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State, community and the negotiated construction of energy markets: Community energy policy in England

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1. Introduction

In this paper we investigate the politics of market construction. We do so using the empirical example of energy markets in the UK and their governance through communities. The last 30 years have seen competitive energy markets become the central model for organising national energy systems around the world, particularly throughout much of the global North. International governance institutions, including the European Commission, have overseen drives to privatise and ‘liberalise’ energy systems, underwritten by belief that market forces represent the most efficient means of regulation (Helm, 2003; Jamasb and Pollitt, 2005). Yet persistent ‘market failures’ and their negative social and environmental consequences are widely acknowledged (Helm, 2002; Bolton and Foxon, 2015). This contradiction is a central pivot in an ongoing ‘double movement’ between pro-market and pro-social action (Polanyi, 1944), which together constitute energy market construction.

A philosophical commitment to deregulation, combined with a social responsibility (and electoral imperative) to mitigate its worst effects on people and the planet, creates challenges for governments. One response has been to enrol other actors and technologies to implement and enact change, part of a strategy of governing ‘at a distance’ (Rose and Miller, 1992). This has notably included mobilisation or co-optation of ‘community’ across multiple policy domains (Somerville, 2016), including energy.

Although there is a burgeoning literature on *governance of community energy* to meet climate change and sustainability goals, to date little explicit attention has been paid to community as a *means for governing* energy markets, which is our primary concern here. We look at the UK government’s Community Energy Strategy (DECC, 2014a, 2015) to explore how this sector is understood as a potential driver of market change. Drawing on a large, unique body of empirical research, we present a case study of the entangled and contested processes of making markets. Our research covers four modes of energy market construction: making policy, shaping existing markets, creating new markets and cultivating consumers. We take our cue from a number of distinct but complementary developments in recent economic sociology and geography, which build on Polanyi’s (1944) insight that

establishment of market-oriented economies is inherently social, political and far from inevitable. In combination these contributions emphasise: the partial, uneven, spatially contingent and conflictual processes of instituting (neo)liberal governance regimes (Brenner et al, 2010); the necessarily active and ongoing construction of markets (Beckert, 2009; Caliskan and Callon, 2010); and the diversity of interdependent economic practices and discourses at work in any given social context, undermining the assumed ubiquity of capitalist commodity production for market exchange (Gibson-Graham, 2006a, 2006b). In response, this paper seeks to document and understand ‘actually existing’ negotiations between competing logics in market construction, focusing on attempts to govern markets through communities (and communities through markets). Following Gibson-Graham’s (2008) call to ‘re-read for difference’, we look again at the multifaceted relationship between government and community representatives to consider the different dynamics at play beyond a unidirectional story of government co-opting community. In particular the article adds to existing literature by highlighting, in the case of UK energy markets: (a) the heterogeneity of understandings, purposes, technologies and organisational forms coalescing between *but also within* states, communities and the commercial sector; (b) how contestation between market and non-market logics patterns organisation and action at multiple orders of magnification, in what might be termed a *fractal* double movement; and (c) how these recursive processes of negotiation, resistance and conflict are performed differently, to varying effects according to their specific contexts. While our findings have immediate relevance to understanding deployment of community in governing energy markets, our ambition is that the analysis makes a significant contribution to broader debates on the politics of markets and marketisation.

2. The negotiated construction of markets

Markets are important means of regulating behaviour and creating order in contemporary societies. Indeed, “markets are the central institutions of capitalist economies” (Beckert, 2009, p. 245). At a basic level dominant policy discourses assume that markets are efficient and

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achieve optimal distribution of resources: consumer choice is seen to regulate providers of goods and services, keeping prices low and quality high; conversely price signals regulate levels of demand (Blaug, 1997).

But markets are not natural phenomena. They are not *a priori* ‘forces’ (Mitchell, 2008); nor are they the only or necessarily primary form of economic behaviour (Polanyi, 1944). All markets are constructed. They evolve or are ‘invented’ through processes of marketisation (Caliskan and Callon, 2010), rooted in broader social and material configurations at particular points in space and time:

“all economies are socially hosted, politically mediated, and institutionally regulated ... economic forms, behaviors, and relations are inescapably embedded in ‘instituted’ social forms, behaviors, and relations.” (Peck, 2013a, p. 1541)

The inherently social and political (or embedded) nature of markets renders them unstable, requiring ceaseless intervention to function in ways that meet societal goals: “the fully self-regulating market is a utopian project; it is something that cannot exist” (Block, 2001, p. xxiv). Moreover, construction of emergent social phenomena such as markets is multilateral, occurring at the intersection of multiple interests. Their continual making and remaking is thus always a *negotiated* process.

Markets are shaped from both ‘inside’ and ‘outside’ (Muellerleile, 2013) by everything from acts of parliament, corporate strategy and collective civic action to the mundane details of individual transactions. Enhanced understanding of market construction therefore implies dialogue between a political-economic concern with the structural/institutional determinants of markets and a cultural-economic focus on their inner workings, bridged by geographical accounts of spatial variation in how markets take form and are governed (Hall, 2011, 2012; Peck, 2012; Muellerleile, 2013; Christophers, 2014, 2015).

Our interest here is in how contestation and negotiation play out at multiple sites and scales. At the macro level, market construction entails the creation of institutional conditions for widespread market-based exchange to flourish. 19th-century England saw concerted political effort to construct a ‘market society’, driven by pursuit of a self-regulating economy, but met by a reactive ‘countermovement’ for social protection (Polanyi, 1944). Likewise, more recent accounts of ‘actually existing’ neoliberal political projects reveal a story of situated conflict and crisis management (Brenner and Theodore, 2002; Peck et al, 2018; see also Leitner et al, 2007).

Two particular features of Polanyi’s (1944) dialectical ‘double movement’ are worth emphasising. First, it is primarily a conflict between logics or ‘organizing principles’ – between ‘the principle of economic liberalism’ and that of ‘social protection’ – rather than strictly a conflict between rival factions of ‘market’ and ‘non-market’ actors (Polanyi, 1944 p. 138). Second, the double movement is characterised by a somewhat counterintuitive interplay between intentionality and spontaneity: pro-market reforms require more political will and coordination than might be assumed; pro-social interventions are not always the outcome of deliberate strategy. As Polanyi puts it, ‘laissez-faire was planned; planning was not’ (Polanyi, 1944 p.147).

While Polanyi’s analysis considers societal-level transformation over a broad sweep of time, our argument is that similar patterns of contestation and negotiation are visible when observing the construction of markets at ever-closer quarters. This means taking seriously the politics of market-making beyond the traditional political-economic concern with large-scale, enduring social structures. By recognising markets (and states, communities, etc.) as performatively reproduced in everyday discourse and practice, the future of these arrangements becomes ‘up for grabs’. The challenge is less to dismantle the status quo than to make something different (Gibson-Graham, 2006b). Despite this, a critical question remains: “not why markets, in theory, are fragile but why, in practice, they are not” (Christophers, 2015: 1861). Here, Butler’s (2010) clarification that most performative acts are of a weak, ‘perlocutionary’ kind is helpful. They exist in tension with other discourses and practices, producing “certain kinds of effects ... if and only

if certain kinds of felicitous conditions are met” (p.152; see also Callon, 2010; Christophers, 2014). How do these conditions arise or otherwise? Cardwell (2015) draws further on Butler (and by extension Foucault) to consider how disciplinary power operates in the “management of possibility” (p.712), cultivating particular types of (market) actor and making certain forms of exchange more likely to emerge than others. These live questions are pertinent to our own analysis of the uses of community in governing market activity.

For example we might home in on the creation, governance and day-to-day functioning of particular markets, themselves the outcome of ongoing negotiation through strategic and everyday performance. The negative by-products of markets ‘provoke’ different actions from society (governments, businesses, political activists, interest groups, civic movements etc.), but despite being ‘ultimately triggered by the (same) contradictory forces of marketization’ (Peck, 2013b, p. 1560), these actions take different forms in different contexts. There is value, then, in investigating conflicting impulses within ‘actually existing’ sites of market exchange: markets for particular goods and services, located at particular points in space and time (Peck, 2012).

At this point we might broaden our view again to explore how that market co-exists with the diversity of other economic relations and modes of exchange thriving within supposedly ‘commodified’ economic spheres (see Gibson-Graham, 2006a; Williams, 2005). Alternatively, we might narrow our focus further to examine the character of particular transactions. Even commercial and consumer activity that initially appears driven by profit motives or utility maximisation frequently involves appeal to more classically ‘social’ logics (White and Williams, 2010; North and Nurse, 2014).

In the empirical analysis that follows, we apply this approach of zooming in and out (cf. Nicolini, 2010) to explore the continual (re) construction of energy markets. In doing so, we observe similar patterns of contestation and negotiation at multiple levels of focus: this can be understood as a fractal double movement.

3. Communities, energy markets and the state

In this article we are particularly interested in the state’s role in managing the contradictions of (energy) market activity which – through the impossibility of becoming truly ‘disembedded’ – create conflict in the sociomaterial realm. The state is but one point of mediation between market and non-market logics, but it remains a powerful locus of change.

Like markets, states are constructed from inside and outside. Government is an ongoing accomplishment of actors, protocols and technologies working together in departments which have differing remits, goals, and relationships with other departments, while also being subject to overarching institutional logics about how to practise statecraft. Furthermore, neither markets nor states can be understood in isolation from their contexts. Markets operate differently in different situations; they vary in their internal logic, having different ‘rules’; people and institutions engage differently with different markets; states look to shape markets in different ways (and so on).

This leads us to question what makes energy markets distinctive in comparison to other forms of market. Energy – used for heat, light, mobility (and so on) – is a necessity for sustaining individual human life and for societal organisation. Arguably energy provision could be considered a public rather than private good (Abbott, 2001; Brown, 2001).

Energy markets facilitate exchange of various goods and services. This includes production and supply of electricity generated from different sources. In 2017, for example, 40% of UK electricity was generated from gas combustion, 29% from renewable energy sources and 21% from nuclear energy (BEIS, 2018a). 86% of homes in Great Britain are supplied with mains gas for cooking and heating (BEIS, 2018b). This is higher than most other countries: for instance district heating rather than mains gas is responsible for over half of heating and cooling

demand in many northern European nations including Denmark, Sweden and Finland, and in other countries liquefied gas, oil and solid fuels remain prevalent (European Commission, 2016a). Each of these subsets of energy markets has its own distinctive traits. However, energy users remain distanced from the technicalities of where their gas and electricity comes from, in part reflecting the predominance of centralised energy supply (Soutar and Mitchell, 2018). From a user perspective energy markets deliver homogeneous products, which makes energy difficult to marketise as a consumer good (Giulietti et al, 2005).

The structure of the UK energy system is complex. Gas and electricity grids are nationally coordinated, with regional bodies responsible for distribution to households. Different retailers then act as mediators, buying the energy produced by generators and selling it to customers (energy users). Market arrangements proliferate between and across the different types of energy organisation involved, yet with limited product differentiation for end-users. Individual generators generally need to connect to the national grid to buy and sell energy; the alternative is to develop new 'private wire' arrangements by installing new cables to deliver energy directly to customers. This is costly and potentially represents a risk to continuity of supply: usually private wire customers retain a grid connection as back-up.

3.1. Governing energy markets

The generation and distribution of energy has a long, varied history of direct state involvement – in a legislative capacity, as a supplier, and in ongoing regulation – reflecting energy's status as critical to national wellbeing (Helm, 2002). The prevailing trend since the early 1980s has been state-led energy liberalisation programmes, seeking to create conditions for more efficient energy systems through reduced public ownership and increased competition (Jamasb and Pollitt, 2005). The extent of privatisation and deregulation in national energy systems varies, even within the EU where market liberalisation remains an explicit policy goal. The UK was a forerunner within Europe (Bulmer et al, 2007), while leading lights of liberalisation elsewhere include Australia, New Zealand, Chile and Argentina (Jamasb and Pollitt, 2005). Many EU nations, including France, Denmark, the Netherlands and Sweden have retained significant levels of public ownership; majority state-owned enterprises account for 24% of EU energy industry turnover (European Commission, 2016a).

Regardless of national differences, the imagined self-regulating market has never materialised. Energy markets have failed in two related senses. First, they have produced negative 'externalities'. These range from greenhouse gas emissions to a raft of social consequences stemming from regressive pricing structures, differential access to tariffs and energy sources, and socio-spatially uneven impacts of environmental damage (Goldthau and Sovacool, 2012).

Second, energy markets have failed to function effectively through breakdown in internal order. In general, Beckert (2009) identifies three key sources of market instability: problems agreeing the *value* of heterogeneous products; deficits of *competition* leading to higher prices than economically necessary; and the social risks of *cooperation*, reflecting uncertainty as to the intentions of the exchange partner or the qualities of the product or service to be exchanged. In energy markets, problems of cooperation and competition have dominated. In the UK, for example, customer trust in energy companies is low (Yougov, 2014) owing to a history of market abuse, lack of transparency, complex tariff structures and perceived overcharging (Ofgem, 2014). In addition, weak competition and the legacy of a regionally organised supply system further contribute to low levels of switching between energy providers (Ofgem, 2014). Entry barriers for new suppliers are high (Koh and Goucher, 2014), reducing scope for increased competition.

3.2. Constructing communities for market governance

If markets are inevitably unstable and do not satisfactorily self-regulate, the challenge for contemporary liberal governments is to find ways of intervening while maintaining the primacy of market mechanisms as the central means for coordinating complex systems. The resulting balancing act means adopting "a range of devices which seek both to create a distance between the formal institutions of the state and other social actors, and to act upon them" (Miller and Rose, 1992, p. 297). One potential outcome is for indirect intervention through 'market-shaping', nudging actions and enrolment of other actors to carry out the work of government (Eadson, 2016).

An increasingly popular approach to governing 'at-a-distance' is via the malleable notion of 'community'. This has become an important part of policy discourse in numerous domains (Somerville, 2016; Rose, 1996) including energy transitions. There is a burgeoning body of literature on this subject, particularly regarding environmental sustainability (Taylor Aiken et al, 2017), but not specifically on uses of community in governing energy markets.

'Community' variously refers to the target population of interventions or the actors that implement them, and in many cases both simultaneously (Walker and Devine-Wright, 2008). Elided with 'local', community often implies a scale of activity, strong interpersonal ties and/or shared meanings (Taylor Aiken, 2015). As a mode of organisation or of economic activity it suggests a third way, distinct from market or state (Levitas, 2000). While there are important differences between uses of the term, it is common for 'community' to be used imprecisely, implicitly drawing on several of these associations at the same time. Alongside an underlying understanding of community as virtuous (DeFilippis et al, 2006; Delanty, 2010), its versatility as a term is appealing from a governmental perspective.

For various reasons communities might helpfully be 'put to use' (Taylor Aiken, 2015) in achieving governmental goals for energy markets. 'Governing-through-communities' (Rose, 1996) provides ways to indirectly intervene in markets at a distance from government; communities are seen as non-political intermediaries, able to enrol non-state actors to willingly act on state goals (Rose, 1996). Community becomes an important object for contemporary statecraft whereby "power is not so much a matter of imposing constraints on citizens as of 'making up' citizens capable of bearing a kind of regulated freedom" (Rose and Miller, 1992, p. 174). Community as a governed territory has its own appeal. The sub-local scale is often a state institutional void, with few formal structures in place (Eadson, 2016). This allows freedom for policy experimentation, unencumbered by existing institutions and path-dependencies. Similarly, as non-party-political entities, communities can potentially be enrolled and mobilised by central government in ways that, for example, local authorities cannot. In sum, "Community ... is not a site removed or free from state power and state effects, but is a key site where the state can be seen to act" (Taylor Aiken, 2015, p. 777).

Viewed in relation to market failure, communities offer a range of possible solutions. Community energy activities potentially provide a source of new market competition through energy production, distribution, storage and supply; a site of technological, social and economic innovation; and a means for achieving behaviour change among energy 'consumers' (DECC, 2014a). They could also include fostering 'critical niches' (Smith et al, 2016) offering alternative economic models less reliant on largescale financial systems to operate or promoting more radically distributed ownership of energy systems.

Of course communities are not only governmental constructs; a large part of their appeal to policy actors stems from the success of existing civil society movements. Examples include the growth of community energy as a sector in the UK, Australia and the United States as well as cooperative energy movements across Europe (Becker and Kunze, 2014), notably in Germany and Denmark. Community is well established as an arena of negotiation (cf. Bond, 2011; Spencer, 2012;

Armstrong and Bulkeley, 2014; Creamer, 2015). Situating community as governmental object and as arena of civil society organisation therefore places it as a point of negotiation between governmental logics, broader ‘landscape’ forces (such as the primacy of markets) and beyond-market values.

We now introduce the empirical material for the article by briefly outlining the UK policy context and research methods, before proceeding to thematic data analysis.

4. Community energy policy in the UK

In the UK, activities known as ‘community energy’ have a history long predating their emergence in mainstream policy. A broad definition includes energy generation, purchase and/or conservation initiatives owned or operated by, and benefitting, communities of place or of interest (Walker and Devine-Wright, 2008; Seyfang et al, 2013). Community energy has existed at least since the advent of the alternative technology movement in the early 1970s and until recently with little state support (Smith, 2003; Walker et al, 2007; Hargreaves et al, 2013). Small-scale renewable energy has had a longstanding association with radical movements seeking holistic and democratic approaches to sustainability transitions. These currents are by no means extinct, notably expressed in the activities of the Transition movement (North, 2010; Seyfang and Haxeltine, 2012).

Policy interest in community energy grew in the 2000s, exemplified by the energy white paper, *Our Energy Future* (DTI, 2003). This positioned decentralised renewable energy generation as central to future supply, especially in the context of low carbon transitions, making it ‘the first articulation of the importance of the local level in national [UK] energy policy’ (Catney et al, 2014, p. 719). The Climate Change and Sustainable Energy Act 2006 subsequently aimed to increase prevalence of microgeneration and imposed a duty on the Secretary of State to ‘promote community energy projects’ (Section 19). The following white paper, *Meeting the Energy Challenge* (DTI, 2007), continued to advocate community renewable energy and the role of community organisations in promoting individual energy behaviour change (pp. 62–3).

Between 2001 and 2010 various government-backed initiatives were launched, each supporting, promoting or funding community energy and framed as responses to climate change and/or fuel poverty.¹ Notable examples include: the Community Renewables Initiative (2001–07) and Community Action for Energy (later Green Communities, 2002–11), which facilitated the development of community-led energy efficiency and renewable energy projects; the Community Energy Saving Programme (2009–12), obliging energy companies to deliver energy efficiency measures for households in specific low-income areas by ‘forming, and utilising existing, local and community partnerships’ (DECC, 2011, p.10); and the Low Carbon Communities Challenge (2010–12), which provided funding and advice for local projects delivering a combination of renewable energy, installation of domestic energy efficiency measures, and educational or engagement activities.

The community energy sector was also affected by policy changes from 2010 onwards, coinciding with transition from a Labour government to a Conservative-Liberal Democrat coalition. These included: introduction of, and subsequent reductions in, feed-in tariffs providing financial incentives for renewable energy generation; and the short-lived Green Deal, which financed loans for energy efficiency measures in domestic properties, designed to be paid back via savings in fuel bills. These developments represented a “significant shift ... away from grants and the subsidy of upfront investment costs, and towards revenue-guarantee schemes to encourage new forms of ‘community

enterprise” (Hargreaves et al, 2013, p. 871). These sit within a broader response from government and the independent regulator, Ofgem, aiming to promote greater market diversity.

For much of the period described above, UK community energy policy was prolific but unsystematic (Smith et al., 2016). In response, the 2010–15 coalition government developed a national Community Energy Strategy (CES) (DECC, 2013a, 2014a, 2015a). The CES drew on research evidence and was produced in consultation with community energy actors. It consolidated existing and proposed measures to support the sector to form partnerships, build community capacity, share knowledge and measure impact. It also announced and/or promoted funding streams, most prominently the Rural- and Urban Community Energy Funds (2013 onwards and 2014–16 respectively). These funds provided small grants and loans for initial development of renewable energy projects. They focused on pump-priming private investment to take projects to full market ‘readiness’ (DECC, 2014b), at which point private finance was expected to cover construction and implementation.

Market logics pervade the CES. Ministerial statements exhort communities to “exercise real market power” (Ed Davey, Secretary of State for Energy and Climate Change), “increase choice and competition” and “break the grip of the dominant big energy companies” (Gregory Barker, Minister for Energy and Climate Change; see DECC, 2014a, p. 4 and p. 50). Community energy is framed explicitly as a means to improve market competition and consequently produce a better functioning energy system.

4.1. Methods

This article draws on four research projects delivered between 2013 and 2017. The main primary data sources are two UK government-funded projects investigating programmes that feature prominently in the CES (DECC, 2015b; DECC, 2015c); these are supplemented by data from a University-funded research project on collective switching, and further interviews with community energy practitioners conducted specifically for this article. Ethical approval was granted by Sheffield Hallam University for each stage of the research. Although individual projects had different research questions to those we ask here, combining these datasets provides a powerful evidence base for analysing community energy policy processes. 227 in-depth qualitative interviews were conducted across the projects, including interviews with representatives from UK government, national charities, industry bodies, local authorities, voluntary and community sector organisations, domestic energy users and private companies. Interviews were professionally transcribed and were re-analysed in development of this article, which also draws on analysis of monitoring data from the Big Energy Saving Network and collective switching projects. Data underwent initial coding for each individual research project. Subsequent reflection on these studies highlighted common themes around the malleable uses of community and conflicting market/non-market logics, prompting our present focus. We first revisited the CES, coding portions of the text relating to the meanings and uses of community, responsabilisation of energy consumers and the marketisation of the community energy sector. We then returned to the empirical data, developing a new thematic coding framework specific to our current research questions on contested processes of market construction.

The following sections focus on this empirical material, exploring the fractal negotiated processes of market construction at different points within the policy process and at different levels of magnification. These are summarised in Table 1, which sets out arenas for negotiation and contestation, governmental tools involved, discourses of community deployed, roles of community and key points of negotiation and contestation. The interventions we examine here share an understanding of community energy as both vehicle and target for market (re)construction. Despite variegated manifestations, the common thrust throughout is one of drawing energy communities further into market

¹ For a more detailed overview of policy developments over this period see Walker et al (2007) and Catney et al (2014).

Table 1
Sites of negotiation and contestation in governing markets through communities.

Arena	Governmental tools	Discourse of community	Role of community	Empirical examples	Key points of negotiation and contestation
Negotiating and producing state logics of intervention	Consultation, facilitation, publication	Multiple, conflicting	Voluntary and community sector representatives on CES advisory group	Community Energy Strategy	Conflicting discourses of community and of markets; variations within 'the state' (e.g. between civil service and ministers), and within community energy sector (e.g. size and purpose of organisation)
Negotiating new logics of action through market-shaping	Market subsidies, bridging loans, competitive grants	Community as place; community as organisational entity	Increase supply-side competition	Feed-in-tariffs; Urban and Rural Community Energy Funds; financial mechanisms for leveraging investment	Deliberations over the changing nature of the community energy sector; negotiating with market structures to achieve non-market outcomes – working 'in-against-and-beyond' market structures
Negotiating new markets as alternatives to incumbent systems	Loans, competitive grants and consultancy expertise	Community as geographic container	Construct new energy markets	Heat Networks	Challenges of constructing new markets for new systems against embedded incumbent system – difficulties stabilising new systems as market objects through negotiation with a range of stakeholders including consumers and suppliers
Negotiating market logics to cultivate energy consumers	Information provision and financial inducements	Community as collection of individual consumers; community as trusted intermediary; community as local authority	Intermediary for delivering state programmes	Big Energy Saving Network; Collective Energy Switching	Co-option of community for market-oriented goals, albeit with limited impact on markets; but evidence of reappropriation by communities (if not active resistance)

modes of exchange (as producers or consumers), in order to facilitate better (self-)governance of those markets and address their social and environmental externalities.

Analysis begins with a short exposition of the policy-making process behind the CES, to reveal the conflicted nature of policy construction. We then consider how market-shaping activities in the CES have impacted on the community energy sector, before homing in on an example of new market construction. Finally we explore how demand-side measures have been translated and mediated as they have come to ground.

Although the CES is a UK-wide document we focus on England: increasing divergence between England and the devolved nations of Northern Ireland, Scotland and Wales adds additional complexity that we felt unable to convincingly capture here for reasons of space and internal coherence of the article.

5. Negotiating and producing state logics of intervention

Consistent with Polanyi's conceptualisation of institutions as "culturally created, stabilized and challenged in different places and at different times" (North, 2016, p. 438), the community energy sector is subject to different interest groups that shape it as both subject and object. As introduced above, community energy was never neutral; before mainstream policy interest it had an already long and diverse history, including significant grounding in grassroots social and environmental movements and with experience of negotiating relationships with states and markets. The development of the CES itself involved a range of different actors, including an advisory group consisting of community energy bodies, energy industry representatives, think tanks, local authorities and individual community energy projects, as well as civil servants from the Department for Energy and Climate Change (DECC) and the Department for Communities and Local Government (DCLG).² All funding commitments also required assent from The Treasury (HMT). Lobbying by different community energy umbrella bodies was important to press the case for greater strategic commitment from government (Smith et al., 2016), but different actors *within* government also viewed the purpose and importance of the strategy differently. Stakeholders saw the then Secretary of State for Energy and Climate Change, Liberal Democrat MP Ed Davey, as the 'driving force' for the CES, particularly one that viewed community energy as a potential market corrective. Civil servants in DECC were reportedly less keen, leading to conflicting ideas about the strategy's purpose:

"The main reason it came out was the driving force of people like Ed Davey who really wanted to do something, but the civil servants back then didn't really understand what the point was and it was very much the Lib Dems pushing it. Also in terms of lack of understanding [by the civil servants] I remember there was a big debate over fracking; they wanted fracking within the community energy strategy cos they see it as it's local energy and fracking would then give money to local community to counteract the damaging effects or whatever, so it was about getting over that perception that community energy isn't about an energy project being done to the community and giving them money." (National stakeholder, interview)

This stark example illustrates how divergent understandings of community, and of community energy as a market phenomenon, were negotiated at the macro level of national strategy. Community energy bodies sought to raise the profile of the sector and gain increased support from government; some leading politicians saw potential in

² In June 2016, DECC was subsumed within the Department for Business, Energy and Industrial Strategy (BEIS). In January 2018, DCLG became the Ministry for Housing, Communities and Local Government (MHCLG).

community empowerment to correct market failures; others in the administrative arm of the state saw communities as a potential impediment to/enabler of energy policy goals and commercial interests, to be carefully managed through financial compensation.

Despite broad consultation some respondents felt that a particular conception of community energy was being advanced, in part due to precisely who represented the sector:

“They were from the bigger, more professional side of community energy, so they were great people who were doing it for the right reasons but it probably didn’t pick up the other smaller community energy type projects so it was probably swayed in a particular direction.” (National Stakeholder, interview)

This ‘particular direction’ was “the start of us moving away from the whole community development-type-thing more into being seen as part of the energy market”, making “community energy more of a viable option” (National Stakeholder, interview). From this view, governmental attempts to marketise community energy can be seen as an economisation process making projects legible as governmental and societal objects within a set of institutions dependent on economic processes (Rydin et al, 2015). More specifically, the particular actors involved (and not involved) in negotiating the strategy shaped the framing of community energy that emerged: the role of the Treasury in signing-off funding requests, the preconceptions of DECC officials, the ideological commitments of ministers, and the representatives involved in the consultation process all affected how community energy markets came to be constructed within the strategy. Likewise both quotes above also show how market/beyond-market pressures cannot be straightforwardly read-off as ‘large companies’ versus ‘civil society’ or ‘state’ versus ‘community’. Tensions existed across the range of societal actors. We now move on to consider how different modes of marketisation within the strategy were implemented, and the resultant processes of negotiation and translation by the programmes’ targets.

6. Negotiating new logics of action through market-shaping

The CES packaged a range of measures seeking to put community to use in shaping energy markets. By ‘market-shaping’ we mean creating institutional conditions (rules, metrics, instruments, incentives and so on) so that market exchange happens in a particular way, but without explicitly interfering in the act of exchange itself or the wider principles of market self-organisation. Examples include feed-in-tariffs, and various grants and loans outlined above, designed to help projects achieve ‘investment readiness’ (DECC, 2014b).

While these mechanisms supported community energy growth in the UK (DECC, 2015a) they embedded community energy within energy and financial markets. The underlying assumption is that for community energy producers to change market practices, they must enter those markets. For instance, feed-in-tariffs only apply to energy sold into the electricity grid, meaning financial viability is often reliant on formal energy market engagement.

One consequence of community energy being shaped as a market object has been increased availability of different forms of private and alternative financial investment. This includes direct loans from private investors, commercial loans and peer-to-peer funding. An example of the latter is Abundance, an organisation encouraging individuals to invest in community energy projects, while also hosting a secondary trading market for buying and selling investments. Pension funds are also investing in community energy projects (IPPR, 2016). Community energy projects become entangled with capital markets; and private investment increases the onus on generating financial returns.

Practitioners reflected on the tensions created by financialisation of small-scale energy schemes. One outlined their dissonant experience at a recent sector conference in England:

“...there was social investors there, some big banks, they’ve got

millions of pounds ready and waiting to invest, trying to encourage groups to even start buying up established solar farms so they can invest and get the fifteen years left of subsidy, so it’s a marketization of community energy and that’s good because [community energy] is still a small part of the energy market and investment helps to establish it ... but you worry that you lose what you were setting out to do.” (Community energy practitioner, interview)

Another stakeholder personified the continual back-and-forth of contradictory logics. While opening up new funding sources these new investment models potentially loosen ties between community energy projects and the community they seek to serve:

“I think that’s really exciting ... but again we’re going to have to think of the messaging around that cos if [investment is] less and less through shares and more and more through loans and bonds how does that affect the community energy model, how engaged are communities if you’re crowdsourcing funding? They’re interested in support for renewable energy but they’re not really interested in what’s happening in [place name] or something like that, so you don’t get that same level of engagement, the whole one member one vote you get with community shares, which maybe you don’t need, maybe the input is the fact that at least it’s being able to fund that local community to do something rather than getting investors actively involved, but it’s something we’ll have to think about.” (National stakeholder, interview)

At stake here are the aims of ‘community energy’ as a movement. Another participant framed this with respect to the roots of the community energy sector, focused on community development, and then to the impact of the introduction and subsequent reductions of feed-in-tariffs,³ which they felt repositioned increasing energy supply as the dominant objective:

“So do we want to keep doing small projects that might have a big impact at local level but not really any broader, or do we want to grow? But if we do that how do we do that without losing the ethos of community energy and do we go back to our roots which was about community development trusts? ... When feed-in-tariffs came in, it was to a certain extent a bit more about chasing the money, as groups started developing those [microgeneration] schemes to bring in income to do community activities, so now it’s going back to how we did it before we were developing those schemes, cos I think some groups lost the focus of why they were doing it; it became about solar panels on buildings rather than the outcomes.” (National stakeholder, interview)

Roth and Dressler (2012) show how governmental market-mechanisms in conservation made market exchange appear the best solution to challenges faced by rural farmers when it did not necessarily serve their long-term interests. Likewise, the above quote implies that growth of a particular form of community energy on the back of relatively generous financial incentives led to a narrow focus on energy production against wider social and environmental goals. The subsequent scaling back of subsidies, reduction in cost of renewable energy technologies and emergence of different financial mechanisms could, it is suggested, lead to re-diversification and reconsideration of what community energy could and should be.

Feed-in-tariff reductions also led to community energy organisations seeking to buy existing private sector assets – such as wind turbines – as an alternative approach, partly to benefit from feed-in-tariffs

³ From 2015 a range of policy changes, including significantly reduced feed-in-tariff rates, made it harder for community energy schemes to be seen as financially viable. Other changes included reduced tax breaks for community organisations through removal of Enterprise Investment Scheme tax relief; changes to the legal status of co-ops for community energy; and changes to the Renewable Obligation.

agreed prior to policy changes. Again, interviews reveal conflicting normative assumptions about marketisation as a phenomenon. Some practitioners were uneasy about this development, seen as going against a 'do-it-yourself' ethos where community building was achieved through the often drawn-out, difficult process of developing an energy project 'from scratch'. For others it was a pragmatic response to a changing political and financial landscape and/or a positive political action of taking private assets into collective ownership.

In practice, although scaling back feed-in-tariffs impacted the community energy sector it did not disentangle it from energy markets. Even without feed-in-tariffs, community energy groups are often obliged to sell energy to commercial suppliers to generate returns on investment, as conditions on energy supply licenses hinder small organisations selling directly to customers via the grid. This situation creates difficulties for retaining benefits within localities by providing local residents and businesses with cheaper energy. Community energy groups in the UK can circumvent market provision regulations by supplying buildings directly rather than using network infrastructure, but these limit potential for projects to supply whole communities and installing new standalone cables can be expensive.

In summary, the UK government's approach to community market-shaping draws community energy actors into a series of market entanglements, rather than opening up new spaces for alternative economic arrangements. Negotiation happens at a practical level, in navigating the changing policy landscape, its implications on the ground, and the tensions created with pro-social goals around community development and local democracy. Viewed one way, these entanglements mark further incremental moves towards ever-greater marketisation. The role of community energy in changing market practices is potentially diminished by focusing on making communities market-ready (rather than more proactively on re-embedding markets in civil society). However, we have also seen how different forms of community energy can emerge that variously seek to engage with, reappropriate, or opt-out of market entanglements. In addition, recent policy changes have allowed the market model to become reopened to question, dependent on individual projects' goals. Conversely, such contingency potentially inhibits sector growth as well as being the outcome of an unstable regulatory regime that increases uncertainty in all projects.

7. Negotiating new markets as alternatives to incumbent systems

The above market-shaping activity seeks to draw community energy actors into existing markets, in order to diversify energy supply and introduce greater competition. The CES also includes programmes to achieve similar results by creating new energy markets, for example, through incentivising new forms of energy distribution. By new markets we mean the creation of new products as market entities, with a new set of institutions, infrastructures and rules. Community or district heating is given particular priority, heating multiple dwellings or premises from a single heat source with advantages for resource and cost efficiency. Similar to community microgeneration, governmental interest in district heating involves mainstreaming a previously existing but not widespread technology through focusing on financialisation and marketisation. The focus and approach to heat network development highlights the challenges of deploying disruptive technologies through established market approaches. Here negotiation appears at various points of contact between the new technology and established practices.

Deployment has been incentivised by government grants and loans for local authorities, acting on behalf of communities (understood here as residents of the geographic area covered by a scheme). Again, funding has prioritised helping local authorities and partners develop a 'business case' to attract financial investment. District heating is expected to appeal to energy users through guaranteed lower costs. However, payback periods for investment in this capital-intensive technology can be 40 years. To reduce financial risk and appear

attractive to investors, customers must sign-up for lengthy contracts. Alongside significant costs in moving to another source, this makes heat networks *de facto* monopoly providers. Partly owing to this monopoly status concerns over consumer protection have been prominent. An industry-led consumer protection body was recently established, but concerns remain about lack of legal protection for heat network customers (Citizens Advice, 2016). In addition, there is no established price-setting mechanism; new heat networks often instead peg prices to natural gas rates as a means of 'stabilising' (Caliskan and Callon, 2010) what is in the UK a relatively novel technology for most people.

These difficulties have often counteracted the appeal of cost-savings to potential customers, in turn creating problems for attracting financial capital. In summary, marketised district heating has had difficulty overcoming Beckert's (2009) three challenges of market coordination, relating to valuation (difficulty establishing a price for district heat), competition (district heating as monopoly provider) and cooperation (customers' lack of trust in a 'novel' product). Those attempting to develop schemes in the UK have:

"...struggled to effectively 'pacify' ... the HN [heat network] as a market object within established, obdurate market and infrastructural arrangements. HNs are a disruptive local innovation. Network-builders therefore face difficulties in economising their projects: turning it from an innovative to conventional project in order to make it part of established market arrangements." (Ambrose et al., 2016)

Because of the risks of developing and maintaining district heating in a marketised setting, many are developed in partnership with private firms, often involving long leases. This creates problems for community leaders seeking to retain influence over future decisions and ensure that schemes continue to reflect community members' interests.

The case of heat networks emphasises the problems faced when market conditions are placed on innovations that are not readily marketised, must compete with deeply embedded incumbent systems and do not fare particularly well as financial investments (see also Webb and Hawkey, 2017). The technology and business model are, in effect, inherently resistant to marketisation, regardless of active civic opposition. This example also raises the possible contribution of alternative economic arrangements beyond market solutions to complex societal problems.

8. Negotiating market logics to cultivate energy consumers

As well as encouraging marketised community energy supply and distribution, the CES introduced various demand-side measures. Particular emphasis was placed on promoting the role of communities for engaging domestic consumers with energy markets. The strategy broadly assigned two roles for community: VCS organisations operating as trusted intermediaries to provide information, advice and guidance to help residents better engage with energy markets; and encouraging local residents to collectively bargain with energy providers to increase buying power (collective switching). These are encapsulated in two national programmes: the Big Energy Saving Network (BESN) and Cheaper Energy Together. This section introduces each of these before exploring how they were mediated, translated and reappropriated 'on the ground'.

BESN is a 'community outreach' programme to help vulnerable consumers reduce energy costs (DECC, 2014a). It aims to empower households to "take decisions that will reduce their bills", chiefly by switching tariff or energy supplier (DECC, 2013b; BEIS, 2017). BESN is delivered by "trusted third sector and community bodies" (BEIS, 2017, p. 6), understood to have existing, established relationships with target populations. Community is invoked as delivery agents – neither state nor commercial actors, often rooted in a particular place – and as beneficiaries, the interest groups community organisations serve or represent.

Cheaper Energy Together was launched in 2012. Its premise, like other collective switching initiatives, was that consolidating buying power of large groups of consumers would allow more effective negotiation of discounted energy deals than individuals acting alone. Increasing switching activity was expected to improve competition among major suppliers and create opportunities for new and smaller suppliers to enter the market or increase their customer base (Bates, 2012; DECC, 2013c). A typical collective switch involves consumers, suppliers and two intermediary organisations: a specialist broker managing technical aspects of the switch⁴ and a ‘community leader’ (usually a local authority) taking the customer-facing role, assuming responsibility for promotion and recruiting participants (European Commission, 2016b). Consumers express interest and provide their household energy costs; suppliers are invited to participate in a ‘reverse auction’, the winner being the lowest tariff; consumers then decide individually whether or not to accept the offer. Like with BESN, the ‘community leader’ is seen as a trusted representative of a particular population of people defined by geographical location. This ‘community’ is also cast as intrinsic to delivery: aggregate demand of thousands of households is regarded as central to negotiating cheaper deals (Bates, 2012).

The effect on energy market activity of these two programmes has been limited. 11% of participants in the first year of BESN switched suppliers (DECC, 2015a), although most switches took place during workshops, supported by advisors: only 3% switched independently following participation. Cheaper Energy Together also met with variable success. On average, the 22,000 households that switched each saved £131 on annual energy bills (DECC, 2013c), but there is little evidence collective switching involves greater consumer engagement with energy markets. Only 11% of participants accepted the cheaper tariff they were offered: as with an earlier campaign, many did not change supplier despite having “already actively opted in” and that “very little extra effort was required to accept the offer” (Deller et al, 2017, pp. 1–2).

This is partly explained by the well-established observation that energy consumption is often invisible and its associated practices are largely habitual and unreflexive (Shove, 2003; Hargreaves et al, 2010; Gram-Hanssen, 2011). Any change is difficult to achieve with information and incentives alone. However, evidence on collective switching goes further: even when householders have already done something active and non-routine, when the deal has been arranged and the benefits are brought to their attention, few actually switch. There is resistance to becoming fully-fledged ‘energy consumers’. Most strikingly, Deller et al (2017) found that increased choice was *negatively* associated with switching. Households offered a choice of two or more tariffs were significantly *less* likely to switch than those receiving just one offer.

Impacts on competition were also muted. Experience varied across the 31 Cheaper Energy Together-funded schemes: some increased the customer base of smaller suppliers, yet the larger auctions were won by larger suppliers (DECC, 2013c). Interviews with local stakeholders suggest that smaller suppliers found it difficult to provide a competitive quote in these cases, lacking capacity to accommodate such a large volume of potential customers. Regarding prices, energy providers tended not to offer discounted rates per se, instead promising cashback to customers who switched and remained with the new company for a minimum period, disincentivising further switching (DECC, 2013d; Competition and Markets Authority (CMA), 2016). Winning tariffs were not necessarily market-leading; indeed for at least one scheme the same provider already offered a cheaper deal. Assessments of the potential to shape energy markets were therefore modest: “You could conclude that

energy companies are still subverting the market really. We haven’t really rocked the foundations.” (Local authority manager, interview).

Despite consolidation of consumer power anticipated through collective switching schemes, other parties such as central government, private sector intermediaries and large suppliers continued to dictate terms. Tensions emerged, for example, in meeting commitments to enrol ‘vulnerable’ populations, which was resource intensive in a period of shrinking local authority budgets. This highlights local authorities’ challenges managing contradictory relationships with different arms of central government: in this instance with DECC as commissioners of the programme, and the various departments allocating core local government funds.⁵ Further pressure came from energy suppliers to recruit broadly, ostensibly to improve economies of scale, including more affluent customers:

“[The] council can aim to be primarily helping people in fuel poverty and I think that’s who it should be aimed at, but the suppliers are coming back and saying you need to be aiming at all groups.” (Local Government Association representative, interview)

Local authorities were encouraged to maximise appeal to large energy companies by compromising on ambitions to target fuel poor households. These findings support a narrative of neoliberal co-option of community action by government (Featherstone et al, 2012; Catney et al, 2014), especially the enrolment of communities to promote market rationality and the opportunities this afforded large energy businesses to defend their oligopoly.

However, an alternative perspective questions the unidirectionality of this account. On the one hand, there is evidence of organisations adapting their purposes and delivery models to fit the agendas of government funding programmes. In a context of scarce, insecure financial support, VCS organisations face pressure to attract “new business” (BESN provider, interview). Similarly, for most local authorities in our research, availability of grant funding through Cheaper Energy Together was pivotal in deciding to introduce a collective switching scheme. On the other hand, many felt this was a worthwhile compromise to secure resources to pursue their own aims. For example, both funding programmes provided a “foot in the door” (Local authority manager, interview) to pursue a diverse collection of “wider and longer-term goal[s]” (LGA representative, interview) from tackling poverty to carbon reduction, lacking funds to address these concerns directly. Other benefits identified included: accessing training and peer support; developing skills internally and in the wider community; generating a base of ‘engaged’ households; building relationships with VCS organisations; and establishing legitimacy with commissioners, funders and private sector partners.

Particular governmental priorities, and the attendant resources, were also utilised *within* organisations to negotiate internal politics: just as national governments rarely speak with one voice, nor do local state/non-state actors. The promise of BESN funding provided leverage to bring prominence to previously marginal concerns:

“It helped push the financial inclusion into the forefront a bit, cos we were a bit in the background in the past ... we were firefighting rather than being proactive ... [BESN] helped the financial inclusion team to force itself out there and say here’s what we’re all about.” (BESN provider, interview)

“I was always saying we need to get projects on energy and everyone was a bit ‘yeah why?’, but now it’s become a real topic.” (BESN provider, interview)

Similarly, local authority officers used collective switching to engage councillors in debates around energy efficiency and environmental

⁴ One commercial provider, iChoosr, is a leading facilitator and advocate of collective switching schemes in the Netherlands, Belgium and more recently the UK (European Commission, 2016b).

⁵ These departments include: Communities and Local Government; Transport; Education; Health; and Work and Pensions. See <https://www.gov.uk/government/collections/funding-allocations-to-local-authorities-paid-outside-of-the-local-government-finance-settlement-2018-to-2019> for further detail.

sustainability, by initially appealing to the urgent political priority of “cheaper energy bills now!” (Local government manager, interview). While it is a stretch to view these responses as resisting the market-oriented logic of cultivating energy consumers, they do demonstrate its creative appropriation for social and environmental ends.

This section has shown how use of community to produce ‘better’ energy consumers was partly hampered by their resistance to accepting energy as a market commodity. It also highlights the reach of national government to empower/disempower local and community actors, and to shape their actions through the control of resources, most notably through withdrawal and selective distribution of funding. At the same time, community organisations were able to put market logics to use for non-market endeavour, simultaneously acting with and against market rationalities.

9. Discussion and conclusion

This paper exposed the ‘fractal’ nature of negotiations between competing logics of energy market (re)production. It placed this in the context of a broader governmental dilemma, bridging an ideological commitment to self-regulation and recognition of the need to intervene in energy markets to mitigate their negative effects. Here the depoliticised notion of ‘community’ becomes a popular focus of interventions to effect change at a distance. Focusing on the UK Community Energy Strategy we explored first how policy was produced and then enacted through three further modes of energy market construction (shaping markets, making new markets and cultivating consumers). Our dataset, drawn from multiple points in the policy process, has allowed a novel analysis which ‘zooms in’ on different sites and modes of making and re-making energy markets. Inevitably we have zoomed in on some sites more than others. There notably remains a need for deeper investigation into the ‘inside’ of governing practices, their situated performances and the relations among interdependent actors and interests that characterise them (see [Macrorie et al., 2015](#); [Watson, 2017](#)).

First, our analysis highlights the continual work required to create functioning energy markets and different ways that energy’s specific materialities and social history make it resistant to marketisation. The role of the state in constructing markets for energy has been more overt than in other sectors, beginning with the well-publicised liberalisation programmes of the 1980s onwards. Our research has revealed some of the more low-profile work involved in maintaining this vision, from policy measures to introduce more market-like conditions (diversifying competition, engaging consumers) down to managing the contradictions these produce at their various sites of implementation.

Second, the work of making energy markets is political. Extending Polanyi’s notion of the double movement, our analysis reveals similar contestation between pro-market and pro-social logics recurring at different levels of focus: not just in the arena of formal politics or between state and commercial entities, but within sectors, within organisations, even down to the conflicted priorities of individual actors. Compromises are reached, but are often temporary. Clearly, some actors have more reach than others to effectively ‘manage possibility’. Formal policy change, for example the introduction and later scaling-back of feed-in tariffs, perhaps comes closest to ‘illuconary’ (i.e. non-contingent) effects (cf. [Butler, 2010](#)). But for the most part our findings illuminate how governmental interventions are translated and mediated as they come to ground, not always landing in predictable ways. Although policy is often treated as an object resulting from strategic decision-making by elite actors, we have highlighted its emergent formulation and outworking, subject to continuing contestation and negotiation.

Third, the use of communities in governing energy markets is particularly interesting in that it attempts to socially embed energy markets, while also marketising/disembedding community energy. Community has been deployed to escape the dilemma of needing to intervene without being seen to intervene. While avoiding the overt

political confrontation of (for example) directly regulating energy companies, this form of indirect, diffuse intervention through communities instead created a dispersed and devolved set of micro-tensions at different points within the energy system, to be managed locally.

Conceptually, our findings highlight the limits to thinking in terms of the ‘inside’ and ‘outside’ of markets: a useful shorthand, but a boundary frequently crossed in practice. For this reason, ‘entanglement’ arguably serves as a better metaphor than ‘embeddedness’ in thinking about society-market relationships (cf. [Callon, 1998](#)). Energy market actors (e.g. governments, investors, suppliers, domestic consumers) are also state actors (e.g. in lobby groups, as voters) and community actors (e.g. residing in a locality). They are constituted as actors by their participation in these various capacities. More prosaically, even in their capacity as *energy market actors* they often have interests in both camps, embodying contradictory logics at the organisational or individual level.

This point might be more apparent in a market for basic resources such as energy than in more abstract financial markets. It therefore serves as a reminder that there is much to be gained from comparative analyses of different types of market in different settings. Our analysis is a product of a particular point in time; it is part of a wider story of ongoing energy market (and community) construction. Between 2015 and 2018 community energy virtually disappeared as an explicit national policy agenda and the sector has been hampered by a number of policy changes, as discussed above. However, there has been growth in political rhetoric around greater intervention in energy markets. This has included apparent willingness to regulate commercial providers more stringently through, for example, introducing domestic energy price caps. Thinking in terms of double movements, at any time and at whichever level of magnification we focus, different ‘sides’ will be in the ascendancy: this is a freeze-frame of a set of unresolved dynamic processes rather than necessarily a point along a teleological trajectory.

The spatial focus is also distinctive. For instance, England is highly centralised while devolution of resources to Scotland, Wales and Northern Ireland make it increasingly difficult to talk about the UK as a single regulatory regime. Divergence on energy has occurred over the time period covered in the paper, with Scotland increasingly taking a lead on energy transitions, including through empowering local and civil society organisations. Broadly speaking, the UK has pursued liberalisation with particular fervour, but it remains formal policy within the EU and other affluent nations.

We emphasise the need to explore actually existing sites and moments of market construction and the negotiations this entails. For example, while its regulatory arrangements and ideological commitments are broadly similar, a study set in Germany would highlight different institutional relations, practices and discourses, including a more decentralised state, with greater local resources and historic sub-local government structures. [Becker et al \(2017\)](#), for instance, explore tensions between different local non-commercial interests. This constitutes a different setting for the negotiated construction of markets which could be usefully explored through our framework. Our analysis also fits within a wider story of contested market construction. A focus on energy is interesting because the hand of the state is overt, but the same processes exist in more ‘mature’ market settings. Our approach is immediately applicable to goods and services whose status as commodity is still a matter of considerable debate, such as housing or water. But we could also imagine its application to domains such as food: more readily conceived of as privately owned commodities, yet intimately entangled with caregiving, meaning-making, enjoyment and survival. Digital connectivity, increasingly essential to societal participation, yet constructed from the outset as a marketised commodity, would be another interesting case study.

More broadly, our analysis contributes to understandings of the ontologically performative yet often path-dependent nature of political processes. We set our study of ‘sites and moments’ within an interest in the longue durée of political-economic change, seeking to zoom in on

the recurring contestations that can be observed within the wider frame and further bring critical political-economic analyses into dialogue with constructivist and/or performative understandings of economies. Specifically we draw attention to the fractal patterning of contested social processes. However, despite this ‘self-similarity’ we emphasise the provisionality and potential openness of processes whose inevitability is too often taken-for-granted. This is useful conceptually, but by highlighting possibilities for change and difference this approach also seeks to counter discourses of fatalism in government and in everyday life (Gamble, 2000) to produce more hopeful and empowering glimpses of alternative futures.

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References

- Abbott, M., 2001. Is the security of electricity supply a public good? *Elect. J.* 14 (7), 31–33.
- Armstrong, A., Bulkeley, H., 2014. Micro-hydro politics: producing and contesting community energy in the North of England. *Geoforum* 56, 56–66.
- Ambrose, A., Eadson, W., Pinder, J., 2016. The role of actor-networks in the early stage mobilisation of low carbon heat networks. *Energy Policy* 96, 144–152.
- Bates, R., 2012. Get it, together: The case for collective switching in the age of connected consumers. *Consumer Focus*, London.
- Becker, S., Kunze, C., 2014. Transcending community energy: collective and politically motivated projects in renewable energy (CPE) across Europe. *People, Place and Policy* 8 (3), 180–191.
- Becker, S., Neumann, M., Moss, T., 2017. Between coproduction and commons: understanding initiatives to reclaim urban energy provision in Berlin and Hamburg. *Urban Res. Practice* 10 (1), 63–85.
- Beckert, J., 2009. The social order of markets. *Theory Soc.* 38 (3), 245–269.
- BEIS, 2017. Big Energy Saving Network 2017/18: Guidance for Applicants. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/650019/BEIS_Guidance_for_Applicants_2017_18.pdf.
- Business, Energy and Industrial Strategy (BEIS), 2018a. Sub-national electricity and gas consumption statistics. BEIS, London. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/678653/Sub-national_electricity_and_gas_consumption_summary_report_2016.pdf.
- BEIS, 2018b. Sub-national electricity and gas consumption statistics. BEIS, London https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/767027/Sub-national-electricity-and-gas-consumption-summary-report-2017.pdf.
- Blaug, M., 1997. *Economic theory in retrospect*. Cambridge University Press, Cambridge.
- Block, F., 2001. Introduction. In: Polanyi, K., *The Great Transformation: The political and economic origins of our time*. Beacon Press, Boston (USA).
- Bolton, R., Foxon, T., 2015. A socio-technical perspective on low carbon investment challenges – insights for UK energy policy. *Environ. Innov. Soc. Trans.* 14, 165–181.
- Bond, S., 2011. Being in myth and community: resistance, lived existence, and democracy in a north England mill town. *Environ. Plan. D: Soc. Space* 29 (5), 780–802.
- Brenner, N., Theodore, N., 2002. Cities and the geographies of “Actually Existing Neoliberalism”. *Antipode* 34 (3), 349–379.
- Brenner, N., Peck, J., Theodore, N., 2010. Variegated neoliberalization: geographies, modalities, pathways. *Global Networks* 10 (2), 181–222.
- Brown, M.A., 2001. Market failures and barriers as a basis for clean energy policies. *Energy Policy* 29 (14), 1197–1207.
- Bulmer, S., Dolowitz, D., Humphreys, P., Padgett, S., 2007. *Policy Transfer in European Union Governance: Regulating the utilities*. Routledge, London.
- Butler, J., 2010. Performative agency. *J. Cultural Econ.* 3 (2), 147–161.
- Caliskan, K., Callon, M., 2010. Economization, part 2: a research programme for the study of markets. *Econ. Soc.* 39 (1), 1–32.
- Callon, M., 1998. Introduction: the embeddedness of economic markets in economics. *Sociol. Rev.* 46 (1, suppl), 1–57.
- Callon, M., 2010. Performativity, misfires and politics. *J. Cultural Econ.* 3 (2), 163–169.
- Cardwell, E., 2015. Power and performativity in the creation of the UK fishing-rights market. *J. Cult. Econ.* 8 (6), 705–720.
- Catney, P., MacGregor, S., Dobson, A., Hall, S.M., Royston, S., Robinson, Z., Ormerod, M., Ross, S., 2014. Big society, little justice? Community renewable energy and the politics of localism. *Local Environ.* 19 (7), 715–730.
- Christophers, B., 2014. From Marx to market and back again: Performing the economy. *Geoforum* 57, 12–20.
- Christophers, B., 2015. Constructing and deconstructing markets: making space for capital. *Environ. Plan. A* 47 (9), 1859–1865.
- Citizens Advice, 2016. Response to the CMA’s Heat Networks Market Study. Citizens Advice, Birmingham https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Energy%20Consultation%20responses/Citizens_Advice_Response_to_CMA_Heat_Networks_Market_Study.pdf.
- Competition and Markets Authority (CMA), 2016. *Energy Market Investigation: Final Report*. CMA, London.
- Creamer, E., 2015. The double-edged sword of grant funding: a study of community-led climate change initiatives in remote rural Scotland. *Local Environ.* 20 (9), 981–999.
- DECC, 2011. *Evaluation of the Community Energy Saving Programme: A report on the findings from the process and householder experience research streams*. DECC, London.
- DECC, 2013a. *Community Energy: Call for Evidence*. DECC, London.
- DECC, 2013b. *Guidance: Helping consumers with energy*. <https://www.gov.uk/government/publications/helping-consumers-with-energy/helping-consumers-with-energy>.
- DECC, 2013c. *Helping customers switch: Collective switching and beyond*. DECC, London.
- DECC, 2013d. *Learning from the DECC Local Authority Competition 2012/13: A case study approach*. DECC, London.
- DECC, 2014a. *Community Energy Strategy: Full Report*. DECC, London.
- DECC, 2014b. *Urban Community Energy Fund – Getting your project ‘investment ready’*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/373276/intro_to_investment.pdf.
- DECC, 2015a. *Community Energy Strategy Update*. DECC, London.
- DECC, 2015b. *Low Carbon Pioneer Cities Heat Networks Project: A Process Evaluation*. DECC, London.
- DECC, 2015c. *Evaluation of the Big Energy Savings Network*. DECC, London.
- DeFilippis, J., Fisher, R., Shragge, E., 2006. Neither romance nor regulation: Re-evaluating community. *Int. J. Urban Reg. Res.* 30 (3), 673–689.
- Delanty, G., 2010. *Community*. Routledge, London.
- Deller, D., Giulietti, M., Loomes, G., Waddams Price, C., Moniche Bermejo, A., Jeon, J.Y., 2017. *Switching Energy Suppliers: It’s Not All About the Money*. CCP Working Paper 17-5. <http://competitionpolicy.ac.uk/documents/8158338/17199160/CCP+WP+17-5+complete.pdf>.
- DTI, 2003. *Our energy future – creating a low carbon economy*. DTI, London.
- DTI, 2007. *Meeting the Energy Challenge: A White Paper on Energy*. DTI, London.
- Eadson, W., 2016. State enrolment and energy-carbon transitions: syndromic experimentation and atomisation in England. *Environ. Plan. C* 34 (8), 1612–1631.
- European Commission, 2016a. *State-owned Enterprises in the EU: Lessons Learnt and Ways Forward in a Post-Crisis Context*. European Economy Institutional Paper 31, July 2016. https://ec.europa.eu/info/sites/info/files/file_import/ip031_en_2.pdf.
- European Commission, 2016b. *Second consumer market study on the functioning of the retail electricity markets for consumers in the EU: Final report*. European Commission, Brussels.
- Featherstone, D., Ince, A., Mackinnon, D., Strauss, K., Cumbers, A., 2012. Progressive localism and the construction of political alternatives. *Trans. Inst. British Geogr.* 37 (2), 177–182.
- Gamble, A., 2000. *Politics and Fate*. Polity, Cambridge.
- Gibson-Graham, J.K., 2006a. *The end of capitalism (as we knew it): a feminist critique of political economy*, 2nd ed. University of Minnesota Press, Minneapolis.
- Gibson-Graham, J.K., 2006b. *A postcapitalist politics*. University of Minnesota Press, Minneapolis.
- Gibson-Graham, J.K., 2008. Diverse economies: performative practices for ‘other worlds’. *Prog. Hum. Geogr.* 32 (5), 613–632.
- Giulietti, M., Price, C.W., Waterson, M., 2005. Consumer choice and competition policy: a study of UK energy markets. *Econ. J.* 115, 949–968.
- Goldthau, A., Sovacool, B., 2012. The uniqueness of the energy security, justice, and governance problem. *Energy Policy* 41, 232–240.
- Gram-Hanssen, K., 2011. Understanding change and continuity in residential energy consumption. *J. Consumer Culture* 11 (1), 61–78.
- Hall, S., 2011. Geographies of money and finance I: Cultural economy, politics and place. *Prog. Hum. Geogr.* 35 (2), 234–245.
- Hall, S., 2012. Making space for markets in economic geography. *Dialog. Human Geogr.* 2 (2), 142–145.
- Hargreaves, T., Hielscher, S., Seyfang, G., Smith, A., 2013. Grassroots innovations in community energy: the role of intermediaries in niche development. *Global Environ. Change* 23 (5), 868–880.
- Hargreaves, T., Nye, M., Burgess, J., 2010. Making energy visible: a qualitative field study of how householders interact with feedback from smart energy monitors. *Energy Policy* 38 (10), 6111–6119.
- Helm, D., 2002. *Energy policy: security of supply, sustainability and competition*. Energy Policy 30, 173–184.
- Helm, D., 2003. *Energy, The State, and The Market: British Energy Policy Since 1979*. Oxford University Press, Oxford.
- IPPR, 2016. *Community and Local Energy: Challenges and Opportunities*. IPPR, London <https://www.ippr.org/publications/community-and-local-energy-challenges-and>

- opportunities.
- Jamasb, T., Pollitt, M., 2005. Electricity market reform in the European Union: review of progress toward liberalization & integration. *Energy J.* 26, 11–14.
- Koh, L., Goucher, L., 2014. Questions around Entry to the UK Energy Supply Market for Small Firms. University of Sheffield, Sheffield.
- Leitner, H., Peck, J., Sheppard, E.S. (Eds.), 2007. *Contesting Neoliberalism: Urban Frontiers*. Guilford Press, London.
- Levitas, R., 2000. Community, utopia and new labour. *Local Econ.* 15 (3), 188–197.
- Macrorie, R.M., Foulds, C., Hargreaves, T., 2015. Governing and governed by practices: exploring interventions in low-carbon housing policy and practice. In: Strengers, Y., Maller, C. (Eds.), *Social Practices, Intervention and Sustainability: Beyond behaviour change*. Routledge, Abingdon, pp. 95–111.
- Miller, P., Rose, N., 1992. Political power beyond the state: problematics of government. *Br. J. Sociol.* 43 (2), 173–205.
- Mitchell, T., 2008. Rethinking economy. *Geoforum* 39, 1116–1121.
- Muellerleile, C., 2013. Turning financial markets inside out: Polanyi, performativity and disembeddedness. *Environ. Plan. A* 45 (7), 1625–1642.
- Nicolini, D., 2010. Zooming in and out: studying practices by switching theoretical lenses and trailing connections. *Organization Studies* 30 (12), 1391–1418.
- North, P., 2010. Eco-localisation as a progressive response to peak oil and climate change – a sympathetic critique. *Geoforum* 41 (4), 585–594.
- North, P., 2016. The business of the Anthropocene? Substantivist and diverse economies perspectives on SME engagement in local low carbon transitions. *Prog. Hum. Geogr.* 40 (4), 437–454.
- North, P., Nurse, A., 2014. 'War Stories': Morality, curiosity, enthusiasm and commitment as facilitators of SME owners' engagement in low carbon transitions. *Geoforum* 52, 32–41.
- Ofgem, 2014. *State of the market assessment*. London: Ofgem. https://www.ofgem.gov.uk/sites/default/files/docs/2014/03/assessment_document_published_1.pdf.
- Peck, J., 2012. Economic geography: Island life. *Dialog. Human Geogr.* 2 (2), 113–133.
- Peck, J., 2013a. Disembedding Polanyi: exploring Polanyian economic geographies. *Environ. Plan. A* 45, 1536–1544.
- Peck, J., 2013b. For Polanyian economic geographies. *Environ. Plan. A* 45, 1545–1568.
- Peck, J., Brenner, N., Theodore, N., 2018. Actually existing neoliberalism. In: Cahill, D., Cooper, M., Konings, M. (Eds.), *The Sage Handbook of Neoliberalism*. SAGE, London, pp. 3–15.
- Polanyi, K., 1944/2001. *The Great Transformation: The political and economic origins of our time*. Beacon Press, Boston (USA).
- Rose, N., 1996. The death of the social? Re-figuring the territory of government. *Econ. Soc.* 25 (3), 327–356.
- Rose, N., Miller, P., 1992. Political power beyond the State: problematics of government. *Br. J. Sociol.* 43 (2), 173–205.
- Roth, R.J., Dressler, W., 2012. Market-oriented conservation governance: the particularities of place. *Geoforum* 43, 363–366.
- Rydin, Y., Guy, S., Goodier, C., Chmutina, K., Devine-Wright, P., Wiersma, B., 2015. The financial entanglements of local energy projects. *Geoforum* 59, 1–11.
- Seyfang, G., Haxeltine, A., 2012. Growing grassroots innovations: exploring the role of community-based initiatives in governing sustainable energy transitions. *Environ. Plan. C: Govern. Policy* 30 (3), 381.
- Seyfang, G., Park, J.J., Smith, A., 2013. A thousand flowers blooming? An examination of community energy in the UK. *Energy Policy* 61, 977–989.
- Shove, E., 2003. *Comfort, Cleanliness and Convenience: The Social Organization of Normality*. Berg, Oxford.
- Smith, A., 2003. Transforming technological regimes for sustainable development: a role for alternative technology niches? *Sci. Public Policy* 30 (2), 127–135.
- Smith, A., Hargreaves, T., Hielscher, S., Martiskainen, M., Seyfang, M., 2016. Making the most of community energies: three perspectives on grassroots innovation. *Environ. Plan. A* 48 (2), 407–432.
- Somerville, P., 2016. *Understanding community: politics, policy and practice*. Policy Press, Bristol.
- Soutar, I., Mitchell, C., 2018. Towards pragmatic narratives of societal engagement in the UK energy system. *Energy Res. Social Sci.* 35, 132–139.
- Spencer, J., 2012. Performing democracy and violence, agonism and community, politics and not politics in Sri Lanka. *Geoforum* 43, 725–731.
- Taylor Aiken, G., 2015. (Local-) community for global challenges: carbon conversations, transition towns and governmental elisions. *Local Environ.* 20 (7), 764–781.
- Taylor Aiken, G., Middlemiss, L., Sallu, S., Hauxwell-Baldwin, R., 2017. Researching climate change and community in neoliberal contexts: an emerging critical approach. *WIREs Clim. Change* 8 (4), 1–14.
- Walker, G., Devine-Wright, P., 2008. Community renewable energy: what should it mean? *Energy Policy* 36 (2), 497–500.
- Walker, G., Hunter, S., Devine-Wright, P., Evans, B., Fay, H., 2007. Harnessing community energies: explaining community-based localism in renewable energy policy in the UK. *Global Environ. Politics* 7 (2), 64–82.
- Watson, M., 2017. Placing power in practice theory. In: Hui, A., Schatzki, T., Shove, E. (Eds.), *The Nexus of Practices: Connections, constellations and practitioners*. Routledge, London, pp. 169–182.
- Webb, J., Hawkey, D., 2017. On (not) assembling a market for sustainable energy: heat network infrastructure and British cities. *J. Cult. Econ.* 10 (1), 8–20.
- White, R.J., Williams, C.C., 2010. Re-thinking monetary exchange: some lessons from England. *Rev. Soc. Econ.* 68 (3), 317–338.
- Williams, C.C., 2005. *A commodified world? Mapping the limits of capitalism*. Zed Books, London.
- Yougov, 2014. *Energy, Politics and the Consumer*. Yougov <http://cdn.yougov.com/cumulus/uploads/document/9ex03cskhs/YouGov-Cambridge-Report-Spring201acc4.pdf>.