



Executive Summary Report:

What are the barriers to community-owned energy projects in Scotland?

Participation in community-owned energy projects is considered an important aspect of the just energy transition. Energy participation at the community level can mitigate the effects of the climate, aid community regeneration by increasing access to fuel, and alleviate fuel poverty. This report maps current barriers to community-owned energy in Scotland, drawing upon a series of surveys and interviews conducted with member-organisations of Scotland's Regeneration Forum. The themes detected offer an in-depth insight into commonalities experienced across different types of community-level organisations, and key differences in and disparities between barriers to community-owned energy as they experienced in rural and urban areas.

The key themes identified as barriers to community-level energy participation are: 'Funding', 'Capacity', 'Community Engagement', 'Communication', and 'Divergence: Urban and Rural Challenges'.

Funding

A key theme identified as a significant barrier to community-energy by all participants was limited funding. This is perhaps not surprising, due to the upfront costs of community-owned energy, and the practical limitations associated with retrofitting community buildings. Nevertheless, experiences of funding and funding aid varied, and even where funding had been successfully awarded, existing financing mechanisms are widely considered insufficient for achieving long-term decarbonisation goals. Interviewees reported experiences of short-term or insufficient funding opportunities, a high level of bureaucracy surrounding funding applications, and perceptions of favouritism among funding agencies and bodies.

A Need for Equitable Funding

The expense associated with renewable technology is a key barrier to affordability, especially when other physical and practical barriers, such as restricted land-use and state regulations, are at play. Factors such as supply issues, a result of the pandemic and Brexit, have meant that importing materials is difficult or unaffordable. Local materials are often also expensive, especially in the Highlands and Islands. An NGO worker at a country-wide community development organisation explained that, in their experience, even where the Scottish Government supports investment, 'this type of financing usually requires organisations to match funding and technical investment from the beginning'. This is often not possible due to limited funds, especially for community groups that seek to develop low-income areas. It seems that whilst limited funding was a barrier outlined by all participants, the organisations working exclusively with deprived communities had the least disposable funds to invest in community-owned energy independently, and had thus been the least successful in obtaining

funding. This demonstrates that experiences of barriers to energy participation are unequal in Scotland, and that funding bodies may improve practices by taking an equity-based approach.

Top-Down: Stringent Requirements and Assessment Criteria

Additional requirements tied to funding for community energy grants and schemes has presented a barrier to sector wide engagement. A local grassroots community development organisation shared that where they had applied to a number of government-led schemes which offered capital funds, they experienced barriers even at the application stage, such as additional revenue-based requirements, which could not be guaranteed. A number of participants reported carbon literacy requirements and training, which they do not have the capacity to fulfil. An employee of a national NGO set up to combat poverty in deprived communities argued that whilst energy-saving advice centres can both aid the climate crisis and reduce fuel bills for those in fuel poverty, encouraging members of deprived communities to engage in climate activism is unlikely to be effective, and can be inappropriate. Thus, it seems that the stringent requirements tied to funding opportunities pose a barrier to community-energy participation, not only due to the limited capacity of community-level organisations to carry these out, but also because funding bodies may not have considered the needs of grassroots organisations or of the communities themselves.

Better communication and consultation between community-level organisations and funding bodies can help reduce barriers to both energy participation and to meaningful poverty alleviation. A number of the interviewees advocated for more synergism between development and climate strategies, and for a bottom-up approach, rather than the imposition of top-down requirements. One organisation representative stated that 'climate change mitigation is important and you can only achieve change by following best practice. But best practice is always hindered by having your arms tied behind your backs to deliver additional almost unrelated outcomes'. Participants have also argued that the centralised nature of the Scottish Government funding landscape has led to impersonal experiences and uneven power dynamics. One interviewee described their experiences attempting to secure funding from the government as 'It just feels like you're putting out the begging bowl, for everything, all the time'.

Organisational Capacity

Space and Time

There is a significant gap between interest in community-owned energy and capacity at the organisational level.

A lack of community-owned space is a key barrier to community energy participation; Grassroots organisations highlighted that whilst they have utilised space for other environmental projects, such as community managed allotments giving residents the option of growing their own free, locally produced food, renewable energy infrastructures take up more space. Permission must be sought to install energy producing infrastructure, and this can be complex. Thus, a preference has been shown for carrying out environmentally positive actions which do not necessitate the installation of physical structures. A lack of space is a principle barrier for urban communities. A participant based in Glasgow argued that 'there isn't even space for allotments, let alone energy infrastructure'. Unless state-owned space was

provided for these measures, local community energy is simply not an option for a number of grassroots community organisations.

The time needed to go through the funding application processes and to maintain the renewable infrastructure was also presented as a significant barrier to community-owned energy. The impact of current affairs has meant that grassroots-level community organisations in particular have had to redirect their focus to other urgent issues, such as hunger and homelessness due to the cost of living crisis, and the provision of warm spaces due to the rise in fuel poverty. Better cohesion between decarbonisation targets and measures to alleviate the effects of the cost of living crisis could better enable third sector community organisations to carry out long term pro-climate actions.

Limited Energy Awareness

Another barrier to community-owned energy is a lack of public awareness and understanding. This applies to funding applications and procedures, as well as a lack of awareness surrounding energy and heat decarbonisation.

A number of participants, especially those representing grassroots community organisations which have not been set up to tackle the climate crisis or fuel poverty, did not distinguish between decarbonisation and other pro-environmental behaviours. When asked about what energy decarbonisation measures or projects the organisation has been involved with, a few participants highlighted involvement with waste reduction, recycling, local food production and marine projects. Whilst these clearly constitute pro-environmental behaviour, these areas do not directly impact upon local emissions and thus cannot be considered as decarbonisation projects. It should be noted that this apparent lack of awareness of the concepts presented may also be explained in part by social desirability bias. Interviewees may have been unwilling to relay that their organisation has not been involved in community energy, and may have instead chosen to redirect focus onto the pro-environmental behaviours they have been involved in. Nevertheless, the knowledge gap surrounding home energy is not surprising due to the technocratic and heavily academic language which often comprises conversations surrounding heat decarbonisation. The way in which the climate crisis and decarbonising home heating is communicated to the general public can be inherently exclusionary.).

A few interviewees directly attributed their preference for alternative (non energy) pro-environmental projects to a lack of energy awareness, indicating that they have chosen not to explore community-owned energy *because* of these knowledge gaps. A number of participants representing umbrella organisations which work alongside grassroots community organisations highlighted the knowledge gap surrounding the energy transition, also pointing towards the fast moving political and policy arenas surrounding climate change and the vast scale of the issue as barriers to greater awareness. When it comes to supporting community-level energy projects, promoting awareness of the issues, the options available, and the associated application procedures should be a priority.

Community Engagement

Another key theme which emerged throughout the interviews was 'Community Engagement'; This barrier was emphasised by the participants that represented grassroots, local community-

level organisations. Larger, umbrella community-organisations which work with different communities across the country seemed to underestimate the difficulty local groups have in engaging community members, and in recruiting volunteers for action. Local organisations reported that they are struggling to attract enough volunteers to run the organisations. A number of reasons were suggested for this, such as limited time, due to community members having increased caring responsibilities, and working longer hours or multiple jobs, as well as a lack of investment in the community due to an increase in community apathy. The disparity between our results and other research in this area may reflect a negative shift in levels of local engagement due to the impact of current events (such as the pandemic, austerity, and the cost of living crisis) on the daily lives of community members, and their capacity to engage in less immediate concerns such as climate change. This could also be explained by the fact that many of the umbrella community organisations are approached by grassroots level organisations seeking assistance with decarbonisation projects already decided upon, and thus perceptions of general community engagement may be somewhat skewed.

Perceptions of hypocrisy by elected officials and was cited as a common protestation to getting involved in energy amongst the community members. A few participants pointed to the fact that community members can see that many of the newer council owned buildings in their area also do not have visible energy infrastructure fitted to their buildings, such as solar panels, wind turbines, or heat pumps. Instead of purposefully installing energy producing infrastructure discreetly, it may increase public engagement in the energy transition if renewables installed by the public sector are visible.

Further, a number of local grassroot-organisation representatives argued that the way in which communities are treated as a homogenous group is curbing efforts to increase engagement. Despite the fact that the Scottish Government and associated organisations have increasingly followed local plans for decarbonisation, these too often do not take into consideration community needs. Instead, grassroots-level participants argued that local plans focus too heavily on structural needs, such as the types of residential buildings and materials that exist in an area, rather than the needs of those living in the community. For example, some communities are strongly divided on local, polarising issues, such as tourism within the island communities. Thus, approaches to community engagement may benefit from considering persisting social challenges. Social and technical expertise, as well as community level consultation, would also be needed to figure out how community-energy could become a possibility for the Roma community in Glasgow, for example. Only then could the community engage meaningfully in inclusive conversations surrounding energy participation.

Communication

Community engagement can be achieved through improved communication by the government and pro-environmental organisations. Many of the interviewees shared experiences of pro-environmental campaigns that have been communicated successfully, through championing other local energy projects, and through an emphasis on community regeneration and income generation, as opposed to climate action. Better communication between local community organisations can be achieved through knowledge-sharing platforms, which can be used to share energy projects and stories of best practice.

In Pauline Hichion's experience (Scottish Communities Finance), the government and associated organisations use language that misses the general public; 'The language of carbon or decarbonisation has become so technocratic that it is too far removed from the language of most people'. In her experience, this put people off the idea of community-owned energy projects as 'most people don't consider themselves investors'. This is a significant barrier to engagement, as renewable technologies can be installed using interest free loans and returns are secure. The elitist language, acronyms and terminology surrounding energy and climate change exclude many members of the general public from the conversation. Paired with the fact that mainly affluent members of society consider investment, even though others may have the financial capacity, the perception that renewables are only an option for the wealthy remains. By using socially inclusive language and finding a way to communicate that investment does not necessarily translate into financial risk, community engagement efforts may be more successful.

Divergence: Urban and Rural Challenges

Rural Challenges

Our data analysis showed that barriers to community-owned energy in rural Scotland are often greater and are often difficult to overcome. Whilst some of the more practical barriers to decarbonisation are less common in rural communities, such as a lack of sufficient space for the installation of renewable energy infrastructure, other key barriers are exacerbated.

Whilst there is an abundance of physical space available, the prices of land in the highlands and islands can be very high, and planning permission is difficult to obtain. High land prices in rural locations often do not align with average income thresholds due to the limited infrastructure and employment opportunities in rural areas compared to the cities. Further, knowledge gaps can present a greater barrier in rural locations as it can often be the case that nobody living in an area (or a reasonable commutable distance) has the expertise needed to embark on energy projects. Without signposting to clear guidance, this is a significant barrier to community-owned energy. Where there is often an element of competition between community projects in urban settings, this fosters the opportunity for learning and collaboration. However, these opportunities may not be present in rural contexts as barriers to action may differ substantially from one region (and project) to the next, due to low populations and physical landscape changes. Further, materials, infrastructure, and labour can be much more expensive in the Highlands and Islands due to lack of supply, which can also pose a logistical barrier.

Fuel poverty may also present a greater challenge across much of rural Scotland, largely due to the fact that many households are not connected to the gas grid; The energy price caps (*as they were understood in September 2022) do not apply to those who rely on oil, coal, or biomass for home heating methods, which have also risen in price. Whilst some participants viewed rising costs as a potential catalyst for energy participation and community engagement, others argued that the increase in fuel poverty is likely to translate into greater apathy towards energy participation, due to the fact that community members are simply facing greater challenges and personal and financial pressures.

Participants highlighted that attitudes may be 'more likely to be climate sceptic and more traditional' in rural settings, which may present a greater challenge to community engagement and interest, especially where decarbonising activities are perceived to 'interfere with traditional, local ways of living'. Further, oil and shale industries continue to employ workers in Scotland, most of which live in the highlands. A transition towards renewable energy may directly impact those employed by the fossil fuel sectors, and thus alternative training and employment opportunities must be provided for these community members, following the principles of a just energy transition.

For residents worried about climate change, there is an understandable concern surrounding the lack of public transport and heavy reliance on cars in rural areas. Thus, attempting to convince community members to use their own initiative and finances to get involved in community-owned energy projects may be a challenge, due to the fact that many are more concerned about the high transport emissions, and would prioritise improving public transport for community benefit. Furthermore, climate change is often perceived as a problem caused by those living in the cities - especially where carbon emissions are associated with visible pollution. Thus, community members may consider decarbonisation to be the responsibility of city dwellers, rather than those living in rural areas.

Urban Challenges

On the other hand, urban areas face different social challenges. Firstly, interviewees have explained that some urban areas in Scotland struggle to engage community members in activities that benefit the larger community because there is not a strong sense of community to begin with. There is often a high level of residential turnover in larger cities, and thus there may not be the same level of investment in urban areas as there is in smaller towns and villages. Our analysis shows that there may be less of a sense of community ownership and obligation in urban areas, and thus less interest in community activities. A participant that works for a grassroots community organisation in a deprived, urban area explained that council drawn neighbourhood boundaries may not align with residents' perceptions of local communities, which has been a barrier to engaging residents in community projects led by the public sector.

Further, where members of the community engage with antisocial behaviour, this can drive a wedge within a community, especially between older and younger residents. This can reduce residents' 'sense of place' and pose a barrier to investment community-owned energy, due to fears of vandalism. Whilst this challenge is not exclusive to urban settings, it seems that instances of antisocial behaviour are more common (or more readily reported) in areas with higher populations. Lastly, urban communities face a number of challenges that are less prevalent in rural areas of Scotland, such as a lack of space (land) for measures such as heat pumps and wind turbines. The complex ownership structures of buildings, such as privately rented and/or owner-occupied tenements, presents a significant practical challenge to the installation of renewables than is generally seen in rural areas.

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