This project is one of a series of Creative Industries KTN Beacon projects. Each exploring innovation challenges and opportunities for creative industries over the coming years. Details of all of these projects can be found at www.creativeindustriesktn.org The CI KTN is funded by the Technology Strategy Board.

Forum for the Future - the sustainable development charity - works in partnership with leading businesses and public service providers, helping them devise more sustainable strategies and deliver new products and services which enhance people's lives and are better for the environment.

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www.forumforthefuture.org

Forum for the Future authors: Fiona Bennie and Chris Sherwin
Forum for the Future support team: Devashree Saha

For more information: www.forumforthefuture.org/projects/creative-industries-project and https://ktn.innovateuk.org/web/sustainability

Contacts:
Fiona Bennie f.bennie@forumforthefuture.org
Jeremy Davenport jeremy@creativeindustriesktn.org
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1. Setting the Context

The world is facing unprecedented challenges – climate change, resource shortages, water scarcity, waste and pollution. With these sustainability pressures on the world’s resources, the need for new thinking and creative approaches is clearer than ever. In the past, innovation and creativity has been part of the problem – generating more ‘stuff’ to fuel ‘use and- chuck’ lifestyles, creating novelty for its own sake. But today, creative’s are becoming part of the solution.

However innovation is critical to our future. It is the way companies survive, grow and remain competitive. It is how they create new products and services to satisfy unmet needs. And ultimately, and most importantly, it is how humankind will overcome these sustainability challenges.

A new generation of creative’s are emerging, who see that, far from being constraining, sustainability offers a fantastic new set of creative levers – enabling them to think up entirely new ways for people to go about their lives. This isn’t just philanthropy, charity, goodwill or creative expression either, as they have one eye of the economic benefits of doing this. This sustainability market for ‘green growth’ was recently estimated as a $3.2 trillion business opportunity - and growing, while UK consumer spending on ‘sustainable’ products and services was last reported at more than £36bn – bigger even than alcohol and tobacco sales combined!

The smart innovators are seeing this as a once in a lifetime opportunity to affect lasting change, and reaping the rewards. It falls to this generation of creative thinkers to imagine a future world that we’d all like to live in – and then build it to last.
1. Setting the Context

What is sustainability?

Sustainability is the goal of meeting human needs without overwhelming the environment or society. Sustainable development is a dynamic process by which sustainability is achieved, enabling all people to realise their potential and improve their quality of life in ways which simultaneously protect and enhance the Earth’s life support systems.

Sustainability is an all-encompassing concept, spanning political, economic and technological spheres, and ecological, social and business issues. In this Beacon Project, our interpretation of sustainability has focussed mainly on environmental sustainability (or green issues) and chiefly uses climate change as a proxy for this, remaining mindful that the issues are interlinked.

Sustainability is clearly an all-encompassing concept that covers ecological, social and financial aspects from a technical, political or societal or behavioural perspective. Though we will use the term sustainability in this project the major emphasis has been on environmental sustainability (or green issues), for reasons of clarity and focus, though we remain sensitive to the interconnectedness of many of these often global issues.

What is climate change?

The facts

1. What is causing climate change?

Human activity has caused global warming. That is the overwhelming verdict of the UN climate change panel, made up of 150 scientists from 130 countries. They say the temperature increases in recent years cannot be explained by natural factors alone. The Met Office has released a publication on the future predictions of climate change.

Greenhouse gases are causing climate change by trapping the earth’s heat before it can escape into space. The biggest culprit of all this is carbon dioxide (CO2), which is produced by burning fossil fuels like coal and oil. Levels of CO2 in the atmosphere have risen by 40% since the Industrial Revolution. Temperatures have risen alongside the increased levels of carbon dioxide since the 19th century.

2. What will happen if we don’t do anything about climate change?

If we do nothing, scientists predict that global warming will cause potentially catastrophic changes in the world around us over the course of the century, including:

- **Extreme weather:** summer temperatures as experienced in 2003 – a record breaking heat wave in Europe which killed 35,000 people – could become the norm.
- **Sea level rise:** steep increases in global sea levels will cause severe flooding in many countries. In Asia, 94 million people could be left homeless, leading to large-scale migration.
- **Water shortages:** glaciers could shrink by almost two-thirds, and the rivers they feed could start to dry up. This would affect drinking water supplies for around a sixth of the world’s population, not to mention the effect on farming and food supply.
- **Food shortages:** drought in parts of Africa could reduce harvests by 50% by 2020.
- **Extinctions:** up to a third of known plant and animal species will be at risk of extinction. Entire natural environments – like coral reefs and rainforests – would be under threat.

There are alarming signs that these changes are already well underway. Storms, floods and droughts are happening more often and with greater intensity, while Arctic summer ice is melting faster than previously predicted.

1. Setting the Context

What is the UK’s carbon footprint?

UK carbon emissions – the facts

Each of the following accounts for about 20% of the UK’s greenhouse gas emissions:

**Home:** the energy used to heat, light and run our homes;

**Travel:** for shopping, leisure, and commuting;

**Food, drink and hotels:** production, transportation, and retail;

**Shopping:** production and usage of all other goods and services (excluding food and drink).

Our **indirect emissions** make up the remaining percentage.

![UK Average CO2 Emissions per Person](image)

**UK Average CO2 Emissions per Person**

- Housing: 25%
- Transport: 23%
- Food: 18%
- Consumer Items: 12%
- Indirect emissions: 22%


The creative industries and sustainability

The Creative Industries are one of the most dynamic parts of the UK economy - they employ 2 million people in Britain and in 2007 they contributed £60 billion to the economy – 7.3 percent of UK GDP. In 2004 they exported 4.3% of all goods and services exported totalling £13 billion. And in 2006 the Treasury calculated that by 2016 the creative and knowledge economy would account for 50% of the UK economy.

It is important for Creative Industries to understand that their businesses will not be the same in the next five -10 years, from an operational point of view and in terms of content generation, product and service creation and the knowledge and skills required. Big challenges such as climate change are driving legislation, disrupting supply chains, altering consumer patterns and driving innovative responses from big businesses including Unilever, Marks and Spencer, B&Q, O2, BUPA, SKY and INDITEX.

Our recently published Snapshot Review of the CIs activity on sustainability, showed three clear areas of activity:

1. Working to reduce the direct footprint of the industries;
2. Working to enhance the creative persuasion they can have on society and;
3. Working to promote technology and innovation for sustainability in order to enhance UK competitiveness.

By direct footprint, we mean any impacts deriving from the day-to-day activities of the industry.
Setting the Context

business, such as carbon emissions from offices, studios and stages; flying around the world on tour; printed materials; manufactured artefacts and so on. By creative persuasion, we mean the influence creative innovations have on people, society, and culture and as a result on mindsets, habits, behaviour and consumption patterns. By technology and innovation for sustainability, we mean the way creative’s can create or apply new green or sustainable technologies that create commercial advantage and add to UK competitiveness.

For this final report, we have re-visited these three areas and followed this with a section on where we should focus our creative energy.

Direct footprint

When it comes to managing their direct impacts, there are an encouraging number of initiatives underway amongst the CIs for all to benefit and learn from. From full scale carbon footprinting and campaigns in some industries (music, film and architecture) to ad-hoc communications that advise creative businesses on how to reduce their environmental impacts (design) – there are transferable formats, learning and a raft of tips and guidelines for how to run a successful, sustainable, creative business. For instance, at our opening event we learnt that the film ‘The Age of Stupid’ was shot with only one percent of the emissions of the Hollywood blockbuster, ‘The Day After Tomorrow.’

As promising as it is that work is being done on these fundamental issues, the uptake of the handy tools available is still nowhere near proportionate to the scale of the challenge we’re facing. This is also the area that should, by now, be a “no-brainer” to most businesses. Aside from the benefits of reducing carbon emissions and water use, for example, addressing these direct impacts reduces the cost of running a business and improves efficiency. Putting their ‘house in order’ then gives creative businesses a licence to operate within the space of sustainability – if you’re not doing it yourselves how can you credibly influence others?

The business case

Reducing your direct footprint will make your business more efficient and will save you money, if not in the immediate transitional period, certainly in the long-term. Monitoring and reducing your energy consumption.

Creative persuasion

The part CIs have to play in creating a sustainable future is not confined to green housekeeping alone, but also their ability to influence our behaviour and inspire new lifestyles. This is where the industries can really make their mark and start to lead. We are inspired and influenced everyday by what the CIs do: the adverts, magazines and books we read; the films and plays we escape into; the TV and radio shows that entertain and educate us; the digital games that challenge us; the buildings we live and work in; the exhibitions we flock to; the clothes we choose to express who we are; the artefacts that fill our homes. These are just a handful of ways the industries reach us on a daily basis. It’s big business too.

A recent sustainability survey of communication and creative consultancies illustrated the number of large, mainstream, global agencies that have now developed a ‘green offer’, with many of the top advertisers – such as Saatchi, Ogilvy, McCann Erickson, Landor – by size and reputation listed.

Many creative projects and businesses, already up and running, are geared up to use this influence as a form of what Lord Puttnam describes as ‘constructive persuasion’ – that

Technology Strategy Board breakdown: content industries and service and artefacts industries

Services – Advertising, Architecture, and Design (including Fashion Design);
Content – Games, Film, TV, Radio, Publishing, Music, (& Performing Arts: dance, theatre, etc);
Artefacts – Fine Arts, Crafts.
1. Setting the Context

is, ways of innovating that change our thinking and mindsets and make sustainable behaviour palatable, even desirable, to consumers and the general public. We have found specific industries doing more in this space than others – namely film, design, music, architecture, art and fashion. But as the following sections show, these activities are nowhere near mainstream yet.

**Technology and innovation for sustainability**

The CIs are serial innovators. They have a track record of using new technology for commercial advantage. The digital market has continued to grow as UK consumers have embraced new technologies, responded to ecommerce, internet advertising and mobile communications. Many aspects of life have adapted to a new, digital ‘version’ of what they once knew. As the TSB’s Creative Industries Strategy report points out, Technology has an important role as an enabler, spurring the development of new products, services, distribution channels, business models and, on occasions, driving the emergence of significant new sectors. Digital technologies in particular have had a profound effect, from the impact of CAD and desktop publishing software on the design industry in the 80s, through to the recent rise of social networking.

The impact of content digitisation on the music industry, in particular, has been profound and consequently changed business models irrevocably.

As a result, technology is challenging many creative industries, pushing them to explore new business models and new ways of reaching their clients and consumers – but it is also providing a rich landscape of opportunity and new markets. We see the uptake of these opportunities as a major part of shifting the CIs towards sustainable business practice and enabling their role in developing the exciting, radically different business models we need to thrive in a sustainable future. This will help ensure sustainable technologies and businesses win out, helping transition us to a sustainable, low-carbon, resource efficient, and creative, eco\-nomy.

**The Business Case**

Innovating and harnessing technology for sustainable solutions is a massively growing area of work. Funding for clean, green-tech and low-carbon solutions are already available. The UK government has pledged £1bn to set up a green investment bank, as part of efforts to lead the UK to a low-carbon economy and global cleantech venture capital investment increased 65% in the first half of 2010 (despite the recession) totalling $2.02 billion across 140 companies. Samsung and Google, for example, have recently pledged billions of investment in green/clean technology and Proctor and Gamble aims to “develop and market at least $50 billion in cumulative sales of "sustainable innovation products"”. The creative industries can and should play a significant role in ‘greening’ existing companies, and kick starting new ones, ensuring good business is green business in the future.

**Where should we focus our energy?**

Above we identify three big sustainability impact areas for the Creative Industries: their actual footprint, their skills of creative persuasion; and their ability to innovate on sustainability. The first is a direct, while the second two are indirect. It’s clearly a joined up agenda, as in many ways managing your own footprint gives you the licence to operate in this space, and the credibility to talk to others about it. But where should the big focus, main investment and emphasis be put?

**The CIs, sustainability and ICT – an analogy**

No quantitative work has yet been done to understand the positive or negative impacts of the UK creative industries or to answer this question. However, there is anecdotal evidence. We can draw lessons from a sector that parallels and enables creative innovation,
1. Setting the Context

Information and Communication Technology (ICT). Research on the impacts of the ICT sector puts the direct/indirect split at 2%/98% i.e. by far the biggest impacts of ICT are not in making it (2%), but in its use and application (98%).

This goes on to say that these indirect (98%) ‘impacts’ are not negative ones, as ICT can for instance be applied downstream, by customers to reduce the need to travel, transport goods, manage energy in buildings, source materials as part of a closed loop economy and reduce waste, and many other things. In concluding, “those that look at the wider 98 per cent solutions will drive real innovation and help reduce the overall environmental footprint of their company,” the ICT case hints that the big sustainability opportunities for the CIs are to use and apply their skills and these kinds of technology to sustainability challenges. This makes economic sense too, as the UK, US and many other governments have pledges and plans to invest in green and clean technologies, meaning business opportunities for sustainable innovation.

So the good news is that there are a multitude of business and creative opportunities, as well as imperatives, on sustainability. The lead question for this study asked ‘how can the creative industries lead us to a sustainable future’, but are they currently doing so? Our baseline review, the practitioner and stakeholder interviews plus the review of best practice that made this up, suggested not.

“Like all industries the CIs have been pathetically slow in responding to the sustainability agenda” Alistair Sawday, chairman and founder of Sawday’s Special Places to Stay. It highlighted pockets of excellence, imaginative and exciting projects. However, these are rather ad-hoc and uncoordinated, lacking the scale of real leaders on sustainability. Director of Julie’s Bicycle, Alison Tickell puts it more strongly in saying “the creative industries are simply not stepping up to the plate on sustainability”. They appear to be, at best, behind others such as multinational corporations (who control industrial supply chains, and in some cases may be CI clients), or behind the new generation of green entrepreneurs emerging that make up the cleantech revolution (which interestingly doesn’t seem to have a huge creative representation). This is obviously disappointing, as the CIs are at the leading edge of many other areas, not least on UK competitiveness. But perhaps more critically it is a huge missed opportunity, which we will explore further in the next chapter.

Are the Creative Industries leading us to a sustainable future?


By 2015, M&S has pledged to extend its sustainability Plan A to ‘Help 1 million customers to create their own personal Plan A by 2015 and 3 million by 2020’: http://plans.marksandspencer.com/media/pdf/planA-2010.pdf

Tesco has committed to ‘helping their customers reduce their carbon footprint by 50% by 2020’: http://www.forumforthefuture.org/greenfutures/articles/Terry_Leathby_interview

See appendix 5b for more details on funding opportunities

http://cleantech.com/about/pressreleases/Q2-2010-release.cfm
http://business.timesonline.co.uk/tol/business/industry_
2. Opportunities

The previous section provided background on sustainability and the creative industries. It highlighted a series of key sustainability impacts areas for the creative industries and how they are currently responding. Though The Forum concluded that the CIs are not leading on sustainable innovation, they certainly could – and there is huge latent potential plus many business and societal benefits from doing so. In this section we will move from ‘responsibility to opportunity’ - highlighting a multitude of sustainability opportunities for the creative industries to take a leading role on sustainability.

**An opportunity toolkit**

Here we identify nine opportunities the Creative Industries can act on to future-proof their businesses and help lead us to a sustainable future. These opportunities can be printed out and used in workshops and meetings to spark discussions on projects, future aspirations and aspects of sustainability.

1. Join forces and scale up the good work
2. Turn technology to sustainability - appropriately
3. Inspire us to a sustainable future
4. Make your case
5. Define your vision, role or goal on sustainability
6. Profit from pioneering on sustainability
7. Challenge the client, change the brief
8. Open up – change creative cultures
9. Prepare for, and design, a radically different future
2. Opportunities

1/ Join forces and scale up the good work

Our baseline report of current sustainability activity within the UK CIs found pockets of excellence and inspiring stand-alone initiatives that were fragmented, needed drawing together, amplifying and scaling up. We found interesting things happening in film, architecture, fashion, design, which if put together, begin to look like a more coherent and convincing whole. There are many opportunities to link up existing creative networks working on sustainability or to appoint sustainability champions within them. And that’s not to mention benefits to be gained from cross disciplinary learning and collaboration.

Collaborate to innovate

Try joining forces with two other disciplines one day a month as a trial run. Our baseline review concluded that some disciplines are more advanced on sustainability than others, so, if you are in a less advanced discipline, why not talk to or team up with an architect on sustainability? Invite an ecologist, environmental manager or Corporate Social Responsibility person along to networks or meetings. This will probably aid creativity too – which happened when an architect, a comm’s specialist, plus others at Biomimicry for Creative Innovation teamed up with biologists at Kew gardens. The Sahara Forest Project is a great example of cross-sector collaboration of architects, water specialists and engineers working together to develop and implement a ground-breaking sustainable solution. Carbon Culture breaks new ground seeing designers teaming up with central government to visualise real-time energy consumption.

Find support or funding in unusual places

As we build a green economy, many opportunities will arise to scale up current CI sustainability activities. Investment in green energy R&D is reported to overtake R&D in traditional fossil fuels. This is likely to increase - as The Policy Exchange estimates the UK will need £800bn to £1trillion by 2030, or £40-£50 billion per year to hit our carbon reduction targets. There will be increasing business, and funding opportunities on sustainability in often unusual places.

Organise in different ways

Sustainability asks us to think hard about the way we currently do business. Creative’s can be radical, visionary and fleet of foot in the way they organise themselves as well as their creative outputs. This could be rethinking your creative organisation or creating a new one based on less hierarchical, more open, flatter structures – which tend to foster sustainable innovation. Look at new organisational models like co-ops, guilds and shared ownership models for inspiration.

Find your sustainability voice and get a seat at the table

The creative industries are not well represented on sustainability. Who is their big champion? Who is pioneering or promoting their cause on sustainability? The CIs should find a senior voice or platform that represents their activities or their potential. Then try to get a seat at the table of sustainability influencers.
2. Opportunities

Turn technology to sustainability - appropriately

Technology will continue to be a big driver for the creative industries as, for instance, a new generation of creative entrepreneurs sprang up as part of the dot.com boom. Digital technology, ICT and web 2.0 offer opportunities to promote sustainability and, more importantly, is a revolution that is happening anyway. However, technological solutions alone are unlikely to solve sustainable problems, it is what you do with technology. Appropriate use of technology requires 1) the consideration of the environmental, social and economic costs and benefits and 2) whether existing technology is actually more effective e.g. see innovation in SMS use in developing countries rather than trying to roll out email.

Use social media, online platforms and ICT as a means for creative persuasion.

Web 2.0 innovations are already having a positive impact on driving more sustainable ways of doing business by enabling people to connect and interact in new ways, to share resources, pool knowledge and information, to buy locally, swap, and solve problems.

Gone are the days of longwinded in-depth research. For quick responses to new ideas and innovations, organisations can take advantage of co-development, community-led engagement and crowd sourcing - helping people use the available platforms to scale-up and disseminate work, as the recent rise of open innovation for sustainability platforms have shown, and as the recently announced Fate of the World: the climate change challenge computer game will do.

Use technology to dematerialise products, profit and consumption

Sustainability guru Professor Tim Jackson estimates that if we are to achieve a sustainable economy by 2050 it will require us to ‘dematerialise’ (reduce the carbon and resource intensity) of every £1 of economic ‘value add’ by up to a factor of 40! This is a major innovation challenge, but one potential way to achieve this is through substituting non-material services for physical products, through digital technology or ICT. Innovations like urban hubs for workers to reduce their need for physical transport to their workplaces, or service innovation like car-sharing clubs, which reduce car ownership. These are examples of the kind of dematerialisation we need here. Could you redesign your ‘product’ or innovation as a dematerialised service?

Exit from high carbon-, explore low carbon technology

At some point in the future, carbon intensive technology will be commercially unviable. Identify what high carbon technology your business and your projects are reliant on or where carbon pinch-points exist. Develop plans for alternatives at the earliest opportunity. There are a myriad of opportunities to invest in and explore low-carbon solutions. The creative industries can support innovation in this area by making them desirable and user-friendly – but they can also use these technologies in order to position themselves well for the future.
2. Opportunities

3/// Inspire us to a sustainable future

After 40 years or so you would think we would be good at selling sustainability to people, but that appears not to be the case. The discourse tends to be full of doom and gloom, linked to losing out and hardship culture. “From many environmentalists, the narrative is overwhelmingly pessimistic – a story of apocalypse, disasters, doom and gloom. Most normal people find this very unattractive. It turns them off. They disengage. They stop listening.” We have not managed to make sustainable choices aspirational, desirable, and acceptable. However, help is at hand, as that’s what the CIs do really well.

History is littered with stories of the CIs influencing hearts and minds, behaviours and actions: from The Bauhaus movement championing a design philosophy of fairness and utility, to provide universal access to good design, better housing, and better lives for all; to graphic and film propaganda helped galvanise our nation to successful action during WWII, to social marketing over the last 20 years helping educate, raise awareness and communicate better thinking and acting on issues as wide as anti-social behaviour on trains, healthy lifestyles and anti-smoking. Inspiration is what the creative industries do, so why not on sustainability?

Use your creative persuasion to build a sustainable future.

Advertising, design, architecture, film, theatre, arts and antiques – all are shaped by, and shape our culture and ways of living. If people think future choices will leave them worse off they are unlikely to accept them. Fuel our imaginations. Use all your skills of persuasion to create inspiring visions of how sustainable lifestyles and choices can be better for us. Help us imagine what this might be or try new things out. Become a part of this movement – work with communities and others to stimulate positive change.
2. Opportunities

4// Make your case

Our baseline review highlighted the lack of a coherent or comprehensive case for other sectors to use the creative industries to help them achieve their sustainability goals. Why would a funder, policy maker or business turn to a creative, rather than a psychologist, scientist or civil engineer for a sustainable solution? As a sector, the CIs need to strengthen and communicate their business case on sustainability by telling good stories about their work. This might be through measurement or metrics, though the collection of convincing, past case studies or even instigating new demonstration projects

Define your value

Companies, technologies, organisation and sectors have created clever methods to measure their sustainability footprints, their benefits or their potential. Designers are beginning to do this too, in estimating that ‘80% of the environmental impacts of products are determined at the early design stages’. How could other CIs measure and communicate their sustainability benefits, real and potential, to help make their case?

Build, or create a library of cases

One way the CIs prove their worth on other issues is through inspiring examples. Building on the previous suggestion to ‘Join Forces’, why not create a library of best practice examples of cases in which the CIs have tackled sustainability challenges. If these do not yet exist, set up a series of demonstration projects – like the Design Council’s ‘Designing Demand’ program, but for sustainability – to explore and prove their worth.

5// Define your vision, role or goal on sustainability

Many opportunities are around action and doing more on sustainability. Our baseline report also suggested it was not clear what the CIs can do on sustainability, what they want to achieve, where are they going, or what the best way to use them is. Without a clearer vision, role or set of goals it is really hard to know what this is working towards. Activities miss a sense of inspiration, velocity and direction. Even engineers and accountants have this on sustainability!

This need not be a lengthy, formal consultative process and could have a lightness of touch, bottom up, work-in-progress feel that characterises creative prototypes, mock ups or wireframes. However it would help frame the role, goal and aim of CIs sustainability work, plus would help set a broad direction for the industries

Create a vision in 1 month

Draw together creative networks and build on the momentum from this project - to create this vision, quickly. Don’t spend a year or two deliberating, act now and with momentum. Be the first sector to create a vision in just one month! We suggest using an online open source platform or social media network – to stimulate debate and agree a role, goal or broad set of principles.
2. Opportunities

6:// Profit from pioneering on sustainability

The global ‘sustainability’ market for goods and services is worth more than $3 trillion, rising to $4 trillion by the end of this government term. In the UK this market stands at £112bn and growing. This spells opportunity for creative’s prepared to pioneer and lead. Those organisations that help create new sustainable products and services, shape new creative outputs and truly sustainable business models and don’t wait for legislation to force change will be the business leaders of the future.

Stay one step ahead

Keep track of up-and-coming social, environmental and economic trends as you would any other industry trends. Don’t rely on mainstream information sources – seek out the unconventional and a range of opinions. Sign up to existing trends and sustainability networks i.e. Treehugger, worldchanging, triplepundit, greenbang, Inhabitat, etc.

Create your future business through a sustainability offer or product

What are the real opportunities around sustainability for you? Don’t be afraid to pilot change, prototype and experiment and learn from failure. Trial new and pioneering products and services - those that stick with current business models will struggle. Arcola Theatre has developed a business offer from licensing fuel-cells products and selling low-carbon technology consulting through an internal collaborative incubator.
2. Opportunities

7// Challenge the client, change the brief

This opportunity is for client-led CI disciplines like design, architecture, and advertising. The single biggest reason we hear for creative projects not considering sustainability is that ‘the client did not write it into the brief’. We do not want to suggest that businesses act in a commercially naïve way, or that CIs should add cost, lose their clients, or be ‘off-brief’. But promoting sustainability, even when not specified by the contact from your buyer, funder or client, is a critical part of sustainability leadership.

It may be that clients do not consider or add sustainability to a project but that should not be an excuse not to do it or try. In truth, clients often turn to outsiders and creative industries for that new angle, that fresh insight or unique approach which they might have missed. Why should this be any different on sustainability?

Add sustainability to projects

Try asking your client if they want sustainability considerations in the project. Link them to cost savings, though efficiency and waste reduction, which clients would like anyway. Add them in invisible ink, under the radar or simply do them anyway - especially if they are cost neutral or positive as your client will thank you. Bigger corporate clients may also have sustainability specialists internally so join your contact, client or buyer up with their sustainability, CSR or environmental manager. The Designers Accord, the sustainability movement within the global design industry specifies the commitment to influence and talk to clients as part of the sign up criteria.

8// Open up – change creative cultures

Put simply, sustainability offers the opportunity, even imperative, to rethink and redesign everything. That means current ways of working and cultures are up for grabs. For instance, hierarchy and individualism, that so dominate our lives, is unlikely to help us move towards a sustainable future. The change requires a collaborative and systems-based approach, which will be radically different from the cult of consumerism and celebrity often found today. What a creative opportunity!

Share ideas openly

The free flow of ideas is fundamental to sustainability — as there is a greater good at work here. Openness and the sharing of ideas, skills, and technology need to become integral to how the CIs work. Openly share IP, knowledge, or wisdom that may be critical for a sustainable future — following initiatives like the GreenXchange.

Lose, or use, the ego for good

Interviews for this project highlighted certain ‘creative cultures’ that are currently questionable for sustainability. These suggested, at the extremes, fame-driven, celebrity-seeking, egotistical ways of working. As well as being ethically and morally questionable, this ‘importance of the self’ is at odds with the needs of the greater good so implicit within sustainability. It would be great to lose the ego but if not, could creative’s do well by doing good? Why not be famous for doing good and creating the solutions that will change the world for the better?
2. Opportunities

9// Prepare for, and design, a radically different future

Put simply, sustainability offers the opportunity, even imperative, to rethink and redesign everything. Many of these challenges can be eye-watering, even paralysing. Here are just three recognised global targets we need to hit to make a sustainable future a reality:

- A reduction in greenhouse gas emissions of at least 80% by 2050, which the UK government has set as a legally binding target
- Many commentators call for at least a reduction by a factor of four (75%) in resources used in products and services we use by 2020
- Halve the number of people living in absolute poverty globally by 2015

This will require massive system changes, not minor tweaks, which require new thinking and creative approaches. However, these could also be seen as amazing creative opportunities to innovate like never before

Get radical

Radically rethink your work and your projects as a creative exercise on sustainability. How could you redesign your core creative outputs or your next project to hit the above targets? Think about systems and solutions, not existing products or services, solutions or artifacts

Consider radically different futures

Thinking through scenarios - such as Climate Futures - can help the creative industries to rehearse different strategies. Conversations about future strategies might not lead to immediate changes, but the simple act of having them can open minds to the possibility of rapid change and the need to plan more long-term. Using scenarios can help to plan for different, but equally plausible, futures.
3. Provocations

Drawing on our opportunities, in this section we conclude this Beacon for Sustainability project with nine specific provocations for three different audiences.

I’m a business in the creative industries

- Get inspired by sustainability - build content around it and see it as your challenge and your brief
- Link up and learn and make a larger whole - create a sustainability movement
- Tap into existing sustainability funding in creative ways to get your ideas off the ground

I’m a policy maker

- Join up the creative/digital with the sustainability/low-carbon policies – to enable creative’s to help build our green economy.
- Look at the business and sustainability case for investing in the CIs rather than in other UK sectors.
- Look at instigating a series of creative industries demonstration projects on sustainability

I’m a business outside of the creative industries

- Involve creatives in your sustainability projects – set them your big challenges and reap the rewards.
- Work with the CIs to engage your employees, customers and consumers creatively on sustainability
- Select your creatives based on their sustainability performance and knowledge
3. Provocations

I’m a business in the creative industries

Get inspired by sustainability - build content around it and see it as your challenge and your brief

Don’t see sustainability just as an issue to manage or a factor to consider in what you normally do. See it for what it is – a constellation of the 21st Century’s biggest challenges. Make it the thing you do. Build it into the heart of your work, your offering and the heart of content generation. We need a new generation of sustainability innovators and creative’s inspired by our big environmental challenges.

Link up and learn and make a larger whole - create a sustainability movement

There is some brilliant work out there in the CIs on sustainability. Talk to and learn from more experienced practitioners or disciplines – so you don’t have to reinvent the wheel. Join this up to become more than the sum of your parts – we need a sustainability movement across the CIs and we need it urgently. Don’t sit back and wait for others to do it, pull together locally, regionally and nationally to influence and inspire the UK to create a sustainable future.

Tap into existing sustainability funding in creative ways to get your ideas off the ground

This is a difficult time for funding for the CIs and the Arts. But all is not lost. There are many funding opportunities from the UK and EU for low-carbon, sustainable, clean-/green-tech research, projects and initiatives. Tap into these funding opportunities, perhaps with other sectors, like cleantech for example, and put creative’s on the map for delivering sustainable, low-carbon solutions that are commercially successful.
3. Provocations

I’m a policy maker

Join up the creative/digital with the sustainability/low-carbon policies – to enable creative’s to help build our green economy.

We need the CIs and digital businesses to play an important role in shaping the green economy. Current sustainability policy is rarely joined up with CI and digital policy. And yet, the CIs value add to the UK economy is unquestioned and unrivalled. In doing this, there are great dual policy benefits to be had in moving the UK towards a greener society – through the CIs ability to creatively persuade consumers and the public.

Look at the business and sustainability case for investing in the CIs rather than in other UK sectors.

Explore the costs and benefits of investing in the CIs on sustainability, to better understand the case for investment here rather than in alternative sectors. CIs funding makes economic sense, but does it make sustainability sense? We might find that a more creative economy is relatively low impact, knowledge intensive and is able to implicitly and simply tackle sustainability challenges in other sectors, so we need to measure and prove that.

Look at instigating a series of creative industries demonstration projects on sustainability

We need to show government and businesses the value of creative input to sustainability challenges, and demonstrate to the CIs themselves the opportunities they could be embracing. The CIs can best demonstrate their value by undertaking a series of sustainability demonstration projects - linked to existing funding streams, local or community challenges or business & technology priorities – these would be an ideal and relatively cost effective way to make the case.
3. Provocations

I’m a business outside of the creative industries

In involve creatives in your sustainability projects – set them your big challenges and reap the rewards.

Creative’s love a new challenge. And sustainability projects need a generous dose of creative input, upstream in thinking and idea generation, as well as downstream in communications. Involve creatives at the start of your projects, bounce ideas off them, come up with ideas with them and involve them through the stages of the project. Companies can hugely benefit from a bit of creative input or reframing. Indeed, it may be the only way.

Work with the CIs to engage your employees, customers and consumers creatively on sustainability

Engaging your employees, customers and consumers on sustainability is often challenging. Understanding what enables behaviour and lifestyle change is too. But the CIs are ideally positioned to help with these ‘people-centred’ issues for your business. The CIs can help you to communicate the issues in an imaginative, engaging and ultimately effective way.

Select your creatives based on their sustainability performance and knowledge

You may use creative services as your suppliers. In an ideal world all the creatives you work with would be sustainability-literate and manage the footprint of their businesses too. Be vocal and motivate them to skill-up and put their houses in order if they’ve not already done so. Share your learning, tools and advice to help them achieve this. And be choosy, if sustainability is at the heart of your business, it should be at the heart of your creative suppliers’ too.
Advisory Group
This project was aided significantly by the input and support of our advisory group — to whom we offer great thanks. These were:
- Ian Goodfellow, Head of Sustainability Practice, Penroye & Prasad
- Andrea Koerselman, Service Design Lead, IDEO London
- Carolyn Roberts, Director of the Environmental Sustainability KTN
- Dr Ben Todd, Executive Director, Arcola Theatre

Overview of the project process

Outline of the 5 project stages:

Stage 1: Kick off and launch
- Clarifying and agreeing the project objectives and work plan;
- Identifying the industry aspirations by 2030 through a high profile launch event.

Stage 2: Industry consultation
- Establishing the CIs sustainability baseline – The Snapshot Review;
- Identifying the key sustainability factors – including impacts, risks and opportunities for the CIs.

Stage 3: Exploring a sustainable future
- Exploring the implications of the above factors for the CIs in a sustainable future;
- Visualising these implications, to bring them to life.

Stage 4: Workshops and action planning
- Designing and facilitating two workshops to ascertain what the implications mean for the CIs and what needs to happen in terms of action plans, innovation and policy, to ensure the CIs play a fundamental role in delivering a sustainable future.

Stage 5: Dissemination
- Supporting the CIKTN to maximise the impact of this Beacon Project.

During the 5 stages there were some key milestones, as follows:

- Stage 1: Inception Report (outline of project) – March 2010
- Stage 1: Kick-off Event – June 16th 2010
- Stage 2: Baseline Report – Published online October 2010
- Stage 2: Advisory Group Consultation (1) – June 2010
- Stage 3: Visualised Implications – September 2010
- Stage 4: Workshop 1 - The South – Bristol 14th September 2010
- Stage 4: Workshop 2 - The North – Manchester 21st September 2010
- Stage 4: Advisory Group Consultation (2) – September 2010
- Stage 4: Final Report – November 2010
- Stage 5: Dissemination – November 2010 – January 2011

The process was guided by the broad overall question of,
“What do the CIs need to do, in the short to medium term, in order to contribute to a sustainable future in 2030/30?”

The process stages were then guided by the following more specific questions,

- How might sustainability impact the CIs and what new risks and opportunities will these impacts create?
- How will the CIs themselves need to become more sustainable and manage their own impacts to show leadership?
- What technologies can the CIs leverage to enable a sustainable future?
- What kinds of new collaborations, ways of working and innovation should the CIs use to enable a sustainable future?
- How can the CIs influence society and consumers to create more sustainable living and choices so that sustainability becomes inspirational, aspirational and desirable?
4a. Appendix Methodology

The process in more detail

Stage 1: Kick off and launch

Identifying the industry aspirations by 2030 through a high profile launch event

The Creative Industries Sustainability Beacon event in June launched the project and brought together leaders from across the UK creative industries, to examine the future of their businesses in a rapidly changing and uncertain world.

**Lord Puttnam**, filmmaker and politician, opened the event with a challenging speech. He highlighted that he is “personally convinced that climate change is already the single greatest challenge facing all of us – ultimately dwarfing our present economic woes...” But he said climate change and other sustainability challenges present a raft of opportunities for all creative industries and their “attitudes and skills... can really help stimulate change.”

Following Lord Puttnam’s opening address, **Jonathon Porritt** led a Talkaoke debate from the ‘donut of chat’, surrounded by an impressive line-up of contributors:

**Film Director, Franny Armstrong** kicked off by showing us the carbon footprint of her film *The Age of Stupid* which emitted “one percent of the emissions of the Hollywood film, *The Day After Tomorrow*”.

**Designer, Tim Brown** then popped up on the big screen, via Skype, from the IDEO studio in San Francisco. As CEO of IDEO, one of the most influential global design consultancies, he’s been in the product and service design world for years. Interestingly, he started out with a confession: that the best part of his career now resides in landfill. The products he has lovingly created over the years have played their part in creating our fast consumption-obsessed world. He now views product design from a systems perspective; something he believes is “important for design but essential for tackling climate change”. IDEO’s Living Climate Change website is a place for designers to discuss what they can bring to the debate, and why they should play a fundamental role in finding the solutions we so desperately need.

**Head of College for London College of Fashion, Frances Corner** then boldly answered the debate question, “Can the creative industries lead us to a sustainable future?”, with “a resounding ‘yes’”. She pointed out that “education has to be part of the way that we address sustainability, otherwise we won’t be able to bring about the constructive persuasion we need”. The new Centre for Sustainable Fashion, which sits within the LCF is working on just that. And their international student awards, Fashioning the Future 2010, are doing a great...
4a. Appendix  Methodology

job at spreading their work far and wide. Architect, Michael Pawlyn followed by saying “There is absolutely nothing inevitable about the future”. As director of Exploration Architecture and bio-mimicry guru, he urged us to think about and design the future that we want, not to simply let it unfold. He uses bio-mimicry, a process that “looks to nature as a source of inspiration for new solutions.” For example, he is exploring the nifty way the Namibian fog-basking beetle stays hydrated in the desert, and using the learning from that natural system in the development of his Sahara Forest Project. He believes designers and architects need to make three transformations: “radical increases in resource efficiency; shifting from a carbon to a solar economy; and transforming from a linear, wasteful, polluting way of using resources to a completely closed-loop model.”

Sustainability communications expert, Dan Burgess – from Pipeline Ideas — finished the expert presentations with a rollercoaster of examples of sustainability comms, including photographer Chris Jordan’s stark images of birds’ stomachs full of plastic waste. Dan feels that many people in the creative industries are “wasting their energy” and should get involved in the sustainability agenda, support the great work that’s already going on and put their skills to good use. He reckons we need to get out there and “agitate”.

Stage 2: Industry consultation

Establishing the CIs sustainability baseline

This stage focused on establishing a series of key insights into where the CIs are on sustainability. We used two principal means to achieve this:

1. Consultation through the launch event and via a number of telephone interviews with the following:

   Advertising: Jon Miller | Mother
   Advertising: Dan Burgess | Pipeline Ideas
   Architecture: Michael Pawlyn | Exploration Architecture
   Design: Valerie Casey | Designers Accord
   Design: Paul Priestman | Priestman Goode
   Design: Tim Brown | IDEO
   Crafts: Rosy Greenlees | Crafts Council
   Fashion: Prof. Frances Corner | London College of Fashion
   Fashion: Anonymous - Director CSR, major fashion brand
   Film: Franny Armstrong | Spanner Films
   Film / Animation: Dom Del Torto
   Film: John Newbigin | Freelance Film
   Producer and Consultant

   Gaming: Steven Barber | Laughing Jackal
   Music: Ruth Rogers | Classical Musician
   Music: Alison Tickell | Julie’s Bicycle
   Performing Arts: Orlando Wells | Actor
   Publishing: Leonora Oppenheim | Coolhunting and treehugger
   Publishing: Alistair Sawday | Alistair Sawday Publishing
   Software and gaming: Fred Hasson | Developers Association
   All: David Worthington | Chairman, Creative & Cultural Skills
   All: Lord Puttnam
   All: Jonathon Porritt

2. In parallel we consulted the industry more widely through the CIKTN social networking platform

Output and outcomes

- A qualitative, Snapshot Review of where the CIs are on sustainability
- 8 key sustainability findings
4a. Appendix Methodology

Stage 3: Exploring Future Scenarios
Exploring the implications of the above findings for the CIs in a sustainable future

We took the previously defined, key sustainability findings and looked at how they played out in four existing scenarios from Forum’s Climate Futures 2030 report. We then produced a series of implications to use with the participants during the workshops. Implications are reached by identifying and prioritising the major commonalities across the different scenarios, resulting in a number of must do, ‘no-brainer’ implications for the CIs.

We brought each of the implications to life by sketching an example scene that represents them.

Stage 4: Workshops and action planning
Designing and facilitating two workshops with the CIs

We engaged the CIs through two multi-disciplinary, interactive workshops – one in Manchester, and one in Bristol. The workshops captured the CIs response to the sustainability implications developed at the previous stage, and through the implications, co-developed some specific actions and next steps for the CIs to scale up their work on sustainability.

The conclusions from all the above stages were then fed into this final report, to create the opportunities and provocations.
4b. Appendix Resources

Keeping up to date on sustainability

Forum for the Future
Treehugger
2 Degrees, the online community for Sustainability Professionals
Our Future Planet (Online community that shares ideas to design a future and bring about global change)
DO (Ideas + Energy = Change) Blogs
Ethical Fashion Forum
Centre for Sustainable Fashion
Centre for Sustainable Design
Futerra sustainability communications agency
Greennormal, Blog by John Grant: Januray 2010
The Guardian Environment
Timesonline - Environment
BBC Climate Change - In Depth
BBC Water - In Depth
BBC Water - Embedded water tool
Climate Change: Monbiot.com
World Changing
UNEP
Uninhabitat
IPCC
Low Carbon Economy Blog
Sustainable Energy Academy
Future Cities
Public Art Sustainability Assessment
British Council Climate Change Forum
TedTalks: Jamie Lerner sings of the city (February 2008)
TedTalks: Kamal Meattle on how to grow fresh air (March 2009)

Books

Sustainable Fashion and Textiles (March 2008)
Creative Community Planning (February 2010)
Designing for Re-use (December 2009)
Emotionally Durable Design (June 2005)
The Positive Deviant: Sustainability Leadership in a Perverse World (July 2010)
Co-opportunity: Join Up for a Sustainable, Resilient, Prosperous World (2010)
The Green Marketing Manifesto (October 2007)
Green Futures, the Sustainable Solutions Magazine
Alternatives (Environment+Action) Canada’s oldest environmental magazine and registered charity
Conversations with the Green Gurus (2009)
Nature and Culture (July 2010)
The Step by Step Guide to Sustainability Planning (October 2008)
Green to Gold (2006, 2009)
Making Sustainability Work (2008)
The Power of Sustainable Thinking (April 2010)
Volcano & Geothermal Tourism (April 2010)
Corporate Impact (March 2010)

Local Hubs and Events

Latis green ideas and innovation networking group
Green Champions of North West London
Intentional Communities for Creating a Better World
London Green Eco-Entrepreneur seekers
Future Energy
National Ethical Investment Week: November 2010 (UK sustainable investment and finance (UKSIF) association)
Ethical Fashion Show, France: September 2011 (Ethical Fashion Forum)
A greener Festival
Creating Tomorrow’s Livable Cities: January 2011

without oil (November 2009)
Green Film Planet think Tank: Start

TedTalks: Al Gore on Climate Cricis (April 2008)
GreenFilmKit.com
The Emerging Markets Summit 2010 (Vince Cable MP)
TedTalks: Rob Hopkins transition to a world

Film

The End of the Line
The Corporation
Food Inc
Collapse
No Impact man
Vanishing of the Bees
Home
The Age of Stupid
The Manufactured Landscapes
An Inconvenient Truth
The 11th Hour
The Truth about Climate Change: Sir David Attenborough
Adam Grossner and his sustainable fridge (June 2008)
TedTalks: Al Gore on Climate Cricis (April 2008)
GreenFilmKit.com
The Emerging Markets Summit 2010 (Vince Cable MP)
TedTalks: Rob Hopkins transition to a world

The Water Footprint Assessment Manual (February 2011)
Integral Sustainable Design (January 2011)
The Sustainable Self (February 2011)
Sustainability and Education (June 2010)
4b. Appendix Resources

Funding Opportunities

Zayad Future Energy Prize (Abu Dhabi)
British Green Gas Schemes: British Gas Green Streets 2009
Help Develop My Technology, Applied research Scheme: The Carbon Trust
The Rushlight Awards: February 2011
Funding for Installing Renewables, Ireland: NuTech Renewables
Funding for Installing Renewables, Ireland
Green Investment Bank Commission: UK Green Building Council
Interest Free Loans £3,000 to £400,000: The Carbon Trust
Carbon Trust Incubator Scheme: £70,000 worth of consulting services
Carbon Trust Incubator Scheme: £70,000 worth of consulting services
PhD Energy Research Studentships, The University of Sheffield (2009)

Communicate 2010 - Connecting with Nature:
October 2010 (Bristol Natural History Consortium)
Environmental Agency Annual Conference:
November 2010
Equality, Growth and Sustainability– Do they mix?: November 2010 (Linköping University)
Towards Green Investment and a Sustainable Future: November 2010 (Eco Innovation Forum)
The Sustainable Business Summit: March 2011
Green IT Expo: November 2010 (Bottomline benefits from sustainable computing)
Major Summit on Corporate Responsibility:
November 2010 (Transforming to a sustainable business)
Ethical Trade and Public Procurement:
December 2010 (Ethical trading initiative)
Low Carbon Futures – Money does not grow on trees: October 2010 (The Green Register)
Annual Conference, York University: April 2011
International Greening Educational Event:
October 2010 (Education for Sustainability)
Green Power Conference: March 2011
Global University Network for Innovation:
November 2010
4b. Appendix The Creative Sectors

In this section we look in detail at five of the thirteen creative industries, considering the key facts and figures, the current levels of activity and ambition on sustainability and specific sector opportunities to scale them up.

Architecture

Overview
As the leading light in sustainability activity within the CIs, architecture should be looked to for its pioneering practices and tools. With buildings making up 40% of the UK’s carbon footprint, architecture has long been pinpointed as an industry that needs tight regulation on sustainability impacts, not just on carbon emissions, but also on social cohesion and community resilience. As a result the sector has shifted dramatically over the years and through a combination of compliance and creativity has shaped some of the best tools and techniques around, to drive sustainable design and construction.

Drivers
There are substantial measures taken to ensure that the industry incorporates sustainability into its practice. With experienced, licensed assessors like Code for Sustainable Homes, Ecocert and BREEAM, development projects from design inception to project completion are monitored quite closely. Further international project certifications like BREEAM International, LEED and Estidama assessments leave consumers no choice but to opt for architects who operate on these lines. Initiatives such as the Carbon Reduction Commitment, the Government’s Carbon Trust Programme and certifications on Energy Performance make architecture a highly regulated industry. RIBA have continued to enable sustainable design through their series of low-carbon toolkits.

For other creative industries, the opportunity to copycat and adapt architecture’s good practice and toolkits is out there for the taking.

Facts and figures
- £4.7 billion contributed to GVA in the UK
- 5,700 businesses
- 121,000 staff in creative roles

The Industry is made up of many SMEs, typically comprising three or four chartered architects and support staff, and a few much larger multinational practices such as Aedas Architects, Foster + Partners, BDP, RMJM and Atkins.

Source: The TSB’s Creative Industries Strategy ‘09: http://www.innovateuk.org/creativeindustriestrategy09/appendices/1.ashx

The Crossway Passivhaus

Designed by architect Richard Hawkes, Crossway was the first retrospectively certified Passivhaus in the UK. The zero-carbon home is situated near Staplehurst in Kent, and uses a technique borrowed from 600-year-old medieval architecture to provide a stylish, energy-efficient living space.

Crossway has been shortlisted for a RIBA award, the RIBA Downland prize, Kent Design Awards as well as being a finalist in the 2009 Grand Designs Awards.
4b. Appendix The Creative Sectors

The world’s largest greenhouses: Eden Projects, Cornwall

Giant Bubble Biomes part of Eden projects, are the world’s largest greenhouses. Located in Cornwall, the Eden Project was conceived by Tim Smit and designed by famed architect Nicholas Grimshaw (Inhabitat, 2010). The covered biomes were inspired by the moon and are constructed from a tubular steel space-frame clad with (mostly) hexagonal panels made from a thermoplastic called ETFE. While ETFE is a type of plastic (which is a petroleum product), it is recyclable, light and durable. In fact, if it rips, there is even special ETFE tape that can be applied so that a full panel does not need to be replaced. It’s also cheaper, lighter and safer than glass. Once pieced together, the panels were sealed around their perimeter and inflated to create a large cushion, which acts as a thermal blanket and keeps conditions inside the biome conducive to housing flora.

Eden runs on a Waste Neutral principle. It means matching the waste sent to the landfill with the amount of recycled materials being bought in. Eden buys things that are only made from recycled materials. They won an award from the Chartered Institute of Waste Management (CIWM) for Environmental Excellence in the category of ‘innovative practise in waste management and resource recover’ in November 2008 (Annual Report, 2008/09).

Source: Eden Project - Giant Bubble Biomes Are World’s Largest Greenhouse

Social and community drivers are also being taken into account, though by no means across the board. Taking into consideration how housing developments can enhance social cohesion, for example, or how developments such as ‘out-of-town’ retail spaces can impact negatively on the communities that once served the new ‘out-of-town’ consumers. Architects can be part of these planning conversations and ensure their work is building stronger, happier, more resilient communities.

Looking ahead to a sustainable future

One of the brilliant characteristics of Architecture is its capacity to be visionary, impactful and inspiring. Innovative, smart and beautiful buildings have the ability to capture imaginations and communicate positive messages. Showing the world what sustainable towns, communities and buildings could look and feel like is a big part of Architecture’s remit on sustainability. But it’s not all about the new structures; Britain has the oldest housing stock in the developed world with 8.5 million properties over 60 years old53 and over two-thirds of the 2050 housing stock has already been built. Architects have a retrofitting mission ahead that will require creative solutions. The majority of the public would admit to being hopeless at managing their energy consumption at home. Gadgets and gizmos are helping to change behaviour, but retro-fitted sustainable homes and offices have a major place in the UK’s future. Beyond their current toolkits and frameworks, Architects can also get stuck into emerging sustainability trends and disciplines such as bio mimicry and systems thinking – there is still plenty of opportunity for architects to skill up for a sustainable future.

50 http://www.carbontrust.co.uk/emerging-technologies/current-focus-areas/buildings/pages/buildings.aspx
51 Source: Inhabitat – “Green Design Will Save the World”
54 40% House Environmental Change Institute, 2005 http://www.eci.ox.ac.uk/research/energy/downloads/40house/chapter05.pdf
55 http://www.hawkesarchitecture.co.uk/
56 http://www.passivhaus.org.uk/index.jsp?id=668

54% House Environmental Change Institute, 2005 http://www.eci.ox.ac.uk/research/energy/downloads/40house/chapter05.pdf
55 http://www.hawkesarchitecture.co.uk/
56 http://www.passivhaus.org.uk/index.jsp?id=668
4b. Appendix The Creative Sectors

Design

Overview

British Design Innovation found that positive occurrences during 2007/8 include a greater focus on the role design plays in sustainability. They go on to say that design and innovation firms have increased their awareness and knowledge of green issues and are demonstrating how design investment can address those issues for industry. They predicted that this area would continue to grow and generate income for the design sector. Great news!

However, according to the Design Council’s Design Industry Research 2010 whilst six out of ten design businesses feel well equipped to advise their clients on sustainable design practice, only 18% think it’s an important factor in winning work from new clients. If the latter is indeed the case, it is unlikely to remain so. Businesses, big and small, who buy design, are going to be demanding increasing levels of knowledge and skills to meet the challenges of the future. Designers have an immense opportunity to skill up on sustainability, low-carbon technology and systems thinking.

Facts and figures:

- Design contributes just over 1% of GVA (£6.8 billion) to the UK economy per annum
- 194,000 people currently work in the design sector
- 32% are self-employed
- There are 18,105 businesses in the design sector
- 94% of design businesses employ less than 50 people

Source: Creative and Cultural Skills 2009: Creative and Cultural Skills - LMI Nov 09

Design for resilience expert, John Thackara, described by Business Week as “one of the great voices on sustainability”, recently suggested designers should focus on life-centred design, rather than human-centred design – that is, with ecosystem services and fundamental environmental limits as much of a guiding factor in shaping design solutions, as what humans need and desire. This is the sort of thinking designers would be well-equipped with to influence their clients, improve briefs and challenge the status quo.

OrangeBox, the furniture design company, achieves Cradle to Cradle accreditation for ‘Ara’

OrangeBox, the furniture design company, achieves Cradle to Cradle accreditation for ‘Ara’. Ara is the first task chair designed and manufactured in Europe to achieve Cradle to Cradle accreditation.

Cradle to Cradle is an approach to design which looks to make us truly environmentally effective, by developing products for closed loop systems in which all the materials used are safe and beneficial either to biodegrade naturally or to be fully recycled into high quality materials for subsequent product generations, again and again. In order for us to maximise the value of the materials used in the chair we’d like to get them back once you’ve finished with them.

Source: http://www.orangebox.com/endoflife.htm
4b. Appendix The Creative Sectors

Drivers

The International Organisation for Standardisation ISO 14001 provides designers with a standard for environmental management, and ISO 14062 is for integrating environmental aspects into product design and development. The Waste Electrical and Electronic Equipment Directive requires electronic equipment producers to be responsible for discarded equipment that would normally end up in landfill. The government target is 70 per cent for the recycling of computers. And The Packaging and Packaging Waste Directive encourages a range of sustainable design approaches, such as reuse, recycling and alternative materials. This directive intends to reduce both the quantity and the toxicity of packaging62.

Beyond standards, designers have adapted and are adapting to a digital world and the new ways of working it brings. Crowdsourced design for example, can wreak havoc for designers, or be embraced. As Wired magazine put it in 200963 crowdsourcing enables companies to: 1. Post a creative project; 2. Watch the world contribute ideas; 3. Choose the idea you like. A process which could potentially put designers out of the picture. FrogMob64, on the other hand, set up by a California-based innovation firm that is using crowdsourced design to bolster its research and feed in global insights to design challenges.

Looking ahead to a sustainable future

Designers have always moulded and adapted to the world they find themselves in, their challenge now is to incorporate sustainability thinking into their work to future-proof their businesses and win themselves the design jobs of the future.

Our Snapshot Review65 highlighted many sustainability-related activities in UK design. From awareness and engagement initiatives like Greengaged66, to consultancies like Sidekick Studios who specialise in sustainable design solutions – the typically fragmented industry is considering sustainability in an equally fragmented way. As the recently published Realising Sustainability and Innovation through Design68, SEE policy booklet points out, “Design thinking can be a tool for realising social innovation and sustainable development by contributing to long-term behaviour change and integrating the user experience into significantly improved products, processes, services and systems.”

If designers can summon up the ambition and skills to embrace sustainability challenges as a driving force for innovation and exciting, world-changing solutions – we’ll be several steps closer to creating a sustainable future.

Carbon Culture is a user-centred, design-led initiative aiming to create substantial energy savings in workplaces by transforming behaviour of building managers and building users with a novel evidence-based change programme. Designed and developed by design consultancy, More Associates, it is currently being piloted by DECC and Defra, and real-time energy reporting has been deployed at six other Whitehall Departments. At the core of the project is a design process that will develop best practice socio-technological behaviour change techniques. The approach will generate valuable energy performance data for staff and management, producing high quality decisions and enabling high performance improvements to be implemented at low cost across large and complex estates. The project will also create best practice examples of behaviour change and carbon reduction. Once the first projects are complete later this year we will have developed an evidence base on what works and what does not, how much control and influence building users have over energy demand and a sense of the scalability of the solution.

58 Creative & Cultural Skills, Design Impact and Footprint http://www.ccskills.org.uk/LinkClick.aspx?fileticket=4VXK07dWPaz%3d&tabid=600
61 http://www.thackara.com/
62 http://www.businesslink.gov.uk
63 http://www.wired.com/epicenter/2009/03/is-crowdsourcing/
64 http://frogmob.frogdesign.com/
66 http://www.greengaged.com/
67 http://sidekickstudios.net/
4b. Appendix  The Creative Sectors

Fashion

Facts and figures
In 2009, the UK fashion industry is estimated to have directly contributed
- £20.9 billion to the UK economy, or 1.7% of total UK GDP
- £6.6 billion of GVA
- The majority of the above is derived through retail distribution, with estimates suggesting that almost 22.5% of all UK retail's GVA can be attributed to the fashion industry.

Overview
Fashion is a big deal. The global apparel, accessories and luxury goods market generated total revenues of $1,334.1 billion in 2008. And the opportunity for the industry to have a positive impact on global society and the environment is just as significant as its economic clout.

In the UK we buy around two million tonnes of clothing - £23 billion worth - every year. The footprint along the global supply chain includes high energy use from washing and tumble drying, water use, toxicity from pesticides, the 1.2 million tonnes of clothing (amounting to 63%) which ends up in landfill, labour rights, animal welfare and trade inequities.

DEFRA has set out the Sustainable Clothing Roadmap with NGOs and major stakeholders on the high street to support organisations and improve the sustainability of the fashion industry – including supply chain challenges, consumer trends and behaviours, market drivers and awareness via media, education and networking.

Drivers
The fashion industry is starting to become heavily regulated. The PAS 2050 – Carbon footprinting process (BSI, 2010) includes a label that shows the greenhouse gas emissions for the entire lifecycle of clothes, from cotton farming, through manufacturing, transport, packaging and retailing, ending with the consumer’s impact through washing, drying, ironing and final disposal. And the Climate Change Levy (CCL) Legislation (BATC, 2010) was introduced by BATC (British Apparel and Textile Confederation) Environment Committee as a response to the commitments the UK made under the Kyoto Agreement. Since 2001, the Committee has helped the textile sector meet all of its energy reduction targets, eliminating the emission of over 300,000 tonnes of CO2 into the atmosphere and saving the industry in excess of £35 million.

One of the biggest drivers for the fashion industry is the impacts of climate change on its lengthy, complex supply chains. Recent flooding in Pakistan, for example, damaged over 80% of the cotton fields contributing to the drastic

First Fashion retailer to become “Carbon neutral”

ASOS.com, UK’s largest independent online fashion and beauty retailer offers over 35,000 branded and own label product lines. ASOS.com became the first retailer to achieve its CarbonNeutral® company status by partnering with The CarbonNeutral Company, a leading provider of carbon reduction solutions. This involved the measurement of greenhouse gas emissions from ASOS.com’s premises, business travel, commuting, outgoing deliveries and packaging materials and the reduction of these emissions to net zero through a combination of internal initiatives and the purchase of high quality carbon offsets.

ASOS has ensured that all its packaging is 100% recyclable and in order to reduce the unavoidable emissions from its carbon footprint ASOS.com is offsetting unavoidable emissions through verified third party emission reduction projects around the world including the installation of wind turbines in India and the restoration of forests in Tanzania.

Source: Carbon Neutral (2010) “ASOS becomes the first fashion retailer to become CarbonNeutral®”
rise in the price of cotton. In mid-October 2010 the price was a record $1.305 per pound of cotton – a rise of 85% over the past 12 months as global supplies trail global demand. At the high-street end of the supply chain, fashion designers and retailers need to look to a very different, sustainable business model if they are to keep meeting their consumers’ needs.

Looking ahead to a sustainable future

Fashion’s influence is unparalleled. From teenagers to established businessmen, its reach is immense. Fashion can move the masses and influence not just what people wear, but what lifestyles they adopt and other consumption patterns they may choose. We see sustainable fashion as a major influencer and enabler for a sustainable future. Companies who choose to embrace sustainable innovation in Fashion by exploring new business models around re-manufacturing and alternative raw materials, for example, will be rewarded with a much more resilient business. Fashion designers can choose to broaden their knowledge in sustainable fashion and build an attractive offer to clients and consumers by applying new, innovative approaches to the fashion status quo.

M&S and Oxfam Clothes Exchange

Oxfam and M&S teamed up to help shoppers support the world’s poorest people. All consumers need to do is bring their old M&S clothes or soft furnishings to an Oxfam shop and they’ll exchange them for a £5 voucher* to use at M&S. It’s a nice, simple way to clear out your home, save money, reduce waste and raise heaps of money for Oxfam.

• Since the Clothes Exchange started in January 2008, it’s helped prevent over 2,500 tonnes of clothing going to landfill
• Selling the clothes in Oxfam shops has raised an extra £3 million
• £5 provides safe, clean drinking water for eight people

Source: http://www.oxfam.org.uk/shop/content/secondhandstore/fashion/ms_clothes_exchange.html

Continental Clothing

CONTINENTAL® has been designing, manufacturing and selling wholesale to the imprints industry since 1994. “We were the innovators of the wholesale baby doll t-shirt in Europe and continue to lead the way in terms of innovation and design.”

They believe they have created an opportunity to force positive change in business ethics and environmental practises in one of the world’s most environmentally damaging industries, and to profit from it. They want to demonstrate that sustainability can confer competitive advantage and profitability – and use this to inspire change.

Their vision is an entire industry in low carbon corporate wear, work wear, promotional wear and leisure wear, built upon fundamental principles of sustainable production and socially positive supply chain management. Their mission is to turn their customers, their competitor’s customers, from all industry sectors, onto the products and services that they offer now and will continue to develop in the future.

Source: http://www.continentalclothing.com/

EarthPositive® Apparel

Their vision is an entire industry in low carbon corporate wear, work wear, promotional wear and leisure wear, built upon fundamental principles of sustainable production and socially positive supply chain management. Their mission is to turn their customers, their competitor’s customers, from all industry sectors, onto the products and services that they offer now and will continue to develop in the future.

Source: http://www.earthpositive.org/
4b. Appendix  The Creative Sectors

Advertising

Facts and figures
- £5.3 billion contributed to GVA
- 11,000 companies in the sector
- 247,000 staff in creative roles

The UK is the third biggest advertiser in the world after the USA and Japan, with London overwhelmingly chosen as the EMEA hub for the major agency networks and media agencies alike.

Source: The TSB’s Creative Industries Strategy ‘09; http://www.innovateuk.org/creativeindustriessstrategy09/appendices/1.ashx

Overview

Spend on advertising in sustainability has skyrocketed in the last few years. In 2003 only £447k was estimated to be spent on green ad’s, while a similar study reports spending of nearly £17 million on advertising containing the words ‘CO2’, ‘carbon’, ‘environmental’, ‘emissions’ or ‘recycle’ from September 2006 to August 2007 alone.

Figures are not available for this trend since,

but, given the launch of An Inconvenient Truth and The Stern Review on the ‘Economics of Climate Change’ later in 2007 heralding the explosion of sustainability into the mainstream, it will likely have continued to increase at least at the same rate. Little surprise then that the advertising sector has seen a notable growth from in smaller boutique sustainability advertising, marketing and communication agencies, and the growth in 2007-09 of the larger, mainstream agencies setting up sustainability offers – notably Saatchi S, McCann Planet, Ogilvy Earth

Drivers

Avoiding ‘greenwash’ — the main criticism and pitfalls of advertising on sustainability is the accusation of ‘greenwash’. Wikipedia describes the terms as ‘the deceptive use of green PR or green marketing in order to promote a misleading perception that a company’s policies or products (such as goods or services) are environmentally friendly.’ Greenwashing is widespread according to a 2007 Canadian study which analysed 1700 green product claims. The report concluded that all but one, made some form of false or misleading claim. Greenwashing is at best annoying, confusing and misleading, but at worst can lead to prosecution, can obliterate a brand or companies value and ultimately can destroy trust or sabotage the sustainability movement. Finally, greenwashing can be risky to brands and business — as Naomi Klein’s No Logo testified.

The UK government’s Department for the
Appendix

The Creative Sectors

Environment, Food and Rural Affairs (DEFRA) has produced a pioneering guideline called the Green Claims code\(^\text{82}\), which sets out the standard of information that the public can expect to be given about the environmental impacts of consumer products. This provides clear guidance and parameters for green communications and product claims.

Complaints against false claims on sustainability can be upheld and advertising withdrawn by three different bodies. The ASA (Advertising Standards Authority) is the self-funded, self-regulating body of the advertising industry across all media, including TV, internet, sales promotions and direct marketing. It helps to police the claims of the industry on green policies. Trading standards can enforce false claims on packaging. Complaints about a claim in a radio or TV advertisement are made to the Radio Authority or the Independent Television Commission\(^\text{83}\).

As part of field tests, in 2007, an IPSOS survey reported that 17% of UK households now wash at 30 degrees, up from only 2% of households in their 2002 survey. The average UK washing temperature across all households has decreased from 43.5°C to 40.2°C over the same period and importantly 85% of UK consumers claimed that Ariel’s Turn To 30 campaign was the main reason that convinced them to turn down their washing temperatures, while twice the number of Ariel brands ‘turned to 30’ than users of the next leading brand.

Looking ahead to a sustainable future

The growth of digital advertising is already transforming the advertising sector, with online ad-spend reaching £3.3 billion in 2008\(^\text{84}\). Online advertising offers significant sustainability opportunities, not least in reducing waste or resource use versus print alternatives like direct mail. Secondly, the rise of the sustainable consumption debate offers big potential for clever new advertising solutions. As we have come to realise the limits of changing production, technology and business alone, the need to engage consumers and the public has become ever more urgent. Government’s and business already have their eyes on this and are already beginning to allocate funding. Advertising will obviously play an important role in changing hearts, minds and behaviours. A final area of growth may be the new models of enterprise and commerce, in which web 2.0 platforms are allowing producers to more directly interact with consumers, creating new marketplaces to reduce waste\(^\text{85}\), tailor products to specific needs or enable limited production runs.

\(^{80}\) http://www.terrachoice.com/files/6_sins.pdf
\(^{81}\) http://www.naomiklein.org/no-logo
\(^{83}\) http://www.guardian.co.uk/sustainable-business/green-product-labeling-claims-blog-maung
\(^{84}\) Source: The TSB’s Creative Industries Strategy ‘09: http://www.innovateuk.org/creativeindustriesstrategy09/appendices/1.ashx
\(^{85}\) http://www.gazelle.com/?no_cookies=true
4b. Appendix The Creative Sectors

Film

Facts and figures
- £3.8 billion contributed to GVA
- £747m spent on production (supported by UK tax relief)
- 9,300 businesses
- 65,000 staff employed in creative roles

In 2007, the UK had the third largest filmed entertainment market globally, after the USA and Japan with key strengths in Special effects and CGI.

Source: The TSB's Creative Industries Strategy '09: http://www.innovateuk.org/creativeindustriestrategy09/appendices/1.ashx

Overview

The Film industry is starting to make headway on sustainability. Over the past few years a number of wheels have been set in motion by industry members who were keen to change the wasteful, carbon intensive filmmaking process into a cleaner, healthier closed loop model. The Mayor of London’s Green Screen report highlighted that the screen production industry in London alone produces around 125,000 tonnes of carbon emissions each year. This carbon emission excludes distribution and exhibition of films and programmes, or production office travel.

Drivers

The UK Film Council has lead the way on various sustainability initiatives over the past decade. It set the target for the UK film industry to reduce its carbon footprint by 30% and increase recycling and composting by 50% by 2020 (UKFC, 2007) and has supported the development of the British Standard for the specification for a sustainability management system.
4b. Appendix The Creative Sectors

Greenshoot

Greenshoot is founded by people with a background in films and commercials and understand that the productions are not completely anti-green. The reasoning is that there needs to be time and individual effort that can make productions sustainable.

Greenshoot aims to recycle each and every bit involved in the production while confirming that the shoots adhere to ISO 14001, meaning it is fully sustainable. Apart from that Greenshoot carries out a complete carbon and sustainability audit to find out ways of saving production money while maintaining carbon neutral filming.

The organization’s activities are divided into the following categories: Sustainability auditing Film set recycling Sustainability advising and co-ordinating.

The organization provides a Greenshoot Waste Transfer Certificate to prove that the materials on the set have been completely recycled. They also provide a Greenshoot Environmental Certification Audit that provides the evidences of social, environmental and economic impact of the shoot. The support provided by the organization exists throughout the filming, where in data on emissions, energy-use, waste tonnage and procurements is calculated in figures on a weekly basis.

Source: http://www.greenshoot.com

system for film (BS 8909) with the BSI with the UK film industry. This world-pioneering standard specifies requirements for a sustainability management system for film, applicable to any organisation that wishes to embed sustainability into the Film. It will initially be available to the UK film industry, but the ambition is for it to set the standard for the international ISO version. The creators of the standard also hope that meeting it will one day become a pre-requisite for UK film funding, and eventually the basis for an industry wide legislation.

Looking ahead to a sustainable future

Films ability to inspire and capture hearts and minds is by no means new – but its role to play in visualising a sustainable future, bringing transparency to global issues and inspiring positive behaviour change is certainly able to grow. The film industry doesn’t just need to clean up its production processes and manage its waste streams better; it can help generate a creative movement on all aspects of sustainability. Recently premiered at the London Film Festival, The First Grader is an inspiring example of a British film (produced by the BBC, directed by Justin Chadwick) pushing the boundaries of sustainable film. Not only does it tell a compelling and necessary story, it was filmed with only 9 British/American crew on location, the rest of the crew were hired locally, in Kenya, along with Kenyan catering and other support services. Furthermore the film has left a positive impact on the remote community it ‘borrowed’ to shoot the film, providing it with modern infrastructure, such as electricity, and a financial legacy to continue the supportive relationship it started.

Film reaches so many from production to distribution and beyond – and has a huge opportunity to build a sustainable industry.

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89 http://www.ukfilmcouncil.org.uk/media/pdf/2/t/Developing_an_Environmental_Strategy_for_UKFC.pdf
90 http://drafts.bsigroup.com/Home/Details/607
91 From the BAFTA Greening the Screen event on Monday 18th October 2010, Piccadilly, London.