Caught in the middle? Creating and contesting intermediary spaces in low-carbon transitions.

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6 Abstract

- 7 The distributed nature of renewable energy has given rise to new forms and scales of
- 8 energy governance, in particular the emerging role of households and community
- 9 organisations in generating and distributing renewable energy. Accompanying this
- trend has been the emergence of intermediary organisations, whose role it is to mediate
- between these actors cf. the market and the state, with the aim to move from local
- 12 experimentation to widespread transformational change. While in recent years a
- significant body of research has emerged that has considered intermediary *functions*,
- less is known about intermediary *spaces*. By tracing how intermediary spaces are
- shaped, negotiated, protected, and expanded, this article makes three contributions to
- the literature on energy governance and low-carbon intermediaries. First, a focus on the
- 17 relational nature of intermediary spaces challenges the community/state binary in
- energy governance. Second, it highlights the power dynamics behind these emergent
- 19 relational spaces; showing such spaces are not neutral, but produced through social
- 20 relations within and beyond them, affecting the functions that intermediaries seek to
- 21 fulfil. Third, it provides an understanding of how the ever-changing nature of
- intermediary spaces can also enable new spaces for action to emerge and challenge the
- 23 status quo.

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- 25 **Keywords:** energy governance; relational space; intermediaries; low-carbon
- transitions; boundary organisations

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Introducing energy intermediaries

- 29 The ways in which energy is produced is undergoing significant change. The growing
- 30 use of renewable sources of energy has changed the socio-material energy landscape
- 31 through the emergence of new technologies, actors, regulations, and forms and spaces
- of governance. In recent years there has been a growing focus on the emerging role of

- 1 'community' as both an actor and site of energy governance (Berka and Creamer, 2018;
- 2 Rommel et al., 2016; Taylor Aiken, 2018a; Walker, 2011), and considered a key means
- 3 for changing the social and spatial relations embedded in our energy systems (Burke
- 4 and Stephens, 2017; Szulecki, 2018; van Veelen and van der Horst, 2018). Community
- 5 groups used here to refer to civil society groups rooted in place are, however, often
- 6 primarily focused on *local* energy generation and use. Although they consider their
- 7 actions as part of a bigger movement for change (van Veelen and Haggett, 2017), they
- 8 often do not have the capacity to actively develop and nurture the types of network-
- 9 oriented strategies required to 'jump scale' and engender change beyond their local
- area (Strachan et al., 2015).

- 12 Alongside community groups, a different type of actor has therefore also emerged: one
- who can mediate between such groups, the market, and the state in the transition to a
- low-carbon society. These intermediary, or boundary, organisations often operate at a
- regional, national or international level, and have been assigned a key role in the
- process of fostering change beyond the local scale (Bush et al., 2017; Hargreaves,
- Longhurst, et al., 2013; Hicks and Ison, 2011; Lacey-Barnacle and Bird, 2018; Moss,
- 2009; Seyfang et al., 2014; Warbroek et al., 2015). In its broadest sense, the term
- intermediaries has been used to indicate actors who enable and foster the exchange of
- 20 knowledge and skills; and who connect, and mediate between different actors in order
- to support innovation and learning (Geels and Deuten, 2006; Gliedt et al., 2017;
- Hargreaves, Hielscher, et al., 2013; Kivimaa, 2014). Such functions can be delivered by a
- range of actors, including individuals, public bodies, non-governmental organisations,
- consultancies or trade bodies (Bush et al., 2017; Küçüksayraç et al., 2015). The defining
- 25 feature of an intermediary is therefore not a particular type of legal or organisational
- 26 body, but rather the arenas of their action, which are defined by their 'in-
- 27 betweenness' (Moss 2009:1481).

- 29 The importance of intermediaries lies in the 'relational work' they undertake:
- 30 connecting and bridging between different actors, enabling local knowledge to be
- transformed into global knowledge (Barnes, 2019; Geels and Deuten, 2006; Gliedt et al.,
- 32 2017; Hamann and April, 2013; Hargreaves, Hielscher, et al., 2013; Kivimaa, 2014;
- 33 Kivimaa and Martiskainen, 2018b). What this emerging body of research on

intermediaries shares, is that its perspectives are primarily functional in nature: its

2 primary focus is on understanding the ways in which intermediaries can assist

3 emerging forms of energy or environmental governance in enacting change beyond the

4 local level.

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6 Despite (1) the growing attentiveness for 'space' in social energy research (Bridge,

7 2018; Castán Broto and Baker, 2018; Taylor Aiken, 2018b); and (2) the notion of

8 intermediaries as defined by their 'in-betweenness', surprisingly little attention has

9 been paid to the ways in which the in-between spaces in which intermediaries operate

are shaped, and how this, in turn, affects intermediaries' functions. To date, the primary

focus has been on how intermediary activities shape the spaces for community energy

at the national and global level, rather than how intermediary activities are facilitated or

constrained through their interactions with these other spaces. This approach, however,

risks overplaying the explanatory power of intermediaries and the networks of which

they are part, as it does not account for how already existing networks and

infrastructures may either facilitate or resist the work that intermediaries seek to

conduct (Hargreaves, Hielscher, et al., 2013; Medd and Marvin, 2008). Understanding

how intermediary spaces are shaped is therefore fundamental for understanding whose

visions for a low-carbon transition is enacted (Hodson et al., 2013).

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This article therefore adopts a relational approach to understand the interactions

between intermediary's functions, and the spaces they occupy. Through an empirical

23 focus on community energy intermediaries in Scotland, it demonstrates how

intermediaries are part of a wider set of socio-political relations, which in turn influence

their capacities and functions. It thus seeks to foreground the political struggles around

how these intermediary spaces not only shape, but are also shaped by the political and

economic contexts in which they operate. Adopting a relational perspective highlights

that intermediary spaces not simply 'are' (they do not pre-exist the activities and

relations that are formed in and through them), but are in themselves the product of a

particular set of social relations within and beyond them. This perspective thus

31 highlights how the changing scales and spaces of low-carbon transitions are part of a

wider political project, but that this process is also actively contested and negotiated,

opening up the possibility of alternatives.

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Relational spaces of energy governance

- 3 In recent years there has been a growing interest in understanding energy as a spatial
- 4 problem (Castán Broto and Baker, 2018). One subset of this body of research has
- 5 specifically built on the work of Doreen Massey and others, to conceptualise space as
- 6 relational; constituted through social (and material) relations (Bridge, 2018; Bridge et
- al., 2013; Calvert, 2015; Castán Broto and Baker, 2018). Applying an explicitly relational
- 8 lens to the study of low-carbon intermediaries highlights the already existing networks
- 9 and relations that intermediaries are part of, and is particularly appropriate for three
- 10 reasons.

- First, adopting a relational perspective can highlight the power dynamics between
- intermediary spaces and the relations that underpin them. As described in the
- introduction, intermediary activities can take different forms, but what characterises
- them is their linking or networking function. Building on Moss's (2009) observation
- that intermediaries are characterised by their 'in-betweenness', I therefore argue that
- the spaces¹ intermediaries occupy are, by their very nature, relational spaces in two
- ways. First, in connecting different spaces, and co-shaping the relational forms of the
- 19 network of which they are part. Second, through these actions, and the relations with
- other spaces, intermediary spaces are themselves (re)shaped. Nonetheless, little is
- 21 currently known about *how* these relations shape the spaces for intermediaries, and
- 22 therefore the possibilities and limitations of their actions. A relational perspective can
- 23 highlight how intermediary spaces are a product of the socio-spatial dynamics within
- 24 and between them (Castán Broto and Baker, 2018; Swyngedouw and Heynen, 2004).
- 25 Such a perspective also promotes a view of spaces as constantly changing, both
- 26 producing and receiving changes through ongoing determinant interactions with one
- another (Castán Broto and Baker, 2018; Massey, 2005, 2009; Moss et al., 2009). The
- 28 emergence, reworking, or disappearance of intermediary spaces is as much a cause as
- 29 effect of the re-organisation of social, political and economic power (Moss et al., 2009;
- 30 Swyngedouw, 2004). Thus, the relation between intermediary and other spaces is not
- 31 simply one-way (with intermediaries seeking to reshape other spaces), but

 $^{^{1}}$ The term 'intermediary spaces', primarily conceptualises these spaces primarily as symbolic spaces, although their effects are often tangible.

intermediary spaces can also be enhanced or challenged through the actions of other

2 actors. As such, a relational perspective can highlight how the networked nature of

3 energy governance produces 'geographies of connection, dependency and control'

(Bridge et al., 2013:333).

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6 The second, associated reason, for adopting a relational spatial perspective is that it can

7 help blur the binary distinction in the literature that often sees communities as either

8 counter to, or part of, the neoliberal state which engages in both 'rollback' and 'rollout'

(Tickell and Peck, 2003) forms of neoliberalism. On the one hand, activists often see

community and cooperative forms of energy governance as an opportunity countering

neoliberal energy governance, which they see as characterised by a withdrawal from

the state through the privatisation of previously state-owned energy assets (van Veelen

and van der Horst, 2018). Others have argued, however, that emerging forms of

community governance in the energy and environmental sphere are as much *part of*

neoliberal governance as they are a response to it. This view, that perceives the state as

'governing through community' (Rose, 1996) sees communities as part of the project of

neoliberal state governance, where community groups are expected to substitute the

direct work of government in meeting nationally defined carbon reduction targets

19 (Taylor Aiken et al., 2017). Furthermore, as Rosol (2012) notes, communities are

20 expected to do so through a second aspect of neoliberal governance: the 'roll out' of

market-principles into the community sphere, such as governance through indicators

and number-based measuring, and a focus on competition rather than redistribution

(see also Catney et al., 2014; Ison, 2009; Middlemiss and Parrish, 2010).

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However, rather than assuming that communities either reproduce or resisted

homogenously across space, a geographical sensibility can offer further nuance by

focusing on diverse ways in which scales and spaces of governance are actively

reshaped (Swyngedouw and Heynen, 2004). Such an approach speaks closely to Gibson-

29 Graham's (2008) concept of diverse economies. A relational approach to space helps

recognise multiple coexisting configurations (Castán Broto and Baker, 2018). When we

31 follow Massey (2005) and start to conceive of spaces as home to coexisting

32 heterogeneity and facilitative of multiplicity, we can also begin to read for difference

rather than dominance. This, in turn, opens up the possibility of not seeing particular

- economic (and environmental) practices as the same as, or opposite to, neoliberalism,
- 2 but focus on *how* the relations of interdependence between people and environment are
- 3 negotiated (Gibson-Graham, 2008; Graham and Roelvink, 2010). A focus on the
- 4 relational space of intermediaries can highlight how this process takes place through
- 5 the integration of different internal and external socio-economic relations. Such an
- 6 approach thus has the potential to show that intermediary spaces themselves are not
- 7 neutral, but shaped by power relations that both surround and enter them. This also
- 8 conveys the situated nature of participation, the boundedness and permeability of
- 9 arenas, and the domains from which new institutions and opportunities emerge
- 10 (Cornwall, 2004).

- 12 The third, brief, reason for adopting a relational geographic perspective, which follows
- from the previous two, is that it opens up alternative possibilities. As power shifts, new
- social, economic or political spaces are constructed, while others will be redefined or
- disappear altogether (Swyngedouw, 2004). If we conceptualise 'space as open, multiple
- and relational, unfinished and always becoming' (Massey, 2005:59), this open up the
- opportunity of envisaging alternative spatial and social configurations (Castán Broto
- 18 and Baker, 2018).

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- 20 To summarise, a conceptualisation of intermediary spaces as networked spaces of
- 21 intervention can thus help achieve three things. First, the 'in-betweenness' of
- 22 intermediary spaces can blur the distinctions between binary categories of
- 23 'communities' and '(nation)-state' in energy governance, instead focusing on the ways in
- 24 which these are connected. Second, this focus on the formation of, and the interactions
- between, different spaces in turn highlights the diverse ways in which spaces of energy
- 26 governance are negotiated, as well as the social origins and power dynamics of these
- 27 relations. Third, such a perspective can provide an understanding of how particular
- spaces may open up to challenge the status quo.

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Community energy intermediaries in Scotland

- 31 Scotland has a substantial renewable energy sector, with 10GW installed capacity, and
- 32 68% of gross electricity consumption generated by renewable sources in 2017 (Scottish
- Government, 2018a). In addition, it has a separate target of 1GW of community-and

- locally owned energy by 2020 (Scottish Government, 2018b). To meet this target for
- 2 community- and locally owned energy, the Scottish Government has introduced a
- 3 number of funding and advice programmes, delivered by a range of intermediary
- 4 organisations, including government agencies, third sector organisations, and private
- 5 sector companies. As such, many community energy intermediaries are expected to
- 6 perform a dual role: advancing the interests of the community groups they work with,
- 7 while also meeting Government requirements and targets.

- 9 Initially support for community energy was provided by non-specialist organisations,
- but in 2008 Community Energy Scotland was established; an independent organisation
- solely focused on promoting community energy. For the next five years, Community
- 12 Energy Scotland was the main support organisation for community energy groups. In
- 2013, however, the newly established Local Energy Scotland (a consortium of five
- organisations who already deliver other Scottish Government energy programmes) won
- the contract to deliver the Scottish Government's community energy support package
- 16 (CARES). In addition to administering government funding schemes, community energy
- intermediaries in Scotland are involved in several activities. They are highly involved in
- the creation of networks and infrastructures aimed at circulating knowledge and
- 19 experiences between different actors. For example, two of the key intermediaries,
- 20 Community Energy Scotland which continues to operate albeit no longer delivering
- 21 the CARES package and Local Energy Scotland, organise regional (Community Energy
- Scotland, 2017) and national (Local Energy Scotland, 2017) conferences, and have
- 23 developed handbooks (Local Energy Scotland, 2013) and toolkits (Local Energy
- Scotland, 2016) to aid knowledge exchange between community groups.

- 26 It is important to emphasise, however, that support for community energy in Scotland
- 27 should be seen as part of a broader agenda for asset-based community development,
- 28 which is supported by the Scottish Government and intermediaries alike (MacLeod and
- Emejulu, 2014; The Scottish Government, 2015a, 2015b; van Veelen, 2017). While often
- wrapped in a language of empowerment (The Scottish Government, 2015a), MacLeod
- and Emejulu (2014) have questioned whether this agenda is simply 'neoliberalism with
- 32 a community face?' For the purposes of this article, this is relevant because it means that
- many intermediaries operating in the community energy sphere, do not solely focus on

- 1 energy issues. Rather, there are many more general community development
- 2 intermediaries focused on supporting community asset ownership, land ownership,
- 3 and enterprise who have entered the energy arena. While this has diversified the
- 4 support available for community groups, it has also ensured that the field for
- 5 intermediaries operating in the community energy sector in Scotland it both diverse,
- 6 but also seen as rather difficult to navigate (Haggett et al., 2014).

- 8 To understand how the spaces for intermediaries are shaped and negotiated, I
- 9 conducted interviews with eighteen representatives from eleven intermediary
- organisations, supplemented by interviews with thirty-nine members of thirteen
- different community energy groups (referred to as 'CG' in the data). Intermediaries
- were identified through a social network analysis of the community energy sector,
- which was undertaken as part of a separate research project during the summer of
- 14 2014 (the results of which can be found in Haggett et al., 2014). I subsequently selected
- participants based on their involvement in supporting the community energy sector, as
- identified through the interviews with community energy groups. An overview of the
- intermediaries can be seen in Table 1. Due to the sensitive nature of some of the
- interview data, all identifying features have been removed.

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- 20 Interviews were conducted between summer 2015 and summer 2016. Ten interviews
- 21 were conducted face-to-face, with the remaining eight conducted by phone. Interviews
- varied in length from 30 minutes to 180 minutes, with the average length being
- 23 approximately one hours. The interviews were conducted in a semi-structured manner,
- but all interviews had the aim to understand the wider context within which
- 25 intermediaries operate, e.g. what shapes intermediaries' activities (changing discourses,
- policies and funding mechanisms around community energy & development); and the
- 27 opportunities or barriers intermediaries had experienced when seeking to change these
- 28 contexts. Interviews were transcribed verbatim and analysed through thematic coding
- in NVIVO, using an inductive approach.

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Table 1: Overview of intermediary organisations included in this study

1	Creating and	contesting intermediary	spaces
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- 2 The empirical evidence highlights the symbiotic relation between the activities of, and
- 3 spaces for, intermediary organisations, as these spaces are shaped by the connections
- 4 within and around them. Funding for intermediaries, and the way in which funding is
- 5 guided by a context of neoliberal economic logics is a key factor that shapes the spaces
- 6 for intermediary action in the Scottish context. The subsequent three sections will set
- out this argument in more detail. First, I will focus on how intermediaries' support for
- 8 community groups has been shaped by the context of the 'contracting' state.
- 9 Subsequently, I will discuss the role funding plays in how intermediaries negotiate the
- interactions between their own space, communities, and the state. Then, I will discuss
- 11 how funding has played an important role in how intermediaries protect their spaces,
- the differentiated responses shown by these organisations shows the importance of
- accounting for intermediaries' own agency. A final, fourth, section shows how
- intermediary spaces and the relations within and beyond them continue to change and
- expand, opening up the possibility of alternative socio-economic configurations.

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Shaping intermediary spaces - intermediaries and the 'contracting state'

- 18 What has become evident through these interviews is that the space for intermediaries
- has been shaped by both 'bottom-up' forces, for example the growth in community
- 20 groups buying land and other assets who have gone on to develop energy projects (
- 21 Braunholtz-Speight, 2015; Simcock, 2016), and 'top-down' forces, particularly changes
- 22 to government priorities and funding mechanisms. Of particular importance in shaping
- 23 intermediary spaces is the role and process of what one interviewee referred to as –
- 24 'the contracting state', which encompasses both rollback and rollout forms of
- 25 neoliberalism:

'It's to do with the retreat of the state and the contracting of the state, who are just transferring more and more [...]. In this debate there is

always this interesting ambiguity around the word 'contract', because

there is contract meaning "getting smaller", and a relationship,

30 **financial often**. So, 'the contracting state', is an interesting play on

words really, because it's both.' (106 – emphasis mine)

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While interviewees (e.g. IO1-2, IO4, CG6 & CG10) identified that both definitions have

contributed to the growth and variety of community activity in Scotland, here, I want to

- focus specifically on the second definition, the (financial) relations between the state
- 2 and intermediaries. This financial relation is especially important in shaping
- 3 intermediary spaces, as it is instrumental in shaping the relations within the
- 4 intermediary sector and between intermediaries and other actors. It was thus identified
- 5 as the key way in which a neoliberal context which reduces politics to economics,
- 6 especially through the introduction of competitiveness and an emphasis on 'value for
- 7 money' as a means of capturing the value of public goods or social costs (Davies, 2018) –
- 8 is made visible and 'real'. Interviewees from intermediary organisations (IO1, IO4-6)
- 9 emphasised that they try to ensure that community-led development, and by extension,
- their role in facilitating this, was guided by what is best for communities rather than a
- 11 regressive form of localism, which further entrenches market principles into the
- community sphere. Nonetheless, it became clear that metrics focused on flexibility, and
- value for money do often guide the work of intermediaries. Most of the intermediaries
- interviewed for this study are third sector organisations whose activities are part-
- funded by government (IO1-2, IO4-8 IO10-11). This funding, however, 'is always a
- 16 *moving beast'* (106), and influences the type and level of support that intermediaries can
- offer, even if this sometimes means facilitating government priorities rather than
- 18 communities' priorities.

- 20 Changes to funding affect the support intermediaries offer in three ways. First, it
- 21 influences the magnitude of the space available to intermediaries. Second, changes to
- 22 funding priorities means that some intermediaries may affect the type of support
- 23 intermediaries can offer and to whom:

'[Intermediary] is shrivelling on the vine these days, there's next to nobody left, they have no money left, the number of meetings I've been to where they say 'we're the funder of last resort, come to us if you can't find funding elsewhere, but we don't really have any money anyway, so...' (CG6)

- 30 In another example, the Scottish Government has designated additional support in
- 31 recent years for projects that are particularly technologically innovative. While this has
- 32 helped support some community groups which were facing particularly challenging
- barriers, it has also moved funding away from other areas. One intermediary employee

noted that this had left a gap in the support their intermediary could offer to
 communities:

'There is all the kind of innovation stuff, which is great, but...you want to get the stuff that works happening as well: insulation in community halls, it's not exciting, the government doesn't like it, it's not ground breaking stuff, but it works.' (101)

Third, a focus on short term contracts combined with a growing emphasis on cost efficiency and value for taxpayers' money can also affect the quality of (non-financial) support intermediaries offer (IO2). When contracts to deliver externally-funded programmes come up for renewal, some interviewees felt that the officials assessing the different bids are more concerned with the financial bottom-line than with the quality of the intermediaries' proposals (IO2, CG10). One intermediary that had lost parts of its (government) funding, continues to deliver other kinds of support to community energy

groups. Nonetheless, it now has to deliver this with less money, affecting the quality of support offered:

'[W]e had to change the way we were working again because we didn't

'[W]e had to change the way we were working again because we didn't have the money to cover our time to deliver the same level of support. Now, it can be difficult to manage the amount of time that we can give groups.' (101)

'When [101] lost their funding, there was kind of a vacuum, because the group that had got it [...] didn't necessarily have employees and they got the contract because their bid was much cheaper. So they didn't have the money to pay the people to provide the support in the way that [the previous organisation] had done.' (CG10)

To summarise, the first important factor that shapes the space for intermediaries is the role of often precarious, external – in this case, government – funding (see also Kivimaa and Martiskainen (2018a) for a parallel discussion on the role of membership funding). Changes to funding, shaped by short-term contracts and neoliberal metrics of value for money and cost efficiency, are a key factor in shaping the ways in which intermediaries relate to both government and communities. It has created a space where some interviewees felt intermediaries are required to prioritise financial considerations over quality or effectiveness of support. These interviews show, however that intermediaries

are not solely passive subjects, but actively negotiate the space they occupy, which will
 be the focus of the next section

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Negotiating intermediary spaces – between communities and the state

- 5 Intermediaries are not solely passive subjects but also play a role in shaping
- 6 government policy, which in turn shapes their own activities. This is a key part of
- 7 intermediaries' work: if they want to be effective they cannot focus solely on internally
- 8 building community energy projects, but must activity try to shape the wider contexts in
- 9 which community energy projects, and by extension the intermediaries that support
- them, exist (Hargreaves et al., 2013:878). This work thus plays an important role in
- shaping intermediary, as well as community, spaces.

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- Although the growing expectation on community enterprise in policy circles could be
- seen as attempts to govern through community, some intermediaries also see it as an
- opportunity for influencing the policy and funding priorities which shape their work
- 16 (IO2, IO4-5). As one director of an intermediary explained, his organisation has seen a
- 17 widespread change in the Scottish Government: as the notion of community-led
- development rose on the political agenda, his organisation has gone from 'shouting at
- 19 *the margins'*, to being 'almost at the centre of policy' (IO4). The opening up of policy
- 20 spaces has enabled intermediaries to bring communities' concerns to the attention of
- 21 policy makers, leading to the introduction of new support schemes, such as the Scottish
- Local Energy Challenge Fund, while others have been asked to sit in government
- 23 working groups to shape and develop future policy strategies. In contrast to findings by
- Hargreaves *et al.* (2013), these interviews thus suggest that intermediaries' lobbying is
- 25 (increasingly) pro-active in nature, although this can potentially be explained by the
- 26 Scottish context, where intermediary organisations generally have relatively easy
- 27 access to policy makers.

- Nonetheless, the permeability of policy spaces can vary, depending on the intermediary
- in question, and the interests they (are perceived to) represent. There is some evidence
- 31 from these interviews which shows that intermediaries who are not actively trying to
- expand their organisation, or who have long standing relations with policy makers may
- have greater weight in discussions around future policy directions (IO2, IO5). Here, a

1 perceived lack of self-interest from intermediaries was deemed essential when seeking

2 to influence policy.

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4 While there was widespread agreement among interviewees that their organisations do

- 5 seek to represent communities' interests in the policy sphere (IO1-8, IO11), they
- 6 highlighted also a reluctance among some intermediaries to be critical of government
- 7 policy:

'Many would argue now that [we were] just a delivery mechanism of government. A 'poodle' of central government you know. I know that... I got exposed to this myself I guess of being criticised for "you are just delivering the government's policy, you are not challenging it, you're not shaping it, you're not...".' (106)

The more dependent you are... it can become more difficult to bite the hand that feeds you, and that's not a good thing. That is part of the problem with the overall analysis of the contractualisation of the third sector is that it becomes much more difficult to be politically active and... because you are always worried inside the system 'ehm if we say that, will we get our next grant or our next contract?'. That's not a good thing, that's not a healthy place to be.' (105)

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These quotes highlight that the reliance of many intermediaries (in this study at least)

on government funding means they may be unwilling to challenge government policy

out of concern of losing their seat at the table or potentially risking future funding

opportunities. I highlighted earlier in this section that intermediaries will try to help

design policy programmes, however, when it comes to delivery, it appears they deliver

'the service that the government wants, and not necessarily the one that you might decide'

(IO6). The unique ways in which each intermediary negotiates being at the

community/policy interface plays a key role in shaping intermediary spaces.

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30 The two previous sections have sought to expand on the notion of how the work of

intermediaries is shaped by funding, in terms of the support intermediaries offer, and

their willingness to challenge government policy. A third key way in which funding

plays a role is in resulting in, what I refer to here as, 'space-protective action', which will

34 be the focus of the next section

- 1 Protecting intermediary spaces intermediaries as collaborators or competitors
- 2 In this section I will set out in more detail the symbiotic relation between intermediary
- 3 spaces and activities by focusing on the dualism of intermediaries as collaborators
- 4 versus competitors. First, the role of intermediaries in shaping collaborative spaces.
- 5 Intermediaries recognise that community groups who are developing energy projects
- 6 can often learn as much, if not more, from other communities who have successfully
- 7 developed such projects, or are currently going through the process of doing so. Here,
- 8 intermediaries often play a facilitative role to enable community groups to share and
- 9 learn from one another's experience (IO1-6, IO8, IO11).

- 11 Intermediaries also develop their own collaborations and networks to improve the
- support on offer. For example, four intermediaries are currently delivering a
- collaborative programme aimed at raising awareness of different funding methods for
- community (energy) projects. One employee involved in the programme commented
- that no single intermediary can offer all the support that community organisations need.
- A collaborative approach can thus help highlight both intermediaries' distinctiveness
- 17 and connectedness:

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- 'That's one of the reason for doing this roadshow with different partners,
 because it's going to bring in different groups, and get them thinking in
 different ways. It is about presenting it in many different lights. Every
 intermediary has a handbag of tricks. For us it's about making sure we're
 in the handbag, and when appropriate, we're pulled out, if that makes
- 24 *sense?' (I011)*

- The protection of spaces for and by intermediaries is not always the result of facilitative
- 27 and collaborative processes, but is also accomplished through competitive means or
- 28 'gatekeeping' practices. While all interviewees lauded the work of intermediary
- organisations, they observed that a small number of organisations may be motivated as
- much by self-interest as their desire to help others. While one might assume that the
- 31 activities of intermediaries are aimed at empowering community groups (see also Shea
- 32 2011), one interviewee suggested that the idea of community empowerment may stand
- in contrast with intermediaries' own interests:

'There are a lot of agencies, who, I think it is in their interest to be 1 2 gatekeepers, and they say 'oh these people don't have the capacity and can never do this sort of thing.' (104) 3 This idea, that some intermediaries try to ensure that their services continue to be 4 required by community groups, was echoed by members of two community energy 5 groups. An employee of one community energy group in the Scottish Highlands recalled 6 7 that the guidance and instructions she received for developing a community energy 8 project unhelpful and more focused on fulfilling the intermediary's auditing requirement than ensuring the successful completion of the community energy project 9 (CG10). The board member of another community group in the North of Scotland also 10 reported difficulty in gaining greater independence from an intermediary organisation 11 of which their group is a member. She indicated that the intermediary controls 12 communication between the different member groups as well as between the groups 13 and other stakeholders: 14 'They [intermediary] let you know what they want you to know. [...] They 15 want us [members] to share ideas, but I think they don't want us to talk 16 about other things actually. I wanted to know how other members did 17 things. I had an awful job getting this information out of them.' (CG3) 18 19 20 In addition to trying to ensure that communities continue to require intermediaries' services, the increasingly crowded space for intermediaries has also resulted that some 21 22 intermediaries feel they may be in competition with one another (IO2, IO3). I attended 23 one presentation by an intermediary (IO3) where one director spoke of the current difficulties the sector is facing, including the emergence of other intermediaries offering 24 a similar service. The director ended their speech with the observation that despite the 25 26 increasingly crowded landscape they were certain that their organisation would be 'the last one standing'. 27 28 This remark left community energy group members in attendance somewhat 29 flummoxed, as they did not see it as a competition, but neither they did not blame 30 intermediaries for this competitive approach. Rather, community group members 31 considered this part of a larger problem, of the precarious situation that some 32 intermediaries are in and the pressures that they are under: 33

'I guess it shows the additional pressures that [intermediary] are under, 1 2 and that for them, ultimately it is a business as well, and that they have their own aims which may be slightly different from those of the groups 3 that are part of them.' (CG3) 4 5 'My contact with [intermediary], I get on very well with, and he's realistic. But he has to push, he is pushing and pushing and pushing, 6 7 because they need results. Because they're reporting back to Scottish Government on results, and if they don't get results, they'll not get 8 funding to pay their people and they won't get funding to pay us." (CG10) 9 10 These last two quotes are interesting as the intermediaries referred to are funded in 11 different ways. Whereas the intermediary from the first quote is funded primarily 12 through membership fees, the second is publicly funded. This thus highlights that the 13 potential for competition over collaboration is not associated with one particular type 14 of funding, but is the result of ways in which the intermediary landscape more generally 15 has been shaped through the growth in number of intermediaries offering comparable 16 17 services and the resulting precarity of income that many intermediaries experience. 18 To summarise, I have demonstrated how finance has played an important role in 19 shaping intermediary spaces, particularly through a neoliberal economic logic, 20 expressed through competitive funding based on a rationale of needing to deliver value 21 for money. It has played a key role in shaping the ways in which intermediaries relate to 22 communities, the state and to each other. However, these sections have also shown that 23 this is not a deterministic relation, and that there are spaces for alternatives. 24 25 Intermediaries do seek to actively change the wider policy landscape, but the power dynamics in place (expressed through funding streams) means some feel unable to 26 speak up. Nonetheless, the last section showed - and echoes findings by Kivimaa and 27 Martiskainen (2018a) – that scarcity of funding does not solely result in competition, 28 but can also create new linkages within and between intermediary spaces, based on 29 collaborative rather than competitive ideals. The next section will look at the future, by 30 considering how emerging intermediary spaces may have the potential to break with 31 the logics that have thus far governed them. 32

- 1 Expanding intermediary spaces the emergence of new intermediaries
- 2 While the sections until now have focused on intermediaries as organisations occupying
- 3 the space between communities and the state, this space itself is hybrid in nature, with
- 4 fluid boundaries, which ensure that intermediary spaces are continuously reshaped.
- 5 This is evident in two ways: first through the ways in which intermediary spaces are
- 6 also present within community organisations; and secondly, by how community
- 7 organisations are becoming intermediaries in their own right.

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- The first way in which intermediary spaces are not restricted to intermediary
- organisations is the presence of intermediary actors within community groups. The
- groups that were interviewed as part of this study often had active community
- members, who were previously or currently employed by intermediary organisations or
- local government (CG2-3, CG5-6, CG9-10, CG14-15). This experience gained elsewhere
- was identified by these community groups as hugely beneficial in helping them navigate
- the context in which they are operating, being able to identify key constraints and
- opportunities, as well as a bringing with them a network of contacts that extends
- beyond the community boundaries. As such, while these individuals may not be able to
- provide funding or build institutional support, they do fulfil some of the other
- intermediary functions identified by Geels and Deuten (2006), such as the translation of
- 20 general knowledge into local contexts. Through this process, these individuals are thus
- 21 integrating intermediary functions into the community space, and as Martiskainen
- 22 (2017) notes, are starting to become intermediary actors themselves.

- 24 The second way in which intermediary spaces continue to be reshaped is through the
- 25 transformation of community groups into intermediaries, further transforming
- intermediary spaces in the process. Community energy in Scotland is characterised by
- 27 its emphasis on renewable energy as an income-generating source for communities, to
- be used for community development purposes (van Veelen, 2017). As community
- 29 energy organisations start to generate income, they have the potential to further
- 30 become intermediaries in their own right. In addition to providing a networking and
- 31 advice function for other local community groups, they are now able to offer –
- 32 sometimes significant financial support as well:

'It's very interesting, I think, in the Western Isles at the minute, I've been 1 2 thinking about this in another context, but effectively... the community owners are effectively small economic development agencies, that's what 3 they have become.' (105) 4 5 6 Contrary to intermediaries relying on often insecure and time limited public funding, 7 community energy organisations who have developed medium to large sized incomegenerating projects, have a source of income that is long-term, relatively stable and not 8 tied to external priorities. Thus, these community energy organisations will be in a 9 potentially much more powerful position to shape local community development than 10 many other intermediaries are: 11 12 'I was telling our contact at [intermediary], that he should be getting on 13 the board of all these renewable organisations, because they're going to 14 be dishing out £300,000 per year potentially, from a board made up of volunteers out of goodwill.' (CG6) 15 16 17 It is important to note that the intermediary functions fulfilled by these community 18 groups tend to move on from the embedding of energy technologies into local contexts (Barnes, 2019) to supporting a variety of community groups that seek to achieve local 19 development in a more general sense. Nonetheless, one of the questions that emerges 20 from this is what the relation of these 'community intermediaries' will be with regional 21 or national intermediaries: will their activities complement or replace some of the 22 activities currently delivered by other intermediaries? 23 24 As community energy organisations have only begun to generate a substantial income 25 in recent years, and are few in number, it will take time to see how intermediary spaces, 26 and the relations within them, are reconfigured as a result. Initial evidence from these 27 interviews suggests, however, that while 'community intermediaries' may be able to act 28 with fewer constraints than the intermediaries described in previous sections, due to 29 their limited reliance on the state or other organisations for funding. This means that 30 31 the work of these emerging intermediaries', and that of the communities they support, may be less constrained by the funding concerns set out in earlier sections. The local 32 focus of these community energy groups combined with their relative freedom from 33

state funding could also mean, however, that they may be less likely to seek to influence

- 1 policy to bring about structural change. At the same time, a diminishing role for
- 2 'traditional' intermediaries in facilitating community development on the ground could
- 3 also affect their ability to influence policy, with the potential for policy makers to
- 4 question whether these intermediaries are representative of communities' views. As
- 5 these spaces for new, community-based intermediaries are still emerging and being
- 6 shaped, the question whether this development will extend or reconfigure the space for
- 7 intermediaries is one to be addressed in more detail by future research.

9 Concluding discussion: intermediary spaces as diverse, political,

10 and emergent

- 11 This article contributes to the debate on how new spaces of low-carbon energy
- 12 governance are negotiated. The combination of new energy technologies and new forms
- of governing have created new spaces of intervention where visions of low-carbon
- transitions are translated into practice (Hodson et al., 2013). Much attention in the
- literature has been devoted to the emergence of community as a new space and scale of
- energy governance. Here, I have adopted a relational perspective, analysing how the
- spaces for intermediary organisations to support community energy groups are shaped
- by their 'in-betweenness' (Moss, 2009), i.e. their interactions with external (community
- and government) spaces. The context of the 'contracting state' most clearly evident
- 20 through the state's financial relations with intermediaries' was shown to be
- 21 fundamental in shaping intermediary spaces. This financial relation, and the 'rollout'
- 22 neoliberal market techniques encompassed by it, influences the type of support
- 23 intermediaries offer to communities, as well as their ability to represent communities'
- interest at the policy level. As such, this research complements earlier work (e.g. Bush et
- 25 al., 2017; Hargreaves, Hielscher, et al., 2013; Kivimaa and Martiskainen, 2018b; Polzin et
- al., 2016) that has focused on the role of intermediaries in mobilising financial and other
- 27 resources to foster low-carbon innovations, highlighting how intermediaries' abilities to
- do so are in themselves shaped by the financial relations that exist between
- 29 intermediaries and other actors.

- 31 I have conceptualised such spaces as symbolic spaces, not least because they are
- 32 simultaneously found in many places and at different scales. Furthermore, the diverse
- ways in which intermediaries integrate, contest and translate dominant economic logics

- 1 (depending on the time, place and intermediaries' own agency) highlights their plural
- 2 and emergent nature. The configurations that have emerged here are specific to the
- 3 Scottish context, which interviewees perceived to have higher levels of support for
- 4 community energy groups compared than other parts of the UK. This higher level of
- 5 support, delivered through intermediaries, has potentially contributed to the relatively
- 6 high reliance on government funding, compared to other contexts, where
- 7 intermediaries may have stronger activist roots and a more antagonistic relation with
- 8 the state. Secondly, as discussed in the final analysis section, intermediary spaces are
- 9 not restricted to intermediary organisations. What characterises the Scottish context is
- the fluidity of these spaces, with many active community group members having
- previously worked, or currently working, at intermediary organisations and vice versa.
- As a result, the separation between intermediary and community spaces is not as
- substantial or clear as it may be elsewhere. Despite these specifics of the Scottish
- context, this article has several findings that transcend this specific empirical context.

First, it demonstrates how intermediary actions are both supported and constrained by

17 the spaces that intermediaries occupy. These spaces, in turn, are shaped through

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- intermediaries' alternatively integrating, translating, and contesting the external logic of
- the 'contracting state'. Adopting a spatial lens to convey the situated nature of these
- spaces, has enabled me to show that intermediary spaces are not neutral, but shaped by
- 21 the ongoing determinant interactions with other spaces (Massey, 2005, 2009). Klerkx
- and Leeuwis (2009:857) have labelled this the 'funding paradox': although
- 23 intermediaries wish to tackle systemic failures and what they perceived as the risk of
- 24 the neoliberalisation of community spaces, they are themselves subject to these
- 25 processes. While the precarity of funding for intermediaries is an important
- determinant in shaping intermediary spaces and actions (see also Kivimaa and
- 27 Martiskainen, 2018a; Klerkx and Leeuwis, 2009), these findings also show the
- importance of being attuned to the diversity of spaces and actions that emerge. By
- 29 following Massey (2005) and Gibson-Graham (2008), and accounting for multiplicity
- and diversity rather than dominance, the findings here show that intermediary
- organisations are not simply sites or expressions of neoliberal governance, nor a radical
- response to it. Instead, the data here show how intermediaries construct multiple,
- 33 context-dependent relations and spaces of both collaboration and competition. Through

these processes, they transcend dichotomies of local/national and community/state, to

favour an explanation that shows *how* different scales interact through intermediary

spaces, and as expressed by intermediary actions.

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5 Second, the empirical material highlights the varied power dynamics behind these

6 emergent intermediary spaces, which in turn affect the functions intermediaries' are

tasked with fulfilling. The literature on intermediaries has been critiqued for both

8 overemphasising (Hargreaves, Hielscher, et al., 2013; Medd and Marvin, 2008) and

9 minimising (Parag and Janda, 2014) intermediaries' independent agency or capacity.

10 Here, I have shown that while intermediary actions and spaces are shaped by external

influences, they are also shaped by intermediaries' own logics and priorities. In

particular, I have highlighted that despite the precarious environment in which many

intermediaries operate, such external factors can lead to differentiated actions. Where

some highlight collaboration and the development of networks as coping strategies,

others have adopted competitive and gatekeeping practices, echoing (Kivimaa and

Martiskainen (2018a)'s finding that collaboration and competition can exist

17 simultaneously. These different responses indicate that despite similar structural forces

that shape intermediary spaces, intermediaries have the agency and capacity to develop

19 their own directions within this. This highlights the ways in which intermediary spaces

are not solely shaped by the integration of external logics, but are also actively

21 (re)shaped through processes of translation and contestation. That intermediaries

engage in this process in a variety of ways highlights, as Moss (2009: 1485) also argues,

that intermediaries are 'political players in their own right', pursuing a variety of

interests according to a variety of means. As such, this adds an important insight to the

existing literature on intermediaries, which has often focused on the ability of

26 intermediaries to connect different actors and help community groups scale up their

activities, and grounded in an expectation that intermediaries are 'neutral' or

'independent' actors themselves (Klerkx and Leeuwis, 2009). Instead, the findings here

show, intermediaries' desire to protect their own space can potentially be at odds with

their (assumed) function to connect and support other actors.

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Finally, through paying attention to the ways in which intermediary spaces are 'open,

multiple and relational, unfinished and always becoming' (Massey, 2005:59), we can also

- begin to see how opportunities for change emerge. The movement of staff between
- 2 community groups, intermediary organisations and policy-making circles shows the
- 3 fluid nature of spaces, as does the emergence of community groups as intermediaries.
- 4 The latter in particular, through financial independence from the state, has the potential
- 5 to foster new sociomaterial relations and spaces around the generation, distribution
- 6 and use of low-carbon energy, while becoming part of a different set of relations and
- 7 networks.

- 9 These findings thus speak to two recent trends in social research on low-carbon
- transitions (1) the growing attentiveness for 'space' in energy research (e.g. Bridge,
- 2018; Castán Broto and Baker, 2018); and (2) the importance of intermediaries in
- governing low-carbon transitions (e.g. Gliedt et al., 2017; Hargreaves, Longhurst, et al.,
- 2013, Kivimaa and Martiskainen, 2018). Adopting a relational approach to the study of
- intermediary spaces highlights the wider set of social relations and power dynamics
- that intermediary organisations are a part of, and which can either resist or facilitate
- the functions that intermediaries are expected to perform. These relations and
- dynamics can be seen as 'already existing', but a relational approach that is attuned to
- diversity also shows how they are always emergent, offering opportunities for change.
- 19 While here I have conceptualised intermediary spaces primarily as symbolic spaces,
- 20 future research may wish to explore in more detail their tangible, place-based effects.

21 22

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References

- 29 Barnes J (2019) The local embedding of low carbon technologies and the agency of user-
- side intermediaries. *Journal of Cleaner Production* 209: 769-781.
- 31 Berka AL and Creamer E (2018) Taking stock of the local impacts of community owned
- renewable energy: A review and research agenda. *Renewable and Sustainable*
- 33 *Energy Reviews* 82(3): 3400–3419.

- 1 Braunholtz-Speight T (2015) Scottish community land initiatives: going beyond the
- 2 locality to enable local empowerment. *People, Place and Policy People, Place and*
- 3 *Policy Journal Compilation* (92): 123–138.
- 4 Bridge G (2018) The map is not the territory: A sympathetic critique of energy
- 5 research's spatial turn. *Energy Research & Social Science* 36: 11–20.
- 6 Bridge G, Bouzarovski S, Bradshaw M, et al. (2013) Geographies of energy transition:
- 7 Space, place and the low-carbon economy. *Energy Policy* 53: 331–340.
- 8 Burke MJ and Stephens JC (2017) Energy democracy: Goals and policy instruments for
- 9 sociotechnical transitions. *Energy Research & Social Science* 33: 35–48.
- Bush RE, Bale CSE, Powell M, et al. (2017) The role of intermediaries in low carbon
- transitions empowering innovations to unlock district heating in the UK. *Journal*
- *of Cleaner Production* 148: 137–147.
- 13 Calvert KE (2015) From 'energy geography' to 'energy geographies': Perspectives on a
- fertile academic borderland. *Progress in Human Geography* 40(1): 1–21.
- 15 Castán Broto V and Baker L (2018) Spatial adventures in energy studies: An
- introduction to the special issue. *Energy Research & Social Science* 36: 1–10.
- 17 Catney P, MacGregor S, Dobson A, et al. (2014) Big society, little justice? Community
- renewable energy and the politics of localism. *Local Environment* 19(7): 715–730.
- 19 Community Energy Scotland (2017) Powering Through Western Isles Community
- 20 Energy Conference. *Community Energy Scotland*. Available at:
- 21 http://www.communityenergyscotland.org.uk/news/23-feb-2017-powering-
- 22 ahead-western-isles-community-energy-conference.asp.
- 23 Cornwall A (2004) Spaces for transformation? reflections on issues of power and
- difference in participation and development. In: Hickey S and Mohan G (eds)
- *Participation: from tyranny to transformation?* London: Zed Books, pp. 75–91.
- Davies W (2018) The Neoliberal State: Power Against Politics. In: Cahill D, Cooper M,
- Konings M, et al. (eds) *The SAGE handbook of neoliberalism*. London: Sage. Available
- at: http://research.gold.ac.uk/23094/ (accessed 2 May 2019).
- 29 Gaventa J (2004) Towards participatory governance: assessing the transformative
- possibilities. In: Hickey S and Mohan G (eds) *Participation: from tyranny to*
- 31 *transformation?* London: Zed Books, pp. 25–41.
- Geels F and Deuten J (2006) Aggregation Activities: Local and global dynamics in
- technological development: a socio-cognitive perspective on knowledge flows and

- lessons from reinforced concrete. *Science and Public Policy* 33(4): 265–275.
- 2 Gibson-Graham JK (2006) A Postcapitalist politics. Minneapolis, MN: University of
- 3 Minnesota Press.
- 4 Gibson-Graham JK (2008) Diverse economies: performative practices for 'other worlds'.
- 5 *Progress in Human Geography* 32(5): 613–632.
- 6 Gliedt T, Hoicka CE and Jackson N (2017) Innovation intermediaries accelerating
- 7 environmental sustainability transitions. *Journal of Cleaner Production* 174: 1247–
- 8 1261.
- 9 Graham JKG and Roelvink G (2010) An Economic Ethics for the Anthropocene. *Antipode*
- 10 41. Wiley/Blackwell: 320-246.
- Haggett C, Quiroz-Aitken M, Rudolph D, et al. (2014) Supporting Community Investment
- *in Commercial Renewable Energy Schemes.* Edinburgh. Available at:
- https://static1.squarespace.com/static/536b92d8e4b0750dff7e241c/t/54c671da
- e4b093e813f4c564/1422291418350/Supporting_Community_Investment_in_Com
- merical_Energy_Schemes_-_Dec_14.pdf.
- Hamann R and April K (2013) On the role and capabilities of collaborative intermediary
- organisations in urban sustainability transitions. *Journal of Cleaner Production* 50:
- 18 12–21.
- 19 Hargreaves T, Hielscher S, Seyfang G, et al. (2013) Grassroots innovations in community
- 20 energy: The role of intermediaries in niche development. *Global Environmental*
- 21 *Change* 23(5):868-880.
- Hargreaves T, Longhurst N and Seyfang G (2013) Up, Down, round and round:
- 23 Connecting Regimes and Practices in Innovation for Sustainability. *Environment*
- 24 and Planning A 45(2): 402-420.
- 25 Hicks J and Ison N (2011) Community-owned renewable energy (CRE): Opportunities
- for rural Australia. *Rural Society* 20(3): 244-255.
- 27 Hodson M, Marvin S and Bulkeley H (2013) The Intermediary Organisation of Low
- 28 Carbon Cities: A Comparative Analysis of Transitions in Greater London and
- 29 Greater Manchester. *Urban Studies* 50(7): 1403–1422.
- 30 Ison N (2009) From command and control to local democracy: the governnce of
- community energy projects. Available at: http://www.mrsgonline.org.au/wp-
- 32 content/uploads/2011/07/Ison-
- From_command_and_control_to_local_democracy1.pdf.

- 1 Kivimaa P (2014) Government-affiliated intermediary organisations as actors in
- 2 system-level transitions. *Research Policy* 43(8): 1370–1380.
- 3 Kivimaa P and Martiskainen M (2018a) Dynamics of policy change and intermediation:
- 4 The arduous transition towards low-energy homes in the United Kingdom. *Energy*
- 5 Research & Social Science 44: 83–99.
- 6 Kivimaa P and Martiskainen M (2018b) Innovation, low energy buildings and
- 7 intermediaries in Europe: systematic case study review. *Energy Efficiency* 11(1):
- 8 31-51.
- 9 Klerkx L and Leeuwis C (2009) Establishment and embedding of innovation brokers at
- different innovation system levels: Insights from the Dutch agricultural sector.
- 11 *Technological Forecasting and Social Change* 76(6): 849-860.
- 12 Küçüksayraç E, Keskin D and Brezet H (2015) Intermediaries and innovation support in
- the design for sustainability field: cases from the Netherlands, Turkey and the
- United Kingdom. *Journal of Cleaner Production* 101: 38–48.
- Lacey-Barnacle M and Bird CM (2018) Intermediating energy justice? The role of
- intermediaries in the civic energy sector in a time of austerity. *Applied Energy* 226.
- 17 Elsevier: 71–81.
- Local Energy Scotland (2013) *CARES Renewable Energy Handbook*. Edinburgh. Available
- at: http://www.localenergyscotland.org/media/1016/cares_handbook.pdf.
- 20 Local Energy Scotland (2016) CARES Toolkit. *Local Energy Scotland*. Available at:
- 21 http://www.localenergyscotland.org/funding-resources/resources-advice/cares-
- toolkit/ (accessed 13 April 2017).
- Local Energy Scotland (2017) CARES Conference 2017. *Local Energy Scotland*. Available
- 24 at: http://www.localenergyscotland.org/news-events/2017/april/cares-
- conference-2017/.
- 26 MacLeod MA and Emejulu A (2014) Neoliberalism With a Community Face? A Critical
- 27 Analysis of Asset-Based Community Development in Scotland. *Journal of*
- 28 *Community Practice* 22(4): 430–450.
- 29 Martiskainen M (2017) The role of community leadership in the development of
- 30 grassroots innovations. *Environmental Innovation and Societal Transitions* 22: 78–
- 31 89.
- 32 Massey D (2005) For space. London: SAGE Publications Ltd.
- Massey D (2009) Concepts of space and power in theory and in political practice.

- 1 Documents d'Anàlisi Geogràfica (55): 15–26.
- 2 Medd W and Marvin S (2008) Making water work: intermediating between regional
- 3 strategy and local practice. *Environment and Planning D: Society and Space* 26: 280–
- 4 299.
- 5 Middlemiss L and Parrish BD (2010) Building capacity for low-carbon communities: The
- 6 role of grassroots initiatives. *Energy Policy* 38(12): 7559–7566.
- 7 Mohan G (2007) Participatory Development: From Epistemological Reversals to Active
- 8 Citizenship. *Geography Compass* 1(4): 779–796.
- 9 Moss T (2009) Intermediaries and the governance of sociotechnical networks in
- transition. *Environment and Planning A* 41: 1480–1495.
- 11 Moss T, Medd W, Guy S, et al. (2009) Organising water: The hidden role of intermediary
- work. *Water Alternatives* 2(1): 16–33.
- Parag Y and Janda KB (2014) More than filler: Middle actors and socio-technical change
- in the energy system from the 'middle-out'. *Energy Research & Social Science* 3:
- 15 102–112.
- Polzin F, von Flotow P and Klerkx L (2016) Addressing barriers to eco-innovation:
- Exploring the finance mobilisation functions of institutional innovation
- intermediaries. *Technological Forecasting and Social Change* 103: 34–46.
- 19 Rommel J, Radtke J, von Jorck G, et al. (2016) Community renewable energy at a
- crossroads: A think piece on degrowth, technology, and the democratization of the
- German energy system. *Journal of Cleaner Production*. 197(2): 1746-1753
- Rose N (1996) The death of the social? Re-figuring the territory of government.
- 23 *Economy and Society* 25(3): 327–356.
- Rose N (1999) *Powers of Freedom: Reframing Political Thought.* Cambridge: Cambridge
- University Press.
- 26 Rosol M (2012) Community Volunteering as Neoliberal Strategy? Green Space
- 27 Production in Berlin. *Antipode* 44(1): 239-257.
- Scottish Government (2018a) Record year for renewables generation. *Scottish*
- 29 Government. Available at: https://news.gov.scot/news/record-year-for-
- renewables-generation (accessed 3 August 2018).
- 31 Scottish Government (2018b) Renewable Energy for Communities. *Scottish Government*.
- 32 Available at: https://www.gov.scot/Topics/Business-Industry/Energy/Energy-
- sources/19185/Communities (accessed 3 August 2018).

- 1 Seyfang G, Hielscher S, Hargreaves T, et al. (2014) A grassroots sustainable energy
- 2 niche? Reflections on community energy in the UK. *Environmental Innovation and*
- 3 Societal Transitions 13: 21-44
- 4 Shea J (2011) Taking Nonprofit Intermediaries Seriously: A Middle-Range Theory for
- 5 Implementation Research. *Public Administration Review* 71(1): 57–66.
- 6 Simcock N (2016) Procedural justice and the implementation of community wind
- 7 energy projects: A case study from South Yorkshire, UK. *Land Use Policy* 59: 467–
- 8 477.
- 9 Strachan P, Cowell R, Ellis G, et al. (2015) Promoting Community Renewable Energy in a
- 10 Corporate Energy World. *Sustainable Development* 23(2): 96–109.
- Swyngedouw E (2004) Globalisation or 'glocalisation'? Networks, territories and
- rescaling. *Cambridge Review of International Affairs* 17(1): 25–48.
- 13 Swyngedouw E and Heynen NC (2004) Urban Political Ecology, Justice and the Politics
- of Scale. *Antipode* 35(5): 898–918.
- 15 Szulecki K (2018) Conceptualizing energy democracy. *Environmental Politics* 27(1): 21–
- 16 41.
- 17 Taylor Aiken G (2018a) Community as tool for low carbon transitions: Involvement and
- containment, policy and action. *Environment and Planning C: Politics and Space*.
- 19 DOI: 10.1177/2399654418791579.
- Taylor Aiken G (2018b) One-way street? Spatiality of communities in low carbon
- transitions in Scotland. *Energy Research & Social Science* 36: 129–137.
- Taylor Aiken G, Middlemiss L, Sallu S, et al. (2017) Researching climate change and
- community in neoliberal contexts: an emerging critical approach. *Wiley*
- *Interdisciplinary Reviews: Climate Change.* e463. DOI: 10.1002/wcc.463.
- The Scottish Government (2015a) Community Empowerment (Scotland) Act 2015.
- 26 Scottish Government. Available at:
- 27 http://www.gov.scot/Topics/People/engage/CommEmpowerBill (accessed 19
- 28 October 2016).
- 29 The Scottish Government (2015b) *One Million Acres by 2020. Strategy report and*
- *recommendations from the 1 Million Acre Short Life Working Group.* Edinburgh: The
- 31 Scottish Government. Available at:
- 32 http://www.gov.scot/Resource/0049/00490614.pdf.
- Tickell A and Peck J (2003) Making global rules: globalization or neoliberalization? In:

1	Peck J and Wai-Chung Yeung H (eds) Remaking the Global Economy: Economic -		
2	Geographical Perspectives. London: SAGE, pp. 163–181.		
3	van Veelen B (2017) Making Sense of the Scottish Community Energy Sector – An		
4	Organising Typology. Scottish Geographical Journal 133(1): 1–20.		
5	van Veelen B and Haggett C (2017) Uncommon ground: The role of different place		
6	attachments in explaining community renewable energy projects. Sociologia		
7	Ruralis. 57(S1): 533-554.		
8	van Veelen B and van der Horst D (2018) What is energy democracy? Connecting soci		
9	science energy research and political theory. Energy Research & Social Science 46.		
10	Elsevier: 19–28.		
11	Walker G (2011) The role for 'community' in carbon governance. Wiley Interdisciplinary		
12	Reviews: Climate Change 2. Wiley Interdisciplinary Reviews: Climate Change: 777–		
13	782.		
14	Warbroek WBD, Coenen FHJM and Hoppe T (2015) The role of intermediaries in		
15	supporting local lowcarbon energy initiatives to build nontraditional		
16	capacities; An explorative case study of Fryslân, The Netherlands. Paper prepared		
17	for ICPP 2015, Milan Italy, Panel session T16P02 Energy and climate change		
18	mitigation governance . Available at:		
19	http://doc.utwente.nl/96742/1/1434404224.pdf.		
20	Warf B (2015) Networks, Geography of. In: International Encyclopedia of the Social &		
21	Behavioral Sciences, pp. 567–571. Elsevier.		
22			