1 million UK designers in green design skills by 2030.

There is plenty of demand for green design skills and, according to 71% of designers, this demand is only going to grow.⁽⁴⁾ Plus, our research shows that designers have the motivation to design for planet.⁽⁵⁾ We want to harness this growing demand and motivation by galvanising the design sector, and its allies, to join us on our Skills for Planet Mission.

This is an urgent call to action for everyone involved in design.

While designers have a fundamental role to play in facilitating green design, it is the responsibility of everyone involved in design to put the systems and structures in place to enhance green design skills.



(1, 2, 4) Design Economy: Green Design Skills Gap, Design Council
(3) Design Economy: People, Places and Economic Value, Design Council
(5) Design Economy: The Environmental and Social Value of Design, Design Council

Our starting point: defining green design skills

To upskill 1 million designers in green design skills, we first need to know what those green design skills are. This Blueprint sets out the Skills for Planet: the critical green skills that all designers need. Its main purpose is to create a shared language that enables the whole design sector to pull in the same direction and have maximum positive impact on the planet and its people.

Although this is the starting point of our Skills for Planet Mission, it is a natural evolution of our Systemic Design Framework, which provides a high-level methodology for delivering green design. The skills outlined in this Blueprint complement the principles, roles and process shared in the Systemic Design Framework.

Design Council recognises that different design disciplines are best placed to capture their unique technical green skills in detail, and many disciplines have already begun this important work. Our job is to bring these together into a broader skillset, so that the strength of the design sector can be felt as a whole.

This Blueprint serves as a guide to this broader skillset: it is deliberately cross-disciplinary and high-level, so that it can add value as a translation piece across the design sector and beyond. At the same time, it hopes to provide enough content on green design skills, so that a range of actors across the design ecosystem can adopt them. In this way, design can fulfil its potential as a backbone of the just green transition.

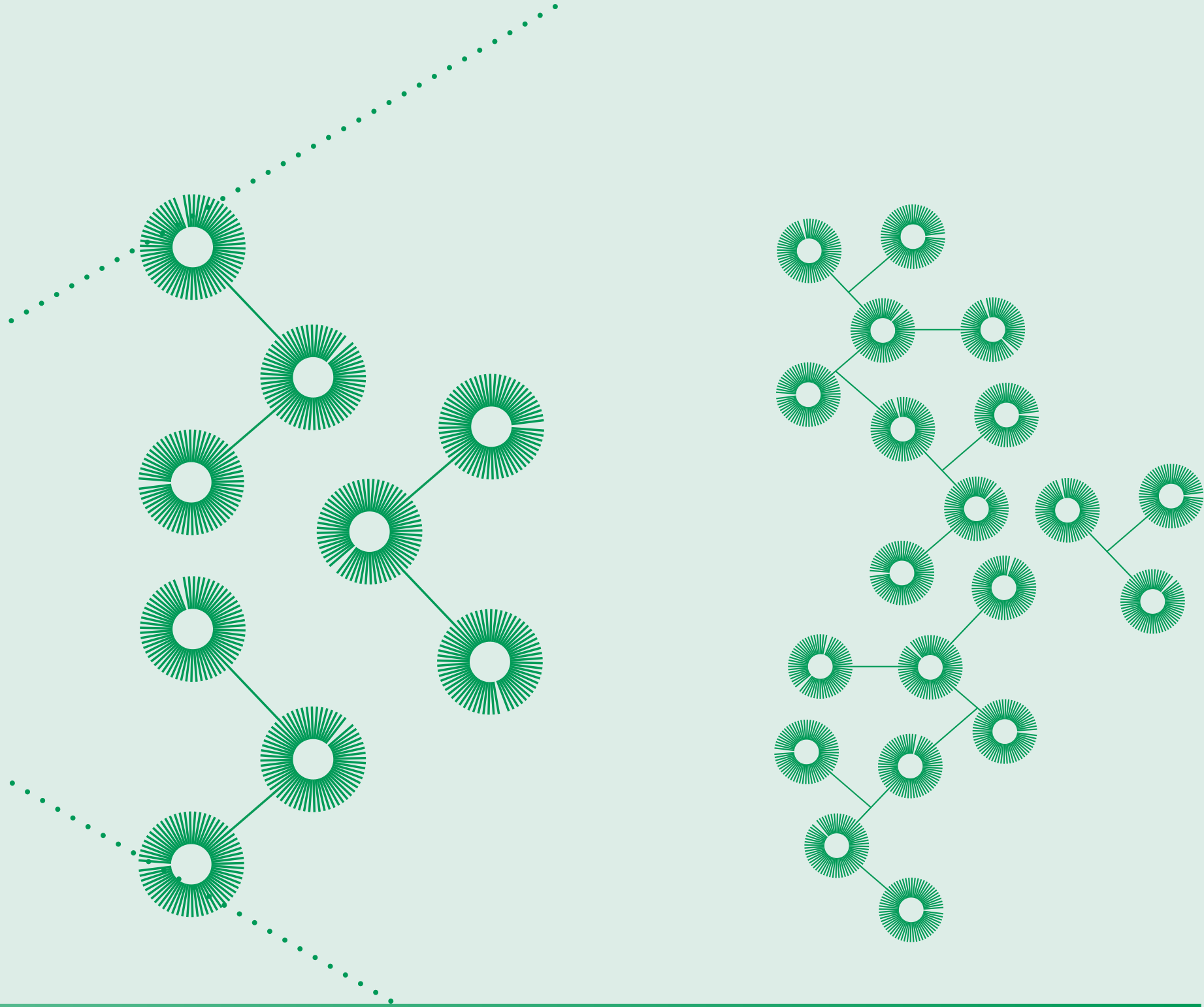
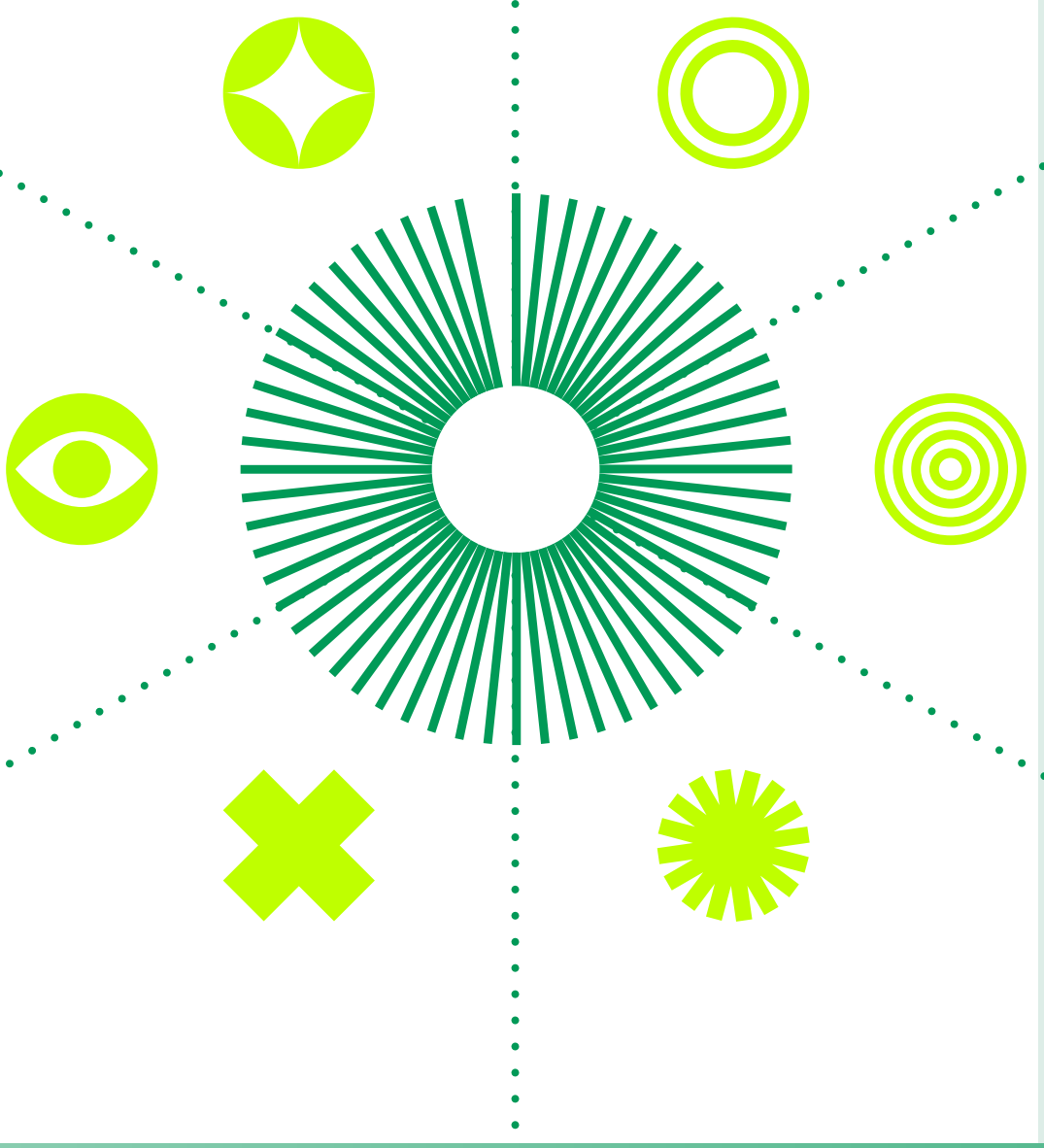
The Blueprint aims to:

- Provide an overview of the core Green Design Skills that all practicing designers need to design for planet
- Create a shared language for the design sector
- Demonstrate the vital importance of design to a just green transition
- Signpost essential existing resources
- Build further momentum for our Skills for Planet Mission

The Blueprint does not:

- Cover discipline-specific, technical skills
- Stipulate how Green Design Skills should be taught or acquired
- Suggest what Green Design Skills look like across different levels of expertise, i.e. at school or in higher education
- Capture a design process
- Set out the supplementary activities that need to happen for green design to thrive, i.e. regulation

Skills for Planet as a catalyst for long term impact



2010

Contemporary Design Practice

A range of methodologies and tools, including the Design Council's Double Diamond, support an exploratory and iterative approach to **human-centred** designing.

2020

Systemic Design Approaches

Methodologies and tools acknowledge planetary and human interconnectedness, including the Design Council's Systemic Design Framework – a reinvigorated Double Diamond focused on designing for planet.

2030

Skills for Planet Mission

Design Council's Skills for Planet Mission ignites wide-scale upskilling of designers, supporting design disciplines to adopt a **Green Design Mindset** and embed Green Design Skills.

2040

Green Design Shift

Design education, industry and policy are united in their drive towards green design, meaning green design practices expand and evolve across the design sector.

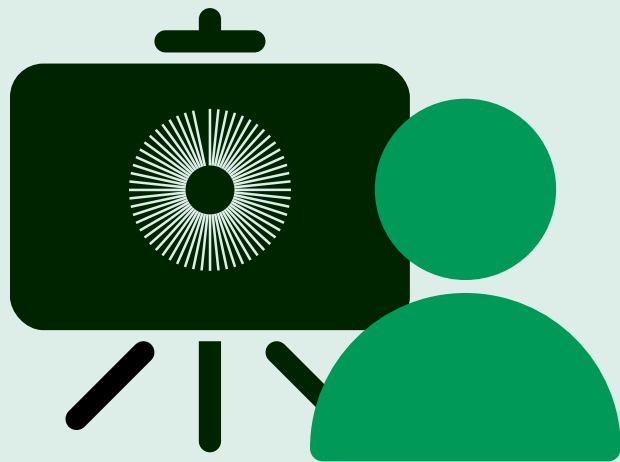
2050

Green Design as Everyday Practice

The Green Design Mindset and Skills become part of 'good design'. Design and innovation influence systems change towards a regenerative world for all.

An invitation to join our Mission

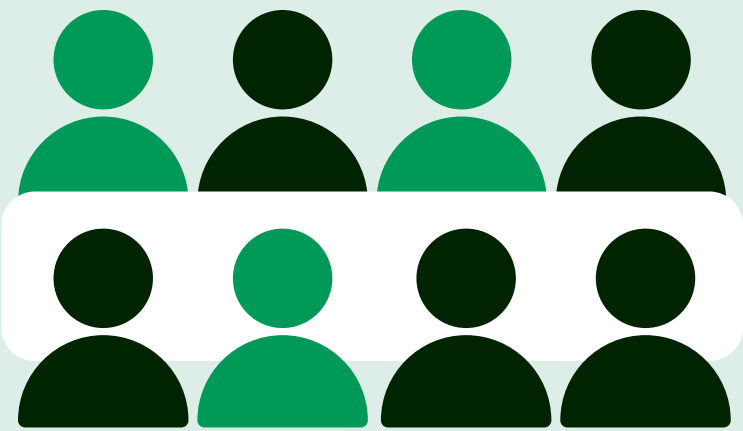
To ensure Design for Planet becomes part of everyday practice, the Skills for Planet Blueprint needs to be adopted and supported across the design ecosystem.



DESIGN EDUCATORS

Provide the designers of tomorrow with the Green Design Skills they need, using this Blueprint to inform learning material within the courses you create or contribute to. Helping students of all stages develop Green Design Skills should be central to learning outcomes, rather than being viewed as an accessory to **Foundational Design Skills**.

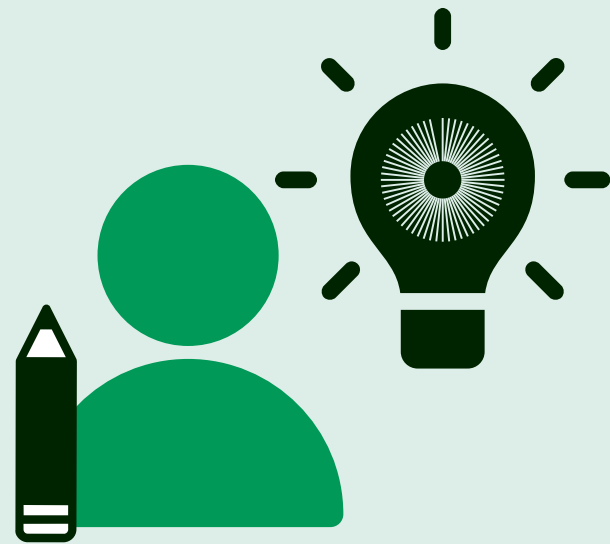
Only 50% of designers feel that their education has provided them (to a moderate or large extent) with green design skills.⁽¹⁾



ORGANISATIONS THAT EMPLOY DESIGNERS

Become a market leader in green design and innovation, weaving this Blueprint into your Continuing Professional Development (CPD) offer. Upskilling the designers within your organisation will enable green design to become the default and, as a result, **net zero** and other environmental targets will be more likely to be achieved.

Only 27% of designers confirm that green design training, support, and mentoring is available to staff within their organisations.⁽²⁾



DESIGNERS

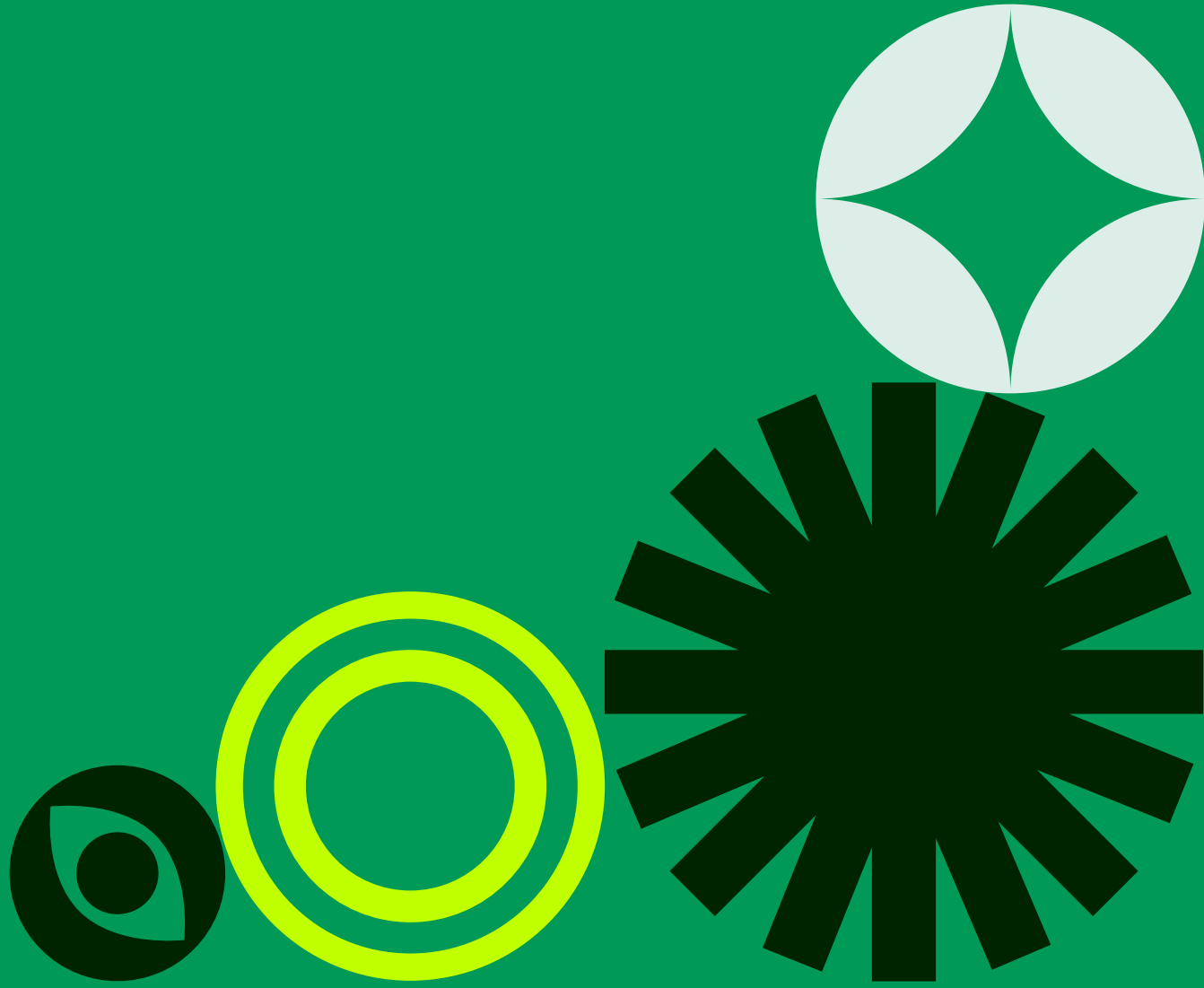
Increase your employability in an environmentally-friendly organisation by using this Blueprint to assess your Green Design Skills. Consider which skills you might need to strengthen and put into practice next, and spend some time exploring resources, speaking to other designers and finding suitable training opportunities.

An ambition to increase their understanding is the most influential factor motivating designers to address environmental and social issues.⁽³⁾

We also encourage the design sector's allies – such as policymakers and organisations that commission designers – to place greater emphasis on the need for Green Design Skills and to create the financial and policy conditions required for green design to become the default.

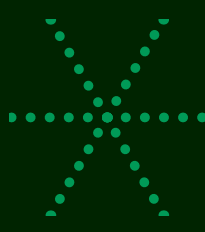
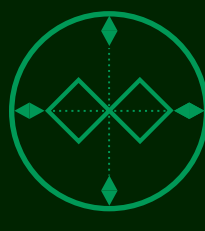
(1, 2, 3) Design Economy: The Environmental and Social Value of Design, Design Council

Skills for Planet Elements

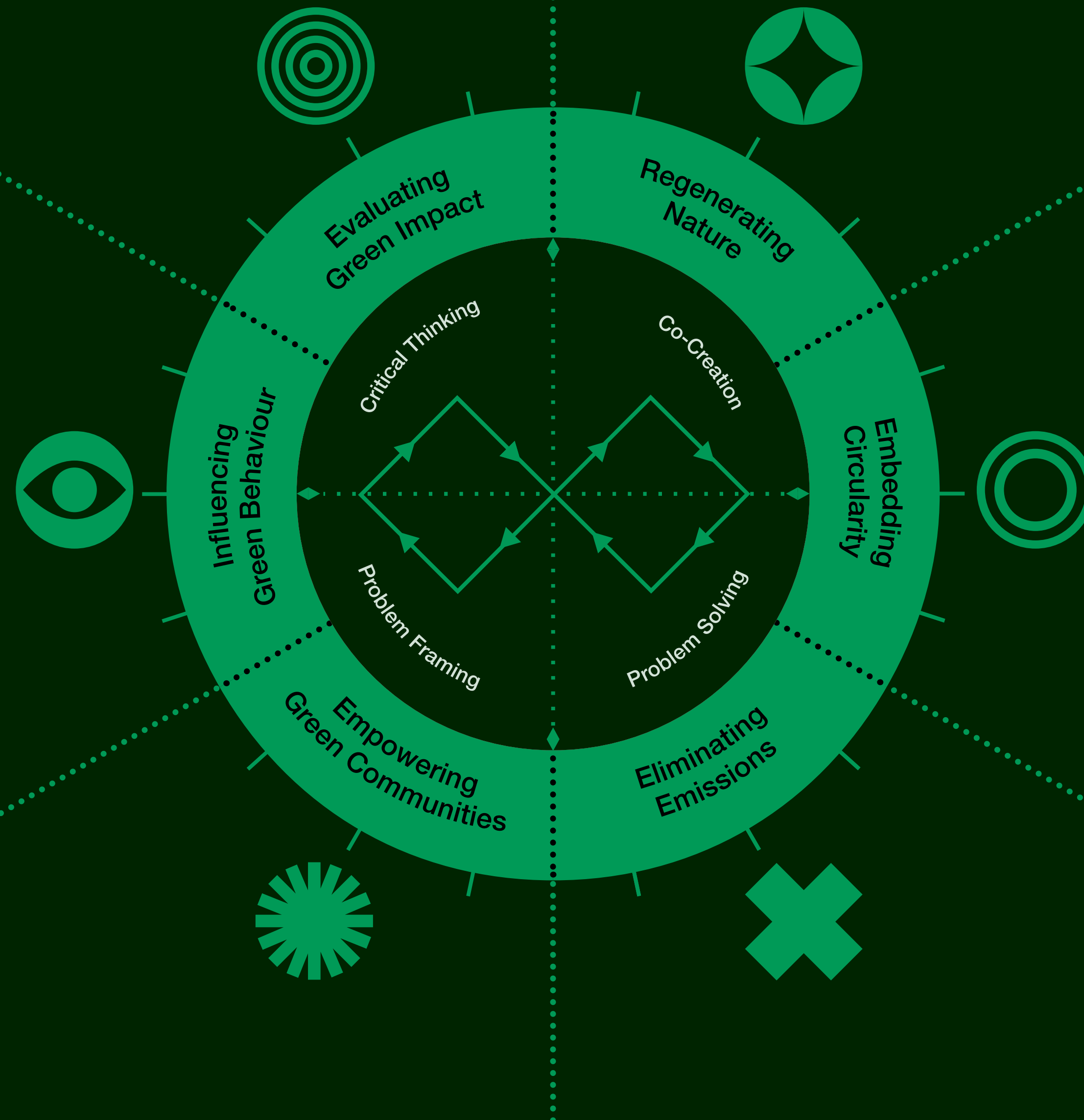


ELEMENTS

The Skills for Planet Blueprint consists of three elements:

-  Green Design Mindset
-  Foundational Design Skills
-  Green Design Skills

This section provides an overview of each of these three elements, before then outlining the Green Design Skills in more detail in [the skills section](#).





Green Design Mindset

A systemic worldview, rooted in the understanding that design must bring **value** to the planet as well as its people.

Contemporary design practice is underpinned by a mindset that includes empathy, humility, curiosity and the ability to embrace the unknown. Typically, this mindset has only extended so far as humans and has focused on delivering a specific solution to a defined problem.

Although this mindset has resulted in innovation, it is ultimately grounded in a narrow worldview that is stopping design from bringing value to the planet and all its life-forms, not just people.

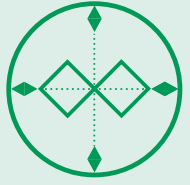
A Green Design Mindset requires a shift from a human-centric to a systemic worldview. How we think determines how we act, and so adopting a Green Design Mindset is essential if designers are to put Green Design Skills into practice.

Our Systemic Design Framework sheds light on the roles, principles and processes needed to adopt a systemic approach. It helps us to zoom out, considering the whole system and all its invisible connections. It also invites us to navigate the chaos that comes with working as part of a wider coalition of change-makers, in complex environments.

Language is critical to a Green Design Mindset: sometimes, a term or word can be a foot in the door to new modes of thinking that challenge what we thought we knew.

A new vocabulary is emerging when it comes to describing people, living species and natural resources. As these definitions are complex, we have chosen to use the simpler terms of ‘humans’ (to represent us), ‘more-than-humans’ (to represent non-human planetary life) and ‘nature’ (to represent the natural world and its resources). Even though we have chosen language that distinguishes us from nature, we fully recognise that we are part of nature. The language we are using is inspired by many sources, including indigenous communities around the world, contemporary ecologists, economists and scientists.

Each time a new term is introduced in this Blueprint, it is linked to a **[glossary](#)** where it is defined.



ELEMENTS

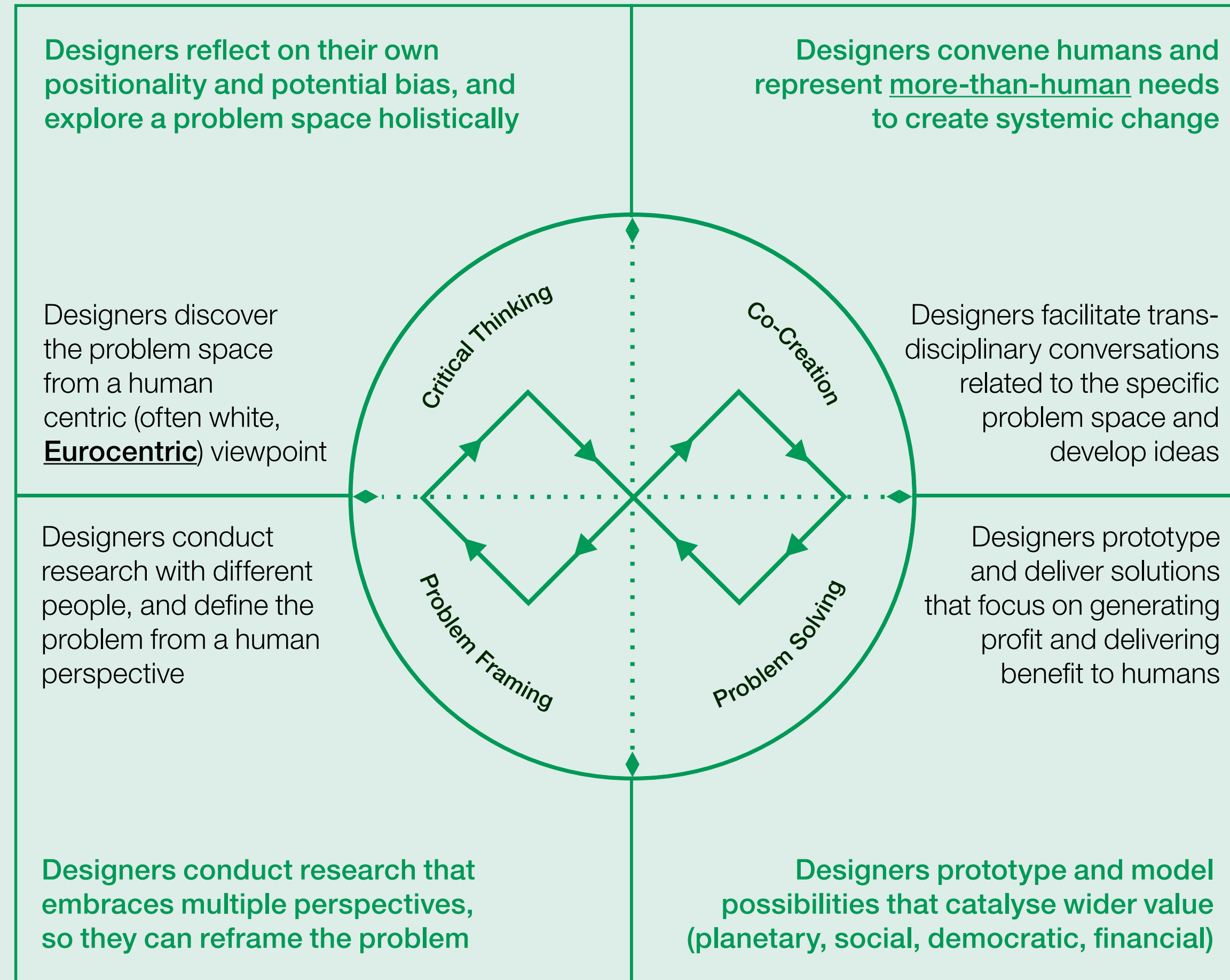
Foundational Design Skills

Capabilities that form the bedrock of contemporary design practice.

Designers already possess inherently valuable skills. The four Foundational Design Skills should be seen as broad skills that most designers currently practice. We have captured these skills as part of this Blueprint to demonstrate that they provide the groundwork needed to deliver green design.

The Foundational Design Skills map to the design process captured by the Double Diamond and Systemic Design Framework, helping deliver design and innovation in action.

However, they must be built upon and adapted to be fully fit-for-purpose: **it is the mindset that is applied to these skills that determines their impact.** Applying a Green Design Mindset ensures that these skills are adopted in ways that bring value to the planet as well as to people.





ELEMENTS

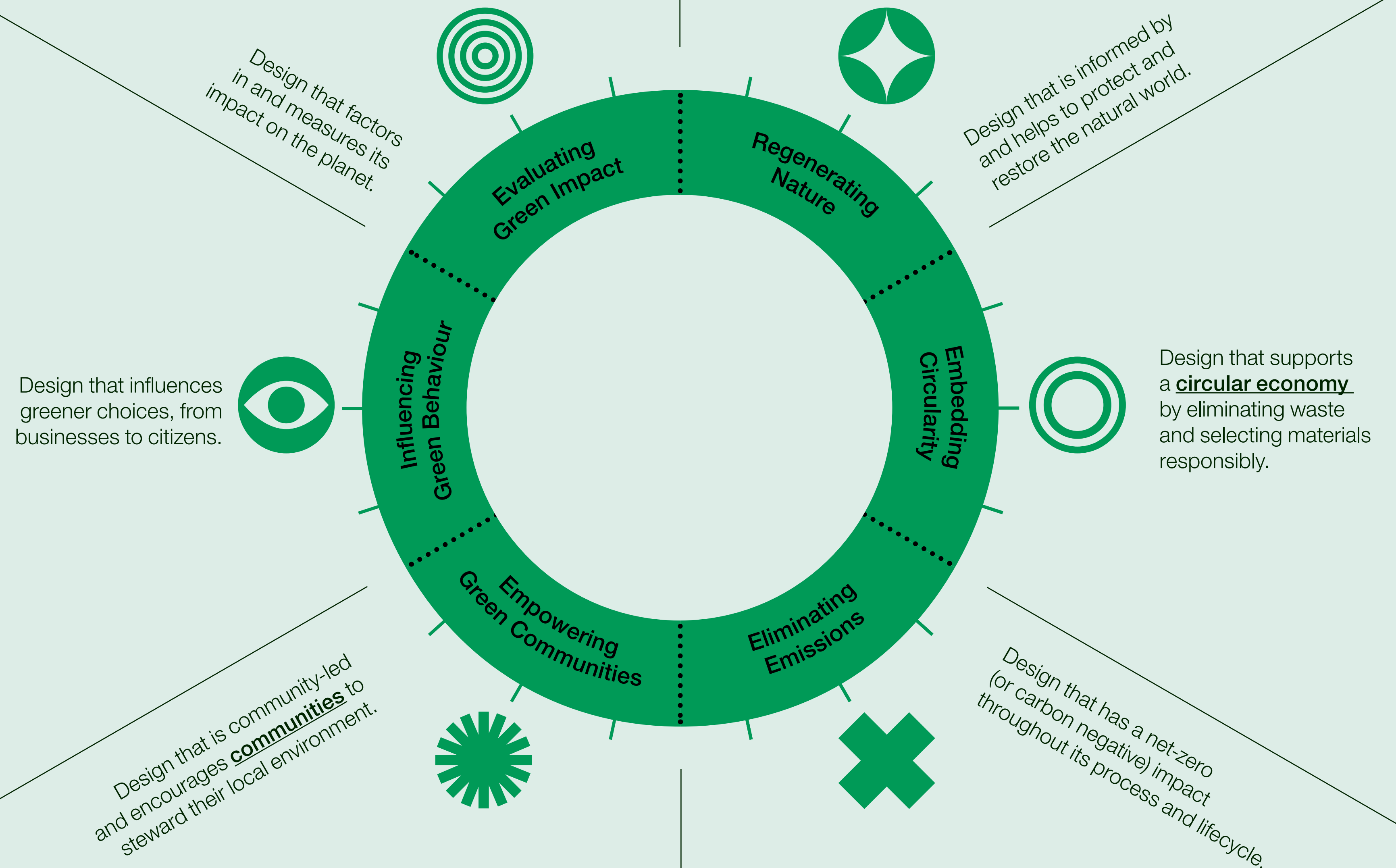
Green Design Skills

Capabilities that support planet and people-centred designing.

The **Green Design Skills** are mapped across six skill areas, which together enable designers to put green design into practice. They build on the Foundational Design Skills that designers already possess, but importantly they apply a Green Design Mindset to achieve positive impact for planet as well as people.

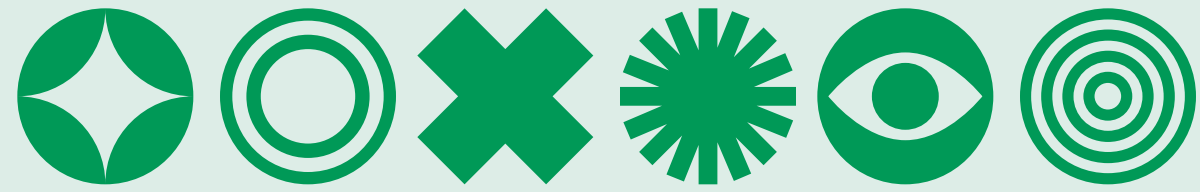
The skills are interconnected and mutually reinforcing. For example, we cannot regenerate nature without eliminating emissions and we cannot eliminate emissions without embedding circularity. In most cases, therefore, all designers should possess all Green Design Skills.

The six skill areas are brought to life by a selection of case studies. Please note, these are all UK-based given that this is where our Skills for Planet Mission is focused. We encourage you to seek out global green design stories for further inspiration. The [Earthshot Prize](#) and [UpLink](#) are good places to start.



Skills for Planet In practice



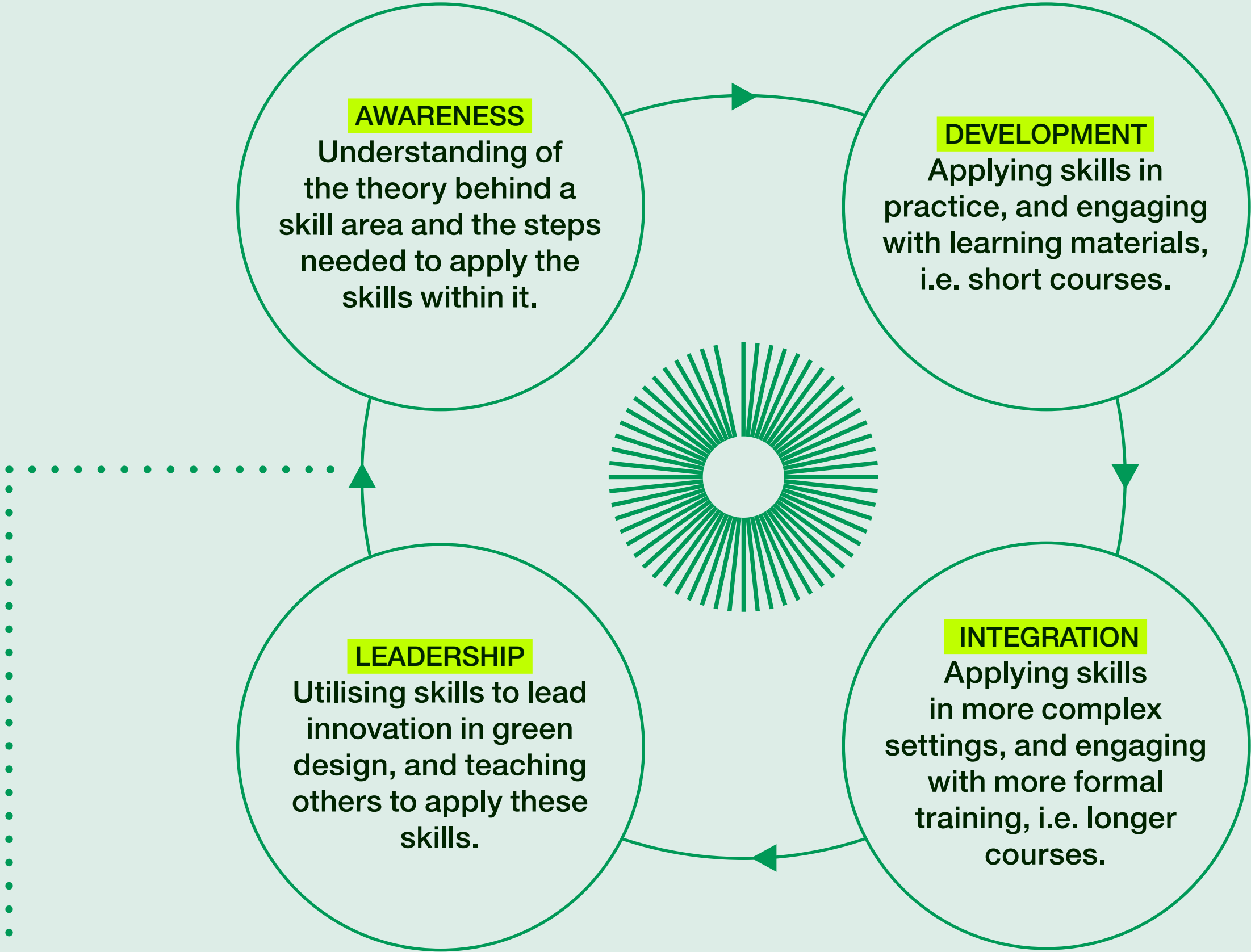


Developing Green Design Skills

Skills are the practical application of knowledge and, ultimately, will only be gained through practice. Each Green Design Skill captured in this section is a snapshot of what that skill might look like in practice. Skills are dynamic and will shapeshift as a designer gains awareness, practices the skill in different or more complex contexts and applies multiple Green Design Skills simultaneously.

Designers should feel confident to test any of the activities set out under each Green Design Skill. The skills can be explored or applied in any order. Where designers start will depend on where they are in their own green design journey; what

knowledge, skills and behaviours they already possess. What is important is that designers start somewhere, perhaps with a skill area that they are more familiar with, before testing out skills they are less comfortable with. Some skills will be best learned under supervision or on a taught programme. Green design upskilling is not solely the responsibility of designers themselves. Rather, Green Design Skills must be woven into the breadth of the design education system: from primary through to higher education and from apprenticeships through to Continuing Professional Development (CPD).



Design Council has defined four upskilling tiers. Awareness is the lightest touch, while Leadership is the most involved. Developing Green Design Skills is displayed as cyclical, because reaching the Leadership tier in one Green Design Skill can then heighten the awareness of another.

See [Green Design Skills Self-Assessment Template](#) in the Appendix.

Developing Green Design Skills

All Green Design Skills are interconnected and can be explored or applied in any order.



Regenerating Nature



Embedding Circularity



Eliminating Emissions



Empowering Green Communities



Influencing Green Behaviour



Evaluating Green Impact

SKILL 1
Implementing nature-focused strategy

SKILL 4
Implementing circular strategies

SKILL 7
Implementing decarbonisation strategy

SKILL 10
Gathering community insight

SKILL 13
Facilitating green choices

SKILL 16
Setting measurable goals

SKILL 2
Representing nature in decision-making

SKILL 5
Adopting a circular business model

SKILL 8
Analysing emissions data

SKILL 11
Nurturing community stewardship

SKILL 14
Communicating business value

SKILL 17
Reviewing benefits and risks

SKILL 3
Collaborating with nature

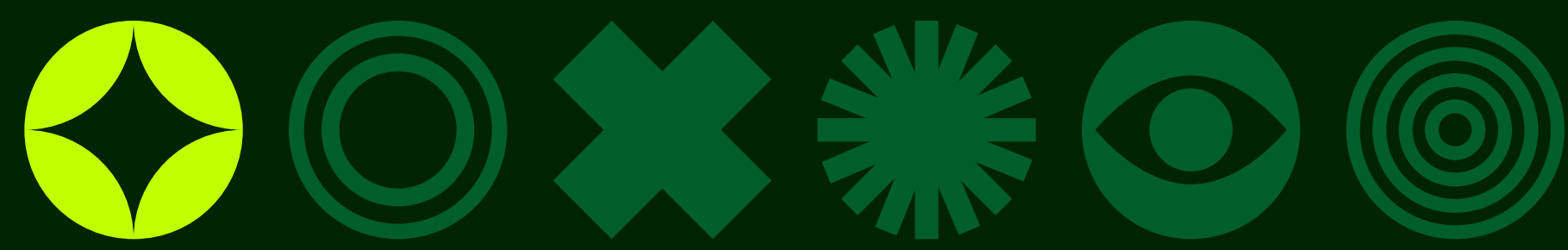
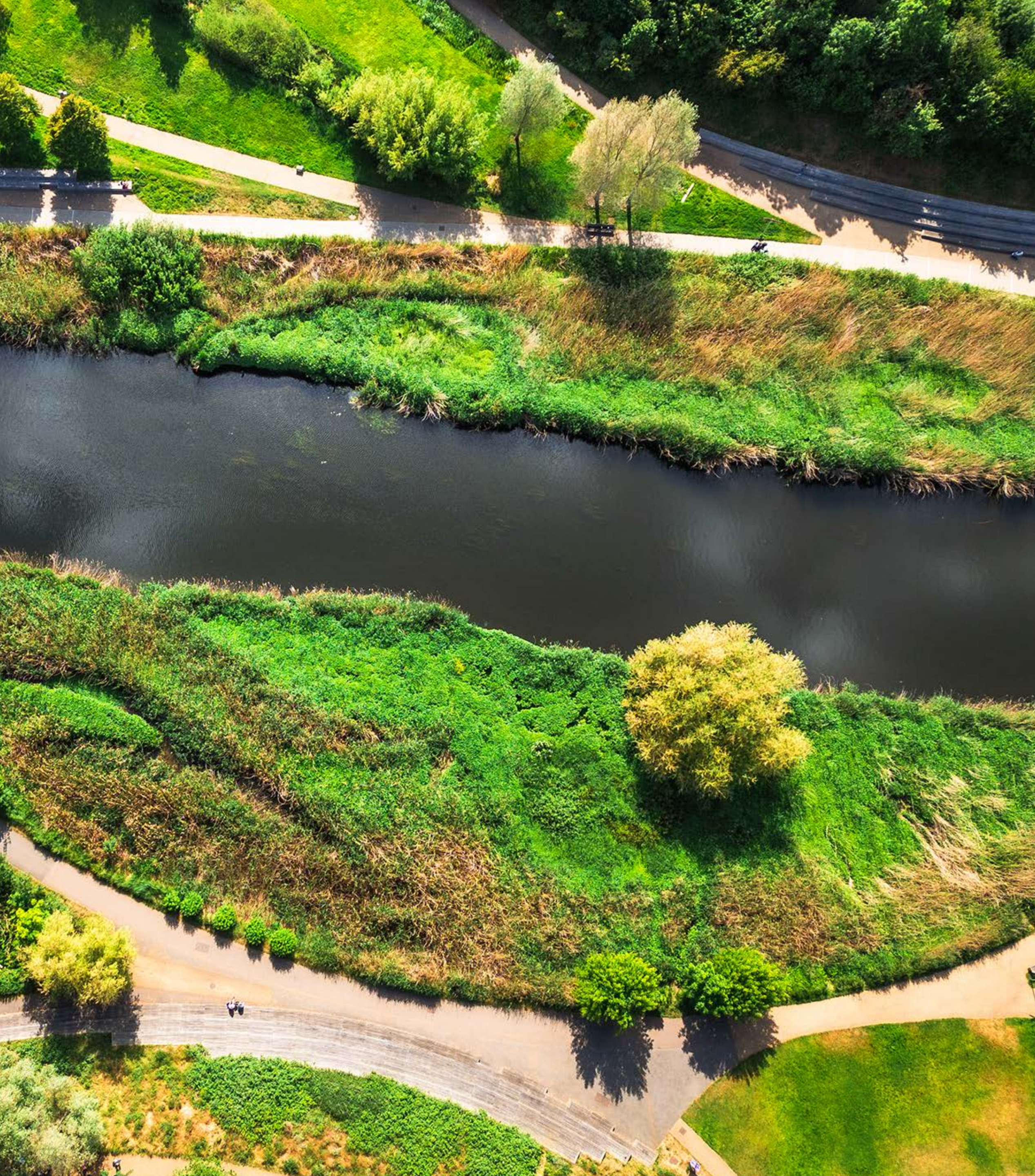
SKILL 6
Selecting materials responsibly

SKILL 9
Planning for future climate scenarios

SKILL 12
Prioritising justice and equity

SKILL 15
Sharing success stories

SKILL 18
Iterating based on evidence



Regenerating Nature



Systemic Design Framework
Connections and Relationships
Orientation and Vision Setting

Sustainable Development Goals





SKILL AREA

Regenerating Nature

Today, many design practices are ecologically extractive – taking from nature without giving back. Designs often place the needs of humans above wider ecological requirements. According to our Design Economy research, only 24% of designers addressed biodiversity issues in 2024.⁽¹⁾

This is a problem because every design decision that does not integrate nature – every native tree replaced with a non-native tree, every natural habitat flattened for development, every hectare of land or sea pillaged for raw materials – is a loss for humans and all planetary life. As Sir David Attenborough reminds us, ‘the natural world is changing. And we are totally dependent on that world [...] and need to defend it.’⁽²⁾

The alternative is design that is informed by ecological processes and cross-disciplinary wisdom, resulting in the protection of the natural world at a minimum, and active regeneration of it as best practice.

This alternative is within our reach, and can be achieved by applying the following Green Design Skills:

SKILL 1
Implementing nature-focused strategy

SKILL 2
Representing nature in decision-making

SKILL 3
Collaborating with nature

Applying these Green Design Skills requires an interdisciplinary approach. Designers are encouraged to seek out wider knowledge and relevant allies.

Wider knowledge:

- Basics of ecosystem dynamics, regenerative agriculture, locally-relevant conservation and restoration, nature-based solutions
- The native biodiversity of the area you are working in
- Alternative decision-making models (for fairer, more inclusive decisions)

Relevant allies:

- Decision-makers within business who are willing to prioritise green outcomes
- Nature specialists who can represent nature (i.e. biodiversity specialists, climate scientists, chartered ecologists, indigenous groups, environmental activists, permaculture specialists, farmers, conservationists)
- Lawyers who can advise on giving nature legal representation, i.e. on a board

(1) [Design Economy: The Environmental and Social Value of Design](#), Design Council

(2) [David Attenborough quotation](#), Good Reads



SKILL 1

Implementing nature-focused strategy

Design that regenerates nature requires design thinking to be nature-focused. Design strategies should not merely reduce harm to nature, but should actively restore and replenish ecosystems.



“Ants have been incredibly industrious for millions of years. Yet their productiveness nourishes plants, animals, and soil. Human industry has been in full swing for little over a century, yet it has brought about a decline in almost every ecosystem on the planet. Nature doesn’t have a design problem. People do.”

William McDonough, Cradle to Cradle

To hone this skill, designers must:

- Consider how the design protects existing ecosystems and can contribute to local and wider nature recovery, at all levels of the ecosystem. See Gathering community insight to better understand a local area by working with communities directly.
- Explore how the design will benefit ecosystems in the short and long term – acknowledging how it supports or counteracts other designs that have come before: what is this design’s specific role in regenerating nature?
- Explore the potential long-term implications of the design further by using Artificial Intelligence (AI) tools where appropriate, modelling how the design will perform in future scenarios. (See Planning for future climate scenarios).
- Identify opportunities to connect people with nature through the design, reducing the false separation between people and planet and increasing the motivation to protect and restore the natural world, Nurturing community stewardship where relevant and welcomed.
- Determine how the design will be re-integrated into the ecosystem throughout construction and use, as well as at end-of-life.

RESOURCES

Innovation Inspired by Nature – resource, Ask Nature

Regenerative design: towards living in harmony with nature – report, ARUP

Roadmaps to Nature Positive: Foundations for all Businesses, World Business Council for Sustainable Development

The Seven Principles of Regenerative Design – article, Ernesto van Peborgh



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 2

Representing nature in decision-making

Integrating nature into decision-making at the start of a project, and ensuring wider ecological needs are advocated for right from design concept through to delivery, is the best way to ensure that nature benefits from our designs and that our relationship with nature is one of harmony and reciprocity.

To hone this skill, designers must:

- Explicitly label nature as a key stakeholder or shareholder at the outset of a project, so that wider ecological needs are systematically woven into all future design decisions. Consider legal means of representing nature, such as by putting nature on the governing board.
- Ensure that nature is considered as part of any success metrics at the outset of a design project, i.e. by integrating nature into company reporting and KPIs. (See [Setting measurable goals](#)).
- Continue to integrate nature into decision-making throughout design and delivery by incorporating specialist nature knowledge into any design critiques.
- Commit to more inclusive language to help shift design towards planet-centred practices.
- Seek out nature specialists to represent nature in decision-making, such as a Chartered Ecologist or Biodiversity Specialist. (See [Collaborating with nature](#)).



“In the Western tradition there is a recognized hierarchy of beings, with, of course, the human being on top—the pinnacle of evolution, the darling of Creation—and the plants at the bottom. But in Native ways of knowing, human people are often referred to as “the younger brothers of Creation.” We say that humans have the least experience with how to live and thus the most to learn—we must look to our teachers among the other species for guidance.”

Robin Wall Kimmerer, [Braiding Sweetgrass](#)

RESOURCES

[Consensus Decision Making: a short guide](#), Seeds for Change

[Find an ecologist or environmental manager](#), Chartered Institute of Ecology and Environmental Management (CIEEM)

[Incorporating diverse values of nature in decision-making](#) – research paper, The Royal Society

[Our selective blindness is lethal to the living world](#) – article, George Monbiot, The Guardian

[Petition to change the definition of nature](#), We Are Nature



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 3

Collaborating with nature

Challenging assumptions, especially when they are derived from colonial and Eurocentric ideologies (albeit subconsciously), is essential to breaking down the false separation between people and nature. Welcoming different perspectives and collaborating intentionally is a necessary part of this process.



“[More-than-human thinking] hoists design out of the mode of solving symptoms and seeks to address one of the root causes of climate breakdown, a failure to understand the ways human activity is entangled with complex living systems.”

Justin McGuirk, [Future Observatory Journal](#)

To hone this skill, designers must:

- Welcome different perspectives from the beginning of the design process (i.e. indigenous groups, climate scientists, ecological experts and activists), as well as different types of environmental knowledge (i.e. cognitive, visual, embodied and creative).
- Enable long-lasting **transdisciplinary** collaboration with different types of nature specialists. Designers do not need to become specialists, but they do need to call upon specialist knowledge.
- Explore means of co-designing with more-than-humans, i.e. utilising AI platforms to interpret and broker communication between different species, or exploring opportunities for **biomimicry**.
- Facilitate inclusive and equitable access to natural spaces, considering all species that will interact with the design, always Prioritising justice and equity.
- Navigate the complexity that comes with holding and incorporating multiple perspectives and forms of knowledge.

RESOURCES

[Co-design with more-than-humans](#) – research paper, European Journal of Futures Research

[Foundations for Building Conflict Literacy](#) – framework, Mediators Beyond Borders

[Introduction to Bio-Inspired Design](#) – course, Bio-Inspired Design

[Lo-TEK Design by Radical Indigenism](#) – book, Julia Watson

[More-than-human governance experiments in Europe](#) – research paper, Democracy Next

[Ways of Being](#) – book, James Bridle



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



Photo Credit: RegenFarmCo

CASE STUDY

The Biohub Farm – from pastoral land to regenerative oasis

The [Biohub Farm](#) in North Yorkshire, run by RegenFarmCo, transforms 92-acres of traditional farmland into a vibrant, nature-centred system comprised of 45 water features, [agroforestry](#), [coppice woodlands](#), and wildflower meadows.

Green design approach

The Biohub is underpinned by a **nature-focused strategy**, listening first and foremost to the ecosystems themselves. For instance, by fostering the right conditions for microorganisms, fungi, amphibians, and other small species, larger wildlife are supported. A Green Design Mindset facilitates a systemic approach, with **hydrological** and ecological features working together to form a resilient, circular ecosystem. For example, waste **biomass** is converted into material that enriches the soil.



Biohub’s success relies on **collaboration with nature**. Firstly, collaborating with nature itself, by moving away from mono-crops seen in modern-day agriculture and instead mimicking natural forests, which have a mix of crops, trees and animals in one space. Second, the team acknowledge that no single individual can orchestrate the complex programme. They rely on collective expertise, pulling in experts from forestry management, ecology, agroforestry and hydrology.

Impact and influence

Biohub’s regenerative approach has successfully enhanced local biodiversity, with 8,000 coppice plants sequestering carbon and a 10-acre wildflower meadow improving nesting conditions for birds. The team have run 70 workshops across the UK, influencing wider adoption of regenerative practices. Their work has been recognised for its innovation and awarded the 2024 Land Use Innovation Award.



CASE STUDY

Faith in Nature – nature on the board

Faith in Nature is a UK-based, ethical personal care brand, famous for being the first company in the world to put nature on the board.

Green design approach

Faith in Nature **represents nature in decision-making** quite literally – having worked with legal experts to grant nature a legal voice and a vote in all board decisions. In practice, this means that a ‘Nature Guardian’ – supported by a committee of environmental experts – represents nature’s interests. Systems thinking is therefore woven into the company’s day-to-day running, for example, by the Nature Guardian championing the introduction of reusable aluminium packaging or questioning how best to influence their customers’ behaviours through reusable packaging.



Impact and influence

The impact of representing nature in decision-making is evident, with the introduction of their aluminium packaging resulting in over half a tonne of plastic waste avoided in six months. Their products contain 99.5% natural-origin ingredients, sourced locally from community-focused suppliers, all contributing to their minimal **carbon footprint** of eight metric tonnes per £1 million, significantly below industry averages. These changes are good for the environment and good for business, with their sales increasing by 11%.

Beyond this, the open-source framework that they created to help other organisations implement this holistic governance structure has been downloaded over 4000 times, with organisations including House of Hackney and Scottish Association for Marine Science adopting the model.

Photo Credit: Barbara Klekowska and Emerson Utracik

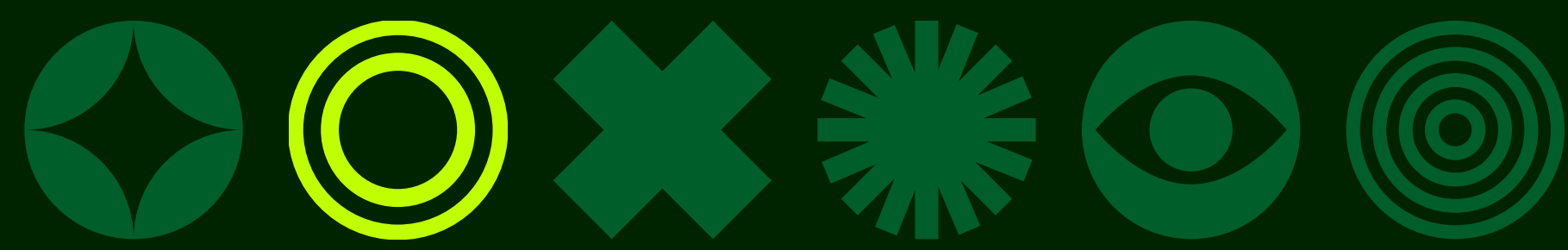
99.5%
natural-origin
ingredients in their
products

11%
increase
in sales

4,000
downloads of
their open-source
framework



Photo Credit: BEEN London



Embedding Circularity



Systemic Design Framework
Leadership and Storytelling
Orientation and Vision Setting

Sustainable Development Goals



SKILL AREA

Embedding Circularity

Today, the Western belief that the natural world exists to provide humans with infinite resources is pervasive and has resulted in the dominance of **linear and recycling economies**. Of all environmental issues addressed in the last year, ‘transition to a circular economy’ was addressed the least, by only 12% of designers.⁽¹⁾

This is a problem because designing for a linear economy results in overconsumption, irresponsible raw material use, excess waste, and pollution. Global waste volumes are expected to rise by 70% by 2050.⁽²⁾ With many wealthy countries shipping their waste overseas, relentless consumerism is also a social justice issue.⁽³⁾

The alternative is design that supports a circular economy by cutting out waste and matching material durability with product lifespan.

This alternative is within our reach, and can be achieved by applying the following Green Design Skills:

SKILL 4
Implementing circular strategies

SKILL 5
Adopting a circular business model

SKILL 6
Selecting materials responsibly

Applying these Green Design Skills requires an interdisciplinary approach. Designers are encouraged to seek out wider knowledge and relevant allies.

Wider knowledge:

- Circular economy principles
- Current and developing regulations
- Lifecycle Assessment (LCA) and repair guides/ systems
- Characteristics of materials, their origins, use and life cycles
- Manufacturing and re-manufacturing processes of materials
- Life-cycle loops of technical and biological based materials

Relevant allies:

- All points in the supply chain who can reinforce circularity at each stage
- Decision-makers in business who are willing to adopt a circular business model and enable circularity at all stages
- Policymakers promoting circularity through regulation and other incentives
- Chartered waste managers

(1) [Design Economy: The Environmental and Social Value of Design](#), Design Council

(2) [What a Waste 2.0: Global Snapshot of Solid Waste Management to 2050](#), World Bank Group

(3) [Why some countries are shipping back plastic waste](#), BBC

SKILL 4

Implementing circular strategies

There are several **circular design** strategies: designing for durability, disassembly, repair, reuse, remanufacture, modularity and other means of extending the lifespan of a design. It is important to evaluate which strategy, or strategies, will eliminate waste, at the same time as being commercially viable and desirable.

To hone this skill, designers must:

- Explore circular possibilities with an open mind, encouraging new thinking and challenging business-as-usual.
- Prototype and test different circular design strategies to see which work best in the context of the wider system and business model. (See [Adopting a circular business model](#)).
- Embed the circular design strategies that will best deliver circularity in the long-term, i.e. aluminium can be energy-intensive to mine and manufacture, but once manufactured, it is very durable and can be recycled an infinite number of times whilst retaining its original properties.
- Align circular strategies with wider organisational priorities, so that environmental benefits are achieved alongside business benefits. (See [Communicating business value](#)).
- Review and adapt circular design strategies periodically to ensure that they continue to be the best fit for context, incorporating any new regulations. Do this alongside [Iterating based on evidence](#), so that any changes to circular approaches fit into the bigger picture.



“In design, people often talk about a ‘Minimum Viable Product’, but if you’re designing for the circular economy, just thinking about a product in isolation isn’t enough. Instead, you need to prototype a ‘Minimum Viable Circular Ecosystem’, which is about piloting activities that provide a systemic solution.”

Barry Waddilove, Founder & Director at CD/CC, Design Council Expert

RESOURCES

[BS 8887 series](#) – design for manufacture, assembly, disassembly and end-of-life processing, British Standards Institute (BSI)

[Circular Design Guide](#), Ellen MacArthur Foundation

[Circular Economy Business Strategies](#) – course, Leyla Acaroglu, LinkedIn Learning

[Circular Economy International Standards](#), ISO

[Cradle to Cradle certification](#)



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 5

Adopting a circular business model

Shifting from a linear to a circular economy means setting up businesses and systems that embed circular economy principles at their core, enabling circular design to become the default approach, rather than remaining an outlier.

To hone this skill, designers must:

- Assess the opportunities for circularity in their organisation, learning from similar organisations.
- Define the circular vision for the business – what would ‘good’ look like? This can be considered as part of wider vision and goal-setting. (See [Setting measurable goals](#)).
- Map out the partnerships, resources, activities, systems and structures needed to deliver the circular vision, exploring the relationships between these components. Equally, consider how the circular design can influence wider behaviour change. (See [Facilitating green choices](#)).
- Explore how the circular approach works alongside the service offering, and vice versa. For example, a design that is going to be rented by multiple users should be designed for durability, whereas a design with a replaceable element should prioritise modularity or disassembly.
- Make a business case for circularity, demonstrating how circularity can deliver business goals, alongside social and planetary ones. (See [Communicating business value](#)).

RESOURCES

[Circular Business Design](#) – A practical guide, PA Consulting

[Circular business model canvas](#), Tillväxtverket

[Circular business models fostering sustainability](#) – course, Coursera

[Doughnut Design for Business](#) – tool, Doughnut Economics Action Lab

[Products that Last](#) – book, Conny Bakker

[The Circular Futures Toolbox and Services](#), Circular Futures



“Business sits at the heart of the transition to a circular economy. A circular economy transformation will empower us with the tools to tackle global challenges, and the power to create resilience and grow prosperity.”

[Ellen MacArthur Foundation](#)



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 6

Selecting materials responsibly

A circular design strategy is intimately connected to the evaluation and selection of materials. The same circular design strategy may work effectively with one set of materials, but not another. It is therefore important to understand material qualities and feed this knowledge into the development of an appropriate circular design strategy, reframing and testing as necessary.

To hone this skill, designers must:

- Investigate the characteristics of materials and explore the opportunity to use resources that already exist, or to recover waste or second-life materials (working with chartered waste managers where relevant), instead of defaulting to new materials.
- Choose materials within current regulatory requirements that do not deplete ecosystems at their source, and can be kept as pure as possible when used and best lend themselves to the design. If appropriate, utilise AI-powered material databases to streamline material recommendations.
- Consider the materials within the context of the circular business model and commercial benefits, i.e. do certain materials or suppliers provide business opportunities or financial savings? (See [Adopting a circular business model](#)).
- Re-evaluate the materials alongside the circular strategy and vice versa, so that decisions are made holistically, as opposed to viewing materials in isolation from how they are ultimately used. (See [Implementing circular strategies](#)).



“711,000 tonnes of post-consumer textiles are discarded annually in the UK and 8-10% of global greenhouse gas emissions come from the fashion and textiles industry.”

[Textiles 2030, WRAP](#)

RESOURCES

[Institute of Making Materials Library, UCL](#)

[Material selection](#) – method, Ellen MacArthur Foundation

[Materiom](#) – bio-based materials

[Polaron](#) – AI-driven material design

[Turning Off the Tap](#) – Presidential Report, CIWM



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.

CASE STUDY

Gomi – a lifelong customer relationship

Gomi is a tech product design company that transforms non-recyclable plastics, like bubble wrap and food packaging, into high-end, consumer electronics products. Each product is hand-made in Brighton and has a material story behind it, whether that's turning recycled Chilly's coffee cups into power banks for Glastonbury, or recycled dolls into Bluetooth speakers.

Green design approach

The company employs several **circular design strategies** to enhance product longevity and minimise environmental footprint. Firstly, Gomi utilises existing materials rather than sourcing new materials, for example all their products use repurposed batteries from Lime e-bikes and scooters that would otherwise be discarded.

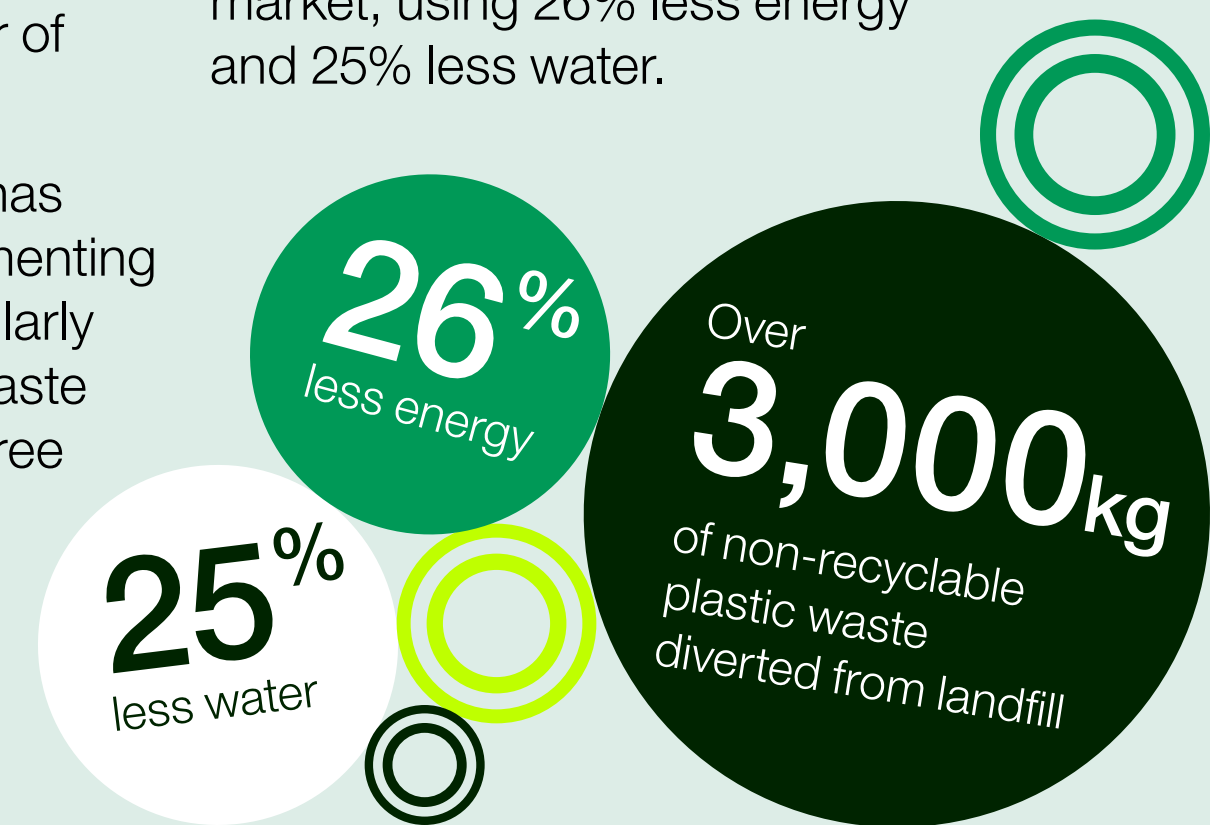


Their products are modular and free from glue, facilitating easy disassembly for repair or upgrade. This design approach not only extends the product's lifespan, but also encourages consumer care and stewardship; if people want the latest model, they simply send back their old product, Gomi dismantle it and press the casing into the new mould. Following customer research, the products now intentionally display their screws, as they discovered that people love the visible reminder of repairability.

Openness to experimentation has been essential, and the experimenting is still going, with the team regularly exploring sourcing from new waste streams and methods of glue-free assembly.

Impact and influence

Over a twelve-month period, Gomi diverted over 3,000kg of non-recyclable plastic waste from landfill. Moreover, by reusing e-bike batteries, Gomi reduces the demand for new lithium extraction, addressing ethical and environmental concerns associated with battery production. Gomi speakers are also much less resource intensive to manufacture than equivalent products on the market, using 26% less energy and 25% less water.



CASE STUDY

BEEN London – seeing the value in ‘waste’

BEEN London is an accessories and homewares design and manufacturing company that is tackling the fashion industry’s high-waste emissions, by transforming discarded materials into fun, durable products.

Green design approach

BEEN’s mission is to pioneer the use of waste as a resource, showing businesses that surplus can be monetised. Their superpower lies in considering the whole product ecosystem – from carbon emissions to end-of-life – and identifying how to turn waste into value. For example, their collection for TATE is made from discarded vinyl that would otherwise be thrown away.

Because the team often work with materials that haven’t been explored before, BEEN have had to turn traditional design thinking on its head, retraining designers to start not with shapes or colours but with the materials. The team enable this **responsible material-first approach** by applying **speculative design** to imagine new possibilities, as well as rapid prototyping to test materials and circular strategies in practice.



Cross-disciplinary collaboration is central to BEEN’s ways of working. They collaborate with manufacturers, makers, material innovators, businesses and customers, creating a fully connected circular economy. Every collaboration starts with a waste stream, whether that’s offcuts from a global luxury fashion brand, or even developing new materials themselves – like Treekind, a plastic-free, fully biodegradable leather alternative co-developed with Biophilica.

Impact and influence

BEEN’s products have diverted 2,722kg of waste from landfills. Additionally, their LCA has demonstrated an 87% emissions reduction compared to high street equivalents. They have also captured 164.44 tonnes of CO₂ through their Amazon tree-planting programme, contributing to reforestation efforts. Their production also supports local craftsmanship, so far creating 42,229 hours of artisanal employment.

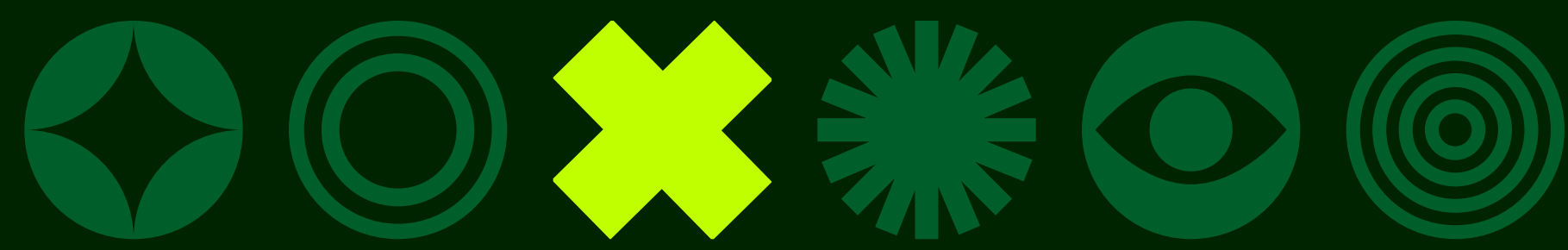
87%
emissions reduction
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street equivalents

42,229
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employment
created

2,722kg
of waste diverted
from landfill



Photo Credit: Jonathan Keenan, Manchester City Council



Eliminating Emissions

Sustainable Development Goals



Systemic Design Framework
Continuing the Journey



7 AFFORDABLE AND CLEAN ENERGY



11 SUSTAINABLE CITIES AND COMMUNITIES



SKILL AREA

Eliminating Emissions

Today, emissions of carbon and other greenhouse gases (GHGs) have increased drastically on account of human action.⁽¹⁾ Design has played a role in this, due to use of high-carbon materials, high GHG-emitting manufacturing processes and intensive GHG-emitting end of life disposal. Fossil fuels still constitute 80% of the UK's total energy supply today.⁽²⁾

This is a problem because extensive emissions are contributing to global heating, resulting in more frequent and extreme weather events that make parts of the world uninhabitable for human and more-than-human species.

The alternative is design that has a net-zero (or carbon negative) impact throughout its lifecycle, including its operationalisation, thanks to a holistic decarbonisation approach grounded in emissions data.

This alternative is within our reach, and can be achieved by applying the following Green Design Skills:

SKILL 7
Implementing decarbonisation strategy

SKILL 8
Analysing emissions data

SKILL 9
Planning for future climate scenarios

Applying these Green Design Skills requires an interdisciplinary approach. Designers are encouraged to seek out wider knowledge and relevant allies.

Wider knowledge:

- Basic carbon literacy
- Carbon footprint of different materials
- Carbon/GHG reduction policies
- Certifications across the whole supply chain
- Digital monitoring, measuring and forecasting technologies
- Awareness of climate policy and macro trends

Relevant allies:

- Decision-makers within business who are willing to prioritise carbon reduction
- Lifecycle analysis and carbon data specialists
- All points of the supply chain
- Policymakers promoting net zero

(1) [Causes of climate change](#), European Commission

(2) [Accelerating Together: How the UK Workforce Can Get Net Zero Done](#), Bain & Company



SKILL 7

Implementing decarbonisation strategy

A holistic decarbonisation approach is essential because the climate crises are complex and interconnected, requiring coordinated action across all sectors of society, from energy to agriculture. Designers must identify and prioritise design decisions that reduce the full range of emissions sources.

To hone this skill, designers must:

- Decarbonise the design process. For example, use clean energy and low-emission transportation, improve energy efficiency in the workplace through better insulation and energy-saving appliances, make virtual prototypes (or prototypes that re-use existing materials), and optimise the efficiency of digital design to minimise digital emissions (generated by energy consumption in data centres).
- Collaborate with local manufacturers and stakeholders to collectively reduce the overall emissions of a design – including supply chain managers, sustainability experts and engineers.
- Consider the ethical implications of design decisions, i.e. ethical mining of materials for solar power systems. (See [Prioritising justice and equity](#)).
- Adopt lean principles, **lightweighting** physical products so that they are less energy intensive to produce and transport.
- Set a ‘carbon budget’ for the project, and develop carbon offsetting strategies for unavoidable emissions, using reputable carbon schemes.



“We’re still grappling with questions like: Are we focused on the right things? How might we design better incentives that accelerate emission reduction? How might we incentivize our partners to change alongside us? But this is a design challenge that cannot wait to be solved.”

Dean Malmgren and Nazlican Goksu, [IDEO Blog](#)

RESOURCES

[All you need to know about carbon offsetting](#), Earthly

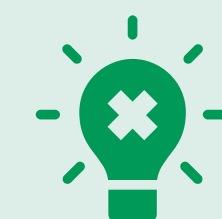
[International Energy Agency](#) – news, commentaries and reports

[ISO 14001 – Environmental Management Systems](#), ISO

[ISO 14064 – Greenhouse Gases](#), ISO

[Net Zero Carbon Buildings Framework](#), UKGBC

[The 5 Lean Principles: Reduce Waste and Drive Growth](#), Business Map



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 8

Analysing emissions data

Although designers do not need to be experts in decarbonisation, they need to be able to understand emissions data and utilise lifecycle analysis tools, so that they can make data-informed design decisions.

To hone this skill, designers must:

- Decide which datasets will be most relevant to the design.
- Identify which tool(s) would be most appropriate to the project: Lifecycle Analysis, energy modelling, carbon-tracking software, Environmental Product Declaration (EPD).
- Set the right benchmarks using carbon-focused best practice guidance and standards.
- Derive insights from the emissions data, evaluating the potential embodied, operational and lifecycle carbon impact of a finished product. Evaluate data holistically, Iterating based on evidence.
- Consider which GHGs in addition to carbon might be generated by the design and incorporate this additional data (i.e. food waste caused by packaging design may generate methane emissions).



“You need science to measure your impact and architects can be reluctant with science because they worry it prevents creativity.”

Arthur Mamou-Mani, Parametric Architect, [Guardian Article](#)

RESOURCES

[Calculation Tools and Guidance, Greenhouse Gas Protocol](#)

[Decarbonising Building Operations: Data as a Driving Force in Reducing Greenhouse Gas Emissions](#) – report, Institution of Mechanical Engineers

[Carbon footprint and lifecycle assessment tool, Footprint Calc](#)

[It is not acceptable for designers to be unaware of the carbon impact of their creations](#) – article, Sophie Thomas, dezeen



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 9

Planning for future climate scenarios

Designers are well-placed to incorporate strategic foresight to make design resilient to climate change. This means considering a design’s future emissions (not just present), as well as how climate scenarios, risks and policy changes will influence a design’s impact.



“Embedding effective and equitable adaptation and mitigation in development planning can reduce vulnerability, conserve and restore ecosystems, and enable climate resilient development.”

[IPCC Sixth Assessment Report](#)

To hone this skill, designers must:

- Research potential climate risks relating to the design’s environmental context, building insight into what the environment might be like in the future, as well as now. Evaluate climate risks systemically, by [Reviewing benefits and risks](#).
- Utilise speculative design tools to visualise and analyse how the design will fit into future scenarios, generating ways that the design could be resilient to future climate possibilities, i.e. designing homes with cooling systems and low-emission energy sources.
- Consider the **embodied carbon** of the product or service, as well as emissions from the design process. For example, the quality of materials may reduce emissions thanks to repair and maintenance extending their lifespan.
- Align design to long-term policy and macro trends, i.e. by using energy sources that have a long-term trajectory towards high accessibility and affordability.
- Integrate nature-based solutions that will increase design resilience, i.e. conserving or planting trees within built environments to aid future heat regulation. (See [Implementing nature-focused strategy](#)).

RESOURCES

[Climate Change Adaptation](#) – guidance, UKGBC

[Designing futures: where design meets futures thinking](#) – article, SPARCK

[Futures Thinking: A Mind-set, not a Method](#) – article, Service Design Network

[How can I use climate scenarios? A practical guide](#), MSCI Sustainability Institute

[UK Climate Projections](#), Met Office UK



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.

CASE STUDY

Litmus x Gola – decarbonising product development

Litmus Sustainability is a Manchester-based business that helps organisations align sustainability with business goals, whether that be through carbon footprinting, sustainability roadmapping or business model innovation. In a recent partnership, Litmus worked with sportswear brand Gola to reduce the carbon emissions generated during their product development process.

Green design approach

To reduce Gola’s carbon emissions, Litmus started by gathering and **analysing the current emissions data**. This process involved sourcing data from the client and from external sources. The company quantified the carbon impact of the manufacture and travel associated with the design process, including practices such as transporting trainers across the world for development, as well as design teams flying internationally to assess designs.



Pivotal to their **decarbonisation strategy** was the development of digital twins in collaboration with Manchester Metropolitan University’s PrintCity team. This technology enabled remote collaboration between design teams, eliminating the need for international shipping of physical samples. Additionally, PrintCity produced realistic 3D-printed trainer replicas locally, further reducing the necessity for global transportation.

Impact and influence

The implementation of these strategies has led to a reduction of approximately 66 tonnes in the associated carbon emissions. The newly designed process also enhances operational efficiency. This project reminds us that targeted interventions can lead to substantial emission reductions.



CASE STUDY

BedZED – pioneering low-carbon, sustainable living

Beddington Zero (fossil) Energy Development (BedZED), completed in 2002 in the London Borough of Sutton, is the UK’s first large-scale eco-village. The project remains a benchmark in sustainable urban design, reducing the environmental footprint of housing — a sector that contributes approximately 25% of the UK’s CO₂ emissions.¹

Green design approach

BedZED’s **decarbonisation strategy** achieves low carbon emissions through a combination of measures, including high levels of insulation, solar PV, a biomass boiler and a green electricity tariff. The build also used reclaimed materials wherever possible to minimise embodied carbon. Emissions data has been monitored closely post-occupancy, allowing designers to adjust and improve systems.



BedZED’s holistic approach was rooted in strong principles of green design – from ‘sustainable water’ and ‘zero waste’, to ‘equity and local economy’ and ‘travel and transport’. The project applied these principles to present needs, but also factored in **long-term climate resilience**, such as by applying water-saving measures, thermal mass for cooling and community-led resource management.

Impact and influence

Arguably, BedZED’s biggest success is that it remains an attractive and popular place to live, demonstrating that sustainable living does not need to result in sacrifice. As well as being good for the planet (homes use 88% less heating, 45% less electricity and 58% less water than the UK average), BedZED is also good for people (a three-person household on the site saves on average £1,391 on transport, water and energy bills per year). The One Planet Living framework and their recently published guidance document continues to share Bioregional’s learnings worldwide.

Photo Credit: Andy Aitchison, Bioregional

¹ Net Zero Whole Life Carbon Roadmap, UKGBC

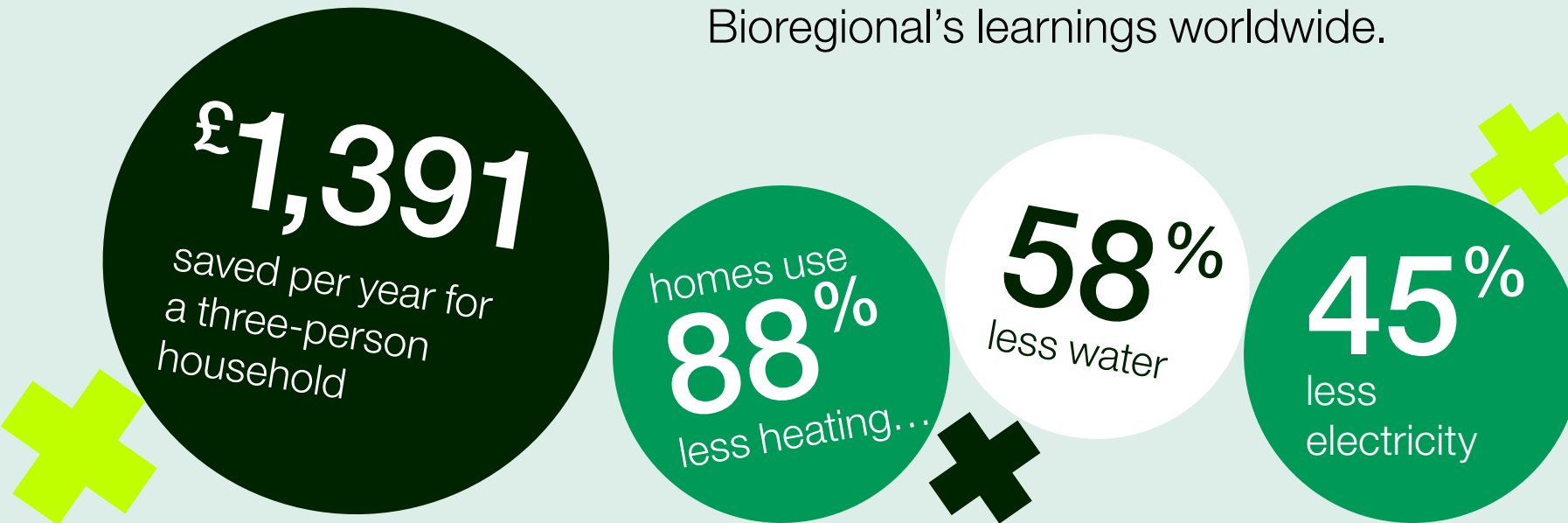
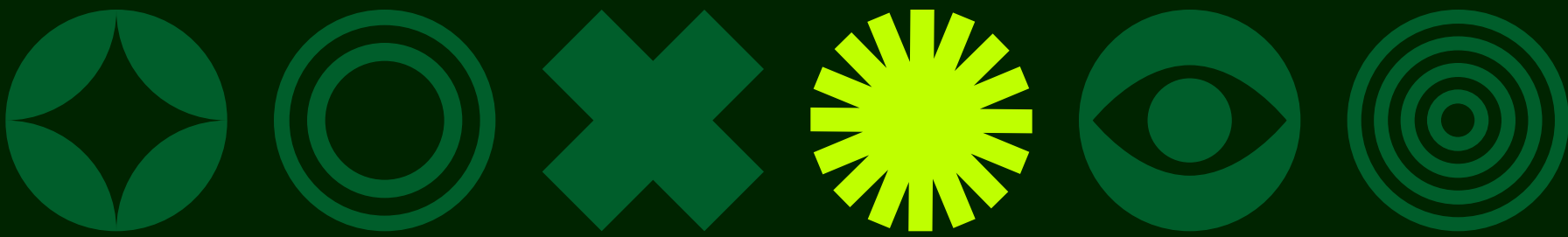




Photo Credit: Surrey County Council



Empowering Green Communities



Systemic Design Framework
Connections and Relationships
Continuing the Journey

Sustainable Development Goals





SKILL AREA

Empowering Green Communities

Today, designs are sometimes created in isolation from those most affected by environmental issues.

This is a problem because it means that design often exacerbates injustice and inequity. Locally, the perspectives of communities (both human and more-than-human) are overlooked, despite the fact that they know their local area best. Globally, the wider implications of a design on the most harmed communities – such as those in the Global South – are neglected, even though they face the harshest effects of climate impacts, while contributing to them the least.⁽¹⁾

The alternative is design that is just and equitable, redistributing power back to communities and deliberately including historically marginalised voices.

This alternative is within our reach, and can be achieved by applying the following Green Design Skills:

SKILL 10
Gathering community insight

SKILL 11
Nurturing community stewardship

SKILL 12
Prioritising justice and equity

Applying these Green Design Skills requires an interdisciplinary approach. Designers are encouraged to seek out wider knowledge and relevant allies.

Wider knowledge:

- Local and international environmental standards and codes, including green building certifications i.e. LEED, BREEAM, WELL
- The influence of privilege and power on design decisions
- Design ethics and justice
- Democratic decision-making alternatives
- **Trauma-informed** approaches
- Oppressive and colonial histories, as related to design practice

Relevant allies:

- Community engagement experts
- Existing community spokespeople or networks/ groups
- Ethical researchers and trauma-informed specialists

(1) [How climate colonialism affects the Global South](#), Fair Planet



SKILL 10

Gathering community insight

The first step towards empowering communities is to take time to develop cultural and contextual understanding through ethical research. This research should be undertaken with communities' consent and involvement. The designer's role here is to facilitate and listen to community expertise.



“Conventional design education believes that by training the mind and the hand, a designer can solve just about any problem [...] Couple that with many design disciplines strongly skewing towards being male and white, and you get race and privilege thrown in too [...] As more and more designers pour into complex social situations (whether new graduates or seasoned professionals), this unintentional blind spot can be disastrous.”

George Aye, [Design Education's Big Gap: Understanding the Role of Power](#)

To hone this skill, designers must:

- ⊕ Engage in self-reflection regularly, so that any research is conducted from a basis of self-awareness about the designer's own power, positionality and potential biases. (See [Prioritising justice and equity](#)).
- ⊕ Spend time with communities in their local environment, understanding their needs, pain points, goals, motivations and relationships – listen deeply and centre this first-hand insight in design development.
- ⊕ Involve local experts or community spokespeople to represent more-than-human needs in the area. (See [Collaborating with nature](#)).
- ⊕ Conduct analysis of the local system (including environmental, historical, cultural, social and economic factors), with the guidance and involvement of local communities. Map components of the local system and relationships between them. How can the design nurture greater closeness between communities and their surroundings, creating a relationship based on reciprocity?
- ⊕ Translate insights into actionable strategies, balancing community, environmental and technical needs.

RESOURCES

[Co-designers scope of practice template](#), Beyond Sticky Notes

[Notes on Participatory Urban \(Re\)Wilding](#) – article, Usman Haque

[Stakeholder Ecosystem tool](#), p. 23 [Systemic Design Toolkit](#), Design Council

[The Call for Trauma-Informed Design Research and Practice](#) – research paper, Design Management Review



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 11

Nurturing community stewardship

Design can build upon and strengthen communities' relationship to their local environment. This is about involving communities in design decision-making and designing ways for communities to be active stewards of their local area.

To hone this skill, designers must:

- Explore communities' current capacity and desire to design for themselves or to be part of the legacy of any design project, as this will form the foundation of any subsequent design methodology.
- Foster co-ownership from the outset, by encouraging community members to be part of data collection and important decision-making throughout the design process (design 'with' not 'for').
- Facilitate conversations about long-term stewardship and design legacy early, discussing what this might look like in practical terms, i.e. What roles do people play across the system? How are nature and the local environment given a voice? What does the governance look like?
- Support communities to build their capabilities (if welcomed to), so that communities can adapt designs to changing local conditions, helping to future-proof the design and ensure it continues to play a positive role for communities and their local environment.
- Be willing to return to the drawing board if new information is gathered that challenges initial ideas.

RESOURCES

[Community-Led Co-design Kit](#),
Inclusive Design Research Centre

[Designing for Legacy](#) video series,
Design Council

[How to be a Connector and Convener](#) –
Characteristics of Changemakers
video series, Design Council

[Hybrid Forums](#) – tool for balancing the
knowledge and interests of different
stakeholders, Helsinki Design Lab

[More-than-human city-region foresight:
multispecies entanglements in regional
governance and planning](#) – research paper,
Regional Studies



“If we want to increase the power of communities we need to bring a fresh philosophy and bold proposals that can enable citizens to create visions for their own areas and give them the resources to put their aspirations into practice.”

Andrew O'Brien, DEMOS, [Taking Back Control: Proposals for How to Give Power and Agency to our Communities](#)



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 12

Prioritising justice and equity

Design practice needs to prioritise justice and equity in the green transition, otherwise even if it manages to regenerate nature, embed circularity and eliminate emissions, it risks doing so in a way that maintains systems of oppression and prioritises the needs of some above others.



“Until designers develop self-awareness and reflexivity about our own power, privilege and positionality — and learn how to address oppressive power dynamics strategically in our work contexts — design will continue to reproduce the exact harms and colonial paradigms it seeks to address. Because it’s not just about **what** we do but about **who** we are and **how** we show up.”

Eloise Smith-Foster, Anti-oppressive Freelance Designer and Eco-futurist, Design Council Expert

To hone this skill, designers must:

- Apply an understanding of oppressive and extractive systems to any design challenge, thereby designing in ways that disrupt exploitative practices. For example, instead of simply selecting more planet-friendly materials, make sure to source these materials ethically to avoid harm being shifted elsewhere.
- Explore the needs of those who are typically excluded and design with them in mind, i.e. designing landscapes that enable equitable access, or products that help communities breathe cleaner air.
- Consider any potential unintended consequences on communities that are most vulnerable to climate impacts, whether locally (i.e. deprived communities facing worse air quality) or globally (i.e. those in the Global South bearing the brunt of extreme weather events), and actively mitigate against these.
- Assess who benefits and who bears the cost of design decisions, incorporating social and environmental justice measures into metrics. (See [Setting measurable goals](#)).
- Know when to step back from a design challenge and let those with first-hand experience take the lead, avoiding unintentionally perpetuating further harm or colonial paradigms.

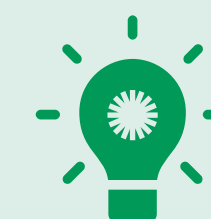
RESOURCES

[Design Justice](#) – book, Sasha Costanza-Chock

[Design Justice Principles](#), Design Justice Network

[International indigenous design charter](#), International Council of Design

[Why am I always being researched?](#) – guidebook, Chicago Beyond



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



CASE STUDY

Voluntary Sector Futures Report – building a just, green and community-centred future

Voluntary Sector Futures is a co-designed 10-year vision for the future of the voluntary sector across Wales. It combines the opinions of over 100 stakeholders into a report that has informed strategic plans and shared goals for the sector. The project was co-led by Futureice and the Wales Council for Voluntary Action (WCVA) with support from the Third Sector Support Wales (TSSW), the Welsh Government and the Future Generations Commissioner for Wales.

Green design approach

The project was deeply collaborative, with a focus on **gathering community insight** throughout, ensuring that as much consideration was given to how the insights were collected, as to their findings. Over 80 diverse voluntary, public and private sector organisations voiced their concerns and aspirations for the future of Wales, through a combination of surveys, interviews and participatory futures workshops.



The team **prioritised justice and equity** by adhering to the Design Justice Network's Design Justice Principles and taking a trauma-informed research and design approach. Local and historically marginalised points of view were deliberately welcomed into the process, resulting in a more inclusive vision for the future. The quality of listening facilitated throughout the project helped to shift power dynamics at WCVA towards a more democratic model.

Impact and influence

The work informed WCVA and TSSW's five-year business plan and resulted in cultural shifts within WCVA and TSSW that will have a lasting positive impact beyond the organisations. The report has been used to inform politicians and officials across Wales.

The project won three awards from the Service Design Network and Core 77.





CASE STUDY

Ksquared – collaborating to retrofit social housing at scale

Ksquared convened a consortium of nine social housing landlords, the North River Alliance, to lift the living standards in social housing via retrofitting. Given that 80% of the buildings we will have in 2050 already exist, retrofitting is essential to meet net-zero goals.¹

Green design approach

By bringing the associations together to work on a joint funding application, the consortium was able to access grant money that would have been unobtainable individually. Funding enabled upgrades in energy efficiency and building performance across 282 homes in some of London's most deprived boroughs.

(1) [A Renovation Wave for Europe—greening our buildings, creating jobs, improving lives](#) (2020), EU-Commission



The project nurtured **community stewardship** from the outset. The maintenance plan was designed in collaboration with residents, with care taken to explain how the community's ongoing involvement would benefit them, such as by alleviating fuel poverty and enhancing living conditions. This process fostered a sense of inclusion, responsibility and mutual gain. Ongoing stewardship by residents has resulted in other households in the neighbourhood requesting to partake.

Impact and influence

The project reduced carbon emissions and energy consumption used for heating the various homes by an average of 30%, resulting in reduced energy bills of £300 per year per household.

As well as environmental impact, the project achieved a 97% resident engagement rate, which in turn increased carbon literacy among residents.

£300

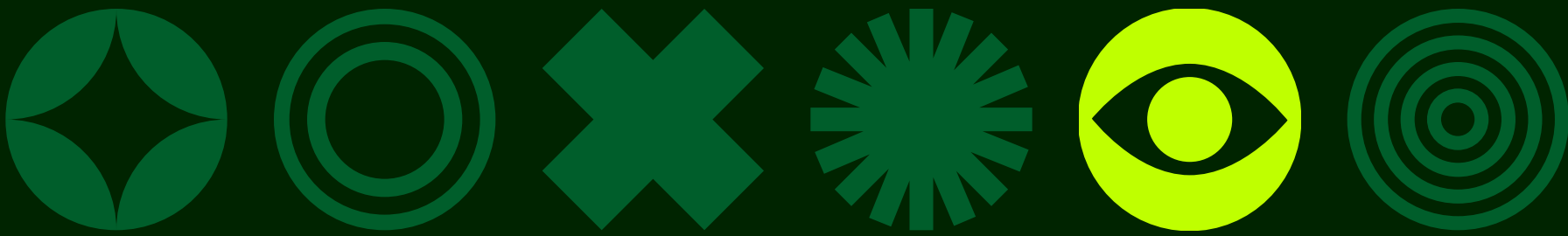
saved on energy bills per year

97%

of residents engaged

30%

reduction in carbon emissions and energy consumption



Influencing Green Behaviour

Sustainable Development Goals



Systemic Design Framework
Leadership and Storytelling
Continuing the Journey





SKILL AREA

Influencing Green Behaviour

Today, designers sometimes struggle to deliver their innovative, planet-friendly ideas, because they lack the skills needed to communicate with different audiences.

This is a problem because innovative ideas that enable positive environmental outcomes get lost or watered down. Organisations do not see the business case for green design and do not commission it, and people consume things that harm the planet because they do not see the value of a better alternative. Innovative green design cannot catalyse wider positive change unless inspiring stories are shared.

The alternative is design that influences greener choices and behaviours, from businesses to citizens.

This alternative is within our reach, and can be achieved by applying the following Green Design Skills:

SKILL 13
Facilitating green choices

SKILL 14
Communicating business value

SKILL 15
Sharing success stories

Applying these Green Design Skills requires an interdisciplinary approach. Designers are encouraged to seek out wider knowledge and relevant allies.

Wider knowledge:

- Alternative business models
i.e. circular business model
- Doughnut economics
- Environmental regulations,
i.e. Extended Producer Responsibility
- Presenting and influencing styles
- Storytelling formats
- Behavioural science

Relevant allies:

- Business mentors for designers
- Decision-makers within business who are willing to prioritise green outcomes
- Peer-to-peer network, i.e. [Better Business Network](#) or [Design Declares](#)
- Storytellers or creatives (filmmakers, photographers, writers)
- Behavioural science experts
- Policymakers supporting green choices
- Media professionals and journalists



SKILL 13

Facilitating green choices

People interact with design everyday, and every time they do is an opportunity for that design to move people towards positive action, whether that means shifting us from over-consumption to consciously consuming what we need, or from seeing ourselves as separate from nature to a part of it.

To hone this skill, designers must:

- Conduct design research to gather deep insight into the target audience. Ensure that research is carried out ethically with multiple views considered. (See [Collaborating with nature](#) and [Gathering community insight](#)).
- Map the audience's capabilities, opportunities and motivations to gain clarity on how best to effectively facilitate green choices and behaviours.
- Map the system within which the environmental issue sits, building awareness of the wider components, relationships and levers at play – behaviours form part of this bigger picture.
- Consider design alternatives that facilitate green choices as the default, while simultaneously addressing the target audience's needs.
- Where green choices cannot be facilitated as the default, or the singular option, consider how users may be motivated to adopt the behaviour that is best for planet.

RESOURCES

[COM-B Model for Behaviour Change](#) – framework, Decision Lab

[Creating Customer Experiences in a Circular Economy Toolkit](#), University of Exeter, Clarasys

[Designing for Behaviour Change Toolkit](#), bridgeable

[Emotionally Durable Design](#) – book, Jonathan Chapman

[Sustainability Guide](#), European Regional Development Fund



Studies suggest that if roughly 25% of a population adopts a new behaviour or belief, this can act as a 'tipping point', rapidly spreading the new idea or practice and triggering large-scale social change.

This [research](#) is primarily attributed to work by social scientist Damon Centola, University of Pennsylvania .



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 14

Communicating business value

A design idea that benefits people and planet will not get business approval unless the designer can effectively convince decision-makers that it is viable from a business perspective and will support economic growth.

To hone this skill, designers must:

- Use data to evidence the commercial opportunities of any desired green outcome, i.e. cost savings through efficiency, future-proofing the business or exposure to new engaged audiences.
- Incorporate Environmental, Social and Governance (ESG) factors into financial modelling, creating a holistic, forward-thinking picture of impact.
- Map and quantify the risk of a proposition (i.e. financial, reputational, safety, regulatory), as well as potential mitigations, so that decision-makers understand the full picture.
- Evaluate stakeholders' appetite for risk and modify the proposition accordingly (while always maintaining a balance of financial, social, planetary and democratic value).
- Repeatedly advocate for the commerciality of green design amongst decision-makers, so that the business prioritises 'more than financial value' across all decisions, not just as a one-off.

RESOURCES

[About Doughnut Economics](#) – information, Doughnut Economics Action Lab

[Business Declares Manifesto: Governing Principles for Businesses in the Polycrisis](#), Business Declares

[Flourishing Business Canvas](#), Flourishing Business

[How to Win Friends and Influence People in Business](#) – course, Dale Carnegie

[Regenerative Business Canvas tool](#), p. 62 Systemic Design Toolkit, Design Council



“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, Design Economy Research, Design Council



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 15

Sharing success stories

The journey to positive environmental impact does not end once a green design has been created. The next step is to showcase the design – and any learnings from the design process – to catalyse wider impact. Doing this may inspire other designers to take a similar approach or lead to partnership opportunities.

To hone this skill, designers must:

- Set an aspirational, hopeful vision that guides the storytelling. (See [Setting measurable goals](#)).
- Understand the target audience: Who are you talking to? How does your design align with, or help progress, their mission or motivation? How can your design help benefit the wider system that it sits within? Equally, how might storytelling create further business opportunities?
- Utilise clear language, removing jargon and translating complex ideas into compelling narratives that humanise and ‘planetise’ the story.
- Select audience-appropriate storytelling or invitation-making style, such as:
 - Data-led storytelling – using impact data effectively (graphing, tabulating, summarising)
 - Experiential storytelling – letting people experience the design first-hand, or immerse themselves in the bigger story that the design plays into
 - Case-study or personal storytelling
- Document green design projects consistently and in ways that highlight planet, people and profit successes and challenges, so that others can learn from achievements and mistakes.

RESOURCES

[How to be a Leader and Storyteller](#) – Characteristics of Changemakers video series, Design Council

[How to Tell Stories that Influence People and Inspire Action](#) – article, Annette Ferrara, IDEO Stories

[Invoking ‘Empathy for the Planet’ through Participatory Ecological Storytelling: From Human-Centered to Planet-Centered Design](#) – research paper, MDPI

[Radical New Narratives](#) tool, p. 56 Systemic Design Toolkit, Design Council

[Storytelling for Influence Course](#), IDEO U



“The right stories, told the right way, have the power to change the world.”

[Earthrise Studio](#)



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.

CASE STUDY

Pd-m – carbon savings are good for business

Pd-m are a med-tech design and sustainability consultancy that uses carbon accounting, storytelling and clear value propositions to demonstrate how sustainable product design can enhance both environmental outcomes and profitability to business.

Green design approach

Pd-m conduct Carbon Reduction Plans (CRPs) that identify emission sources and set reduction targets, **communicating the business value** that carbon savings can bring by mapping environmental impact to financial performance. For example, by reducing material usage and product size, production costs can be lowered alongside carbon footprints. In doing so, they challenge the belief that net zero is a cost to business and a distraction from revenue-generating activity.



Keen to demystify the net-zero agenda, Pd-m **share their success stories** by taking the time to engage in thought leadership, via podcasts, speaking at industry events and displaying case studies on their social media channels.

Impact and influence

On one project, Pd-m demonstrated the possibility for a 587 tCO₂e carbon saving across scope 1 and 2 emissions, as well as an additional 5,397 tCO₂e in product emissions. The design changes would simultaneously result in a cost saving of £302,000 per annum. Convinced of both the environmental and business benefits, the client continued to work with Pd-m on other product improvements.



5,397
tCO₂e saving in
product emissions

587
tCO₂e saving
scope 1&2
emissions



Resulting in
£302,000
cost savings
per annum

CASE STUDY

Fat Llama – Circular Economy Through Peer-to-Peer Sharing

Fat Llama, the UK-based peer-to-peer rental marketplace, is redefining ownership by enabling people to rent almost anything—from cameras and drones to electric scooters and power tools. In a world where the average drill is used for only 13 minutes in its entire lifetime, Fat Llama is tackling the environmental cost of overproduction and underuse.

Green design approach

At its core, Fat Llama is built on the principles of circular design: extending the lifecycle of products and reducing the demand for new manufacturing. Through doing this, the platform encourages and **facilitates green choices**, eliminating the need to buy new, single-use items. The platform offers both lenders and borrowers insurance, identity checks, and seamless logistics, incentivising responsible behaviour through minimising the risk associated with the experience.



By offering its borrowers a cheaper option to buying a product they're likely to only use once or twice, and a new and easy revenue source for its lenders, Fat Llama is effectively communicating the value of making environmentally conscious decisions to all its users.

Impact and influence

Fat Llama have overseen more than 1 million rentals, reducing the demand for new product purchases. The platform has helped prevent an estimated 2,000 tonnes of CO₂ emissions by substituting rentals for new item purchases. Its users also benefit, having access to products that are up to 60% cheaper than buying new.

2,000
tonnes of CO₂
emissions saved

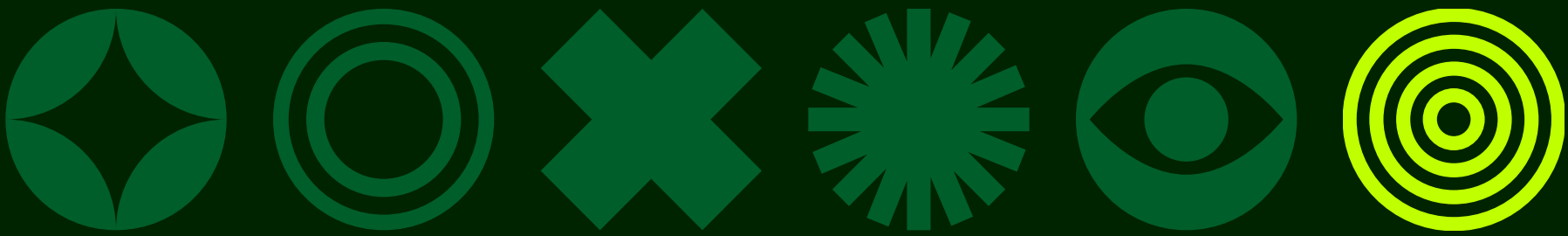
60%
cheaper than
buying new

1 million
rentals overseen





Photo credit: NAARO

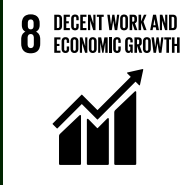


Evaluating Green Impact

Sustainable Development Goals



Systemic Design Framework
Orientation and Vision Setting





SKILL AREA

Evaluating Green Impact

Today, the wider impact that a design might have – whether positive or negative, short-term or long-term, social or planetary, local or global – is often an afterthought, if considered at all. Only 19% of designers consistently measure the environmental and social impact of their projects, while 43% never do.⁽¹⁾

This is a problem because if we do not understand the impact of a design, then it may cause unintended damage to the planet and to people. There may also be unknown benefits that are not captured (and therefore not measured), meaning that the ability to showcase the positive impact of a design is minimised.

.....
: **The alternative** is design that measures
: and learns from its impact on the planet.
:
.....

This alternative is within our reach, and can be achieved by applying the following Green Design Skills:

SKILL 16
Setting measurable goals

SKILL 17
Reviewing benefits and risks

SKILL 18
Iterating based on evidence

Applying these Green Design Skills requires an interdisciplinary approach. Designers are encouraged to seek out wider knowledge and relevant allies.

Wider knowledge:

- Wider impact goals, such as [Sustainable Development Goals](#) or [Science Based Targets](#) initiative
- Impact measurement and assessment options and approaches
- Vision and goal setting approaches
- Basic data literacy

Relevant allies:

- Decision-makers within business willing to set environmental impact targets, adopt long-term perspectives and not go ahead with a design if it does not meet certain environmental criteria
- Impact measurement and evaluation experts
- Quantitative and qualitative researchers
- Data analysts

(1) [Design Economy: The Environmental and Social Value of Design](#), Design Council



SKILL 16

Setting measurable goals

Setting measurable impact goals at the outset of a project ensures that impact is not an afterthought, and helps keep the design on track. As a result, a design is much more likely to achieve its potential environmental, social, democratic and financial value – and be held accountable to it.

To hone this skill, designers must:

- Explore the planetary, social, democratic and financial value that the design can offer to the wider system (see [Design Value Framework](#)) and consider this alongside its overarching [vitality scale](#).
- Set a hopeful, ambitious vision that brings the positive value of the design to life, so that throughout its development and delivery there is a desired end outcome to aim towards.
- Create a Theory of Change that helps break the vision down into more manageable, clearly defined elements, remembering to think holistically about ‘value’ during this process.
- Define indicators that will enable outcomes to be measured, i.e. if the goal is to increase the biodiversity of an area, the indicator might be the number of species recorded in the area after a set time period.
- Think about time horizons: what is the short, medium and long-term impact and how can this be measured effectively?



“Design needs to take a wider view on the traditional definition of value. In the context of a climate emergency, persisting social inequities, and a newfound emphasis on wellbeing and mental health, the value that design brings to the world must be calculated differently.”

Sadie Morgan, Founding Director at dRMM, [Design Value Framework](#)

RESOURCES

[Future Vision](#) tool, p. 20 Systemic Design Toolkit, Design Council

[How to Set Measurable Goals for Your Next Design Project](#) – article, Ran Liu

[Theory of Change Toolkit](#), Nesta

[Three Horizons Framework](#), International Training Centre

[Science Based Targets](#), standards and guidance for businesses



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 17

Reviewing benefits and risks

Developing a green design requires multiple decisions to be made systemically: an individual decision may present itself as the most planet-friendly one, but what is the compound effect of all decisions? Taken together, does the design cause more good than harm? If not, does it need to exist at all?



To hone this skill, designers must:

- Map the potential present and future harm that the design may cause, by pulling together learnings from any prior speculative design, lifecycle assessment or other exploratory work.
- Review the design systemically, by evaluating individual decisions as part of a whole, i.e. does the material selected reduce waste but conversely increase the carbon footprint? If so, how can these emissions be eliminated?
- Apply a long-term perspective to evaluating the total benefits and risks.

What short-term business sacrifices might enable the design to achieve its full regenerative potential?

- Consider whether there are any further opportunities to mitigate against social and environmental risks or provide additional benefits.
- Analyse the trade-offs and finalise design decisions in the round, assessing the overarching vitality scale of the design to determine whether it is responsible to take the design from idea to reality. If it is not, then do not progress.



“Regenerative impact [means] tangible progress towards improving the health of our interwoven social, ecological and economic systems and their ability to restore and replenish one another. This moves us forward from the passive ‘do less harm’ principle of sustainability, to the active ‘do more good’ principle of regeneration.”

Joanna Choukeir, Director of Design and Innovation at the RSA, [A vitality scale towards a regenerative world](#)

RESOURCES

[Learning from the Futures: Speculative Design tools in Service Design](#) – article, Service Design Tools

[Unintended Consequences tool](#), p. 50 Systemic Design Toolkit, Design Council

[Unintended Consequences: Unknowable and Unavoidable, or Knowable and Unforgivable?](#) – research paper, Frontiers

[Fundamentals Of Risk Assessment: Methods And Tools Used To Assess Risk](#), Forbes



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.



SKILL 18

Iterating based on evidence

To maximise the usefulness of any impact goals, collected data must be analysed and any insights must then inform the design. Designers do not need to be impact measurement experts, but they should be data literate so that they can draw their own insights from data and use these to produce more planet-friendly designs.

.....

To hone this skill, designers must:

- Agree the best approach for capturing data against impact indicators (established while Setting measurable goals), this can be a mixture of quantitative and qualitative. Consider how digital tools can help data collection, i.e. **remote sensing**.
- Periodically review data, including Analysing emissions data, utilising digital tools if helpful, i.e. real-time dashboards.
- Generate insights and consider opportunities for redesign, i.e. does the data demonstrate that more carbon is being emitted than set in the carbon budget? If so, what can be done to further decarbonise?
- Evaluate redesign holistically, once more Reviewing benefits and risks and prototyping options.
- Consider whether the impact indicators, or the goals themselves, need to change based on any new information (both from proprietary data, as well as from wider data or research, i.e. climate science).
- Consider sharing proprietary data more widely to enable others to improve their designs.

.....

RESOURCES

Decolonial evaluation: centring communities and shifting power – article, The Catalyst

Find open data, gov.uk

How to measure impact – guidance and suggested tools and methods, LSE

The Data You Need for a Life Cycle Assessment –guidance, Ecochain

Why you should design with data – article, Hafeez Babatunde



“Data is the bridge between subjectivity and objectivity in design and it is easier to define success in design by measuring it.”

Hafeez Babatunde, Why You Should Design With Data



Applying a Green Design Mindset to Foundational Design Skills will ensure these Green Design Skills support planet and people.

CASE STUDY

Queensland Court and Gardens – transforming urban green spaces for community wellbeing

Queensland Court and Gardens project in Cardonald, Glasgow, retrofitted the green infrastructure surrounding two existing apartment blocks, providing 228 homes with enhanced access to nature. The project addressed local environmental and social challenges through a quantitative approach to measuring and evaluating impact.

Green design approach

By creating a baseline of resident views of the neighbourhood and local greenspace through an initial survey, the designs for Queensland Court could be **iterated based on evidence** of resident needs. For instance, the pre-survey revealed the desire for attractive and relaxing spaces, resulting in the creation of lush planting and seating areas.



The success of the development was evaluated by sharing a post-project study that used the same questions as the pre-survey. It demonstrated that residents feel safer and have better amenities as a result of the design, in addition to an overall increase in general satisfaction.

Impact and influence

The evaluation of impact resulted in benefits to the project, by providing enhanced opportunities to embed residents' wishes into the design. There were also benefits beyond the project itself, as the rigorous evaluation approach enabled funders and the third sector to evidence the value of investing in the landscape.

Thanks to the development, residents' use of green space increased by 29%, with 30% now spending time outdoors 4-7 times a week. The project also achieved a Building with Nature accreditation, demonstrating its success in enhancing water, wildlife, and wellbeing.

30%

of residents now spend time outdoors 4-7 times a week

29%

increase in the use of green space

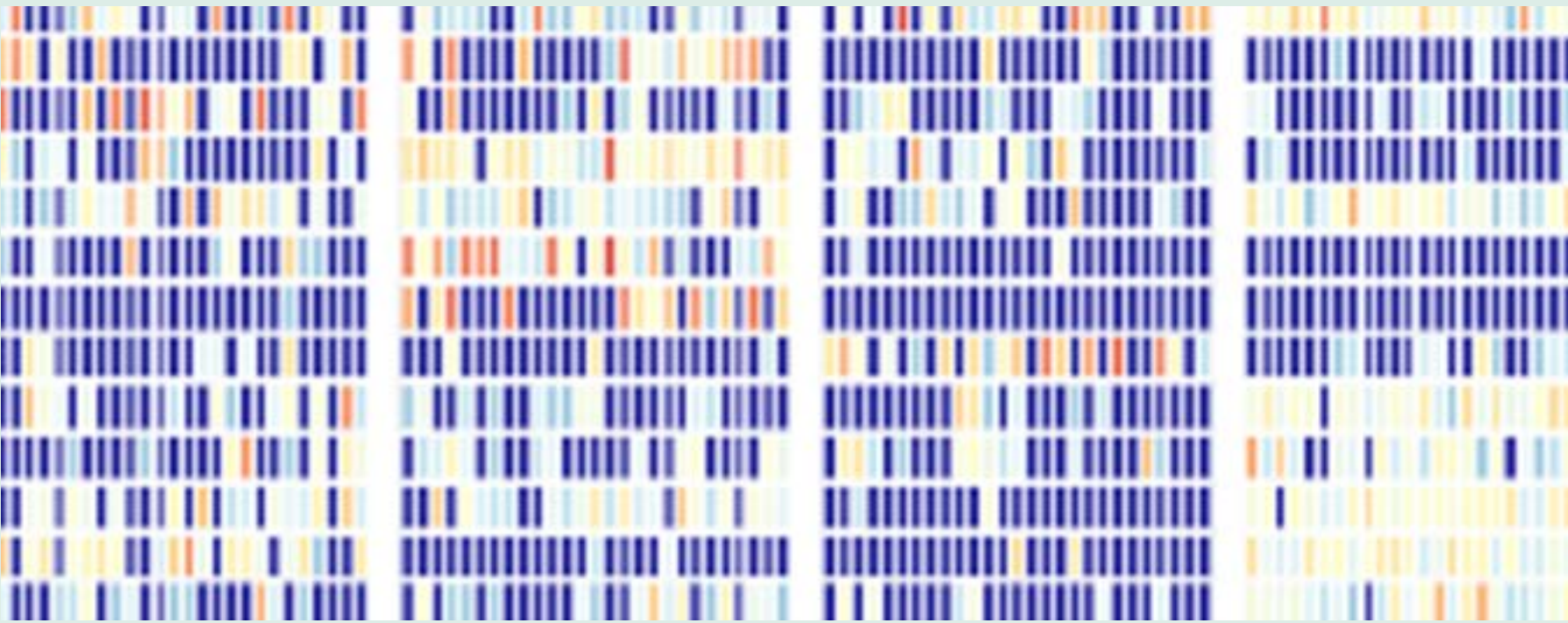
CASE STUDY

SUPERB – forest restoration for a thriving future

SUPERB is a pioneering EU-funded initiative that addresses large-scale forest degradation through 12 demonstration sites in Europe, including one in the UK. A focus on determining and evaluating impact from the outset allows SUPERB to deliver scalable, evidence-based restoration that creates resilient, biodiverse landscapes.

Green design approach

When **setting measurable goals**, SUPERB selected metrics that enabled both early-stage and long-term restoration progress, such as species richness, forest structure and soil condition. Using a **chronosequence** that represents restoration outcomes beyond the project’s duration demonstrates the team’s long-term, systemic outlook. The need for comprehensive data was weighed against the practicalities of sustained measurement: trying to measure too much can, conversely, impede engagement with restoration.



A multi-level governance structure helps **review benefits and risks** holistically. Each country sets its own context-specific goals, while a central steering committee zooms out and evaluates trade-offs as they emerge. Iterative learning was built into the design, with regular Monitoring, Reporting, and Verification (MRV) reports used to refine interventions based on real-world evidence.

Impact and influence

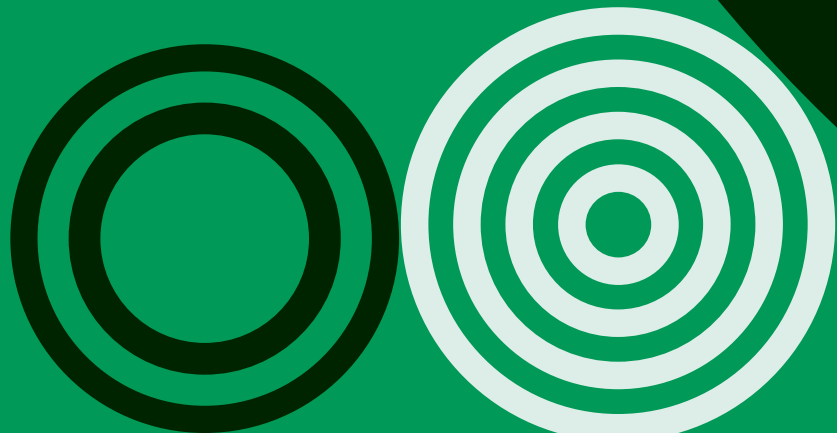
As a result of the project’s impact and governance-oriented approach, the project was able to spot a temporary dip in biodiversity following intensive management interventions, allowing the team to course correct by adjusting protocols.

Overall, species richness has increased by 20–30% in several restored plots and acoustic monitoring has revealed a 35% increase in avian activity compared to baseline degraded sites. As the team continues to measure impact in the long-term, they will be able to demonstrate further impact over many decades.

20–30%
increase in
species richness

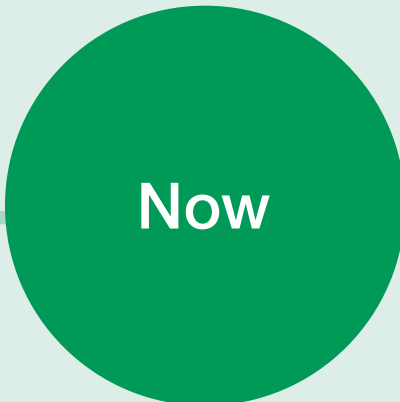
35%
increase in
avian activity

Skills for Planet What next?

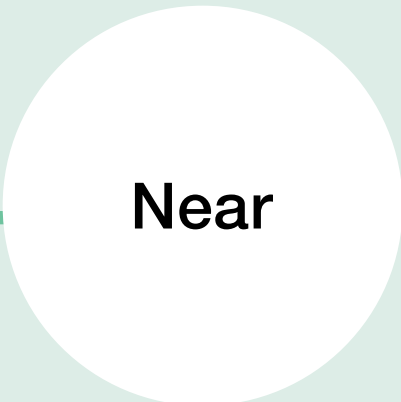


What next?

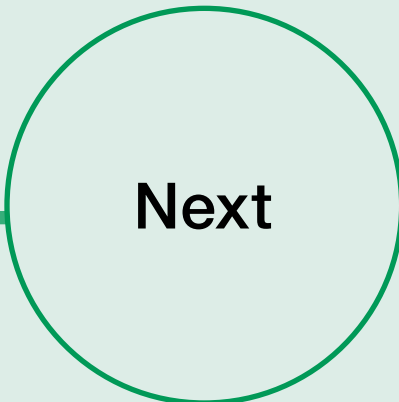
This Blueprint is our starting point. It will only have tangible impact if it is put into action across the design ecosystem.



We encourage design educators, organisations that employ designers and designers themselves to join our Skills for Planet Mission. Start by applying the Green Design Skills in practice, and identify any skills gaps. Use the actions outlined for each skill, the case studies and the resources to help you explore.

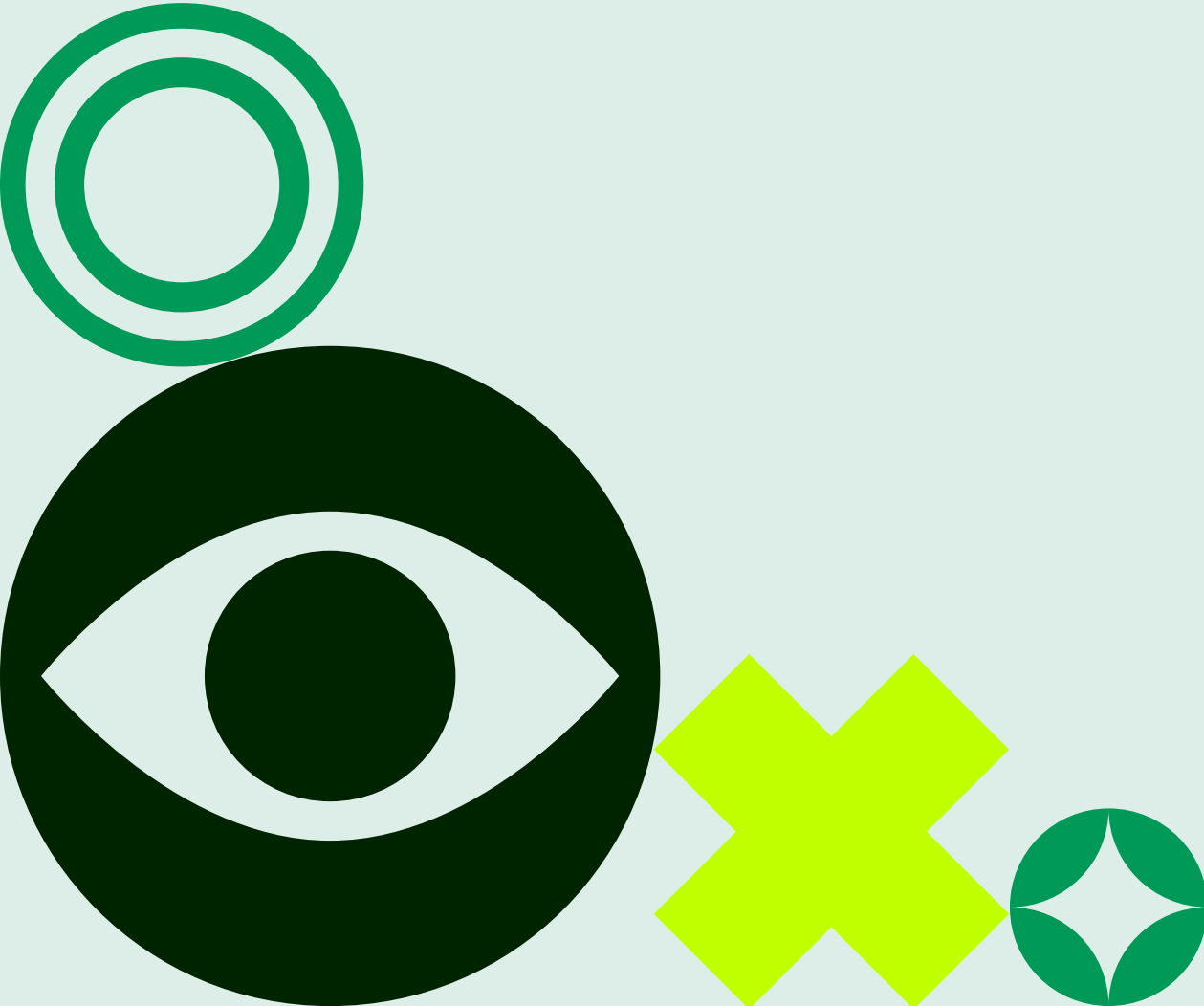


Design Council is building simple tools to help educators, organisations, designers, design commissioners and policymakers continue embedding the Skills for Planet Blueprint. Some initial examples can be found in the Appendix.



We will facilitate wider adoption of the Blueprint through longer-term partnerships and interventions. Through this process the Blueprint will be tested and will evolve to encourage green design upskilling in different contexts.

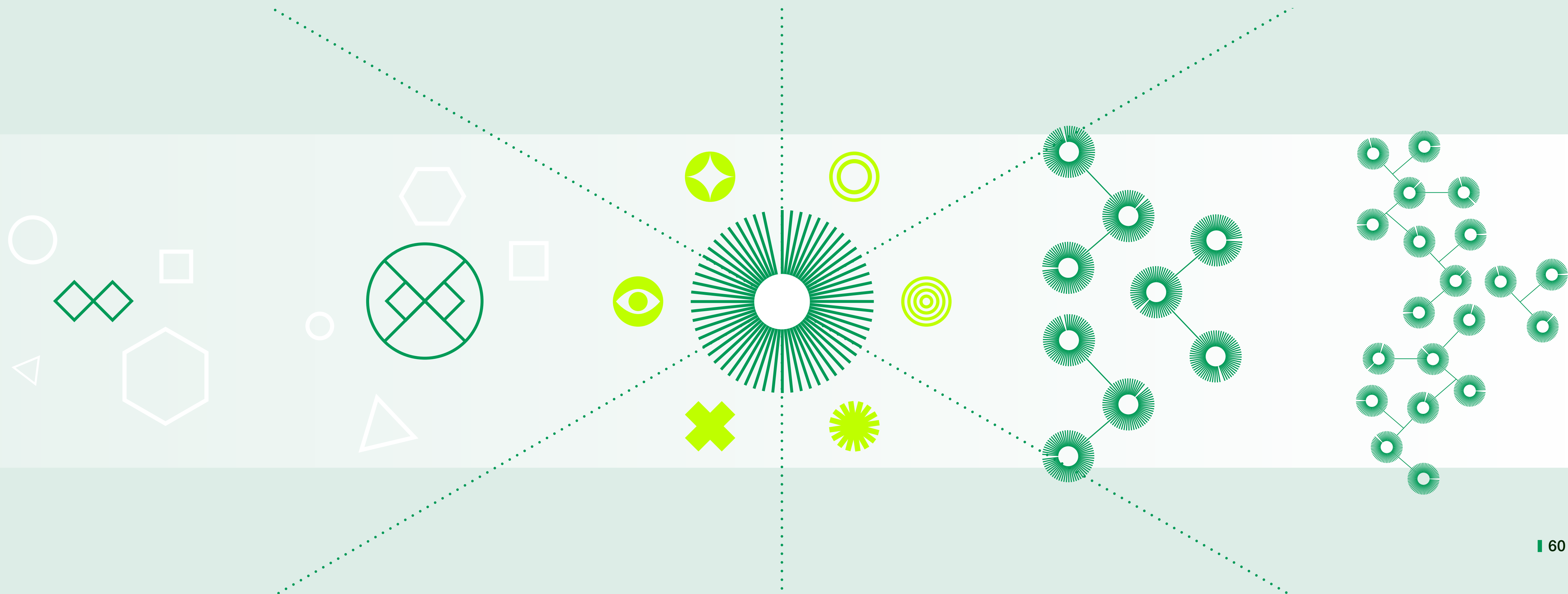
.....
: **Design Council will measure progress**
: **towards our Mission of upskilling 1 million**
: **designers through regular monitoring and**
: **evaluation across each of these phases.**
:



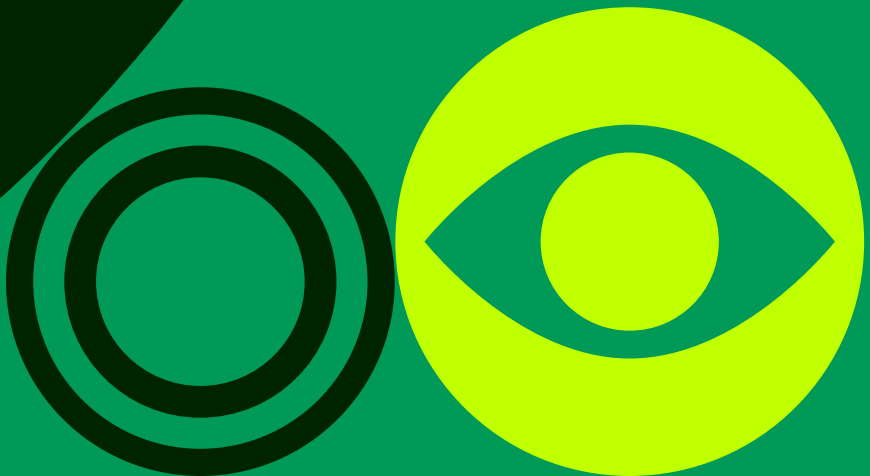
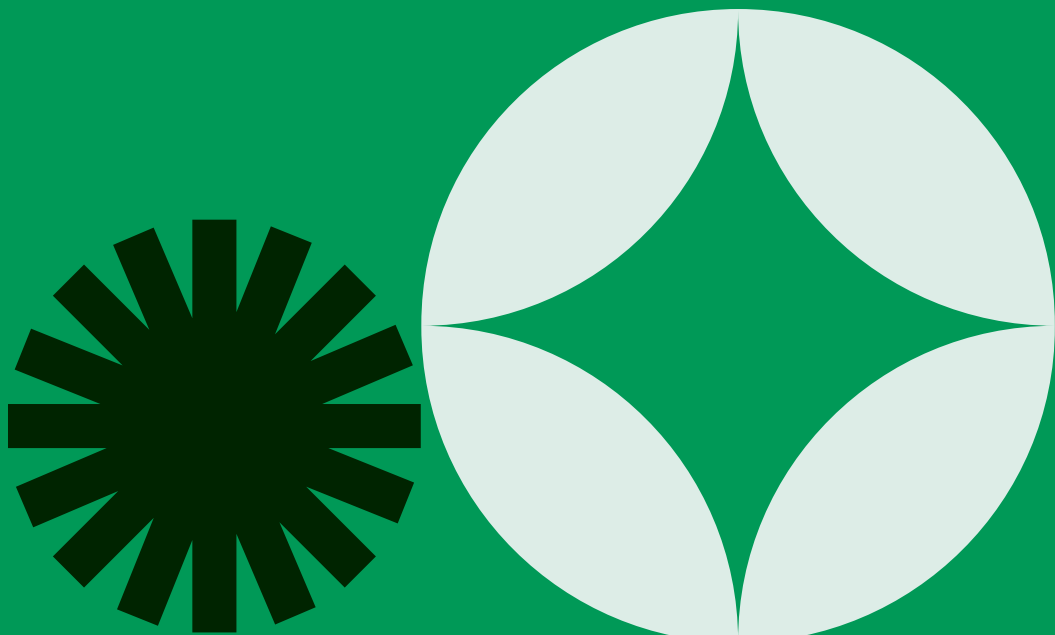
Join us on
our Skills for
Planet Mission

Pledge to embed this Blueprint and join a community across the design ecosystem who are building a regenerative world for all, powered by Green Design Skills.

Let us know how you can
contribute to our Skills for
Planet Mission here.



Skills for Planet Appendix



APPENDIX 1: SYSTEMIC DESIGN FRAMEWORK

A complementary process

The Systemic Design Framework incorporates an updated Double Diamond alongside an expanded process that sits around it. The **Foundational Design Skills** map to the Double Diamond and Systemic Design Framework, with each of the four skills underpinning each of the four design stages.

Meanwhile, each **Green Design Skill Area** maps to the sections of the expanded Systemic Design Framework that guide the majority of its activities. These are captured on the title page of each Skill Area.

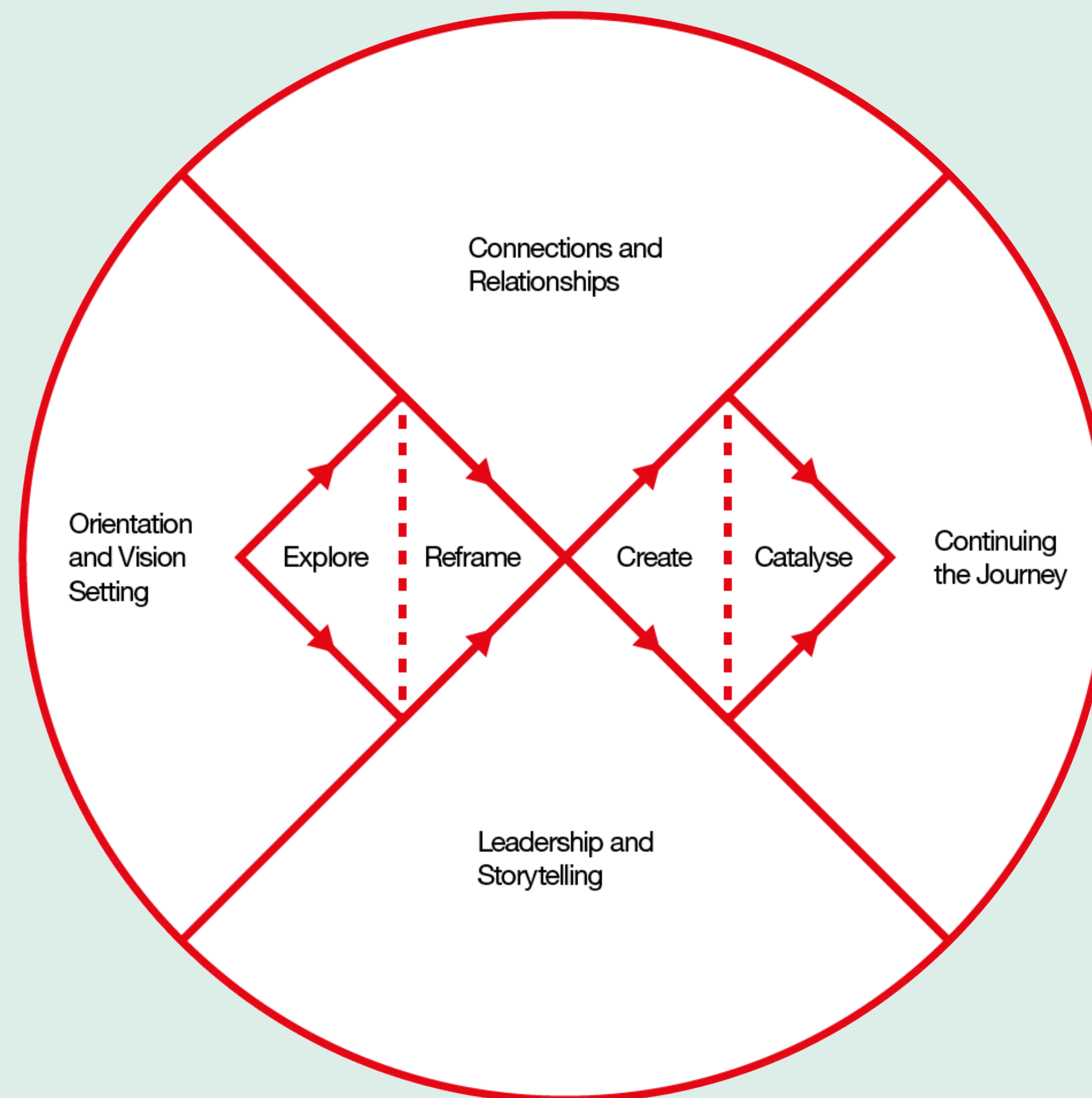
For example, Empowering Green Communities sits across Connections and Relationships (given the importance of collaborating with communities), as well as Continuing the Journey (given the role communities play in actively stewarding their local environment).

A guiding methodology

We have followed our Systemic Design Framework to guide the development of this Blueprint. After launching our Skills for Planet Mission we:

- **Explored** the problem space, reviewing existing evidence and developing our high-level approach to delivering the Mission, starting with this Blueprint
- **Reframed** our approach through research and co-design, engaging over 100 subject matter experts through workshops and interviews
- **Created** this Blueprint through several iterations, synthesising insights from our engagement phase

This piece of work hopes to ignite the Skills for Planet Mission, **Catalysing** a movement that together can close the green design skills gap and build a regenerative world for all.



APPENDIX 2: QUICK TOOLS

Green Design Skills Self-Assessment Template

1. AWARENESS

I understand the theory behind this theme and the steps I need to take to apply the skills within it

2. DEVELOPMENT

I have experimented with applying one or more of the skills in this area into my own practice, and have engaged with learning materials, i.e. short courses and practical toolkits

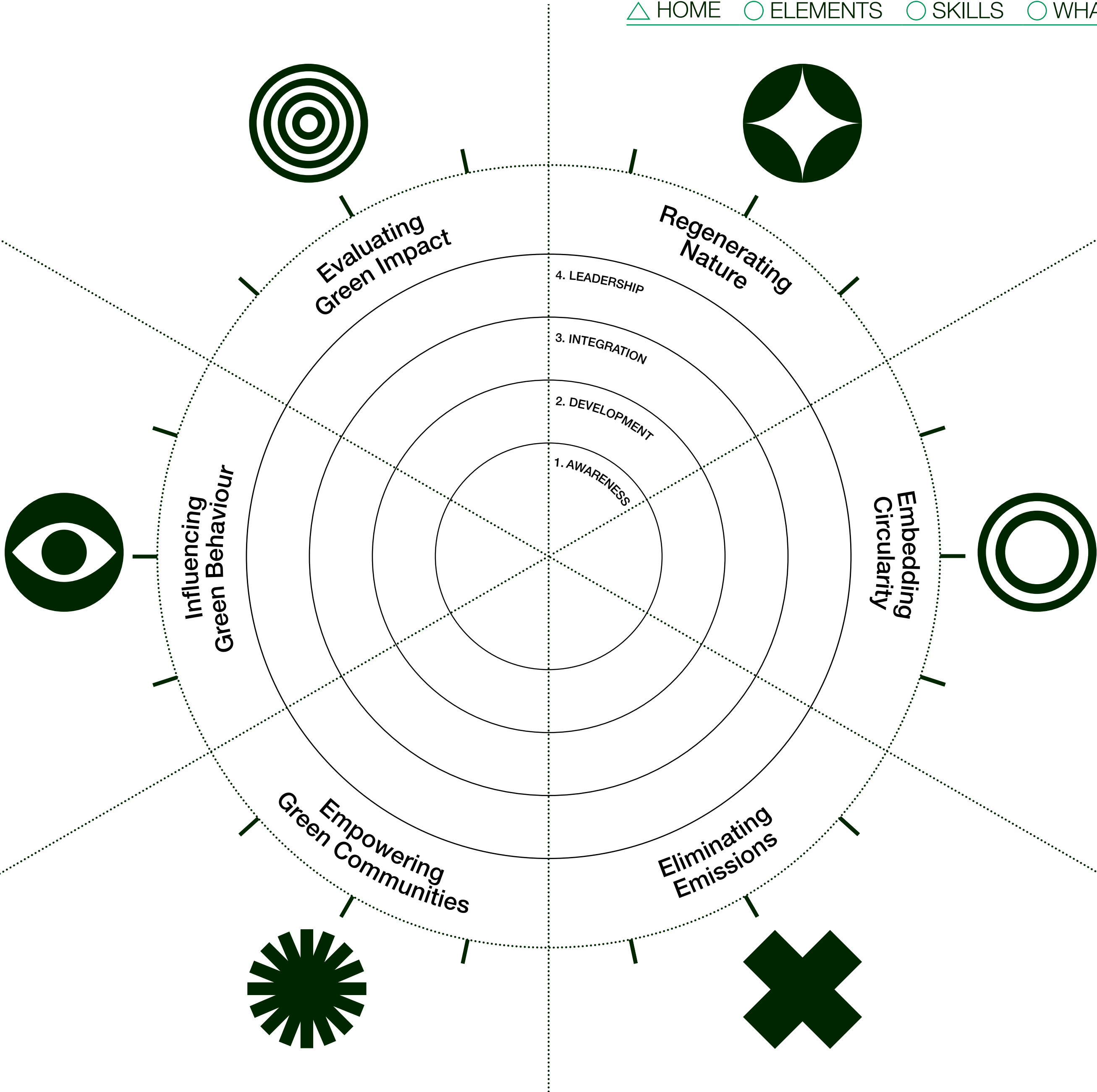
3. INTEGRATION

I have deepened my skills in this area through applying the skill in more complex settings or situations, and have done more formal training, i.e. longer courses or certification

4. LEADERSHIP

I have utilised these skills to lead innovation in green design, and teach others to apply these skills

Print me and colour me in!



APPENDIX 2: QUICK TOOLS

10 questions
to ask to adopt
a Green Design
Mindset

Q1

How does this strategy, idea or design regenerate nature, embed circularity and eliminate emissions?



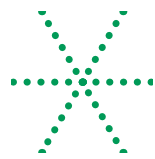
Q2

What are we trying to achieve and how will this create environmental, social, democratic and financial value?



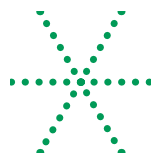
Q3

Is it our place to intervene here, or will we be exacerbating power imbalances (i.e. between marginalised communities and external designers) by doing so?



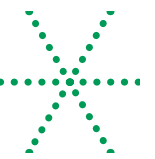
Q4

Have we zoomed out to consider where we are best-placed to act to achieve positive environmental and social impact, given our place in the wider system?



Q5

What methods or tools could we introduce, or remove, to enable inclusive practices (i.e. to give nature or marginalised communities a voice)?



Q6

Which relevant allies (from other disciplines) can we collaborate with to achieve the best outcomes for planet?



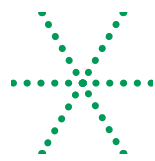
Q7

What will the impact of this strategy, idea or design be in the short, mid and long-term?



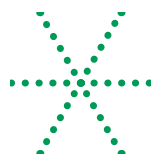
Q8

What data can we collect and analyse to help hone our design and evaluate our impact?



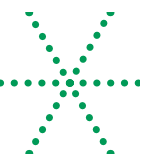
Q9

What opportunities do we have to influence green behaviour through our design, whether that be citizens adopting green choices or other designers considering green design options?



Q10

Looking ahead, how can we ensure that this design continues to be fit for purpose, regenerative and adaptable to our changing world?



APPENDIX 3: GLOSSARY (1/3)

DESIGN COUNCIL DEFINITIONS

Allies – People from other disciplines that designers should work with to help embed the Green Design Skills effectively.

Communities – Humans and more-than-humans with a shared characteristic or interest, i.e. living in the same area or with an identity-forming narrative in common.

Designers – The 1.97 million people who are part of design disciplines (i.e. architects, product designers, craftspeople), or who apply design skills in non-design industries.

Design for Planet – Designing in a way that is regenerative and not extractive, helping to address the climate crisis and achieve net zero and beyond. Design for Planet is also Design Council’s 5-year mission (2023-2028), which sets us on a pathway to delivering our vision (to create a regenerative world for all).

Foundational Design Skills – Capabilities that form the bedrock of contemporary design practice.

Green design – This term has different implications in different sectors, but for our purposes it is an umbrella term for all design approaches that centre all planetary life through design, seeking to regenerate the natural world and protect it for future generations.

Green Design Mindset – A systemic worldview, rooted in the understanding that design must bring value to the planet as well as its people.

Green Design Skills – The set of 18 skills outlined in this Blueprint that support planet and people-centred designing. When used in lower case (‘green design skills’), we are speaking generally and not just about the specific 18 skills.

Skills for Planet Mission – Design Council’s recently launched mission to upskill 1 million designers in green design skills by 2030.

Value – The planetary, social, democratic or financial benefit that a design delivers, including the wider effects.

INDUSTRY TERMS

Artificial intelligence – Technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision making, creativity and autonomy ([IBM](#)).

Carbon footprint – The amount of carbon dioxide (CO₂) emissions associated with all the activities of a person or other entity (i.e. building, corporation, country, etc.) ([Britannica](#)).

Circular design – The practice of creating durable, reusable, repairable and recyclable products that generate zero waste to support a circular economy ([Interaction Design Foundation](#)).

Circular economy – A systemic approach to economic development designed to benefit businesses, society, and the environment ([Ellen MacArthur Foundation](#)).

Colonialism – Indigenous peoples’ experiences of oppression – specifically, the seizure of native resources, as well as the embedding of Western ideology into society ([Eye On Design](#)).

Decolonial design – An acknowledgment that design has advanced colonisation and needs to recentre its theory and practice in global Indigenous cultures and histories ([MIT Press](#)).

Design justice – Rethinking design processes, centring people who are normally marginalised by design through collaborative, creative practices to address the deepest challenges our communities face ([Design Justice Network](#)).

Embodied carbon – Emissions associated with materials and construction processes throughout the whole lifecycle of a building or infrastructure ([UKGBC](#)).

Ethical design – Design that takes accountability for the impact it produces, both by ensuring an inclusive and representative design process, as well as a final outcome that avoids all harm (adapted from Kate Every, [Medium Article](#)).

Equity – fairness or justice in the way people are treated ([Merriam-Webster](#)).

APPENDIX 3: GLOSSARY (2/3)

Eurocentric – Seen from the point of view of Europe, considering Europe or Europeans to be the most important ([Cambridge Dictionary](#)).

Green Transition – The general concept of moving from a carbon based economy to a more sustainable economy ([The Beautiful Truth](#)).

Human-Centred Design – An approach to creative problem solving that puts people at the centre of the design process, believing that problems are best defined by the people who face them ([Social + Behaviour Change](#)).

Just Green Transition – A ‘just transition’ means moving to a more sustainable economy in a way that’s fair to everyone – including people working in polluting industries ([Greenpeace](#)).

Lightweighting – Removing weight from a component or assembly to create greener design, through substituting or eliminating materials, or optimisation ([Boyd](#)).

Linear economy – A system where resources are extracted to make products and materials always move in one direction – from raw material to waste ([Ellen MacArthur Foundation](#)).

Marginalised communities – Groups of people who have been ignored or prevented from participating in the social, economic, cultural, and political processes of society ([Power to Fly](#)).

Net zero – A state in which the greenhouse gases going into the atmosphere are balanced by removal out of the atmosphere ([Net Zero Climate](#)).

Remote sensing – Acquisition of information about the land, sea and atmosphere by sensors located at some distance from the target of study ([Science Direct](#)).

Retrofitting – Improvement work on an existing building to improve its energy efficiency ([Centre for Sustainable Energy](#)).

Speculative Design – An approach that explores future possibilities, rather than simply designing for an immediate use (adapted from [School of Critical Design](#)).

Transdisciplinary – Unity of intellectual frameworks beyond disciplinary perspectives ([ArchPsych](#)).

Trauma-informed design – Builds on the principles of trauma-informed care, filtering design decisions through psychological and cultural research, so that design provides a sense of safety, respect, community and dignity (Adapted from [Neumann Monson Architects](#)).

NATURE

Agroforestry – A land management approach that combines trees and shrubs with crop and livestock farming systems ([Woodland Trust](#)).

Biomass – Biological material derived from living, or recently living organisms ([Forest Research](#)).

Biomimicry – A practice that learns from and mimics the strategies used by living organisms to solve challenges ([Biomimicry Institute](#)).

Climate and biodiversity crisis – The interlinked crises that encompass devastating extreme weather events, ocean acidification and drought, as well as the global loss of species resulting in less diversity of animals, plants and fungi found in the natural world ([House of Lords Library](#)).

Coppice woodland – Coppicing is an ancient woodland management technique that involves felling trees at their base to create a ‘stool’ where new shoots will grow ([National Trust](#)).

APPENDIX 3: GLOSSARY (3/3)

Chronosequence – A set of ecological sites that share similar attributes but differ in age ([Collins](#)).

Ecology – The study of relationships between living things and their environment ([British Ecological Society](#)).

Ecosystem – A geographic area where plants, animals, and other organisms, as well as weather and landscapes, work together to form a bubble of life ([National Geographic](#)).

Environment – The air, water, and land in or on which people, animals, and plants live ([Cambridge Dictionary](#)).

Extractive – Economic prosperity as the end, at the expense of social and environmental health ([RSA](#)).

Hydrology – The study of the distribution and movement of water both on and below the Earth's surface ([National Geographic](#)).

Indigenous communities/ peoples – Those descended from the earliest

inhabitants of a country before colonisation, who live in culturally distinct societies and communities ([Greenpeace](#)).

More-than-human – all living beings that are not human.

Nature – In this Blueprint nature refers to the natural world and its resources (plants, animals, landscape), however in reality humans are not separate from nature, but a part of it.

Natural world – All of the animals, plants, and other things that exist in nature that are not made or caused by people ([Cambridge Dictionary](#)).

Natural systems – Terrain, climate, sea, and space that may undergo changes due to ecological or human-induced factors ([Science Direct](#)).

Regenerative – Building the conditions for long-term social and environmental replenishing as the end, with economic prosperity as the means ([RSA](#)).

LEARNING

Capability – The ability to do something ([Cambridge Dictionary](#)).

Competence – Broader attributes that refer to an ability to use knowledge, skills, social and/or methodological abilities in work or study situations and in professional and personal development ([European Commission](#)).

Knowledge – Understanding of or information about a subject that you get by experience or study ([Cambridge Dictionary](#)).

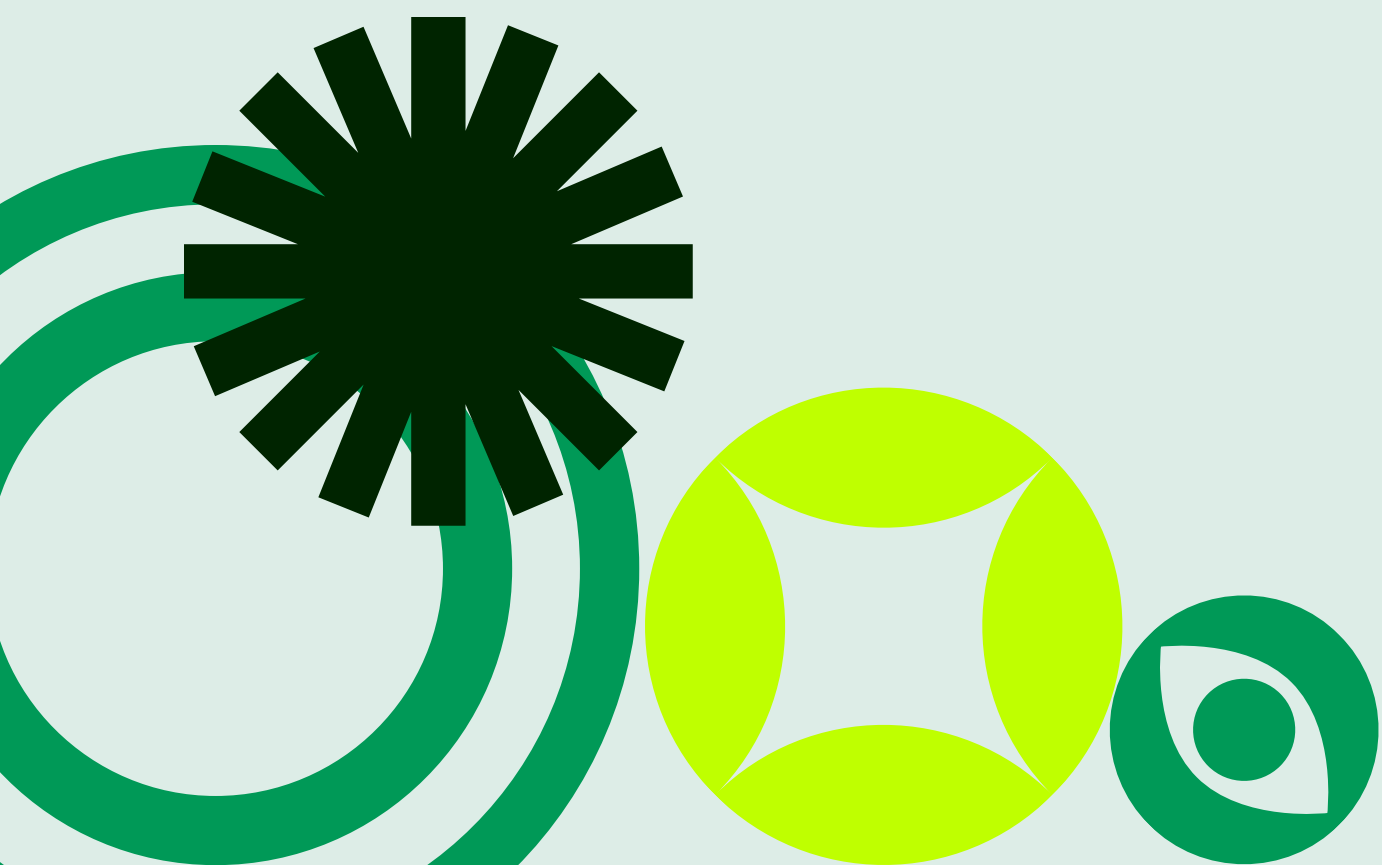
Mindset – A person's way of thinking and their opinions ([Cambridge Dictionary](#)).

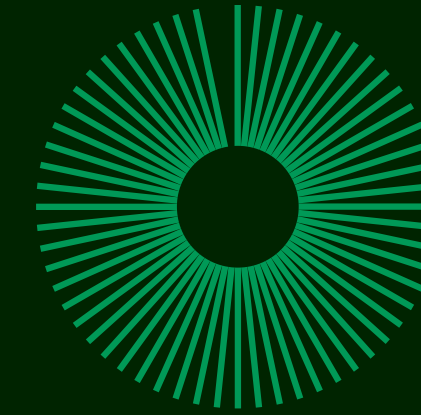
Skill – The ability to apply knowledge and use know-how to complete tasks and solve useful problems ([European Commission](#)).

APPENDIX 4: ACKNOWLEDGEMENTS

The Skills for Planet Blueprint: the critical green skills that all designers need was written by a core team of Design Council colleagues: Rachel Bronstein, Rachel Moriarty and Bronwen Rees. The team would like to thank those who offered their wisdom, time and energy to this piece of work and helped make it possible:

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- Workshop attendees and early thinkers:**
Adam Towle, Akil Benjamin, Anne-Marie Bartlett, Antonia Arbova, Az Chinaliev, Barry Waddilove, Camilla Ween, Carly Tinkler, Cher Potter, Chris Thompson, Dan Jones, Daniel Charny, Elmer Zinkhann, Emma Dick, Erica Purvis, Fara Muneer, Francesco Mazzearella, George Pope, Heba Elsharkawy, Janice Windle, Jessica Bonehill, Joe Iles, Joe Macleod, Jonathan Ball, Jonathan Irawan, Joseph Shaffery, Josie Warden, Justine Carrion-Weiss, Libby Stevens, Linda Lloyd Jones, Lindsey Wilkinson, Mark Mason, Mark Riches, Matthew Jones, Marie Williams, Melissa Sterry, Michael Pawlyn, Mihyun Kim, Natalie Daniels, Natasha Trotman, Nicola Peel, Paloma Gormley, Paul Appleby, Rachel Jones, Richard Cass, Robert Philips, Roderick Adams, Roland Harwood, Rosie Carmichael, Ruth Wassermann, Samer Bagaeen, Sarah Douglas, Sarah Spencer, Sarah Wigglesworth, Sheena Raeburn, Stephanie Hankey, Veronika Kapsali





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