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Latest figures from the Office for National Statistics showing reduced material consumption in the UK raise interesting questions. Should we, as product designers, be congratulating ourselves for our efforts to design products sustainably? Is the change simply an evolution of user behaviour? Is reduced consumption likely to be a long-term trend or a short-term economic blip? And what can we do to build on this progress? Before we jump to conclusions we should look at the figures and factors in more detail.

According to the Office for National Statistics' latest consumption data, on average people in the UK have reduced consumption from 15 tonnes of material in 2001 to just over 10 tonnes in 2013. In the world of product development this is an opportunity for us to consider how much of this is down to the sustainability of products we design and how much is a progressive change in consumer behaviour. It's also an opportunity to look at how we can improve sustainability in a world where manufacturing abroad is ever-increasing.

First of all we need to look at the bigger picture economically. The UK is now considered to be an increasingly service based economy, with a declining proportion of domestic manufacturing and a great increase in products imported from abroad. This means that Britain consumes less raw materials and energy as the manufacturing processes and their environmental impacts are 'off-shored' to lower cost economies. In addition, analysis of the figures indicates that the global recession has led to a large drop in construction, feeding through to a huge drop in the consumption of non-metallic minerals used in the building industry.

Another big driver of this shift has been changes in technology and consumer behaviour. Take a look at how consumer technology has developed over the last decade. We have become digitalised, with data replacing physical objects – CDs have been superseded by MP3 and streaming and DVDs by online film providers like Netflix. But more than this, we as consumers expect our products to do more than one thing as they have become mobile and miniaturised. A mobile is no longer a phone, but a mobile computer acting as a hub of online communication, with high definition camera and any number of apps to assist in everything from transport to your heart rate. We don't need a separate hi-fi, TV or even a torch these days with clever multifunction mobile devices and apps. All these things have had a dramatic effect on consumption and use of physical materials.

Product designers have been one of many players involved in driving and supporting these developments in consumer technology but in some areas the influence of industrial designers and engineers has been the key driver behind reduced material usage and environmental impact. One industry which has benefited from improved design is white goods, where a greater awareness of sustainability has meant a significant cut in metals. This has been facilitated by high tech engineering design and use of new lightweight materials. Rising material costs and a focus on environmental impact have driven similar change across a range of industries.

So as product designers in the UK, what can we do to ensure this trend continues and benefits the future global environment, rather than just UK statistics? As a greater proportion of the goods we buy come from abroad, it is important we engage with the global supply chain. China is the largest exporter of manufactured goods and consumer of raw materials, and therefore it is vital designers, retailers and manufacturers work with Chinese factories to help them improve their processes and reduce environmental impact.

With a multi-national team of designers on the ground in Shanghai, IDC's team works closely with UK colleagues and Chinese factories to ensure they engage the sustainable design practices we define during the design process. As part of our commitment to sustainable design, we carry out a carbon foot print for all new product developments carried out in China. The good news is that Chinese companies are responding to this by wanting to make sustainable choices and increasingly see this giving a competitive advantage in sectors as diverse as domestic appliances, industrial equipment and medical devices.

Back in the UK, it's important we as product development professionals keep sustainable design moving forward and continue this process of engagement and education, wherever products are manufactured.

The full ONS report is available at: <http://www.ons.gov.uk/economy/environmentalaccounts/articles/ukenvironmentalaccountshowmuchmaterialistheukconsuming/ukenvironmentalaccountshowmuchmaterialistheukconsuming/pdf>