POLITICS

A train that can't be stopped – political implications of decentralisation

How powerful is the move towards smaller-scale, locally-based energy generation projects around the world, and what are the industry implications? *Marie Claire Brisbois* has been studying exactly these questions.

The rapid expansion of decentralised generators is shaking up the politics of electricity. Many of these new generators aren't the usual energy system suspects. They include cities, regions, social enterprises, not-for-profit groups, and other community and co-operatively-owned businesses.

The key defining feature of this sector is that generation, from their perspective, is an opportunity to address social and environmental goals. Profits are important, but not an overriding obligation to shareholders. As this sector develops, it has the potential to challenge the long-standing central political positions held by existing generators and utilities.

While still emerging, these decentrally-owned generators are slowly, yet very surely, securing routes to market, capturing market share, and shifting associated jobs and growth. This has consequences for who gets a say in energy policy decisions. One of Shell's 2013 New Lens Scenarios foreshadowed this disruption when it framed a future decentralised world as politically unstable. Meanwhile, many social groups view decentralisation as an opportunity to create a more democratic and equitable energy system.

With both hopes and fears pinned on this new decentralised reality, a research project led out of the Science Policy Research Unit (SPRU) at the University of Sussex has been investigating the political implications of decentralisation. The Powershifts project seeks to understand:

- if the decentralisation of generation ownership is indeed shifting patterns of political influence;
- what those shifts look like on the ground, and;
- what this means for political systems in the future.

The first phase of the project involved three deep dives into the politics of grid access for decentralised generation in Great Britain, the Netherlands, and Ontario, Canada. What came out were some important findings for the energy industry and policy makers.

First, is growing decentralisation shifting political systems? The short answer is yes, and the impact is growing stronger every day. The long version answers the second question: what do these power shifts look like in practice?

Netherlands Climate Accord

Not surprisingly, how shifts manifest depends on where you are. For example, the Dutch government recently passed a Climate Accord with a non-binding objective that 50% of all future renewable generation will be owned by community groups. This result isn't a product of ideological support for some fuzzy notion of 'community'. Rather, the Dutch government did two very pragmatic things. First, after concerted lobbying by Dutch energy co-operatives, they embraced the boom in decentrally-owned generation and contributed money to help the sector professionalise.

The government encouraged the development of a lobby group that could represent the interests of community and co-operative energy at relevant policy tables. This helped to reduce the burden on policy makers by consolidating policy 'asks' from the sector, and ensuring that community energy had skilled people at the table who could parlay effectively with highly resourced industry lobbyists.

The second thing that the Dutch government did was examine the evidence. Space is at a premium in the Netherlands. Any onshore renewables project requires high rates of social acceptance from the well-educated and politically active Dutch population. Inclusive community energy projects have higher acceptance rates than those where profits leave the community.

Meeting their ambitious renewables targets on schedule meant that the Dutch government needs to ensure projects won't be held up in court – *ergo* 50% community ownership. The details of implementation of the Climate Accord are still being worked out, but the implications for future system ownership are profound.

Uncovering shifts in Great Britain and Ontario required a bit more digging. While Great Britain does provide some resources for the community energy sector, these have not been matched by a commitment to political or

Photo: Shutterstock

regulatory inclusion. Both Great Britain and Ontario have consolidating lobby groups that try, with their limited capacity, to contribute to policy consultations and calls for evidence. However, both have seen only limited success.

There are more similarities between Great Britain and Ontario. Both places previously had feed-in tariff (FiT) schemes that allowed those with existing capacity in renewables development to make some very good money, very quickly. In both cases, there was considerable backlash against the FiT that led to its cancellation. In both places, potential decentrally-owned generators are begging for grid access.

Without a scheme that allows these generators a route to market, there appears to be no good business case for them.

Britain and Canada

The story could end there for the British and Canadian cases. However, project findings have revealed that decentralisation is, unequivocally, a train that can't be stopped. In the absence of supportive policy and regulatory regimes, decentralised generators are getting creative in their search for markets. Direct partnerships between community energy, cities, not-for-profit institutions, and grid operators are increasingly common.

As one British grid manager observed: 'it's probably too strong to say it's nationalisation through the back door, but you're getting much more participation of local authorities.'

One important detail is that any diversification of supply requires the support of grid operators. Across the three countries, almost all are supportive – so long as they are able to cover the costs of changes to the grid. From a major Dutch operator: 'we welcome decentralised energy production and we facilitate it to integrate it into our systems. It's our core task.' Rather tellingly, the only unsupportive grid operators were those that also own existing centralised generation assets.

Moving to Ontario, the current policy and regulatory regime is unsupportive of decentralised generation. In response, the Ottawa Renewable Energy Co-op recently set up the province's first direct power purchase agreement (PPA) with the Canadian Science and Technology Museum, facilitated by the local utility. With a guaranteed and reliable buyer, the co-op has been able to get financing for the project and sell shares to its members. Recognising the potential for partnerships with cities, the Ontario community energy sector is beginning to actively target municipalities for PPA development.

In Great Britain, Community Energy England, the association for decentrally-owned and local generators, has identified a number of strategies that their members are using to create viable business cases. Increasingly, community groups are working to buy up generation assets linked to existing FiT contracts and transfer them to community ownership.

A fully community-owned asset management company, Bright Renewables, has recently been formed that will help facilitate this kind of transactions. Like in Ontario, British community and local energy groups have also been turning to other behind-the-meter solutions, including PPAs, to ensure viability.

The British and Canadian cases aren't just examples of plucky community-minded and municipal energy groups who won't give up. Combined with the Dutch findings, they also help to answer the third Powershifts question: what do current trends mean for political systems in the future?

Unstoppable transition

The growth of decentralised generation is unstoppable. With falling technology costs, high public legitimacy, and creative business models built on partnerships beyond traditional system players, decentralisation is a defining feature of the ongoing energy transition. For politicians and regulators charged with maintaining a cost-effective and secure supply, this is a pressing issue. Any attempts to limit decentrally-owned generation will, quite rightly, be treated as regressive. The most logical solution is therefore an overhaul of unsupportive policy and regulation.

In places like Great Britain and Ontario, continued development of generation that is not at least coordinated through the official regulated system represents a threat to energy security and grid stability, with implications for the distribution of energy costs. These are issues that have inherent political consequences. They are also not a surprise. The need to better integrate and govern decentralised generation is something that the British Future Power Systems Architecture project has been highlighting in that country for the past several years.

Findings from Powershifts revealed that policy-makers and regulators in all jurisdictions are struggling to cope with the exploding diversity of players which play important roles in the evolving electricity system. It is therefore logical to build capacity amongst decentrally-owned generators to allow them to effectively lobby for their interests – as was done in the Netherlands.

With falling technology costs, high public legitimacy, and creative business models built on partnerships beyond traditional system players, decentralisation is a defining feature of the ongoing energy transition

While cities and regions often have existing political capacity, smaller groups require support to be able to participate effectively in policy conversations. These consolidated groups should be invited to relevant policy and regulatory discussions to ensure their interests are represented.

Critically, there needs to be a stable route to market so that decentralised generation can be coherently integrated into the system, even where governance, ownership, and control of these resources is decentralised.

There will inevitably be larger shifts in political systems as a result of decentralisation. In particular, the Dutch Climate Accord will integrate huge numbers of new actors into the generation system. As these actors find political voice, it will be very interesting to see how that is exercised. As one Dutch interviewee noted: 'we're not a threat to anybody at the moment. It'll be interesting when that hits them. But by then, it's probably too late.'

The social and environmental priorities of decentrally-owned generators mean that it's likely that their policy requests will differ significantly from traditional profit-oriented generators. Advocates of 'energy democracy' have predicted cascading changes to energy, social and environmental policies as a result of democratisation of the energy space. Interestingly, impacts of this nature weren't detected in the Powershifts case study results. However, the stage is set for their emergence.

The next phase of the Powershifts project is a 36-country survey of policy makers in economically developed nations which are involved in issues of grid access. Results from that research will build upon these findings to evaluate global trends. That information will be available by September. In the meantime, the political dynamics around decentralisation are, and will continue to be, a constantly shifting space. ●

Dr Marie Claire Brisbois is a Lecturer in Energy Policy at the Science Policy Research Unit (SPRU) at Sussex University.
ac.uk/spru