8 Sustainable rural development and rural energy communities in a post-Brexit UK

Paralysis or broader visions in uncertain times?

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Introduction

Rural areas have become increasingly important for sustainable energy transition, mainly as a resource for the production of renewable energy (hereafter, RE). In this context, political interest has emerged that aims at linking RE development with rural development (hereafter, RD) (ECA 2018). This ambition particularly applies to a supranational European context, where several EU funding programmes are available for intensifying the production and use of RE to support potential synergies with RD. Hence, the development of RE has received explicit acknowledgement at the policy level as a promising means for supporting rural economies (OECD 2012; IEA-RETH 2016; ECA 2018). This is embedded in an increased awareness that rural areas do not merely provide the resources for the production of RE for the benefit of urban growth centres. Instead, RE is also conceived as a lever for the economy and livelihood in rural areas (ECA 2018).

In the UK, the potential of RE for RD has particularly been associated with the idea of asset-based community development (Macleod and Emejulu 2014). Community-driven energy projects have therefore been utilised as a central instrument for combining RE projects with RD goals (Callaghan and Williams 2014), while the potential of this coupling is mainly related to the availability of energy and land resources in rural areas where often disadvantaged regions and communities are located. The development of renewables is then envisaged as an economic driver for these areas, depending on the facilitation of ways and capacities to exploit these resources to the benefit of rural communities (Clausen and Rudolph 2020). However, a decentralised utilisation of RE resources does not automatically translate to meaningful RD and has to be proactively nurtured. This mainly happens through a redistribution and channelling of profits from energy production into the local economy, while addressing social and economic challenges that rural and peripheral areas increasingly face, such as economic decline, fuel poverty, outmigration and the withdrawal of public services. In practice, a redistribution of profits has occurred through the provision of community benefits from utility-scale renewables[1] (Kerr, Johnson and Weir 2017) or the community (co-)ownership of the energy facilities where revenues

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are re-invested locally for the common good. Hence, this opportunity has been enabled by RE policies and initiatives in the environmental domain rather than by rural policies.

With the UK's withdrawal from the European Union (EU), it remains unclear as to how this linkage between rural and renewable energy development may be affected. While a lot has been contemplated over potential consequences of Brexit for the energy cooperation with the EU (e.g., Little 2018; Cairney *et al.* 2019), considerations dealing with the potential consequences of Brexit for the intersection of rural-renewable energy development are very limited.

In this chapter, we focus on precisely this interrelationship between rural areas and the development of RE in the UK in a post-Brexit situation. In light of both historical policy development and popular movements, we are grappling with the overarching question of whether Brexit may lead to a paralysis of the ongoing processes, or whether the UK's exit from EU could potentially lead to a renewal and upsurge, and perhaps innovative, ways of connecting the two development opportunities. Since the answer is not a simple and straightforward one, various imaginings of the future need to be considered. Thus, we will illuminate different scenarios on the post-Brexit situation, each of which focusing on specific trends, challenges and opportunities that have been observed in policy development and popular movements. Different scenarios are inferred from academic literature, but also policy reviews, white papers, governmental strategies, public debates and interviews (mainly with people on the Isle of Lewis in Scotland, 2019–2021) – not as predictions of the future, which would be beyond the scope of the chapter, but as aggregated expressions of existing tendencies for how energy-related issues may further evolve in a post-Brexit UK. In this regard, they merely serve as socio-technical future scenarios (Konrad and Böhle 2019; Weimer-Jehle *et al.* 2020), which – in their capacity of being future-oriented visions of connected social and technological orders – can arouse reflections and hopefully contribute to stimulate a debate about desirable and less desirable futures – including political incentives that support or avoid particular outcomes.

In order to provide some orientation within the framework of a complex context, a particular focus will be on the so-called "community energy" initiatives in peripheral and rural areas that have been promoted in light of ideals of asset-based rural community development and in response to austerity politics. While our focus is on the UK in general, we also draw on the specific case of Scotland in order to make effects and challenges more tangible. In what follows, we will first outline the EU policies and programmes supporting the interplay between RE and rural areas followed by a description of how this interplay has been governed in the UK and its devolved governments. Third, we will outline overall shifts in RE policies. Fourth, we will provide a reflection on how recent policies and trends towards rural energy transition may be impacted by Brexit. This includes the illustration of four scenarios sketching out potential configurations of the interrelationship between rural and renewable development in the UK after Brexit. The conclusion provides a brief general reflection on the issue.

Renewable energy within the EU's rural development policy framework

Putting emphasis on the linkages between rural and RE development is not a new phenomenon. In some countries, for example, Denmark, this link has been supported by national energy policies since the 1970s based on considerations of the need to support local solutions to secure the energy supply and support national industries (Christensen 2013). While emphasising potential synergies of development, the coupling has been argued to be an effective way of implementing RE technologies, while at the same time contributing to the advancement of RD (Lovins 1977; Hofmann and High-Pippert 2005).

At the international policy level, the expansion of RE has received explicit attention as a promising means for advancing RD and boosting rural economies within the last decades (OECD 2012; IEA-RETH 2016; ECA 2018). Several evaluations and supranational policy documents indicate that RE projects can be established in ways that benefit sustainable RD (OECD 2012; IEA-RETH 2016; Nordregio 2017). In order to maximise the economic benefits of RE deployment for rural areas, these evaluations highlight approaches to RD that are embedded in local conditions and focus on the competitiveness of rural areas (Clausen and Rudolph 2020).

At EU level, the policy framework for RE also started to promote RD through the designation of specific funding programmes and focus areas (ENRD 2015). Not least, the Renewable Energy Directive (RED) from 2009 (European Parliament 2009) and its recast RED II from 2018 (European Parliament 2018) include references to the opportunities, renewables may have for regional development, especially in rural and remote areas (ECA 2018). The initial interest for the coupling can be seen in light of the overall goal to reduce greenhouse gas emissions, reduce the EU's dependence on fossil fuels and imported energy, thus increasing energy security (ECA 2018: 10). The key element of the EU's current RE policy framework – the RED – is an integral part of the EU's climate and energy packages. The 2020 climate and energy package (European Commission 2009), put in legislation in 2009, set the target of 20 percent of the energy consumed in the EU in 2020 to be produced using renewable resources, hence requiring Member States to adopt National Energy Efficiency Action Plans (NEEAP). Later, as part of "Clean energy for all Europeans" package, the European Commission in 2016 proposed an update of the RED for the period from 2021 to 2030, called RED II (European Commission 2016). Ratified in 2018, the new directive established a binding RE target for 2030 of at least 32 percent. With this came also a series of measures for "making the European Energy sector more secure, more market-oriented and more sustainable" (European Commission 2016), hence urging EU Member States to put in place special protections for local non-profit initiatives that could boost the production of RE and help them reach their national renewable energy target. It includes a variety of financial incentives, such as feed-in tariffs (FITs) or feed-in premiums (FIPs), and measures, such as quota obligations with tradeable green certificates.

Both RED and RED II determine that legislative and policy documents also identify the potentially positive impact of RE on RD. This complies with the references made by RED and the RED II proposals to the opportunities presented by RE for employment and regional development, "especially in rural and isolated areas" (recital 1 of the RED and recital 3 of the RED II (European Parliament 2009: 1; European Parliament 2018: 1). RE is a cross-cutting priority relevant to many EU policy areas, including RD policies (ECA 2018: 17). The EU provides support for RE under several funding programmes, which include the European Regional Development Fund (ERDF), the European Agricultural Fund for Rural Development (EAFRD) as well as the Horizon 2020, LIFE and LEADER programmes, which have long endorsed bottom-up initiatives for rural development (Ray 2001). Within the framework of RD policy, investment support for RE deployment is subject to shared management by the Commission and the Member States since Rural Development Programmes (RDPs) are drawn up by the Member States and approved by the Commission. Based on the programmes the Member States then select the projects to which funding is allocated. The Community Strategic Guidelines for Rural Development for 2007–2013 (European Commission 2005) and Regulation (EC) No 1698/200519 (The Council of the European Union 2005) also take these issues up in the context of the RD policy framework. The considerations on the potential of RE in rural areas was, for instance, expanded in the "Health Check", a reform package of the CAP which the EU's agriculture ministers agreed in November 2008. Here RE was recognised as one of six "new challenges",[2] and further, in the 2014–2020 programming period, the EU support for RD, including support for RE projects, was delivered within a new framework. The EAFRD had become one of the five European Structural and Investment Funds (ESIFs), which, as an overall framework intended to better coordinate and improve the implementation of the Europe 2020 strategy for smart, sustainable and inclusive growth (ECA 2018: 19).

Linking EU renewable energy and rural policies with policies in the UK

At the national UK policy level, the efforts to linking RE and RD must be seen in the light of both national political organisation and influence from the EU. Apart from Northern Ireland, energy policy is not a devolved matter and sits with the UK government. Thus, the UK government determines the overall energy policy, including the regulation of a common electricity market and the support mechanism for renewable energy. Only Northern Ireland is a distinct insofar as it shares a single electricity market with the Republic of Ireland, which results in the greatest level of legislative agency on energy matters, despite having the least political capabilities to deliver a coherent energy vision and having to abide by certain EU laws regarding the electricity market (Muinzer and Ellis 2017). In contrast, the Scottish government has been able to direct the course of RE developments in Scotland by making use of its sovereignty in spatial planning and by controlling subsidy levels for particular energy technologies (see Cowell *et al.* 2017 for more detail). This means in practice that the Scottish government can deny

planning consent for certain types of energy infrastructures, like nuclear energy facilities, while providing targeted financial and logistic support for others, like community wind turbines.

Regardless of internal self-determination, the UK, just as other EU Member States, had to comply with EU climate goals (Cowell *et al.* 2017). Thus, the UK not only moved steadily towards, but also increasingly helped to define the EU mainstream on climate change policy (Grupp 2002: 139). This mutual influence reflects devolved environmental responsibilities as well as a re-scaled shift from "government to governance" (Swyngedouw 2005) in international environmental policy – in accordance with a decentralisation and decline in the directing role of the state. This particularly applies to the UK, which had long made a name for itself by trying to avoid adapting to EU Climate Change policy. As described by Grupp (2002: 141), the UK used to be early on "somewhat adrift from the European mainstream on climate change policy and closer to the US". Accordingly, the key characteristics of the British energy regime from the 1980s until the mid-2000s have been described as large-scale, centrally planned and private sector-led (Walker *et al.* 2007). Despite a greener agenda from the 2000s onwards, this approach continued with the transition from fossil to RE. Hence, the framework for market support for RE that targeted and was effectively exploited by large, incumbent energy corporations rather than smaller new entrants (Strachan *et al.* 2015) reflected the embeddedness of energy policies in UK's liberal market economy (Ćetković and Buzogány 2016).

However, along with the green energy transition and international consensus to tackle climate change, including the increased interest in linking RE and RD, some significant changes in the political focus also took place (Braunholtz-Speight *et al.* 2018). Such a change arose not least, when the term "community renewables" became part of UK energy policy (Walker and Devine-Wright 2008). Community renewable energy refers to RE initiatives and projects that are wholly or partially owned and managed by community and collective organisations constituted as for-, or not-for-profit organisations (Berka and Creamer 2018: 1). Operating across a geographically defined community, they are designed and driven by local residents and ideally involve an empowerment of communities to obtain more autonomy to address local needs – including achieving social economic and democratic benefits (van Veelen 2017; Berka and Creamer 2018).

In a UK context, and despite the continued prioritisation of a fossil-based growth imperative, the emergence of community renewables reflected an effect of the EU upon UK climate change policy. While the UK started in the 1990s to transform from being a taker of EU policy to proactively trying to shape green energy policy (Burns and Carter 2018: 2), this momentum gained traction in the new millennium and the UK became a key voice not only on climate change at the European level but also on community RD (Burns and Carter 2018). A central shift in this regard came in 2007, when the UK government signed on to the EU's "20-20-20" targets and the subsequent adoption of the UK Climate Change Act (CCA) (2008)[3] compelled the UK to adopt a more interventionist and ambitious energy policy. As the EU required new incentives, subsidies and planning

approaches for renewables (Carter and Jacobs 2014), community RE emerged as a new policy tool to help achieve a low-carbon energy transition (Walker *et al.* 2007; Seyfang, Park and Smith 2012).

A series of central government-funded programmes following the CCA further positioned this strategy as these served the aim of supporting, facilitating and subsidising the establishment of "community" RE projects (Walker *et al.* 2007: 65). Especially the introduction of feed-in tariffs in 2010 boosted the formation of community-driven energy projects which were disproportionally initiated in rural areas (Braunholtz-Speight *et al.* 2018). Likewise, the establishment of community energy projects in Scotland received financial and logistic support from the Scottish Government administered by Local Energy Scotland and Community Energy Scotland (Slee and Harnmeijer 2017). In 2014, the UK government also published the first-ever Community Energy Strategy, presenting a de-centralised vision of energy transitions in which communities would play a leading role (Devine-Wright 2019). Together, these politics led to a short-lived boom of local and community energy initiatives and a rapid rise in the number of cooperatives in the period 2010–2015 (Sweeney, Treat and Shen 2020: 36).

The EU formally acknowledged and backed "community energy" in their own right in the recast of the RED II only in 2018, as part of the "Clean Energy For All Europeans Package" (Hoicka *et al.* 2021). In particular, the 2019 Internal Electricity Market Directive mentions and addresses "Citizen Energy Communities" as an "inclusive option for all consumers to have a direct stake in producing, consuming or sharing energy" (European Parliament 2019: 6). Although this Directive recognises community energy projects to "have delivered economic, social and environmental benefits to the community that go beyond the mere benefits derived from the provision of energy services" (European Parliament 2019: 7), it emphasises the significance in sharing electricity and taking up technologies as well as the necessity of a level playing field to participate in competitive auctions. Thus, the EU's understanding of community energy appears to resonate with ideals of converging an internal energy market and further rolling out privatised solutions to the climate crisis (Sweeney, Treat and Shen 2020), rather than enabling social transformations and rural development.

On the other hand, whereas UK policy incentives clearly emphasised the prioritisation of rural renewable community projects as a contribution to achieving climate goals it has, from a local perspective, been argued that in many cases community energy was primarily perceived by local communities as a tool for local economic development and regeneration (Walker *et al.* 2007: 73). Hence, although many community energy initiatives were guided by climate change concerns, the main driver behind the local enthusiasm in rural areas was the potential of economic injections for local development. As argued by Wokuri (2021), this dimension is also key to explaining why organisations like the National Trust, which are not involved in RE development, or even organisations that tend to be sceptical about RE projects, like the Campaign to Protect Rural England, support community energy initiatives.

Additionally, while RE policy enabled a less explicit, yet a fruitful, link between energy-related interests and economic development in rural areas, rural policies

have less productively embraced the potential of RE. Rural policy in the UK has been confined between increased policy convergence encouraged by the EU and national policy divergence under devolution (Keating and Stevenson 2006), but has, from an overall perspective, changed little since it was formed (Shucksmith 2019). It has been dominated by a sectoral approach largely focusing on agricultural matters and the environmental protection of the countryside rather than an integrated and broader rural policy that address the needs and opportunities of changing rural communities (Shucksmith 2019). On the other hand, the EU encouraged their member states to establish broader RD programmes in order to qualify for EU funding schemes, which are administered by the devolved governments in Wales, Northern Ireland and Scotland.

Furthermore, similar to energy governance, rural governance in the UK has also been claimed to be increasingly permeated by a neoliberal agenda portrayed as community empowerment, self-determination and localism that advocates the freedom and responsibility of local communities to determine and influence asset-based social and economic development opportunities (MacLeod and Emejulu 2014). This may be particularly apparent in the Scottish context where community empowerment, both in energy transition and RD, has not least been a central pillar of the Scottish Government, as reflected in UK Community Energy Strategy (DECC 2015) or the Scottish Community Empowerment Action Plan and the subsequent formalisation in the Community Empowerment (Scotland) Act (2015) (Dinnie and Fischer 2019). This strategy is also reflected in the ambitious goal to produce 2 GW of electricity capacities from community and locally owned RE projects (Scottish Government 2017) – an approach that reconsiders the role of the state from a provider of services to an enabling actor facilitating the ability of people and communities to do things for themselves (Markantoni *et al.* 2018). However, while this approach is claimed to consider empowered and engaged communities as key actors in delivering solutions to long-standing inequalities in times of austerity (Burkett 2011; Lacey-Barnacle 2020), it has, in turn, been criticised for merely justifying the withdrawal of the state, creating intercommunal competition and reproducing structural inequalities already affecting marginalised rural communities (Catney *et al.* 2014; MacLeod and Emejulu 2014).

In short, it can be argued that the interplay between RE and RD has, paradoxically, been discursively shaped by EU rhetoric and practically "realised" by UK policy strategies that advance community empowerment and localism in light of a rollback of the influence of regional and central government bodies from local and rural matters. At the same time, the discrepancy between the EU's intention to endorse community energy projects and their parallel shift towards market-based development approach for renewables presents another paradox that has also been reflected in the UK RE policy (Clausen and Rudolph 2020).

Shift in policies and practice

The critique outlined above has been further reinforced in light of recent developments. Not long after the shift towards community-based interventions in rural

areas, developments in UK RE policies began to move in the opposite direction. Following the start of the Tory government in 2015 (Devine-Wright 2019), RE policies became more dismissive towards the establishment of RE projects on land, especially wind farms, while favouring large utility-scale projects offshore. Thus, the rationale for the introduction of an auction-based support system for RE projects (*Contract for Difference*) in 2014 (DECC 2017; Wood 2017) was founded in desired cost reductions in subsidies through the preference of larger projects (economy of scale). Levies imposed on electricity bills (Carter and Clements 2015) and an abolition of regional powers for technology-specific support levels (Berka, Harnmeijer and Slee 2017; Cowell *et al.* 2017) were included in this, however, these developments only pre-empted the already planned shift of the EU towards more market-based auctions for allocating subsidies for RE projects. In April 2014, the European Commission published its revised "State Aid Guidelines of Environmental Protection and Energy 2014–2020" (European Commission 2014). These Guidelines introduced a shift from FiT to auctions whose goal was to reduce the costs of renewables across Europe (Sweeney, Treat and Shen 2020: 19). The new system is based on procurements auctions in which typically a certain amount of power (MW) or energy (MWh) of renewables is offered for bidding (Alvarez *et al.* 2017). The shift formalised what key Member States – such as the UK – had already started to do and instigated the end of the widespread FiT system across Europe. Yet, the UK Government went a step further and abandoned subsidies for onshore wind entirely, depriving rural renewable communities from an important economic foundation. The expansion of onshore wind energy has stagnated as a result of the fundamental policy changes, which also had detrimental effects on the community energy sector (Mirzania *et al.* 2019). This is mainly due to the uncertainty regarding the possibility of long-term revenues, which render debt-financed planning and construction costs too risky for communities. However, in order to counteract this development and while acknowledging positive economic effects on peripheral areas, the possibility of wind farm developers in remote islands to bid for subsidies in auctions was reintroduced in 2018. In light of the danger to miss climate change targets and the necessary rate and scale of renewable energy projects required to support the de-carbonisation of the energy sector, the UK Government reinstalled the possibility for onshore wind farms to compete in subsidy auctions in 2020. This development is worth noting from the perspective that community energy, and thus an essential link between rural and renewable energy, had already suffered before the exit from EU – not *because* of EU policy, but because of changes implemented by the UK government. Despite efforts and success by the devolved government in Scotland to advance community energy projects, the small overall share indicates that community energy has remained a niche between the state and the market in the UK (Wokuri 2021).

In this changing policy context, the new focus of local energy projects has turned from community-owned projects to local enterprise projects. The latter involve local authorities and private businesses with a focus on growth, job creation, skills and infrastructure improvements, usually led by private commercial actors. According to Devine-Wright (2019: 4), this "shift in UK policy from

community energy to local energy signals an ideological shift in how decentralised energy transitions should take place". While community energy is driven by a communitarian ideology, characterised by empowerment, autonomy, self-sufficiency and local development enabled through energy projects, local energy tends to be reinforced a neoliberal ideology (Devine-Wright 2019). From this perspective, economic growth, well-being and prosperity are supposed to be facilitated through joint energy actions rather than grassroots initiatives (Devine-Wright 2019). Based on these developments, the British government has been overly optimistic when it comes to living up to climate goals after Brexit (Cowie *et al.* 2018). Indeed, UK carbon emission targets are more ambitious than those set by the EU legislation and there is little indication that Brexit has had a meaningful impact on the overall approach taken by the UK Government to climate change and low-carbon transition (Little 2018). The same applies to the even more ambitious Scottish approach and targets. The Clean Growth Strategy of 2017 (HM Government 2017) reiterates the strong links between economic growth, environmental protection and energy transition, and promises vast investments in support of low carbon innovation to deliver a more diverse and reliable energy mix. However, strategies and goals related to RD seem to play a minor part in the Clean Growth Strategy and seemingly remain rooted in sectoral tracks, specifically mentioning the de-carbonisation of the agriculture sector, renewable heat initiatives in rural areas and innovation in forestry. A Rural Development Programme for England and a Countryside Productivity Scheme appear as the most prominent links to bring together RE projects with interests and challenges of rural areas in a post-Brexit UK. Thus, it remains to be seen whether and how RE and RD may be combined in practice.

Explorative post-Brexit scenarios

At the time of writing, it is still uncertain and difficult to make substantial statements as to how the current situation of the coupling of RE development and RD may be affected by Brexit and the directions in which it may proceed. As part of the process leading up to Brexit, various actors, such as researchers, consultants and politicians have prepared scenarios and reported recommendations for energy priorities as part of the decision-making process and negotiations with the EU. The point of departure for such considerations is not necessarily based on questions referring to particular consequences for the development of RE in rural areas, but relates, for example, more generally to overarching issues, such as energy security or the management of climate change. We will draw on such considerations and also reflect upon our own insights from fieldwork in Scotland, while maintaining a focus on the link between energy transition and rural development. We draw on the notion of explorative scenarios to "explore situations and developments that are regarded as possible to happen" (Börjesen *et al.* 2006: 727) by bringing together various perspectives to work out and contemplate on how certain present and past developments may pan out in the longer term. In doing so, we sketch out four explorative scenarios, on which we will

elaborate below. The explorative approach is based on extensive readings of policy reviews, public debates, academic literature and additionally draws on a number of semi-structured interviews. Most recently, this includes 14 interviews with both stakeholders involved in community energy projects and residents on the Isle of Lewis, Scotland, conducted between 2019 and 2021. These interviews focused on opportunities and barriers of community energy. Furthermore, this also refers to insights and impressions gained through fieldwork-based on numerous research interviews across the UK on various issues related to the social acceptance, conflicts and contestations of renewable energy developments as well as renewable energy policies, conducted by the second author in the period 2010–2021. While none of these interviews were particularly tailored to explore the implications of Brexit, issues related to Brexit as part of the wider socio-political context emerged in some of the interviews. The four explorative scenarios crystallised as overall possibilities and conceivable trends derived from the literature and interviews. They are not based on a detailed cross-reading of the material, but more on a continuous recognisability, as they emerged as hints, references and indications in different political, economic, academic and local contexts.

The four scenarios are the following: (a) Brexit will have no immediately tangible effect on RE projects in rural areas; (b) Brexit aggravates the vulnerability of rural communities that are already exposed to economic decline and their ability to benefit from energy transition in a "race to the bottom"; (c) Brexit leads to more difficult conditions to establish RE facilities in rural areas in general; (d) Brexit enables a rise in new decentralised (but potentially "governmentalised") community-based energy solution in rural areas.

Status quo with limited effects

The first scenario concerns the possibility of a status quo. Although Brexit appears to have a major impact on a number of societal issues, it is not certain that it will have any significant impact on the coupling of RE and RD. The main domestic challenges are still related to the amount of revenues generated through RE production that can be diverted into the rural economy as well as the financial support for planning and developing community energy projects. As the electricity market is UK-based, it is not directly affected, and since maintenance of technology happens from the UK, and so far supply chains for technology imported from Europe (e.g., turbine parts) have only been slightly delayed, real implications have not really been experienced yet (personal communication, Community Energy Scotland, 06/05/2001). An indirect consequence may be related to the potential absence of EU funds for which a few more proactive and innovative community energy organisations had previously applied. The EU-UK Withdrawal Agreement envisages that the UK will cease to be eligible for new financial operations from the European Investment Bank (EiB) reserved for EU Member States (Norton Rose Fulbright 2021). However, in order to provide greater funding certainty, the UK Treasury has committed to underwriting all funding obtained via a direct bid to the European Commission and has confirmed Horizon 2020 projects will

continue to be supported as well as structural and investment fund projects (such as the European Regional Development Fund and the Cohesion Fund) subject to certain conditions (Norton Rose Fulbright 2021). Additionally, support of energy infrastructure projects from the EIB is supposed to be partially compensated by the establishment of a national infrastructure bank to invest infrastructure projects alongside the private sector. The UK-EU Trade and Cooperation Agreement (TCA) also specifies agreements on subsidies, the use of interconnectors and market regulations now that the UK has left the EU Internal Energy Market (Norton Rose Fulbright 2021). This approach suggests a potential increased flexibility from UK funding. Additionally, it has, on a practical level, been argued how new investment will be put in "levelling up" funds to support "left behind places", i.e., the post-industrial and rural areas that voted strongly in favour of Brexit (through, e.g., the competitive Levelling Up Fund, the Community Renewal Fund, the future Shared Prosperity Fund or the Community Ownership Fund) (UK Government 2021). The notion of "left-behind places" and the intention to address uneven development by providing marginalised regions with support and opportunities to catch up has become a recurrent slogan in post-Brexit Britain (Leyshon 2021).

Yet, it appears doubtful to what extent these plans translate into a *long-term* strategy for supporting renewable and socio-economic impacting energy projects in rural areas. It can also be argued that strategies related to creating synergies between rural and RE development have already been downgraded not only at EU, but also at the UK level. Hence, rather than being induced by Brexit, the major immediate implications for RE in rural areas is regarded to result from other causes, for instance, Covid-19, which is assumed to potentially be a game-changer for the importance of and the organisation of RE in rural areas (Community Energy Scotland 2020). As described by a representative of one of the community energy trusts on the Isle of Lewis, the pandemic situation may thus have the effect of delaying the experience of the consequences of Brexit, since "[people] don't feel consequences of Brexit, because they are overshadowed by Covid-19 consequences, unless you import and export, so Brexit will only manifest in a few years" (Personal communication, community development trust, 6/05/2021).

A race to the bottom

A second scenario implies that the outcomes of Brexit may have major negative implications for the relationship between RE and rural policies. In an overall sense, this scenario must be seen from the perspective that the EU has had a profound effect on UK climate change policy, including a specific interest in the coupling of rural and renewable development. Maclennan and McCayley (2018) hint at the fact that the negligence of rural areas and towns had a major influence on the result of the Brexit referendum, but also warn that those areas are likely to suffer the most from the unpredictable consequences of continued austerity, economic instability and decline in tourism in post-Brexit Britain. Likewise, the

absence of the EU framework setting minimum standards for member states is feared to raise the prospect of a regulatory "race to the bottom" (Burns and Carter 2018: 6), both in terms of maintaining the climate change standards in general and in terms of creating a fruitful relationship between RE and RD. Although the UK Government has been keen to assuage such fears while stressing that the UK can secure a "Green Brexit" reforming key policies targeting rural matters, like agriculture, actual manifestations of reforms on an environmental policy level still need to be seen (Burns *et al.* 2019). Following Brexit, the UK has so far been released from its RE targets under the RED, potentially giving the government more freedom both in the design and phasing out of RE support regimes (Norton Rose Fulbright 2021). In this regard, critical voices have stated that the UK government may not be really interested in decentralised renewable power developments (Sweeney, Treat and Shen 2020). The fact that the UK has recently abandoned or drastically cut FiTs in favour of market competition, while in addition supporting the building of a nuclear power plant,[4] further support that the centralised energy system of the past is considered the first priority (Tsagas 2020). Hence, a crisis-stricken situation, in which the primary matter is to maintain economic activities after leaving the EU, has early on been argued to raise the risk of a "zombification" (Jordan, Burns and Gravey 2016) of environmental and climate change policy. This term is used to hint at the danger of policies and associated institutions not being reformed or updated as deemed necessary to respond to the new situation, thus becoming inert. In terms of climate change policy such a development would not only counteract a potential adjustment and harmonisation of energy policies among the devolved governments, but also jeopardise potential synergies between renewable and rural development. In that case, more responsibility for linking energy transition and RD would need to be taken by the devolved governments, especially Scotland. This fear is also related to a situation where systemic structures and organisations supporting this link have already undergone major changes and have been weakened by austerity politics (Armstrong 2015). Similarly, the neoliberal trends that have already taken place may be expected not only to continue, but also to exacerbate a situation characterised by long-term cuts in public services, the abolishment of organisations supporting community energy groups and an increased focus on national economic growth, as reflected in the shift from community to local energy. As described by Wokuri (2021), these developments make it difficult for community energy to exude transformative power for rural areas, since all resources of community energy organisations are absorbed in the "struggle to institutionalize advantages and to challenge decisions that affect them negatively" (Wokuri 2021: 3). Such a situation would merely allow community organisations to maintain their assets for their survival rather than proactively contributing to RD activities in their vicinity. Without dedicated top-down forces and incentives by the state, that support bottom-up approaches towards local control and capacity-building, it remains difficult for developers of RE projects to achieve more than an increase in national RE capacities.

Populist headwind against renewable energy in rural areas

A third scenario relates to the situation where the post-Brexit period leads to an increased demarcation and self-isolation from other European countries. As is the case with a number of other sectors within the EU, we witness the paradox where the EU's ambitions to reform, rescale and re-territorialise energy systems in the EU have been met by protectionist efforts from some political parties, publics and other institutions in the member states (Stegemann and Ossewaarde 2018). It has been argued how, in the years leading to Brexit, right-wing populist discourses reinforcing Euroscepticism were also aimed at EU targets for increasing the production for RE (Batel and Devine-Wright 2018; Fraune and Knodt 2018). Along with anti-immigration arguments and climate-change scepticism, arguments against RE are put forward which are considered to threaten both national and local identity (Batel and Devine-Wright 2018). Such populist rhetoric has also been employed by anti-wind movements which claim to defend democracy from "non-elected, non-local corporate and bureaucratic elites and special business and environmental interest groups" (Barry, Ellis and Robinson 2008: 78), which are not least seen to represent large-scale RE facilities. Likewise, national as well as other European decision-making processes for RE projects can be viewed as opaque, centralised and undemocratic, while depicting a threat to the local countryside, local self-determination and Britishness – or, primarily, Englishness (Batel and Devine-Wright 2018). Since particularly onshore wind has been the subject of planning controversy, and the UK is already marked as one of the most difficult countries in Europe for getting planning permission to build wind farms (Bauwens, Gotchev and Holstenkamp 2016), popular and political opposition to wind energy development may intensify in some areas, while others may remain assertive towards certain renewables. This may be a contributing factor to uneven development and a potential game-changer, which may not only affect the extent to which the relationship between rural and renewable energy development can be realised, but may also have fundamental political repercussions, reinforcing tensions between the devolved governments, while highlighting and challenging asymmetrical devolution settlements (Burns and Carter 2018: 6). For example, Scotland is a major supplier of RE to England, but also disproportionally benefits from a common electricity market by capturing a larger share of subsidies for supporting renewable energy developments (Cowell *et al.* 2017). This raises further questions with regard to the independence movement in Scotland.

Although the local public tends to favour small-scale and decentralised energy schemes due to their potential to contribute to the local economy based on local (co-)ownership, it is difficult to imagine that a decentralised policy directly translates to citizen-led actions that have the primary goal to exploit energy production for the benefit of RD. It is more likely that decentralised energy and rural policies would continue to favour larger projects consisting of public-private partnerships led by commercial actors that tackle climate targets rather than social transformations and inequalities (Devine-Wright 2019) in rural areas.

Broader visions of decentralised energy solutions

Although negotiations and distractions in the aftermath of Brexit may have been surmised to become a threat in terms of losing momentum in tackling climate change and undermining energy transition efforts, there is also the possibility that greater devolution after Brexit may lead to entirely new ways of providing RE solutions. This may not only be true in terms of new forms of technical solutions, but also in terms of organisational models of decentralised energy projects that specifically address the needs of rural areas. This fourth scenario could evolve as a response to the critique of EU policies being too broad and unfocused, whereby Brexit could engender direct and flexible support schemes that boost RE production in rural areas and explore new potentials (e.g., Cowie *et al.* 2018). Considering current political trends towards asset-based community development and the governance regimes that assign the state an enabling rather than providing function, it is not, from this perspective, unlikely that Brexit may prompt rural communities to further exploit the economic robustness of RE infrastructures to substantiate their economy and way of life. Since strengthening the resilience at the community level is part of the UK's national resilience strategy based on a "whole-of-society" approach (Cabinet Office 2021), the Brexit situation and persistent austerity politics may generally urge communities to bear greater responsibility for local matters. This also applies to issues of RE – not necessarily in terms of ensuring the green transition, which rather seems to constitute a positive side effect, but to ensure socio-economic development of vulnerable and marginalised rural areas.

Recent developments have also shown that community development trusts around the UK have begun to carry the burden of social responsibilities for their communities. They step in where public services are withdrawn and where the welfare system fails to take care of local needs by reinvesting their income from RE facilities in local projects (Martiskainen, Heiskanen and Speciale 2018; Wokuri 2021). Depending on reforms in rural and environmental policies, the Brexit situation may potentially render this supportive role of energy communities even more visible. When income from local energy projects is required to cushion the effects of austerity politics, it ultimately redefines the primary function of community energy projects from a pillar of energy transition to an enabler of RD. Thus, new business models of energy projects may emerge that mainly serve to fulfil socio-economic issues. For example, the community development trusts on the Isle of Lewis have been able to divert funds to uphold local public services, such as the delivery of mail and local transport, that were interrupted by the lockdown during the Covid-19 pandemic (personal communication, citizen, 30/10/2020).

However, in light of the absence of EU rural funding programmes that were administered by the devolved governments in the UK, a lot depends on how domestic policies may change and how much funding will be allocated to rural areas beyond agricultural interests. Hence, the same situation could also potentially lead to an intensification of governmentality (Bues and Gailing 2016) and de-politisation, which will not promote a coherent and integrated rural-renewable

development. Instead, a Brexit situation can further extend a neoliberal approach to community energy as providers of social services in rural areas, thereby taking on the role of the diminishing state as a protector of economic and social well-being of citizens. The situation where energy communities are stimulated through smaller subsidies for the purpose of acting as a mainstay for social services in rural areas does, from this perspective, not necessarily promote the proliferation of citizens and community ownership as a sustainable future scenario, but can rather be anticipated as a strategy of exhaustion and further decline. Alternatively, it seems obvious to rethink the market and power structures more profoundly (Burke and Stephens 2018) in which the UK energy sector is embedded. The need to comprehensively reclaiming energy systems from a current investor-focused and profit-driven approach to energy transition has been put forward as a suggestion to ensure that public investments both serve the broader public interests and meet climate goals (Sweeney, Treat and Shen 2021). Seen from this perspective a "public goods" framework offers the most sustainable platform for a broad and enduring involvement of (rural) communities.

Discussion and conclusion

Current transformations in the energy sector have not only put rural areas and communities on the agenda again and opened up new potentials for development, but also turned rural areas into a contested frontier at which the utilisation, control and profits from RE are negotiated. In this chapter, we have sought to outline various scenarios for the interrelationship between rural areas and the development of RE in a post-Brexit situation in the UK. Each scenario takes a point of departure in political trends and popular tendencies of how energy-related issues may further evolve in a post-Brexit UK. The scenarios outlined are developed on the premise that any attempt to understand the impact of Brexit on the devolved energy system in the UK needs to address a "combination of political, policymaking and conceptual uncertainty" (Cairney *et al.* 2019: 6). In the end, it is therefore not unlikely that we may experience a combination of elements from these scenarios, and, most likely, tendencies not surmised in this chapter. The emphasis itself may, however, turn out to vary and the outcome may not least depend on the link between popular movements in rural areas and the choice of political strategy. In terms of the latter, competitive financial injections targeting left-behind places do rather seem to provide seed money instead of providing long-term certainty for supporting a broader expansion of decentralised RE in rural areas. Experiences have shown that it is not sufficient to provide finance for communities to take ownership and control of their assets in order to compete with each other (Macleod and Emejulu 2014; Markantoni *et al.* 2018). Instead, it is necessary to provide certainty and protection in terms of support schemes that allow them to utilise the resources in an economically viable and beneficial way.

The central challenge therefore is a rift between diminishing strategic and logistic support of rural communities that consider RE as a lever for economic and social development of rural areas, and, on the other hand, a national energy policy,

which is increasingly driven by ambitions to escalate market-driven RE expansions. Thus, as described above, experience has shown that the latter tends to decouple social transformations and RD from RE development (Phimister and Roberts 2012; Ejdemo and Söderholm 2015; Devine-Wright 2019). The inconsistency between stated aspirations towards decentralised RE based on greater community ownership and the turn towards more competitive market-based support schemes for RE that favour larger projects and certain technologies tend to deprive rural communities of fundamental preconditions to effectuate the aspirations. While this inconsistency is not unique to the UK, but similarly articulated in EU strategies and policies, Brexit may still provide a chance to do things differently in this regard. The core issue of combining decentralised RE and RD is to identify new ways of how social innovation can respond to this market trend and counter incumbent actors (Lacey-Barnacle 2020) in order to capture the value of RE for the benefit of rural communities. This fundamentally includes a greater awareness of not necessarily what community energy means, but what it should do (Creamer *et al.* 2019).

Based on such considerations, we argue for the need for alternative modes of decentralised energy production that foster RD. As suggested above, the post-Brexit situation can potentially be seen as a "window of opportunity" where rural and renewable energy development could be brought together. The willingness of communities to actively participate in the energy transition should be supported as a pillar in its own right with its specific goal of promoting sustainable RD, instead of being misused as a stopgap to cushion the consequences of austerity politics. Should this be the case, however, it requires political initiatives that more wholeheartedly support citizen participation, local ownership, collective benefit-sharing in a holistic fashion, not least, new structures in the form of financial and logistic support to promote community-led projects in rural areas. In absence of such initiatives on a national level, they may be evoked by the devolved governments and possibly further reinforce separatist tendencies. Socio-economic inequalities, already existing community-based projects demanding support for their continued existence and a growing local recognition of the need to take local action on climate issues may lead to political pressure and broader systemic change. In consequence, much depends on how Brexit proceeds, what domestic policies emerge, and how networked RD (Shucksmith 2012) can be enabled combining bottom-up initiatives and top-down support and how it embraces rural issues in a more holistic manner.

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Notes

1 A utility scale renewable energy facility is one (typically 10 MW or larger) which generates renewable energy and fits it into the grid supplying a utility with energy.

2 The other 'new challenges' were: climate change, water management, bio-diversity, dairy restructuring and broadband.
3 The CCA established long-term goals in the reduction of carbon emissions.
4 The government has said that nuclear is vital for its plans to reach net-zero emissions by the middle of this century [https://www.bloomberg.com/news/articles/2021-09-24/u-k-exploring-plans-to-build-new-nuclear-power-project-in-wales].

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