



A View from the Inside

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As academics we often refer to those ‘on the inside’ i.e. those working in industry, policy or the third sector who are practically engaged with and implementing those things we research. **Here we interview these people to capture some of their views, challenges and realities.** We do so in order to better appreciate how academics can contribute more effectively to their work

Judith Ward. Director. Sustainability First

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1. What does your job entail?

Sustainability First is a **small environment think-tank**, it’s been going for 15 years. It’s focus is sustainable energy and environmental policy...I think its **unique selling point is that it aims to make a practical difference and to look to shape policy in very implementable ways**...In 2010 we conceived of and set up what became the **‘GB Electricity Demand – Realising the Resource’ project**...We created a Smart Demand Forum – electricity networks, energy retailers, DECC Ofgem, consumer bodies for households and industry, a comms company, BEAMA (the appliance manufacturers body), ELEXON, and National Grid...One of the most important things was that we took everyone around that table on a journey and together we increased the understanding of what the electricity demand side might be. In a very systematic way we **produced 13 papers** [<http://www.sustainabilityfirst.org.uk/publications.htm>]...We hope the collective level of understanding around the GB electricity demand side may not fall back again below the level we’ve now benchmarked. We’re now **on the threshold of an ambitious new multi-partner project** on shaping a public-interest ‘voice’ for the water and energy sectors.

2. What is the biggest challenge you face in your work?

In the area of smart energy **everybody can very readily see and understand the ‘vision’ of what an innovative, smart, digital energy world might one-day look like. But, the real question – and a major challenge - is how do we achieve this in a practical way** with outcomes which are sustainable? Do we understand **the commercial realities of this smart world? Do we fully understand the regulatory issues? Similarly the role of policy and the kinds of intervention which may be needed – if indeed any – to kick-start this digital energy world?** Compared with the telecoms world, the utility world is still somewhat traditional. It’s presently quite hard to foresee how either current actors - or new ones - can innovate on a commercial basis to achieve transition at scale within some of our current frameworks. Above all, in investing to modernise the energy system and investing for the step-up to the low carbon, I believe **there’s an innate tension which we see play-out between how on earth do you invest and develop policies for the long term, in a world driven by wholly understandable short term drivers, such as affordability**...So then, the last point, which is a different order of challenge – and one I imagine, familiar to a university. Our GB Electricity Demand project, as a three-year year project, gave us the luxury of drilling-down in-depth. But in a purely practical way, for a small organisation, **actually communicating to the wider world what we learned - so that it really does feed-in - is quite hard** - because that’s about having additional time and resource to deliver that.

3. What would it mean to you to solve these challenges?

Potentially we are **on the threshold of a really significant change and transformation for low carbon** both on the energy side and the transport side...but for me, if we could solve this challenge it would mean **we’d have found ways to manage the transformation in ways which consumers actually want, so the changes aren’t imposed on them**...It would mean a great deal to me to solve these challenges by customers and consumers ‘pulling’ these things through. No-one requires consumers to buy expensive smart phones or electronic goods and there is a major market for those technologies. But, at present, we’re lacking a consumer ‘pull’ for smart innovative low-carbon energy, other than perhaps ‘early-adopters’. So, **what I’d like to see is ‘customer pull’ for green-tech - making it more affordable - and a market environment where customers deliver a low carbon world, rather than through government or regulation.**

4. In what ways can academics help solve this challenge?

Academics have a lot to offer. I think it’s partly to do with time-frames because on the whole **universities have the opportunity to look rather longer and further-out – and innovate via technologies which aren’t necessarily near to market**...I also think universities are doing a great job on their involvement in the many smart energy pilots...[but] one area where the universities could do a bit more, is in **trying to get to grips with how to leverage the many lessons which are coming out of these trials**...We really are developing an empirical learning base in the area of smart energy, but there’s a risk of funding more and more new projects without pausing to reflect. We need thematic analysis and meta-studies of these projects...Which leads me on to data - as I also think the **universities are really starting to think what to do with the legacy data from these pilots and trials**...how that data can be made available and be deployed to serve public interest issues and feed into policy-making and decision-making.

5. Are there constraints on your work that academics should be aware of?

Universities have a terrible dilemma in that the time frames in which they work are not necessarily commercial ones...It therefore means that the funding bodies and the **universities may need somewhat greater clarity on where they can add real value** on smart energy projects ...Universities also perhaps need to be mindful that companies, government, regulators and others in the policy arena may perhaps not look to peer review journals as a first ‘port-of-call’ for their information ...Academic **papers are sadly often unseen by the vast majority beyond the university sector** – even though they contain much material of wider interest.