

The role of cities, regions and towns in achieving net zero

December 2019

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There are many unknowns surrounding a net zero future but three things are very clear. Once these three things are accepted, it is obvious the transition to net zero needs to be led from our towns, cities and regions. Massive change is required. We need to start thinking in a new way about how we manage our society and political system as well as our energy system.

Firstly, people matter. We cannot impose new technologies on people without their consent, and conversely, if people are onside with carbon reduction it is usually massively cheaper than only technical solutions. For example, which costs more - using less heat or building new power stations?

Secondly, considering energy in isolation from wider infrastructure systems is unlikely to result in economically-efficient outcomes. The most obvious example of this is new housing development, which must be considered together with energy and transport infrastructure at a local level.

Thirdly, the economics of low and zero-carbon energy technologies are more dependent on location than fossil-fuel assets. Renewables projects which are highly economic for one town might make no sense for another a few miles away. The good news is we are able to control our energy networks at a much more granular and distributed level than ever before.

Cities, regions and towns have many virtues, but the main one is people have a strong connection to the place where they live and their community. If you want to motivate and engage people in a meaningful way for a sustained period and if you are asking them to make difficult trade-offs – for example around land use - you should probably start by engaging them where they live.

Locally is also where it is possible to make sensible integrated planning and infrastructure decisions – thinking about transport, energy, economic and housing infrastructure as a whole, for example, with all the necessary and fully-informed decision-makers in the same room. This is almost impossible to do at national level (without loss of the level of detail required to secure efficient outcomes).

So it's clear we need to give our cities, regions and towns a much stronger role in delivering a zero carbon energy system. What form should this take?

We are actively working on this in the West Midlands. There are trade-offs between working at the village or street level – which people can relate to – and the scale at which it is economic to manage markets and infrastructure (small city scale, perhaps, at best). We will need national system operators and infrastructure networks as well as city, region and community infrastructure.

To achieve an efficient transition to a zero-carbon future, cities and regions will need capacity, funding and powers to contribute to regulation and management of energy infrastructure locally. This could take the form of regional multi-utility regulators (analogous to local planning authorities) or regional energy infrastructure planning and commissioning bodies (analogous to strategic transport bodies, like Transport for London or Transport for the West Midlands). Neither of these approaches requires nationalisation – they can coexist with any form of ownership structure.

There are some excellent global examples of success. My favourite is from Connecticut in the US where a state-owned 'Green Bank' is funded by a very small (0.1c) levy on local energy bills to the tune of \$27 million a year. It has commissioned over \$1 billion of targeted green energy

infrastructure investment locally. In Europe, you need only look at Munich, where the integrated city energy/transport/telecoms utility, Stadtwerke Munchen, is credibly aiming to deliver zero carbon energy for Munich by 2025.

In the UK, we start from the massive handicap of having just about the least well-resourced local authorities in the developed world. Our local and regional government accounts for around 1.5% of total government income; in the US the figure is 9% and in Germany it is 11%. The OECD average is 9%. It is highly unlikely – without transfer of powers and funding from London – that most local authorities will have the capacity, resources or competence to be efficient and sensible consultees.

So recognising the role of cities, regions and towns in efficient delivery of net zero requires a much wider shift in our political system and a reversal of the centralisation of powers which has been endemic to the UK for the past century. We need greater and more consistent devolution, and we need it fast.

Matthew Rhodes is Chair of Energy Capital West Midlands, a non-statutory body established by the Mayor to develop and deliver a regional energy strategy for the West Midlands.