



Craft & Environmental Sustainability

Craft has an essential role to play in building a more sustainable future, and in this briefing note we explore how makers are trailblazing the use of recycled and sustainably-sourced materials and pioneering new, low-impact alternatives.

We also investigate how makers are raising awareness of environmental issues through their work, and we see how they are challenging the conventions of a consumer society based on over-consumption.

Finally, we explore what is distinctive about craft and its ability to effect change; and in the context of emerging Government environmental policies and initiatives, we also consider how the craft sector can be best equipped to build on its successes in furthering the sustainability agenda.

The Value of Craft

Sustainable materials innovation:

Decorative garden tools made from [recycled paper](#), [home furnishings made from used bicycle inner tubes](#) and [jewellery made from old fabrics](#) are just some of the recent product innovations from makers who use their understanding of materials and making to upcycle used objects into new innovations.

Makers have the skill and creativity to work with rare and difficult materials, and those such as [Rachel Max](#) – who creates baskets and sculptures from replenishable Indonesian cane – and [Ruth Singer](#) who works hemp into pillows and scarves – have used this skill to find new and marketable uses for sustainable materials. Felt maker Yuli Somme ([Bellacouche](#)) uses waste wool produced by Dartmoor sheep farms, and in the processes minimizes the shipping of raw materials whilst also reducing local landfill.

By choosing sustainable materials, these makers make a clear contribution to the sustainability agenda, not only reducing the environmental impact of their work but also introducing new materials to designers and environmental issues to consumers.

Other makers go further, developing entirely new and sustainable ways of producing fabrics, glass and building materials. [Laura Marsden](#), for example, has developed a way of heating waste plastic bags into a new material – ‘Eternal Lace’ – which is sculpted and stitched into jewellery and fashion accessories. At the same time, glass maker [Ian Hankey](#), is working to develop a new and energy-efficient workshop set-up for small-scale, hot glass production. And recent [research](#) from the Crafts Council profiles Jim Roddis and Gary Nicholson’s work developing TTRUA / Resilica*, which transforms ‘hard to recycle’ glass waste into an attractive and durable architectural material used today in the Costa Coffee and Pitcher & Piano chains.

At the cutting edge, craft research centres are working to create ‘unimaginable’ future materials for the future, often combining traditional materials and



techniques with new, digital technologies. [The Metabolic Media](#) project at the Textiles Futures Research Group, for example, has developed a new way of working with energy-harvesting composite materials and using the principles of weaving and lace-making to build modular textile structures for urban food production. From materials recycling to this type of future-oriented innovation, it is makers' specialist, materials-based knowledge and creativity which is driving sustainable development.

Making a sustainable product lifecycle:

Perhaps because makers work independently, dealing direct with their suppliers, customers and clients, many are acutely concerned with their place within a global economy which promotes over-consumption and unsustainable sourcing.

Selling direct to consumers (at shows, festivals and open studios or through commissioning) is a central part of many craft businesses which is becoming more visible thanks to online retailers from [e-marketplaces](#) to [maker collectives](#). Whilst for some makers this direct selling – whether in person or online – is primarily a route to market, for others it represents a key aspect of a sustainable business practice. [Research](#) shows that trading independently not only shifts responsibility for environmentally conscious decision-making away from the shareholder and back to the maker (and buyer), but also creates new and more economically sustainable possible trading infrastructures, such as local exchanges of materials for finished goods.

Ethical trading operates on a global scale too, for the many makers whose work is supported by craft organisations such as the jewellers' collective [Ethical Metalsmiths](#) and the international organization [Aid to Artisans](#). Recent [Crafts Council research](#) shows the success of particular collaborations with local communities in emerging economies, highlighting [Craft Champion Sheila Teague's](#) jewellery designs for Oxfam and Sarah Rhodes' work with both Gantsi Craft in Botswana and Made in Kenya (a fair-trade jewellery company supplying Top Shop, amongst others). This – and other – [research](#) suggests that makers are well equipped to effect real social change in a post-colonial, global economy, because their skills, knowledge and ways of working enable genuine collaboration with local communities.

For other makers, encouraging sustainable consumption means creating objects which last. Amy Twigger Holroyd at [Keep & Share](#) focuses on making 'quirky classic' knitwear designed not to date but to be adapted and passed from one person to another, whilst Barley Massey at [Fabrications](#) fashions customers' favourite old clothes into new soft furnishings which last because of their emotional resonance.

New ways of encouraging this kind of enduring connection between consumer and product through new technologies are also being explored: the [Autonomic](#) research cluster at University College Falmouth, for example, is developing new generative and distributed manufacturing technologies which involve consumers directly in both making and design, whilst [Cambridge University and the London College of Fashion](#) are working together to investigate the use of 3D body scanning and rapid prototyping technologies to produce customized, body-related knitwear. In these examples, craft is the link



between people and technology, which promotes sustainable consumption and use.

For all these makers, working with sustainable materials is just part of a lifecycle-based approach, in which issues of sustainable consumption, use and disposal are also promoted through an integrated approach to making, design and business practice.

Raising environmental awareness:

Craft makers also use materials and material processes to engage new audiences with environmental issues. Taking their work into schools and community settings, some makers use creative, materials-based workshops to raise environmental awareness in schools and at community events. Recent Crafts Council [research](#) profiled Karen Whiterod ([Footprint Arts](#))'s school workshops, which build exploration of environmental issues into practical learning activities focused on transforming waste plastics into kinetic sculptures and 'fantasy foliage.' It also highlighted Amy Twigger Holroyd and Barley Massey's work, running leisure workshops and selling knitting patterns alongside finished products to promote the handmade as a positive solution to the dilemmas of ethical consumerism.

The sustainability debate sparked by craft extends from the classroom to the gallery, as other makers use exhibition work to communicate environmental issues and provoke debate. In 2008, the Crafts Council supported Tracey Rowledge to travel to Greenland as part of the [Cape Farewell](#) expedition, which each year brings artists, scientists and educators together to raise awareness about climate change. Few people have the chance to travel to the Arctic and witness first hand the ice cap's deterioration, but Tracey's 'Arctic Drawings' – described in [Crafts Magazine](#) as 'by the sea and of the sea' – poignantly evoke for everyone its vastness and vulnerability.

In summary, makers are making a significant contribution to the sustainability debate, not only innovating sustainably and engaging new audiences in environmental issues, but also taking the opportunities offered by independent trading to pioneer newly sustainable business practices.

Implications – Supporting Sustainable Making:

Continuing Professional Development (CPD): Recent research from the [Crafts Council](#) suggests that as a consequence of shifting consumer values, the market is growing for 'ethical luxury' goods and that the opportunity is currently open for craft makers and retailers to expand market share amongst consumers who were previously loyal to established luxury brands. Focused workshops or other forms of CPD could facilitate entry to this emerging market niche for craft makers and retailers.

Education: It is during their education that many makers develop the motivation and drive to engage with sustainability agendas, and the significance of a high quality learning experience – focused on making within a framework of critical reflection which includes sustainable development – cannot therefore be over-estimated. Education infrastructures need to be maintained and developed, to ensure that this sector strength continues to grow. In particular, the connections



between craft and other art and design subjects, and STEM subjects (science, technology, engineering and mathematics) need to be strengthened to inspire and enable the kind of boundary-pushing collaborations outlined above.

Innovation Funding: Government support for materials research and development and knowledge transfer should be made easily accessible to the sole traders and micro-enterprises which characterise the craft sector: accepting that innovation often starts small, new investment models need to be developed which enable the scaling-up of sustainable materials and process innovations developed by makers. Because makers work across many industry sectors, the potential for such scaling up is significant. However, because most are independent sole traders, without significant capital or access to finance, some intervention is required for innovations to be commercialized.

At the same time, scientists and engineers should be encouraged by collaborative innovation and knowledge transfer schemes to work directly – and with a focus on developing marketable, sustainable solutions – with artists, designers and makers.

Green Investment Bank: Finally, the Government's proposed Green Investment Bank should not limit its scope to companies developing sustainable energy solutions, but should also be made accessible to all businesses whose work can demonstrate positive environmental impact potential. In particular, the Bank should promote loans to businesses working to develop sustainable materials and technologies, and to those directly promoting sustainable consumption in their work. In order to harness innovation from all sources, and the conditions of loan should be made attractive to micro-enterprises and sole traders.

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