Community Energy in the UK, 2016: The Beginning of the End?

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Through the introduction of legislation that stands to exacerbate an already front-loaded risk profile onto renewables developments, community renewables currently faces an EU-wide existential threat. In many ways, the period following the election of a majority Conservative UK Government in Westminster in the spring of 2015 provides a useful picture of what this future EU-wide landscape might look like for community renewables.

A Cursory Cross-Section Through the UK Community Renewables Sector

A detailed overview of the community renewables market segment is provided by Harnmeijer et al. (2013) and Slee & Harnmeijer (forthcoming; preprints available on request). Since early beginnings in the 1990s, the segment has been growing by about 30% annually in raw capacity terms, which is roughly three times faster than the commercial market segment over the same period. Community electricity has vastly dominated heat in terms of project numbers, capacity and investment. Deployment has been dominated by onshore wind and hydro, with a short-lived boom of solar PV over the past 5 years that – as for all UK renewable electricity technologies – was curtailed by the

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Figure 1: Map of community energy projects in the UK. Source: Energy Archipelago (March 2016), http://energyarchipelago.com. See Harnmeijer et al. (2012) for information about this global dataset.

unexpectedly aggressive curtailment of support mechanisms in the second half of 2015. To date, there are no community marine renewable developments in the UK.

As might be expected, the scale of development varies enormously, from 10s of kW-scale hydro- and solar projects to the 9 MW Point & Sandwick community wind farm in the Outer Hebrides. As ambitions have grown and policymakers and practisioners have 'learned by doing', the average size of community developments has steadily risen over time.

UK community renewables stands apart from analogous market segments elsewhere by virtue of an unusually rich diversity of legal structures and business models. These show strong regional variation, however, with energy cooperatives dominating in England, Northern Ireland and Wales; and community trusts dominating in Scotland. The past decade or so also saw an exceptionally varied upsurge in community joint ventures with commercial developers, wholly concentrated in Scotland. In the European context, there exists an unusually small role for local authorities in the

Policy shock	Technology				
	Anaerobic Digestion	*Hydro (run-of-river)*	*Solar PV*	*Wind (onshore)*	*Wind (offshore)*
ROC termination date			Closure brought forward	Closure brought forward	
CfD auction no. 2	Postponed, possibly cancelled	Postponed, possibly cancelled	Postponed, possibly cancelled	Postponed, possibly cancelled	Postponed, possibly cancelled
FiT pre-accreditation	Removed	Removed	Removed	Removed	n/a
FiT levels	Consultation expected late 2015	Curtailed, and may be removed, as of January 2016	Curtailed, and may be removed, as of January 2016	Curtailed, and may be removed, as of January 2016	n/a

Table 1: Overview of changes to main UK renewable electricity support mechanisms, 2015.

Technology	Band (kW)	Before (p/kWh)	Consultation (p/kWh)	Consultation Δ (%)	Decision (p/kWh)	Decision Δ (%)
Hydro (run-of-river)	0 – 15	15.45	10.66	-31	8.54	-45
	15 – 100	14.43	10.66	-26	8.54	-41
	100 – 500	11.40	9.78	-14	6.14	-46
	500 – 2000	8.91	6.56	-26	6.14	-31
	2000 – 5000	2.43	2.18	-10	4.43	82
Solar PV	0 – 4	12.47	1.63	-87	4.39	-65
	4 – 10	11.30	1.63	-86	4.39	-61
	10 – 50	11.30	3.69	-67	4.59	-59
	50 – 150	9.63	2.64	-73	2.70	-72
	150 – 250	9.21	2.64	-71	2.70	-71
	250 – 1000	5.94	2.28	-62	2.27	-62
	1000 – 5000	5.94	1.03	-83	0.87	-85
	Stand alone	4.28	1.03	-76	0.87	-80
Wind (onshore)	0 – 50	13.73	8.61	-37	8.54	-38
	50 – 100	13.73	4.52	-67	8.54	-38
	100 – 500	5.89	4.52	-23	5.46	-7
	500 – 1500	5.89	4.52	-23	5.46	-7
	1500 – 5000	2.49	0	-100	0.86	-65

Table 2: Changes in UK Feed–in Tariff (FiT) regime for dominant renewables technologies, 2015.

UK segment, with few exceptions. This goes a long way to explaining the dearth of community renewable heat projects.

Policy Shocks

Three key support mechanisms currently support renewable electricity generation by independent power producers in the UK: the Renewables Obligation ('RO'), the Feed-In-Tariff ('FiT') and the Contract for Difference ('CfD'). A fourth mechanism, the Renewable Heat Incentive ('RHI'), applies to renewable heat. Between them, these mutually exclusive mechanisms span the breadth of major

renewable energy technology types and capacity classes.

Beginning on the 18th of June, 2015, a sequence of policy reforms were introduced that, as an ensemble, signalled an intention to phase out support schemes specific to renewable electricity across the UK (Tables 1 and 2). The general trend is now towards technologically agnostic auction-based systems that add further risk to what was already the riskiest phase of project development, particularly for communities (Harnmeijer et al., 2015): the 'development' stage before financial close is achieved.

Another major blow to UK community renewables came through tax reform. Tax benefits, such as the 'Enterprise Investment Scheme' (EIS) and the 'Seed Enterprise Investment Scheme' (SEIS), have played a key role in energising community investment into renewables. They have incentivised market access to non-specialist investors, effectively lowering hurdle-rates (= cheaper cost of capital) and giving projects access to finance at rates more favourable than available through commercial finance providers. Both were removed on the 1st of November 2015.

A Bleak Outlook – Except, perhaps, in Scotland

As is currently the case in Brussels, a simplistic (and disappointingly under-informed) narrative of 'subsidy-free' renewables has overtaken present discourse at Westminster, with no mainstream discussion of the long-term opportunity cost: missing out on the important positive externalities associated with community renewables, which stands to be impacted disproportionately.

As far as the UK goes, all eyes are now on Scotland, where a devolved administration is presently hard at work preparing an eagerly awaited new Energy Strategy (anticipated in the Autumn 2016) that is widely expected to place community energy centre-stage. In Scotland, community renewables enjoys cross-party support, together with general recognition for benefits not currently internalized through the market. There is every reason to believe, therefore, that Scotland will become even more than a bastion of UK community renewables than it already is.

Reference

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