

# **Sustainability** *first*

## Five big ideas for sustainability

Celebrating fifteen years of the charity Sustainability First



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# Fifteen years of Sustainability First

Ted Cante Chair of Trustees, Sustainability First

**A**t Sustainability First we like to think of ourselves as a ‘think-tank’s think-tank’. Whilst we don’t shout from the roof tops, and we are often not in the front line, behind the scenes we continue to have credibility and influence, driven by our expertise and the substantive contribution we make. We provide authoritative, in-depth research that helps shape ideas early on, often choosing areas that are overlooked by mainstream policy circles or that require substantial thought to progress. We have been at the forefront of thinking in some key areas, most notably on the energy demand side; sustainability and regulation, customer engagement, and, smart meters, smart grid and energy savings.

We have also developed new thinking on long term issues for the water sector.

This work is not carried out in isolation, Sustainability First works frequently in collaboration with voluntary organisations, business, parliamentarians and key agencies. We are extremely grateful to all those we work with, and who contribute their time and financial support to the charity. In particular those who actively supported our major three-year project on the GB electricity demand side.



We would also like to thank our Trustees who take an active and supportive role in all we do and our Associates who continue to contribute their expertise to help take the sustainability debate a long way forward. And I would personally like to thank Judith Ward and Gill Owen who have led so much of Sustainability First’s work with skill, knowledge and determination, accompanied by such grace and good humour.

## **Fifteen years is a long time in sustainability**

We were established in the year 2000, which is just a blink of an eye in environmental terms, yet since this time we have seen some amazing changes, not least in the use of technology. Who would have thought fifteen years ago that we would use drones to survey marine reserves? Who would have anticipated the way smart phones are controlling home management systems? Who would have imagined the way that

washing machines will connect to the grid or that social media can bring such pressure to politicians and decision-makers on environmental issues? At the pace that technology is now developing, fifteen years is a long time.

The next fifteen years will witness huge changes again and will herald some important national and global decisions on how we deal with energy demand, climate change and environmental degradation. This year itself is a crucial one for the environment, with the UN climate summit in Paris and new Sustainable Development Goals. Where we will be in fifteen years time is hard to imagine but as we our optimists at heart we hope that we will be able to look back at 2015 as a year that truly started to embed some seeds of change.

### **Our focus going forwards**

We hope that Sustainability First will continue to weave its magic behind the scenes during the next fifteen years. We still maintain a very active interest in the energy demand-side and how that will play out in terms of practical implementation. Projects currently underway include working with Frontier Economics on a demand-side supply curve for the Department of Energy and Climate Change, on an exciting Innovate UK project led by Tempus Energy and with National Grid on their Power Responsive initiative to raise awareness of demand side opportunities.

Much of our work over the next fifteen years will focus on the long-term public interest. One specific project will explore the public interest issues around smart meter data with TEDDINET and the Centre for Sustainable Energy. But our core focus lies in the establishment of a new

Network- the New Energy and Water Public Interest Network (New-Pin) which brings public interest groups together with regulators and companies to explore whether we can collectively develop a more clearly-articulated public interest 'voice' capable of being more clearly 'heard' by the companies and by regulators in their business planning, to underpin both the short-run operation and the long-run investment programmes of the water and energy sectors.

### **Sparking debate**

We were so pleased to see so many partners and colleagues join us for the celebratory event we held in the House of Lords in June, kindly hosted by Lord Teverson. It was an entertaining and inspiring evening. We asked five people to set the debate alight on what is needed to tackle sustainability over the next fifteen years, or longer, by sharing one big or new idea and had some excellent and thought provoking contributions from our speakers Simon Roberts, Cathryn Ross, David Baldock, Simon Anderson and Pip Roddis. They were game enough to also indulge in some light-hearted competition with two rounds of 'highly technical' voting by coloured card for the most inspirational and practical ideas. With their kind permission we have printed their ideas here and we hope you are as inspired by them as we were. Needless to say these are their ideas and not those of Sustainability First itself.

We sincerely hope to be able to celebrate Sustainability First's next fifteen years with you all in 2030, or if not, that by then sustainability issues are so mainstream that the organisation is no longer needed.

# Get people speaking

*Simon Roberts Chief Executive, Centre for Sustainable Energy*

**M**y big idea is ‘*smarter people as part of smarter communities*’: a better informed, more engaged society, with a strong sense of collective responsibility for achieving our sustainable energy goals.

To do this we need to hold half-a-million meaningful discussions on sustainable energy. A national programme of local citizens’ meetings focused on how their locality makes its fair contribution to the transition to a low carbon society.

These well organised discussions will result in a stronger sense of collective purpose and personal agency in establishing and living with a low carbon energy system. This would significantly increase the response to every well designed low carbon policy, planning proposal, product and service, thus reducing implementation costs.

However there are at least three catches:

**Catch 1:** *The approach sounds like an unappealing, woolly process unrelated to the ‘tough decisions that need to be made’.*

But the evidence shows that:

(a) people are increasingly rejecting those top-down decisions; and (b) structured discussions between lay-people about sustainable energy enhances understanding and transforms opinions and commitment to action.

(b) **Catch 2:** *It will cost money.*

But that cost would be dwarfed by the

resulting reduction in policy implementation costs.

**Catch 3:** *There is a ‘tragedy of the commons’ dimension to this problem.*

Everyone with a relevant policy goal or regulatory obligation gains significantly by nourishing public understanding and consent, but no one specifically gains *enough* to justify their direct investment in securing it. So no one takes it on and everyone free-rides, eroding public consent in the process. It needs direct government intervention and funding to address it in the public interest.

What has to change? Politicians and officials need to understand and commit to the process: to understand that the social and cultural conditions required for a successful transition do not currently exist, having been steadily eroded by relentlessly technocratic approaches over the past 35 years.

They need to make low carbon a ‘must do’ feature of every neighbourhood plan, and they need to fund the network of local facilitators to manage half a million well designed conversations.

Unless, and until, we secure a new level and quality of public consent for the transition to a low carbon society we will fail to achieve that goal.

We need a different approach which starts by trusting people to understand the challenges and opportunities and to make decent choices for their localities, framed by wider societal goals.

Without this, an uninformed, uninvolved, disconnected population will resent having to pay for low carbon policies through their bills and taxes; they will reject proposals to host the technologies in their landscapes, neighbourhoods, homes and businesses; and they will fail to adopt the smart and not-so-smart

behaviours needed in a low carbon energy system.

Half a million meaningful discussions will change this.

## Q&A

### What will be the big asks in these conversations?

Instead of asking people what they are going to do about climate change, we will ask people in groups how they are going to make a contribution to a low carbon society 'round here'. Then people stop talking about Jeremy Clarkson or China and they start thinking what the options are locally, what trade offs they might have to make and how they might be involved and might benefit from it. It is a really transformative process.



### People are very busy, they don't have much time. Why would they engage with your conversations and won't you just end up with the same people coming along who are already engaged?

That is the big challenge and is why it needs to be funded properly with a tight network of facilitators. We need to have conversations where people are already having conversations. This might mean training up hairdressers to have conversations when they are cutting people's hair, or going to talk to people in pubs. You must not assume that if you run a process in a village hall with some dusty sandwiches that people will come along. You would need to go to where people are already having conversations.

# Value the Customer

Cathryn Ross Chief Executive, OFWAT

**H**ow would it be if you discovered a new technology that could: Deliver huge environmental improvements and social benefits? Make your business more efficient? Generate ideas about new and better ways of doing things and new products? Inspire and engage your staff and deliver legitimacy across regulated sectors?

How much would a business pay for that new technology, that wonder widget? Quite a lot.

I can announce exclusively, that we have this technology today. We have that wonder widget....it is called A Customer.

Some companies have been wise to this for a while: the companies that are at the top of the customer service, satisfaction and trust league tables. Companies like John Lewis, First Direct and Pret A Manger.

But we all know regulated sectors are a bit different: the customer voice is less strongly heard. Regulated companies need a regulatory framework that informs, enables and incentivises them to do the right thing.

What regulators need to do is nudge, cajole, push and ultimately require the companies they regulate to own their relationship with their customers, to really understand what they want, and what drives their behaviour.

Companies need to stop thinking about customers as passive receivers of 'utility' services; to stop lazily thinking that 'we all know what customers want' and do the hard work of really understanding them.

To get beyond the idea of 'service provision' and to start thinking of customers as partners, as people who can make a contribution to the outcomes that customers and society experience from regulated sectors.

What does this look like? It is regulation that:

- requires and rewards good customer engagement - really incentivising frontier shift and building customer voice into the process;
- requires Boards to get involved in customer engagement;
- rewards companies for delivering what their customers want and need, rather than what the regulator says they should;
- sets a tough efficiency challenge so that companies have to innovate and think differently about their customers;
- celebrates innovation and best practice, names and shames the laggards;
- challenges and provokes debate – points out where there is scope for improvement, and takes as its benchmark not other utility sectors but the genuine ‘best in class’

Smarter regulation is regulation that does not replace customer power with regulator power, but harnesses the power of the customer to deliver customer information, customer voice, customer action.



# Use our leverage with Europe

David Baldock Chief Executive, IEEP

**W**e need to use the strongest levers we have to deliver sustainability. We need vision, the right frame, the right community, regulation (smart of course) and we need to have political momentum. Can we find these on our own? In the UK, with an oversized financial sector, a strong technical sector, hardly any manufacturing sector and not much ability to feed ourselves, almost certainly not.

But, conveniently, we are part of a club. Together we have a better balance of resources, skills and activities and can broadly feed ourselves. As a club we give each other the courage to act, we go beyond what we would do on our own, we set more ambitious targets and have a bigger impact on the energy sector than almost any other driver. The EU has the most advanced set of environmental policies in the world for that reason.

On a good day members can think long term, achieve sometimes uncomfortable targets, impose penalties for non compliance, agree support for each other in the face of external pressures, richer countries even give to poorer ones, not always graciously. There is a greater investment in science and technology. Product

standards can be set for 3-400 million people. It kind of works. In short, the EU is a laboratory for sustainability, it is something that is a microcosm of the macrocosm. And we happen to be members of it.

We have thought that we want to get more out of the EU. So the government is bravely standing up and asking for more. What have they got on the shopping list? Does it include increasing our environmental ambition? Achieving goals already set? Trying to deliver on sustainability? Currently it does not.

My proposition is that we need to have a word or two in the prime minister's ear to amend our demands of the EU to ensure that it adds one or two things that are about the future not the past. To ensure that David Cameron approaches his negotiations on the EU with environmental goals in mind.

What do you think would be a persuasive argument for David Cameron to take this on? I don't think he actually wants to leave the EU, and actually a lot of people, particularly young people, might be quite excited by something positive on the agenda. So adding in environmental 'asks' could add more traction to his side of the debate.

# Q&A



Is there a danger that by trying to reach agreement between 28 different countries you end up with the lowest common denominators?

Yes, in theory, but in practice no. The oddest thing is that the EU hasn't descended into the lowest common denominator, even after accepting the new countries. There have been a few family arguments, i.e. the Polish don't like the 2050 roadmap but on the whole debate and agreement has been very positive and the EU has carried on being a forum that people are happy to go forward with. We now need to ask it to go further.

# Crossing the Chasm

Simon Anderson Chief Strategy Officer, Green Energy Options Ltd

**T**he challenge with low-carbon technology is not getting it to work, but getting it to sell.

In the UK we pay a lot of attention to technical research and product development, we are happy to fund initiatives. As a nation we are curious and headstrong and happy to get behind ideas. As a result we are not short of the technology we need.

So why is it, with all this brainpower, that truly innovative technology, that could help promote energy efficiency and lower carbon impact, is still sitting on benches and hard drives labelled '*if only*'?

Part of the answer is addressing the challenge which Geoffrey A. Moore describes as "Crossing the Chasm": the gap between technology that works and large scale market acceptance.

The reason is that the sheer cost of marketing and selling new products is very high, and exacerbated by the cost of low-volume short-production runs. Getting to market is, to put it mildly, extremely challenging.

We are not without means: there are grants, awards, subsidies and tax rebates. But mostly to get products to market we rely on venture capitalists, all of whom are extremely wary of backing businesses that rely on subsidies, which can be withdrawn at the last minute.

This means that in the low carbon technology sphere the main funding route to market, the venture capitalist route, does not work. The net result is that great technology languishes on the shelf and research and development (R&D) money is wasted.

Here are three things that we could do :

1. Regulate rather than subsidise. It works: just look at cars and white goods since the introduction of fuel efficiency regulations.
2. Change procurement rules. There are two methods for procurement competitions: specify the solution and compete on price or specify the price and compete on solutions. The first works when buying commodities – but is used for everything. The second works for new products – but is rarely used. Requiring government and regulated industries to compete on solutions would open up significant volumes and get new products to market more quickly and more effectively.
3. Provide market entry funding. R&D funding usually focuses on the early stages. We need to work to focus it equally across the whole product development

spectrum to include market entry activities, particularly for SMEs.

To conclude we have much of the technology we need if only we could get it to market: we need to get to work on crossing the chasm from great ideas to mass market.

## Q&A

Surely as well as removing subsidies, governments can remove regulations?

Yes but regulations don't seem to be removed so easily. Subsidies follow the lobbying market, regulations stand a better test of time.



To what extent should government promote one technology over another?

Not at all. This is where regulation comes in. It is subsidies that distort the market.

# Engage young people

**Pip Roddis** International Delegate – UKYCC / Climate Change Policy Officer  
– RSPB

**T**he key to addressing our sustainability challenges is to engage young people. To sum it up in one word, or perhaps three immortal words: education, education, education. We need to educate and inspire young people to be the next generation of sustainability champions, as it's these young people who will inherit the global environmental challenges up to 2030, and beyond.

So how do we do that? First we need to get young people to care about the environment. Second we need to empower young people to do something with that passion, to tackle the sustainability challenges that we face.

My interest in environment and climate change, and what led me to take roles with the UKYCC and RSPB, can be traced back to being in nature with my family when I was young, looking at wildlife and learning to respect and value the natural world. It is well known that interacting with nature at a young age cultivates deeply held attitudes towards the environment and the world we all live in.

At the RSPB we often talk about the four horsemen, or horsewomen, of the environmental apocalypse, which we define as habitat loss,

pollution (including carbon emissions), invasive species and the over-exploitation of natural resources. But more and more we are talking about the fifth horseman – which is our disconnection from the natural world. If people don't feel connected to nature, if they don't care about the environment and understand why it matters, there simply won't be the will to tackle other environmental problems. In that sense, the fifth horseman is staring into the eyes of the other four.

The first thing we should do is put the natural environment at the heart of the national curriculum, and to make it a requirement that all young people are taught about caring for the natural environment. Being outside and having access to green spaces makes a huge difference, so as many lessons as possible should actually be taught outdoors.

Second, the Government should host and fund a National Schools Climate Conversation. Every school and university should have a public conversation, with their students involved, about how climate change will impact their institution and how they plan to manage their climate risk. These conversations should cover all aspects of sustainability, including food, water, energy and biodiversity, and should consider the risks posed

by climate change under a 2, 3, 4 and 5 degree scenario. This would help to make climate change more real to young people, and also give them a voice on how climate change should be managed. The outcomes of these public conversations could then contribute to a national schools risk register, delivered to the Prime Minister, so that young people are playing an active role in the democratic process around climate change.

The 10-11 year olds of today will be my age in 2030, and will have started out on their careers and adult lives. They are the ones who will quite possibly inherit a 2 degree plus world; a world that humans have never experienced before, and that we simply don't understand. We need to educate them and empower them with the skills, understanding and knowledge that they need to take on this challenge.

## Q&A

What should be dropped from the curriculum to accommodate these conversations?

You wouldn't need to drop anything. Being outdoors has been shown to have a range of benefits: better concentration, improved productivity, reduced behavioural problems, improved mental health so students would be able to concentrate even better!



# About Sustainability First

Sustainability First is small environment think-tank with a focus on practical policy development in the areas of sustainable energy and water.

Our aim is to improve knowledge and understanding of complex multi-disciplinary issues such as demand side response in the electricity market. We develop implementable ideas in key policy areas – such as energy, water and the roles of economic and other regulators in sustainability policy – where it can make a difference. We undertake research and analysis, publish papers and organise policy seminars. Our primary focus is on policy and solutions within the UK, but we draw on experiences and initiatives both within and outside the UK.

## People

### Director:

Judith Ward

### Associates

Dr Gill Owen  
Sharon Darcy  
Jon Bird  
Clare Dudeney  
Rebekah Phillips

### Trustees

Ted Cante CBE (Chair)  
Richard Adams OBE  
Phil Barton  
Sara Bell  
Derek Lickorish MBE  
Derek Osborn CB  
Trevor Pugh  
David Sigsworth

### Technical and Administrative support

David Sheales  
Claire Froomberg  
Jens Linblad

## Contact

### Sustainability First

11 Belgrave Road  
3rd Floor. IEEP Office  
London SW1V 1RB

Tel: 020 7340 0935

<http://www.sustainabilityfirst.org.uk>

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Photographs from the event at the House of Lords are available to view [here](#).