

SEIZING THE DAY

This spring the Environment Agency teamed up with the Northwest's water company, United Utilities, to launch a campaign warning of the link between climate change and water resources. It aims to encourage people to get into the habit of using less water, which means reversing the current long-term trend towards using more and more.

The link between water and climate change is two-fold. Firstly, climate change experts predict that changing weather patterns in the Northwest will mean more winter floods but drier summers, putting pressure on our water resources. And secondly, it takes a lot of energy to process the water we use – the water industry uses about three per cent of all the energy consumed in the UK. If it comes from burning fossil fuels, then producing all that energy is releasing carbon dioxide.

But climate change can often feel like a problem that is simply overwhelming. We expect governments and institutions to take action on our behalf, or we're unsure of exactly what we can do on as individuals.

So Source has been out about in the region talking to the trendsetters who are ahead of the curve. We found them everywhere from Manchester to the Lake District, self-employed and working for multi-national corporations, and ranging from chief executives to artists.



Janette Porter Artist

"Art Cargo consists of 19 hessian sacks hung on six washing lines across a working warehouse at Garston Docks in Liverpool, along with six rows of 19 sacks on the ground. The sacks are part of the history of the waterfront. They had lain unused for 20 years but before that had been carefully and beautifully repaired many times.

I created Art Cargo last year for the Living at the Edge project, or L@tE. The project's website is the hub for an international series of art works looking at how communities that live on the water's edge are coping with climate change. Other pieces are in Russia, Croatia, Cornwall and the Fens.

The dockers told me that winters are rainier but not as cold as they used to be. They are physically feeling how climate change is affecting their work.

Climate change is something that small communities around the world are dealing with. It's not just the big stories. It is about listening to people, working creatively with communities and sharing information at a global level.

I don't think artists can find the solution to climate change, but communities can. What artists need to do is identify communities struggling with climate change and offer them projects, not ready-made packages."

www.lateexchange.com

The everyday heroes already fighting climate change.

Dr Kevin Anderson
Research Director
Tyndall Centre for Climate
Change Research

“As I see it there are two main areas where we need to do further research. The first is less about designing new technologies to get us out of this climate change hole, and more about developing the means by which we can rapidly increase the uptake of existing low-carbon technologies. Why is it that we’re not making more of the easy technological wins that will allow us to achieve the urgent and radical cuts in CO2 emissions we need to make? We’ve moved on from prioritising the hard science of climate change itself, now we to look into the social science of why we behave the way we do and how we can break the cycle of high energy and high carbon living.

The second area we need to focus on is closing the disjuncture between the science of climate change and the politics of climate change. Even in the UK, which in many ways is leading the international community, we are still not grasping the nettle of the scale of the problem. For example, the carbon targets within the draft Climate Change Bill are completely out of synch with what the science is telling us we need to do. We need to make the politics of climate change more evidence based.”



Liz Thompson
Environmental Adviser
Co-operative Group

“It’s been about a decade now that I’ve been seriously interested in environmental matters. It was an area the bank was moving into through its ethical policy, and becoming a parent also had a big influence.

Personally, it’s involved making more conscious choices. Recycling at home, buying green electricity, composting; we do all that. My job gives me the opportunity to research into ways of combating climate change and so you become more aware of the various options. Once you’re aware, it makes complete sense: when we replace white goods it’s with A-rated appliances for instance.

Having children has made it all much more fun, and making them aware of the impact of their actions is part of it. You lead by example.

As a business, I know that our efforts to reduce CO2 emissions help to attract both customers and staff.

Before we took action as a group, we had to measure where we were starting from. We looked at how much power we used, as well as our transport habits and the amount of waste we produced. Over time we’ve switched to renewable energy (virtually all our energy – 98 per cent – is now renewable), encouraged the use of video-conferencing to cut down on travelling, and have put a recycling structure in place throughout the business.

We’ve also supported on-site renewable energy generation – we have a wind farm on Co-operative-owned land in Cambridgeshire, over 7,000 solar panels covering the CIS tower in Manchester (the biggest solar energy project in the UK) and micro-wind turbines on another of our properties in Manchester. We’re also investing in renewable energy in schools in a new project worth £1.5 million.

There’s a lot left to do: food miles is an area needing further attention, and as waste is a key issue for us we’re also working on a new programme to minimise packaging. Should we be selling incandescent light bulbs? We’re working on that too.

I do worry that as a society we’re not doing enough, and I find it strange that you still talk to people who don’t think it’s their problem. But I believe that you have to take action.

As a business we’ve set ourselves energy savings targets of twenty per cent by 2010 and twenty-five per cent by 2012. The biggest CO2 saving we’ve made so far is undoubtedly through our purchase of renewable energy – that saves approximately 300,000 tonnes a year.

At home, the kids are so into it now that it’s become part of our lifestyle.”



Danny Frost
Furniture maker and timber supplier
Cumbria

“I’ve been in the furniture making business for fifteen years and respecting the environment has always mattered enormously to me. We don’t tolerate any waste products and try to find a home for every offcut of wood, even if it’s used for charcoal, which we make ourselves. Recently we planted a thousand trees for every year we’ve been in business. It’s all native broadleaf. We’ve put some on our own land and if anybody wants to plant trees in their garden or field, we buy the saplings and give them away. I think of it as restocking nature’s shelves.

We get ninety-nine per cent of our wood from within Cumbria which avoids fuel miles spent in transporting logs halfway across the world. We only use trees that have been felled for good reason, or trees that are standing dead if they’re in good enough nick. Local farmers who know us will give us a ring when a tree’s found blown over on their land as well, and so we get to use all the native hardwoods: oak, beech, sycamore, ash. There are even a few pockets of elms left in Cumbria that we manage to source sometimes. It’d be far cheaper to buy in wagonloads of timber from Eastern Europe, which is what the sawmills use, but that doesn’t make much sense to me.

Over the years we’ve tried to do more. We built our own kiln a couple of years ago that is partly powered by solar energy.

Whereas most commercial mills shove green wood straight into the kiln to dry it out fast, we air-dry ours for three years and only use the kiln to extract the last little bit of moisture. We have to have a Land Rover for the business, but we cycle around a lot and made a decision to use a motorbike for anything that didn’t involve heavy loads: it’s more fuel efficient and a lot more fun!

The next project is installing a big wind turbine on our site. It’ll cost around £40,000, which is a huge financial commitment for the business and the payback time is looking like 15-20 years. But we do this stuff because we want to, and increasingly we’re seeing that our customers who commission us to do corporate work or create individual pieces for their homes really value it.

The most irritating part of trying to be environmentally friendly is fighting against regulations that don’t make sense. Some of the timber we use is from sustainable forests and gets the FSC label, but with trees that have blown over or if we use a tree that’s already dead, the rules say we can’t get the accreditation. And I think using that kind of salvaged timber is all about being creative with the resources that we’ve got: I don’t want to lower my standards to FSC criteria, I want to be more sustainable than that.”

www.dannyfrost.co.uk

Anne Selby
Chief Executive
Wildlife Trust for Manchester,
Lancashire and North Merseyside

“We had the opportunity to build our new headquarters from scratch, and wanted to practice what we preach in terms of sustainability. So we used reclaimed brick and slate, sustainable timber, solar panels for heating our water, and we’ve a wood-chip boiler and use recycled rainwater. The building’s low thermal mass means it holds heat in. It’s not completely carbon neutral, but it’s a pretty good effort.

Though our build was underpinned by strong sustainability principles, it cost the same as a standard office building. If you’re prepared to do your research in the planning stages, a sustainable office doesn’t have to be expensive. In the long term, the energy and maintenance costs will be lower too.”

Adrian Davison
Group Energy Manager
United Utilities

“The water industry is here forever so we have to look long term. Combined heat and power (CHP) units are great for us because they reduce both our carbon emissions and our electricity bill. They really are zero carbon because we can run them on biogas produced from sewage.

In the last few years we’ve spent £25 million either replacing old units with newer ones or installing units at new sites. Now we have them at 23 sites, generating about 140,000MWh of electricity per year. The new units are about 50 per cent more efficient than the ones from the 1990s and we’re looking at about a four year payback period.

As well as biogas-fired CHP we also run six hydropower schemes and in April we started buying 25 per cent of our electricity from certified renewable sources. We’ve made a decision to do that for at least the next three years, which is a major commitment. We’re also carrying out research into using biofuels and wind turbines.”



Fiona Pelham
Event organiser
Organise This

“Organise This is an events management company that plans events in a way that is environmentally friendly and involves the community.

The events industry is traditionally not very sustainable. Think of the emissions produced by everyone travelling to the event, the waste paper and the food waste, and the energy used by lighting, audio-visual equipment and heating or air conditioning.

We go through exactly the same steps as any other event management company, except that at every stage we consider the environmental and social impacts. So when we do our site visit, we talk to the venue about waste reduction and recycling, or about using local caterers to reduce food miles. At a recent event in Preston we persuaded 70 per cent of delegates to travel by public transport (the remaining emissions were offset), most of the food was locally sourced and all the food waste was composted. We also do a lot of measurements so we can produce a report for the client.

I also do a lot of speaking around the world to try and spread the message. This summer I've been asked to address an international conference in Montreal and I've also presented to the Green Meetings Industry Council.

Organise This has been going since 2004 and at first it was hard work – people just weren't interested. But now it's a positive advantage because people have suddenly begun to understand how important the issues are. Delegates themselves are demanding to see action on them.”

www.organisethis.co.uk

David Broadbent
Regional Chair North West
Persimmon Homes

“One of the hottest questions in construction at the moment is how we can make homes that are more environmentally friendly. One of the ways Persimmon is trying to answer that question is with our Living-i project in Irlam, Manchester.

There are five different houses in the project - each one is a unique trial home that uses a different range of construction methods and materials, and the latest in home technologies. From the outside the homes look like an ordinary house that you can imagine yourself living in, but each one has been looked at with fresh eyes from the foundations upwards and the outside in, with every element extensively researched. So we can use these five homes to assess various building techniques and materials for the future.

One of the properties is a detached timber-framed 'Eco-home' that has been constructed to achieve a very high Eco Homes rating. All components are focused on energy saving and sustainable products.

Another is a detached steel-framed property known as the 'techno home' because it focuses on hi-tech products and cutting edge technological, communications and security systems. It also uses a number of off-site manufacturing techniques.

There's also a pair of semi-detached properties that are known as the 'lifetime home' and the 'modular home'. The lifetime home has a basement and third floor, which allows for growth and adapts as the needs of the family living in it change.

Both use off-site manufacturing processes and modular construction because it's one way around the industry's skills shortage, and because it's in line with the government's drive for sustainability. So, for example, the modular home is constructed using off-site concrete manufacturing processes, which minimises waste, transportation and contamination on site. It'll also include wireless control technology.

The final property is constructed using the Space4 insulated timber frame system, which is one of the most efficient and energy saving systems on the market. We're testing the Space4 system as part of our drive to achieve the government's target of zero carbon homes by 2016.

House builders are waking up to the threat of climate change, and we're also facing more and more green legislation, so the industry is working hard to change the way we build for a greener future.”

