Sustainable Innovation Manual

UK GBC

Foreword

Anyone who's embarked upon an innovation journey knows that it's never straightforward. The prospect of coming up with ideas that genuinely represent a breakthrough can feel daunting, and a million miles away from day-to-day business.

But what if there was a process we could follow that helped shift our thinking into a mode that unlocked new ideas and opportunities for business, people and the environment? Happily there is: the UK Green Building Council's Sustainable Innovation Manual.

Whatever your goal; a new product, new service, or new approach on a project, this manual provides the necessary tools to assist in building the bridge between where you are now and where you want to be. It contains a step by step process, carefully designed to enhance you and your team's capacity for collaboration, and to develop new ideas to deliver sustainable outcomes.

Not only that, but by showing how to make innovation and sustainability part of business as usual, and breaking down barriers between business leadership and creativity, it will help create the space and culture for your new ideas to thrive.

Our idea is to demystify the process of innovation. Our goal to encourage everyone to bring their own perspectives, skills, and insights to bear on the problems we need to solve, whilst working collaboratively. We hope it will inspire you and your colleagues, and ultimately work to drive more positive change through innovation in the built environment sector.

Cat Hirst
Director of Learning and Innovation
UK Green Building Council

Introduction

The UK Green Building Council (UKGBC) exists to radically improve the sustainability of the built environment, by transforming the way it is planned, designed, constructed, maintained and operated.

For this transition to occur, we need to inspire new ways of tackling existing and emerging challenges.

This manual is here to promote a culture of innovation in the built environment sector, and more specifically to aid the generation of solutions that are both sustainable and innovative.

SWITCH ON
THRIVE YOUR FUTURE

This innovation process was developed and delivered in collaboration with our partner Switch On. Switch On is a leadership consultancy – born from a disruptive innovation agency – dedicated to equipping leaders with everything they need to find and seize opportunities for continuous business breakthroughs that create value and drive impact within the Volatile, Uncertain, Complex, Ambiguous, Networked and Stressed (VUCANS) world.

Once only an after-thought in our industry, today in the light of climate change, resource scarcity and changing demographics, adopting a sustainable aproach has become a necessity.

Overcoming significant systemic challenges demands radically new approaches to transform the way we live, and the buildings in which we live.

But how can we turn the promise of sustainable innovation into reality?

How do we build capacity to drive innovation and positive change in the built environment? This manual is a guide to answering those questions. We know innovation will be key.

It provides advice on how to approach the innovation process, stage by stage, for all types of project teams, whether drawn from individual businesses, key stakeholders and influencers, or from multiple organisations.

It's a product of the UK Green Building Council's 2017 inaugural Innovation Lab, an approach tested and honed by over 50 corporates, SMEs and innovators who came together to tackle the common challenges in the built environment, through a rigourous programme of open innovation.

The lab was designed and facilitated by UKGBC and Switch On with the insight and idea generation driven by lead partners Canary Wharf Group, Landsec and M&S. The Lead Partners worked collaboratively over a 12-month period coalescing around six face-to-face workshops to identify challenges and co-create solutions.
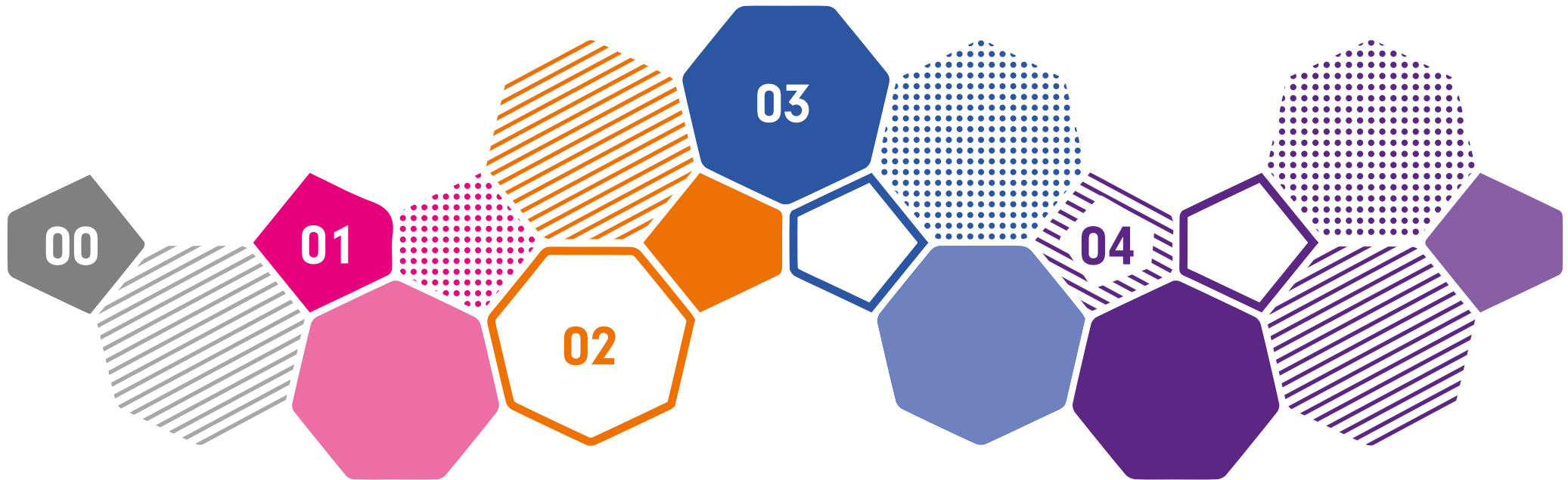
These lead partners brought a wealth of experience and insight on the built environment as well as a real appetite to think differently and work together to challenge the status quo.

By its nature innovation requires people to leave their comfort zone.

To help teams let go of the norm, and instead structure thoughts and refine new ideas for major challenges, the manual contains carefully developed templates that create a framework and a guide to thinking differently.

While it was developed by innovators to encourage fresh thinking on sustainability for the built environment, the process described in the manual can be followed to encourage innovation on sustainability for any sector.

The Innovation Process

Stage	Stage	Stage	Stage	Stage
00 Inception	**01 Intelligence**	**02 Insight**	**03 Ideas**	**04 Implementation**
Before you begin	Defining a problem worth solving	Turning a problem into an opportunity	Using insights to develop solutions	Getting market ready
Step 1. Assemble your team	**Step 1. Map the system**	**Step 1. View your challenge like a customer**	**Step 1. Run an ideas generation workshop**	**Step 1. Refine your financial model**
Step 2. Be clear on IP	**Step 2. Map the future**	**Step 2. Conduct an insights workshop**	**Step 2. Conduct a market review**	**Step 2. Gather support and buy-in for your solution**
Step 3. Agree your process	**Step 3. Identify your challenges**		**Step 3. Develop a sustainable solution**	**Step 3. Develop a prototype**
	Step 4. Prioritise the challenges		**Step 4. Refine your elevator pitch**	**Step 4. Test in the market**
	Step 5. Refine your challenge			**Step 5. Commercialise your solution**
				Step 6. Track your impact

Stage
00

Inception

Before you begin

Before you begin:
Assemble your innovation team

Innovation is a team sport. Getting the right group together is vital.

There are two key factors in assembling a team that clicks.

Common purpose

Make sure everyone is pointing the same way. An innovation initiative requires a clear sense of direction, even if the particular challenge to be solved is not defined at the outset.

That means a clear focus on why the team has come together. Draw up a mission statement, a charter that places the team's vision of sustainability at its heart. The focus on sustainability provides the necessary sense of purpose, and acts as a constant reminder of the ultimate goal: profit, people and planet.

Diversity

A diverse team is a team that innovates. Diversity makes for agility, and minimises group-think.

So build team diversity proactively. Recruit members with skills and expertise, backgrounds and personalities that are verifiably different. Membership won't be static either. Teams should evolve if they are to respond best to challenges as they arise.

> **"The relationship between innovation and diversity is positive and significant"**
> Boston Consulting Group and Technical University of Munich, 2017

> **"Almost always, great new ideas don't emerge from within a single person or function, but at the intersection of functions or people that have never met before."**
> Clayton M. Christensen

> **"Every risk is worth taking as long as it's for a good cause and contributes to a good life"**
> Richard Branson

Before you begin:
Be clear on intellectual property

Clarifying the Intellectual Property (IP) before you even start on your innovation journey may feel like a difficult task, but it will abolsutely be worth it.

Upront clarity on who will own new ideas will faciltate openess, collaboration and creative flow during later stages.

Clarify ownership

Clarify the ownership of potential intellectual property (IP) at the start. Draw up confidentiality and non-disclosure agreements too. Sorting these questions up front builds a foundation of trust, and facilitates open dialogue.

It's not always possible, later, to point to what stage IP was created, particularly following an open innovation approach, or when working across multiple organisations.

Invest time with your legal adviser to ensure that they understand the innovation process and its goals, in order to develop the appropriate documentation and avoid conflict later.

Before you begin:
Agree your innovation process

It takes more than post-it notes, flip charts and bean bags to innovate effectively. Adopt a rigorous approach.

Plan and commit

This manual provides a framework that sets teams up for success, while still enabling you to tailor the process to suit your needs.

It's essential to plan for and commit to time and headspace away from the distractions of day-to-day business tasks.

Rookie errors

Avoid these pitfalls as you embark on your innovation journey:

- Failure to identify a significant problem in need of a solution
- A problem which is identified but never gets the solution it needs
- A solution that delivers incremental change rather than breakthrough thinking
- Fizzle fade: trust and energy dissipate.

Sustainability sense check

Before you move on to the next stage, here are some quick checks.

? **Does your identified purpose consider environmental and social factors as well as economic drivers?**

? **Is your team positioned to consider sustainability <u>and</u> commercial goals?**

Stage

01

Intelligence

Defining a problem worth solving

Map the system

Real innovation emerges from fresh thinking about systems and the support networks that lie behind products, services and business models.

Achieving a breakthrough requires an understanding of how systems function in the first place: you can't break the rules without knowing them.

Create a visual summary

Draw a visual summary of the system in which your innovation team is currently operating.

One way of doing this is to establish your nodes (**players** and **issues** within the current system) and the flows between them.

The key *players* in the current system:

**Businesses   Government
NGOs**

The *issues* affecting the current system:

**Social   Environmental
Economic   Political**

Identify flows

Using arrows, now identify what flows between the nodes, e.g. information, resources and value, and connect them on the map. Now colour-code the level of influence over players and issues and flows that your innovation team currently has, according to the categories below:

- Direct
- Indirect
- Non-existent

Remember that the process of systems mapping is as important as the map itself to the team.

Map the future

Systems evolve. Many are complex and volatile. Understanding how a selected system might develop over time is fundamental to ensuring any innovation that emerges from the process has resilience.

Identify trends

Using the **TRENDS REVIEW TEMPLATE**, consider the emerging, social, economic, environmental, and political trends that impact on your system.

Project trends

Extrapolate those trends with the team to a time horizon that's not so far ahead to be science fiction but distant enough to escape the immediate future, in order to challenge your thinking. A good basis is 30-50 years.

Start by considering global trends before narrowing the focus to the built environment.

Consider further methods

A review of trends is one way to model the possible future. Others include:

Forecasting
Projecting a future from existing data

Scenario mapping
Modelling possible and preferred futures

Foresight
Imagining a future based on signals of change already in evidence.

Identify your challenges

Innovation isn't a solution in search of a problem. It's a new way of solving an existing problem.

So what is the problem?

Pinpoint the pain

Work with your team to identify the existing and emerging business pain points of your chosen system. This is any form of negative impact - emotional, financial, physical or environmental - experienced by an individual, organisation or stakeholder.

At a commercial level, the more pain, the greater the business opportunity - i.e. the greater the pain the more people will pay for that pain to go away.

Get perspective

Consider existing and emerging business pain points from various perspectives: your customers'; your supply chain; your organisation; and your own perspective.

Combine them with the future-mapping results to clarify how pain points may develop over time.

Find the challenge

Complete the challenge identification template for each pain point.

Try to engage with the wider business or organisation to ensure a deeper understanding of the challenge ahead, and the problem you need to solve.

| System Map | **+** | Future trends | **+** | Business pain point | **=** | Sustainable innovation challenge |

Prioritise your challenges

So, your team have now identified a number of challenges.

But how to judge where to invest your time and efforts?

Transfer challenges

Move your list of challenges into the **CHALLENGE PRIORITISATION TEMPLATE**.

Find what matters most

Work through each of the challenges to identify the most pertinent challenge across a set of pre-defined criteria, detailed in the template. Your chosen challenge will then become the basis of your innovation process.

Refine your challenge

The team knows where the challenge lies, but can they express it clearly enough to engage others?

Refine and define it

A focused challenge is compelling: develop your **CHALLENGE STATEMENT** using the template.

Making your statement short and simple is a challenge of its own, and may require numerous attempts to get right, but the process will also help consolidate the team's thinking.

If progress is flagging and your idea feels too big to handle, there may be other problems hidden within your problem, like a Russian doll. Using the *NESTA Core Problem template* can help you get to the root cause.

Sustainability sense check

Before you move on to the next stage, here are some quick checks.

? **Once developed will, the solution to your challenge statement deliver sustainability benefits?**

? **Is your challenge ambitious enough? Would a potential solution be sufficiently 'disruptive' to impact on tomorrow's sustainability challenges?**

Stage

02

Insight

Turning a problem into an opportunity

"You can't just ask customers what they want and then try to give that to them. By the time you get it built, they'll want something new"

Steve Jobs

View your challenge like a customer

A good innovation process puts people at its centre.

When innovating you may be excited by the promise of a new idea, however you must firstly stand in your customers' shoes and view your problem from every angle.

Identify your customer

Imagine how an end-user would view your problem. Would a solution to this challenge save them time, money or effort? Answering that requires an understanding of the end-user.

Build a customer profile

Consider who your customers are as individuals, their needs and their wants. How does it feel to stand in their shoes?

One valuable resource in creating a profile of an end-user is innovation project members with experience of the end-user pain points. Primary research (interviews, focus groups, demographics) and secondary research (surveys, user data and behavioural patterns) all contribute to building a detailed picture of the end-user's perspective.

> "Success is not delivering a feature; success is learning how to solve the customer's problem"
>
> Eric Ries, The Lean Startup

Conduct an insights workshop

Successful innovation comes through insight; the ability to approach a problem in a new way, and transform a challenge into an opportunity.

Generating strong insights provides the groundwork for any good idea and you should think of them as 'fuel' for the ideas stage.

"Finding holistic solutions to sustainability challenges calls for collaboration with unusual stakeholders."

Cookbook for Sustainable Innovation, 2017

Generate insights

Run a workshop to generate insights on your customer. During this workshop you will complete multiple versions of the **INSIGHT IDENTIFICATION TEMPLATE**. Involve your innovation team and external facing colleagues from sales and marketing, customer experience and strategy or business development teams. Invite prospective end-users who can contribute direct experiences and views.

The workshop should be structured and take no more than 4-6 hours. A mix of plenary information and guidance, working groups and feedback sessions will keep the event lively and focused. Participants should feel free to contribute comments and observations that take the innovation team well beyond their comfort zone, challenging beliefs and assumptions.

Facillitate

Group your participants into perspective teams to consider your agreed challenge from different angles. All groups should look to deliver at least one insight (hopefully more) by the end of this workshop. During the session, consider the following facilitation points:

Cross-pollinate:
Participants should follow their personal interest and enthusiasm, moving between groups during the day. One individual should remain in each group for continuity.

Get feedback:
Each group should capture their insights and share them in plenary sessions with the wider team at specific points throughout the day.

Iterate & re-develop:
Your challenge statement will inform the insights of the group, and vice versa. Revisit the challenge statement as a touchstone as insights develop.

Capture your new insight

Show how your insight reimagines the status quo, list your new assumptions and how you have turned a challenge into a unique business opportunity – the new proposition.

Sustainability sense check

Before you move on to the next stage, here are some quick checks.

? **Do your insights reflect the social and environmental trends you have previously identified?**

? **Are you considering social and environmental drivers for your customers, in addition to economic drivers?** (i.e. lighter = less materials, less energy use = lower cost)

? **Could there be any potential negative sustainability 'rebound effects' from your insights at this stage?**

? **Are your insights ambitious enough to deliver 'disruptive' ideas commensurate with today's sustainability challenges?**
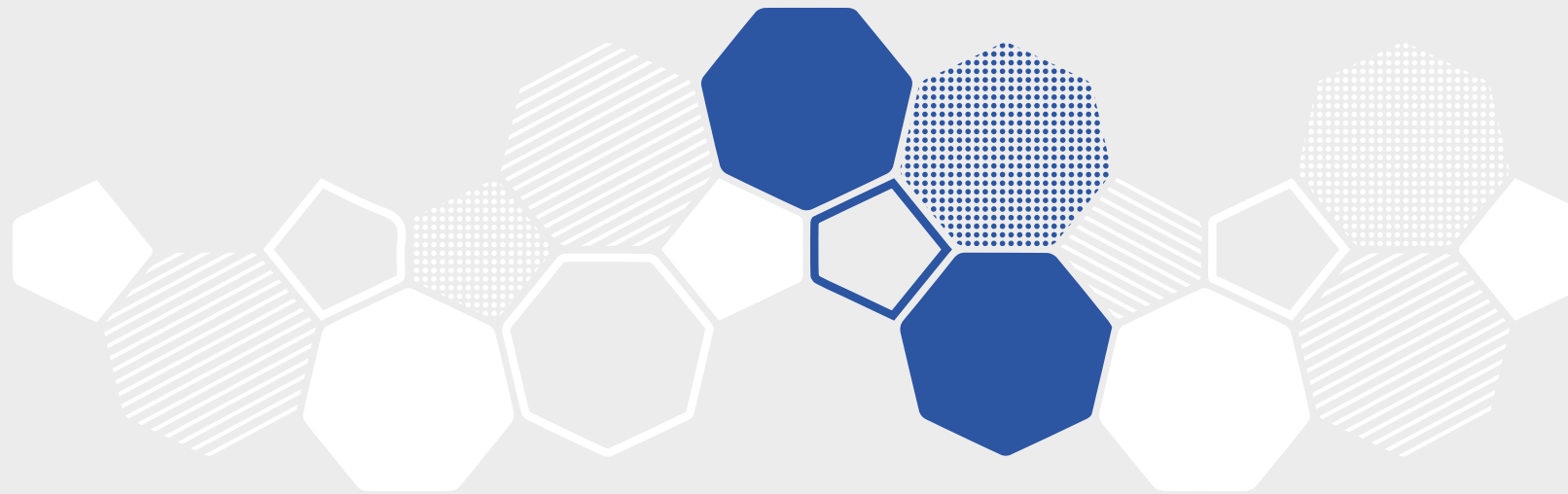
Stage

03

Ideas

Using insights to develop solutions

"Ideas are like rabbits. You get a couple and learn how to handle them, and pretty soon you have a dozen."

John Steinbeck

Run an ideas generation workshop

This is the point in the process where your insights transform into an idea. Ideas will be generated that don't just improve current propositions incrementally, but instead break through to new thinking.

Reflect and consider

Run an ideas workshop. This will provide a supportive environment where new ideas can take form. Allow about six hours to review and share the insight statements generated so far. As one large group, or smaller groups, reflect back on your challenge and your insights.

Discuss your thinking

It is essential to steer team conversations away from business-as-usual. Free thinking can appear tangential, but unlikely avenues can produce intriguing possibilities. There should be a level of excitement as you work together to come up with a breakthrough idea. Creative flow is the thing.

The workshop should generate at least one new promising idea to form the backbone of your future innovation. Consider if your idea is leading change or merely managing the effects of your challenge. Question if your new proposition is liable to be disrupted itself, and how this might be mitigated.

Refine your idea

Use the **ELEVATOR PITCH TEMPLATE** to hone your idea, you will revisit this in step four.

Some basic ground rules:

Participants	**Headspace**	**Ambition**
Your decision-makers should be present in the workshop to own the ideas.	Give yourself enough room to discuss, iterate, challenge and consider all possibilities.	Think big: there is a difference between an idea, and an innovative idea.

> "The best way to get a good idea is to get a lot of ideas."
>
> Clayton M. Christensen, The Innovator's DNA: Mastering the Five Skills of Disruptive Innovators

Conduct a market review

You've now got an idea, but is there a market for it, and will further development be time well spent?

You must be confident that your idea of a new product or service has a unique selling point (USP).

Review the market

Identify other existing innovations that address a similar problem, and establish what stage of maturity they are at. This is vital in understanding who your key competitors could be, or even potential collaborators.

Completing the **MARKET REVIEW TEMPLATE** will help you to identify what already exists in the same space as your idea. Review the product or service value propositions, target audiences, level of maturity and positioning.

Hopefully, you will discover from your market review that nothing quite occupies the niche you have worked to identify. But it's also important to be open to the possibility that there may be an emerging solution to your challenge – new innovations are coming to market every single day!

Consider options

If you do identify an existing product or technology in a similar space, work to establish if there is scope to leverage this emerging innovation or collaborate with the team involved to work together to co-develop a solution.

Or - if following the detailed review - you conclude that your idea is truly unique, you now move on with the full reassurance that you're in a great position to develop this idea into a unique, sustainable product or service.

> "What if we found ourselves building something that nobody wanted? In that case what did it matter if we did it on time and on budget?"
>
> Eric Ries, The Lean Startup

Develop a sustainable solution

Transitioning your idea into a viable, commercially sound and sustainable solution requires a rigorous approach.

Your first idea may not be well defined and it will certainly need further development.

Build out your idea

Complete the **SUSTAINABLE SOLUTIONS TEMPLATE**. This process will help address important questions about the viability of your solution from a business and sustainability perspective: who pays what for what? Completing the template you will consider; the value proposition; what resources you may need; what partners you need to engage and key channels to reach your customers.

Spend time working on your idea, taking into account the findings from your market review, which will keep you focussed on your USP.

Get feedback

It is a good idea to seek feedback early on from trusted stakeholders. If you're doing this formally, non-disclosure agreements may be prudent, but don't underestimate the benefits of informal feedback from trusted peers at this stage.

Refine your elevator pitch

No matter how great the idea, you must bring it to life with a compelling story.

Your elevator pitch will become your key communication tool with the outside world and crucial when it comes to reaching the market.

Revisit your pitch

Go back to the **ELEVATOR PITCH TEMPLATE** you completed earlier, and refine it based on the discussions you had during the previous stage.

Say your ideas aloud. Focus on fulfilling the end-user's needs not functionality. If it lasts more than a minute you've probably lost your audience. Concentrate on the essentials. Here's the problem, here's the answer (your USP), here's the value to you…

Test and refine

Test your pitch on someone who knows nothing about the topic: decision-makers are often not interested in technical details.

Hone it, so you're confident when delivering it, this will help you to excite and impress potential investors and other important stakeholders.

Pitch perfect

Stay disciplined with the length of your pitch, but if you do feel you need to add detail, you could consider developing a visualisation, storyboard or handout to supplement your pitch.

"You can have brilliant ideas, but if you can't get them across, your ideas won't get you anywhere."

Lee Laccocca

Sustainability sense check

Before you move on to the next stage, here are some quick checks.

? There may be a gap in the market for your solution, but is there a market in the gap?

? Will your solution have a positive social and environmental impact?

? Is your solution ambitious enough to overcome tomorrow's sustainability challenges?

? Are you confident you can communicate your solution to a non-technical audience?

Stage

04

Implementation

Getting market ready

"Ideas won't keep.
Something must be done
about them."

Alfred North Whitehead

Develop your financial model

Now you can get serious about the financials, and clarify income, costs, investor contribution models and potential funding sources.

Develop a financial model

Your financial model should include:

Set-up cost projections	Feasibility & prototype expenditure projections
Proposed operating budget	Cashflow projections

Investment contribution model (including funding streams)

Project financials

For all of the elements of your financial model, ensure you are projecting costs, income, and cashflow on appropriate timescales, both short (e.g. the first 3 months) and longer-term (up to 3 years) to illustrate return on investment (ROI) and business sustainability.

Consider funding options

There are many ways in which you can finance your idea with funding and support, but you'll need to be resourceful, particularly in the prototype stages.

Consider 'pepper-corn' funding for feasibility from R&D/Innovation/new business budgets, or look externally for innovation grant funding from government, even crowdfunding.

Valuable business support can be obtained from Accelerator programs: _Sustainable Ventures_, _Climate-KIC Accelerator_, _Bethnal Green Ventures_ are all sustainability oriented.

Gather support and buy-in

You'll need support to develop your innovation, whether from your internal board, a client, or an external investor or funder.

Support comes in various forms from funding, partnership, pro-bono offers or dedicated resources. But to get others to back your proposal and bring your solution to market, you'll need a thoroughly considered, detailed strategy for development and roll-out, and a polished pitch.

Build a pitch deck

Complete the **PITCH DECK TEMPLATE**.

In Silicon Valley, one of the best known and respected pitch deck formats, is that championed by Guy Kawasaki. With only 10 slides, this slide deck template is a highly effective and compelling format which keeps you focussed, and positions you to get the buy in you need to progress your solution. Our template has been adapted from that.

Develop a prototype

Before you can scale your solution, you need to be sure it will work. For this, develop a prototype.

Build and learn

A prototype, or minimum viable product (MVP) helps you to test functionality and solve technical issues, ensuring your idea meets end-user's needs.

Consider your requirements

You should carefully consider where to allocate your prototyping funds. You may require specialist software or user experience (UX) skills for a digital prototype, or engineering skills for a hardware solution.

"Do not fear mistakes. There are none."

Miles Davis

Test in the market

This is the point to test your prototype with real customers, via your first pilot projects. Sometimes called beta-testing, the point you get your prototype into the hands of the customer will give you valuable input and feedback.

Trial your prototype

Ensure your testing is robust.

Important principles for market testing irrespective of what the product or service is, include:

Defining a timescale	Setting out a methodology	Targeting who or what you are going to test it on	Agreeing your impact metrics

Collect feedback

If your solution is a service, customer feedback will be crucial. Look to include focus group sessions with your target client groups. For a product, you'll likely want to field test your solution.

In either case, collaborate with your potential customers or clients – they are the experts.

Commercialise your solution

Commercialisation is crucial to deliver your innovation to the market at scale and make a positive impact.

Be clear on your level of ambition and remain committed to this at all times.

Scale up

Develop your prototype into a fully-functioning product or service ready for a full-scale roll out. To achieve this, you should apply your research findings from your market testing.

This may lead you to further technical and functional development, identification of manufacturing partners and engagement of a supply chain.

Plan your roll-out

Now that you are ready to launch your innovation, you will require a clear plan for commercialisation.

You should consider the following issues and prioritise the activities that most quickly unlock the opportunity to scale:

| Business model and pricing structure | Launch plan for marketing and communications | Distribution channels | Staffing and resourcing |

Track your impact

Post launch it is important to understand the impact you are having in the the world.

Planning and tracking your impacts will help you improve your innovation and customer experience and understand your sustainability impacts.

Choose your metrics

Decide on your key performance indicators (KPIs). Setting up a feedback loop to measure, report and analyse your KPIs will track the impact of your innovation.

Look beyond financials

You will undoubtedly identify a number of financial metrics, but in addition to this, ensure you are tracking social and environmental impacts. For example:

Resource savings	Carbon reductions
Health & wellbeing improvements	Socio-economic benefits

Nature & biodiversity gains

Report your progress

Decide how these impacts will be communicated back to business stakeholders and the public – it is advisable to consider an integrated reporting framework for this.

Sustainability sense check

Before you move on to the next stage, here are some quick checks.

? **Have you delivered positive outcomes which address your identified challenge?**

? **Are you confident that your innovation will have a positive impact on the world?**

? **Can you accurately capture and quantify the environmental and social impacts of your innovation?**

? **Have you considered how you can showcase the social and environmental impacts to drive adoption of your innovation?**

Glossary

Accelerator

Fixed duration programme (usually between three and twelve months); typically growth-based (payment via equity rather than fees); focus on services over physical space; admission in cohorts; provision of startup services (e.g. mentorship, entrepreneurial training); highly selective. (*Source*)

Elevator Pitch

An elevator pitch is a short description of an idea, product, or service that explains the concept in a way any listener can understand in a short period of time (usually 30 – 60 seconds).

Incubator

Open-ended duration (exit usually based on the stage of the company, rather than a specific timeframe); typically rent/fee-based; focus on physical space over services; admissions on ad-hoc basis (not cohort-based); provision of services including mentorship, entrepreneurial training; often provide technical facilities such as laboratory equipment; selective (but typically less so than accelerators). (*Source*)

Intellectual Property (IP)

Something unique that you create. An idea alone is not intellectual property. For example, an idea for a book doesn't count, but the words you've written do. (*Source*)

Prototype

Prototyping is an approach to developing, testing, and improving ideas at an early stage before large-scale resources are committed to implementation. It is a way of project and team working which allows you to experiment, evaluate, learn, refine and adapt. Ensuring that ideas are fully explored before any conclusions are drawn. (*Source*)

Minimum Viable Product (MVP):

"[the] version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort" (Eric Ries, the Lean Startup)

Venture Capital

Investment in return for equity.

References & Resources

Arup Foresight (2018). "Drivers of Change"
Available at: http://www.driversofchange.com/tools/doc/

BITC & WSP (2015). "The UK in 2030: Key trends for the built environment"
Available at: https://www.bitc.org.uk/system/files/bitc_future_trends_document_-_final.pdf

Boston Consulting Group (2017). "The Mix that Matters: Innovation through diversity"
Available at: http://www.iberglobal.com/files/2017/innovation_diversity_bcg.pdf

CBI (2017). "Innovation Survey 2016"
Available at: http://www.cbi.org.uk/cbi-prod/assets/File/CBI%20Innovation%20Survey%202016_%20results.pdf

Edie (2017). "Megatrends: Exploring the Future of Sustainable Business"
Available at: https://www.edie.net/downloads/Megatrends-Exploring-the-future-of-sustainable-business/225

Goodman, J.; Korsunova, A.; Halme, M. (2017). "Cookbook for Sustainability Innovation: Recipes for Co-Creation"
Available at: http://sub.aalto.fi/wp-content/uploads/2017/04/Cooking.pdf

IDEO (2015) "Design Kit: The Human-Centred Design Toolkit"
Available at: https://www.ideo.com/post/design-kit

Innovate UK (2014). "Horizons"
Available at: http://horizons.innovateuk.org/assets/all-cards.pdf

Kawasaki, G. (2015). "The only 10 slides you need in your pitch"
Available at: https://guykawasaki.com/the-only-10-slides-you-need-in-your-pitch/

McKinsey (2017). "Reinventing Construction: A route to higher productivity"
Available at: https://www.mckinsey.com/~/media/McKinsey/Industries/Capital%20Projects%20and%20Infrastructure/Our%20Insights/Reinventing%20construction%20through%20a%20productivity%20revolution/MGI-Reinventing-Construction-Executive-summary.ashx

MIT and Boston Consulting Group (2013). "Sustainability's Next Frontier: Walking the Talk on the Sustainability Issues That Matter Most"
Available at: https://sloanreview.mit.edu/projects/sustainabilitys-next-frontier/

Nesta & Thinkpublic (2011). "Protyping Framework: A guide to prototyping new ideas"
Available at: https://media.nesta.org.uk/documents/prototyping_framework.pdf

Nesta (2014). "Development Impact & You Toolkit"
Available at: http://diytoolkit.org/media/DIY-Toolkit-Full-Download-A4-Size.pdf
(refer to pg. 45 for the Core Problem' template)

UK Government (2011). "Industrial Strategy"
Available at: https://beisgovuk.citizenspace.com/strategy/industrial-strategy/supporting_documents/buildingourindustrialstrategygreenpaper.pdf

UK Government (2018). "Guide to Intellectual Property"
Available at: https://www.gov.uk/intellectual-property-an-overview

UKGBC (2018). "Innovation Insights: Making space as agile as technology"
Available at: www.ukgbc.org/innovation-insights

Volans (2017). "The Breakthrough Pitch: How to stretch the sustainability ambitions of business executives"
Available at: http://breakthrough.unglobalcompact.org/site/assets/files/1756/guide-breakthrough-pitch_14nov17-1.pdf

Collaborators

Lead Partners

Canary Wharf Group
Landsec
M&S

Delivery Partner

Switch On

Consultant

Reboot Innovation

Workshop Participants

AECOM
Arup
Balfour Beatty
BuroHappold
CBRE
Climate-KIC
Credit Suisse
Cundall
Direct Line

Evora
Levitt Bernstein
Liftshare
Royal College of Art
Sustainable Ventures
UCL
World Future Council
XCO2

Sustainable
Innovation
Manual

Innovation Templates

UK GBC

The templates provided in this section are designed to accompany the innovation process and to guide you towards the creation of a sustainable solution to the challenge you have identified.

They are intended to be used in a workshop format, but can equally be used and applied by an individual to any challenge, as a way to frame and organise thoughts.

The templates included in this document are illustrative of their content to be read alongside the innovation process.

For versions that are both editable and printable at a large format for use in a workshop scenario, please download our PDF template pack here.

TRENDS REVIEW TEMPLATE

Use this template to plot the emerging trends relevant to your project scope. Use post it notes to move the most relevant trends to the centre and less relevant to the edges.

UK GBC

Economic

Social

More Relevant

Less Relevant

Environmental

Political

FOR REFERENCE

CHALLENGE IDENTIFICATION TEMPLATE

Use this template to identify a challenge and then work to articulate the challenge clearly. Complete one template per challenge.

UK GBC

What is the challenge? Explain in one short snappy sentence

Who experiences this problem/challenge? Who is your future customer?

What is the pain? What pain - emotional, financial, physical or environmental - is caused by this challenge?

What are the assumptions? What assumptions underlie the pain in the current situation?

Where's the evidence? What evidence is there to support your case? (provide links to any reports/data/statistics)

CHALLENGE PRIORITISATION TEMPLATE

Only use this template if you've identified multiple problems. By listing your identified problems, you will be able to prioritise and filter down to decide upon the problem you will take forward.

UK GBC

Problem/Challenge	Does it fit within the scope of the challenge brief?	Is it a problem you care about solving?	Is it a problem which your CEO/board will care about you solving?	Will someone pay for you to solve this problem?	If you solve this problem will it have a wider benefit for people and the environment?	Would a solution to this problem be fit for the future?
Example 1	✓	✓	✓	✓	✓	✓

CHALLENGE STATEMENT TEMPLATE

UK GBC

Challenge Title/Tagline (explain in one short phrase – maximum five words)

Challenge Checklist

✓ It fits within the scope of the challenge brief

✓ I care about solving this problem

✓ My CEO/board will care about me solving this problem

✓ Someone will pay for this problem to be solved

✓ Solving this problem would have a beneficial impact on people and the environment

✓ Solving this problem would create a solution fit for the future

Challenge Statement (explain clearly and concisely what the problem is and why it needs solving)

FOR REFERENCE

INSIGHT IDENTIFICATION TEMPLATE

Use this template to identify and articulate your key insight into the challenge you have identified.

UK GBC

What are you realising now that you didn't before?

How is this thinking different to the status quo?

What's the existing offering?

What is your new proposition?

Summarise how your proposition both: i) addresses the challenge and; ii) leads to a unique business opportunity

Consider how this insight will help you:

✓ Connect with customers/employees/clients on an emotional level (not just transactional)

✓ Re-examine existing conventions and challenge business as usual

✓ Transform a real and identified problem into a business opportunity involving the creation of new customers

✓ Imagine a new future which successfully balances the need for financial growth, people, and the environment.

SWITCH ON
THRIVE YOUR FUTURE

This template has been adapted from the Switch On sustainable innovation toolkit. To find out more about Switch On, visit *switchonnow.com*

ELEVATOR PITCH TEMPLATE

Use this template to clearly articulate your idea.

Read this pitch aloud to a group of colleagues and refine until clear and concise.

UK GBC

Business Model Name & Tagline
(Give your idea a name and explain it in one short phrase – maximum ten words)

Elevator Pitch Prompts

✓ What problem have you solved (and why was it important to solve)?

✓ What do you uniquely offer (what is your differentiator, what can you offer that competitors can't)?

✓ What are the benefits of your offering (how would it directly benefit your audience)?

✓ What is your call to action (what would you like the listener to do)?

Elevator Pitch (Try to keep it to 1 minute. If you can't explain everything you need to in this time, you may need further clarity on your idea.)

FOR REFERENCE

MARKET REVIEW TEMPLATE

Use this template to review current market conditions and map existing innovations that respond to your challenge.

UK GBC

Market Conditions

The current size of the market:

Projections for the growth of this market:

The Innovation Landscape

List the emerging innovations in this space working to solve the same or similar challenge to yours below. These could be potential collaborators or competitors, and could be at various stages of maturity (in pilot, market ready, fully established etc)

Product Service Name	Value Proposition	Target Audience	Level of Maturity (in pilot, market ready, fully established etc)	Competitor or Potential Collaborator?

SWITCH ON
THRIVE YOUR FUTURE

This template has been adapted from the Switch On sustainable innovation toolkit. To find out more about Switch On, visit *switchonnow.com*

SUSTAINABLE SOLUTIONS TEMPLATE

UK GBC

Key Activities
Sustainable Solutions Template

Key Resources
What resources do we need? (physical, intellectual, human, financial)

Customers
Who are your customers?
What will our customers expect?

Key Partners
Who do we need to collaborate with to make this a success?

Environmental & Social Benefits
Detail the environmental and social benefits that will result from this idea.

Value Proposition
People, planet, profit.

Assumptions
Detail the underlying assumptions of your business model.

Risks
Detail the key risks and provide ideas for how you can mitigate them.

Cost Structure
How much will it cost to get this new idea up and running?

Revenue Streams
Detail how it will generate income and who will pay.

PITCH DECK TEMPLATE

Use this template to structure your pitch presentation deck, whether that be to your own internal board, a client, or an external investor or funder.

UK GBC

Based on a structure championed by Guy Kawasaki, this slide deck template is a highly effective and compelling format which can keep you focused and position you to get the buy in you need to progress your idea.

1. Title

2. Problem/Opportunity

3. Value Proposition

4. Underlying Magic

5. Business Model

6. Go to Market

7. Competitor Analysis

8. Management Team

9. Financial Projections and Key Metrics

10. Current Status, Access to Data, Timeline and Use of Funds

FOR REFERENCE

KEY CONTACTS:

Alastair Mant
Head of Business Transformation
alastair.mant@ukgbc.org

Elfrida Hamilton-Russell
Head of Learning and Leadership

elfrida.hamilton-russell@ukgbc.org