

Scene Ltd. submission to the Parliamentary Select Committee on Energy and Climate Change, Subgroup on Local Energy

May 2013

Introduction

This submission is made in response to the Energy and Climate Change Sub-Committee Inquiry on Local Energy. It is submitted by a partnership consisting of two organisations:

- (1) The Sustainable Community Energy Network (SCENE), an Edinburgh-based social enterprise that specialises in global community energy research, consultancy and investment; and
- (2) The ResPublica Trust, an independent, non-partisan think tank.

Where the scope of the question was unclear to us, we have added terms in ***bold italics*** in order to refine it. For further information on our research into community- and local energy generation in the UK, we point you to our forthcoming ResPublica Green Paper entitled, *The Community Renewables Economy: Starting up, scaling up and spinning out*, which is due to be published in early July 2013.

1 *What contribution could medium-sized energy projects (5-50MW) make to the UK's climate change, energy security and energy affordability objectives?*

1.1. For most renewable generation technologies, the 'medium'-scale band offers better economies of scale than smaller (< 5 MW) projects; meanwhile, many larger-scale (> 50 MW) opportunities, with the notable exception of combined heat and power (CHP), have already been developed.

1.2. Assuming certain conditions are met, onshore projects in the 'medium'-scale band could make the most important contribution to the UK's climate change, energy security and energy affordability objectives, compared to other capacity classes.

1.3. At present, this represents merely a theoretical opportunity that does not take account of key market- and planning considerations.

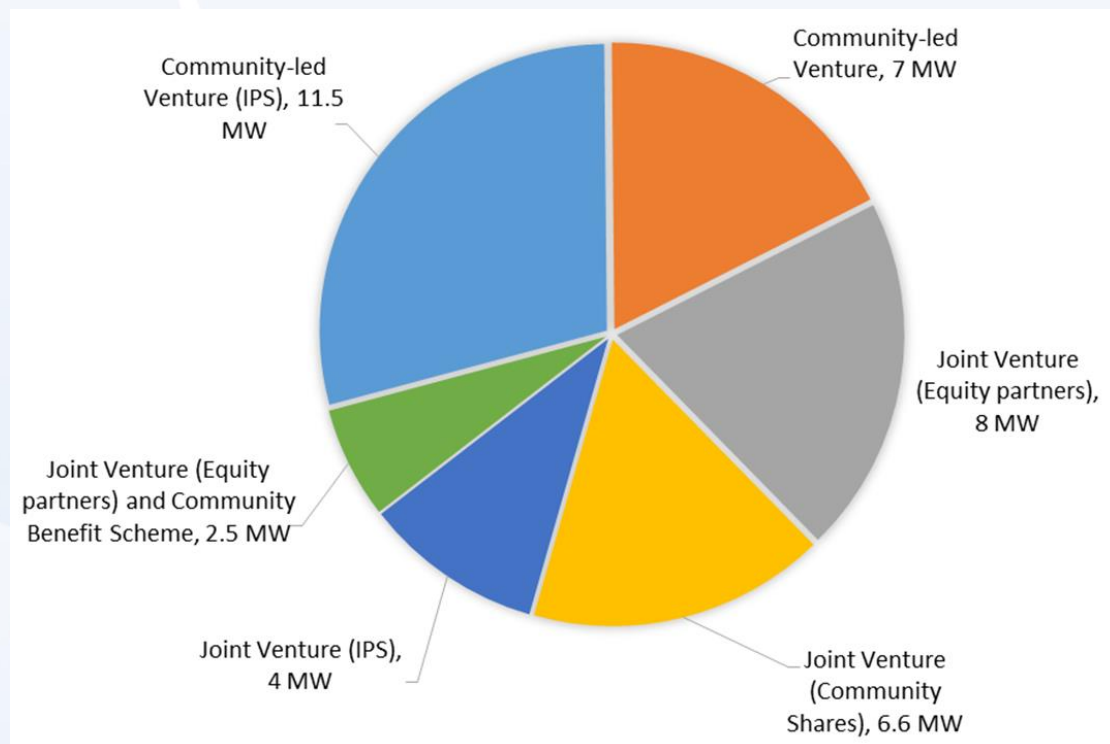
1.4. To exploit the potential that medium-scale projects offer would require broadening market access to this capacity class, in particular by facilitating joint-ventures between developers and local stakeholders, including communities and local authorities.

1.5. If market access remains restricted as it is now, mounting opposition to medium-scale projects will likely prevent, in large part, both the potential and benefits from being realised.

1.6. At the current rate of growth of community energy, we estimate that this sector could grow to 550 MW of capacity by 2020.

2 What different models of **community- and local** ownership exist for medium-sized energy projects and how prevalent are they in the UK?

2.1. The current upper capacity limit at which projects are eligible for Feed-in-Tariffs (5 MW) largely determines which models of community- and local ownership currently exist for medium-sized energy projects.



Community-owned capacity in UK renewable generation, categorised by business model. Source: SCENE.

2.2. In part because of the relative complexity of current support mechanisms for medium-sized projects, community- and local ownership in this capacity class exists largely through joint venture arrangements.

2.3. There are currently only three medium-scale energy projects that are wholly community-owned: the Lochcarnan Community Windfarm on South Uist (6.9 MW); and the Westmill Solar and Wind Co-operatives in Oxfordshire (5 and 6.5 MW respectively).

2.4. By way of comparison, members in Danish co-operatives such as the Middelgrunden wind farm outside of Copenhagen jointly own equity equivalent to 20 MW of generation capacity.

2.4. In the UK, the total community- and local equity in medium-sized projects is split between joint ventures with developers (53%) and wholly-owned (47%).

2.5. As is the case for community-led projects, equity in joint ventures is also held through two basic models: development trusts (DT's) in Scotland, and cooperatives elsewhere in the UK.

Different sub-types exist for both development trusts and cooperatives, and a variety of legal structures are used for the joint ventures themselves.

3 *What types of financing model are most suitable for small- and medium- scale projects?*

3.1. The structure of the UK planning system directly determines the suitability of different models to finance small- and medium- scale projects. The risks to small investors of wholly-owned community-led projects are so great, that we feel in the present system a great deal of willing community capital is going to waste. One way to counter this is to bolster opportunities for communities to engage in joint ventures with developers. Developers are better equipped to deal with the risk and complexity, but the community should be given the opportunity to take an ownership stake in pre-planning and project investment.

3.2. For small-scale projects, the major difficulty lies in securing finance in the risky pre-planning phase of development. There are two possible ways to finance this phase:

3.2.1. Rely on grant-funding or low-risk loans. Experience in Scotland and elsewhere has shown that this approach must be integrated with basic financial and technical due-diligence procedures to prevent mis-allocation.

3.2.2. Diversify risk by bundling early-stage projects.

3.3. Both these pre-planning finance models can be integrated, and co-ordinated in partnership with willing local authority treasury and planning departments, and be partly supported through community benefit arrangements and business rates.

4 *Why are community-owned energy projects more prevalent in countries like Germany and Denmark than they are in the UK?*

4.1. In collaboration with Radboud University in The Netherlands, SCENE is conducting a detailed study of community-owned renewable energy in both Germany and Denmark, and are formally partnered with the German Federal Renewable Energies Agency.

4.2. Local ownership accounts for 50% and 86% of German and Danish onshore renewable generation, respectively¹.

4.3. This is largely explained by the fact that Germany and Denmark:

4.3.1. Have enjoyed simple, stable and sustained support mechanisms; and

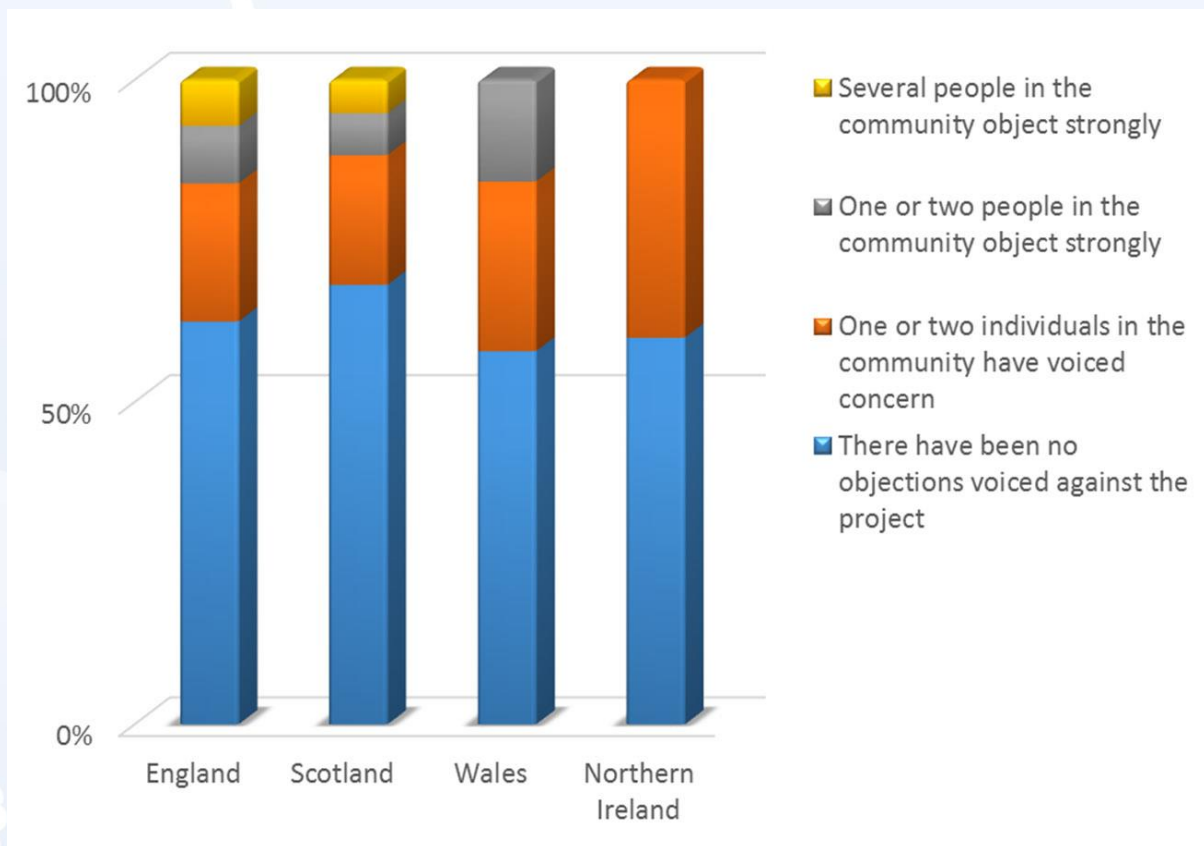
4.3.2. Have planning systems that encourage rather than obstruct partnerships and collaboration between local authorities and other local stakeholders, including businesses, farmers and communities.

4.4. Tellingly, Danish abandonment of FiT's in favour of more complex mechanisms between 2000 and 2009 went hand-in-hand with a marked decrease in decentralized ownership and generation of renewable energy.

¹ Anna Harnmeijer, Jelte Harnmeijer, Nicola McEwen, Vijay Bhopal (2012), 'A Report on Community Renewable Energy in Scotland', UKERC/ECCI/SCENE, Edinburgh.

5 *Is there any evidence that medium-scale energy projects are more likely to be accepted by local communities?*

5.1. We have looked into this question in detail, by surveying for and analysing local opposition to both community-led and joint venture projects across the UK. Across the UK, 87% of projects experienced no direct opposition at all. 8% reported that one or two members of the community raised objections, and 5% reported that more than two members raised objections.



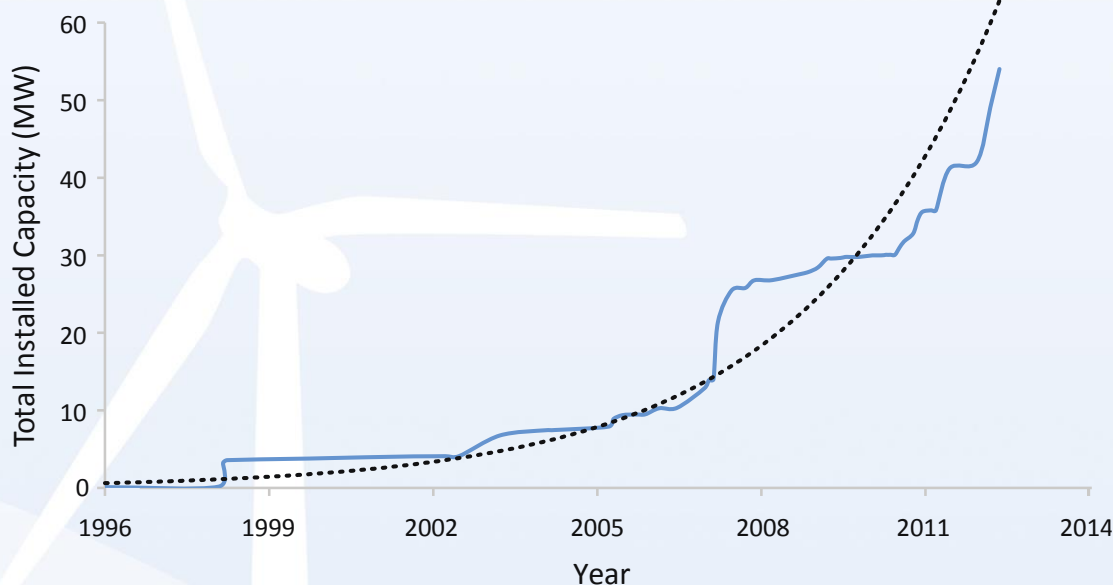
Opposition to projects in which communities had a stake. Source: SCENE.

5.2. Our findings corroborate studies showing that opposition to renewable energy projects melts away where co-ownership is offered².

² ICM (2012), 'ICM poll for the Co-operative Group', The Co-operative Group.

6 What appetite is there for community-owned medium-scale energy projects in the UK?

6.1. Amongst communities themselves, there is a rapidly growing appetite for a community-ownership component in medium-scale projects. The relative immaturity of suitable support mechanisms, and barriers to market entry, together largely account for the fact that total UK community renewables capacity is still small.



Total operational UK community renewable capacity, 1996–2013. Source: SCENE.

6.2. We calculate that, if certain reforms are introduced as part of the Electricity Market Reform bill, community ownership could account for 550 MW and 8900 MW of the UK's renewable capacity by 2020 and 2030, respectively. Our findings also suggest that, under this scenario:

6.2.1. A gradually growing culture of acceptance would appreciably decrease current barriers to renewables development in general;

6.2.2. £637m and £11.5bn would be invested into the renewables sector by communities themselves by 2020 and 2030 respectively;

6.2.3. 123,000 construction jobs between now and 2030, and between 9000 and 36,000 permanent jobs.

7 *What appetite is there among private sector organisations in the UK to invest in their own medium-scale energy projects?*

7.1. There is a large and growing appetite amongst private sector organisations to invest in medium-scale energy projects.

7.2. Three main factors constrain private-sector demand for investment in renewable generation:

7.2.1. The planning process is widely regarded as risky, slow, politicised and non-transparent;

7.2.2. Governmental support for renewable energy is seen as volatile;

7.2.3. Developers currently have little or no incentive to partner in joint-ventures with other potential stakeholders, such as local authorities, communities, businesses and housing associations.

8 What appetite is there among UK local authorities to invest in their own medium-scale energy projects?

8.1. The appetite amongst UK local authorities to invest in medium-scale energy is highly variable.

8.2. Many successful projects (e.g. Cornwall, Isle of Wight, Orkney) stand testimony to the important role that local authorities stand to play in meeting the UK's energy and climate-change objectives.

8.3. Current planning regulations often prevent willing local authorities from partnering in projects with communities and/or developers.

8.4. Many local authorities are in a good position to act as partners in small- and medium- scale projects by providing low-cost debt finance after planning permission has been awarded.

8.5. From our own survey work, we found that - of the community projects that were successful in obtaining planning permission - far more reported that their local authorities was knowledgeable and supportive. Furthermore, if a local authority was perceived as being knowledgeable, it was twice as likely to be supportive. This data strongly suggests that the organizational style, expertise and stance of a local authority has a crucial bearing on the success rate of community projects.

		Supportive Local Authority?	
		no	yes
Knowledgeable Local Authority?	no	6%	17%
	yes	11%	66%

How successful community projects perceived the stance of their local authority. Source: SCENE.

9 What are the barriers to medium-scale energy projects in the UK?

9.1. Many of the barriers facing renewable energy projects are now relatively well identified and described.

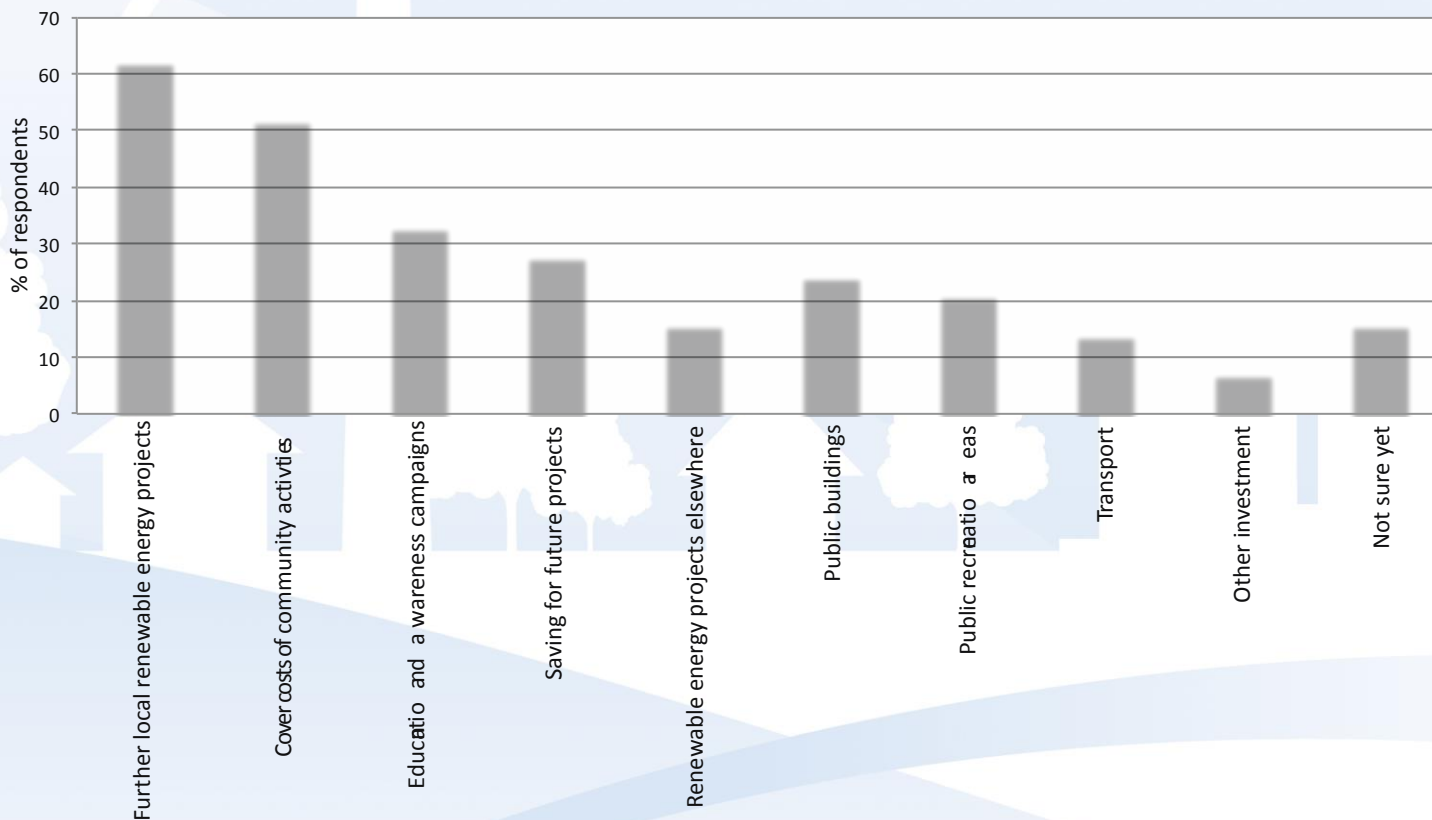
9.2. These barriers include continued uncertainty around support mechanisms, problems accessing the grid, pre-and post-consent delays, and opposition to developments resulting from a perceived lack of engagement and investment opportunities.

9.3. In this context, effective engagement between developers and communities plays a vital role in the long-term outlook for UK renewables, for two reasons:

9.3.1. Experience in Germany and Denmark has clearly established that effective engagement, coupled with access to investment opportunities where desired, plays a key in fostering a positive culture towards renewable energy;

9.3.2. Careful analysis of how revenues from community-owned renewable energy generation are spent highlights the important role that successful engagement, and co-ownership in particular, stands to play in driving the renewable energy sector at large.

“How do you spend or plan to spend your community renewables revenue?”



How UK community renewables revenue is spent. Source: SCENE.

10 *How effective are current Government policies in encouraging local and medium-sized energy projects? Could they be improved in any way?*

10.1. The single-most important way in which local medium-sized energy projects can be encouraged is by facilitating market access for willing local authorities, businesses, communities and other potential stakeholders.

10.2. Experience in other European countries shows clearly that securing and safeguarding the opportunity to invest in renewable energy generation for these potential stakeholders is a crucial policy component, and a prerequisite to establishing a functional renewable economy.

10.3. Independent registries, such as <http://connect.scenetwork.co.uk>, should be supported to facilitate the exchange of engagement- and development best-practice.

10.4. The fixed-rate feed-in tariff, currently available to all renewable energy generators below 5 MW, should be extended to all generators below 50 MW.

10.5. Should the feed-in tariff threshold not be raised above 5 MW, the proposal of a Green Power Auction Mechanism (GPAM) should be implemented.

10.6. The sub-£1M debt-finance void should be addressed by enhancing market access to membership-based organisations (e.g., housing associations) and encouraging and facilitating low-cost prudential borrowing by local authorities for post-planning finance.

10.7. In line with the Localism Act, local authorities should exercise their right to borrow and invest in renewable energy generation, at whatever level of capital is prudent.

10.8. With reference to ResPublica's recent report on neighbourhood planning³, the Department for Communities and Local Government (DCLG) should incentivise local authorities to increase community owned equity in renewable energy (Community Right to General Assets). An increase in community stake could be mediated by Energy Investment Trusts (EITs). This types of institution could facilitate community investment in renewable energy installations (a Community Right to Invest in Energy).

10.9. The concept of renewable energy 'sleeving' should be introduced and promoted by local authorities, in order to match local community user-groups and energy intensive business with renewable generators.

10.10. Supply-side aggregation implemented through sleeving could be complemented by demand-side aggregation of small and medium size generators into ESCos. This would help to close the loop between local supply and local demand, where there is support for energy user-pooling, but not necessarily any large-scale renewable generators in the vicinity.

³ ResPublica (2012), 'Rethinking Neighbourhood Planning'.

10.11. Developers and generation companies should embrace more tangible and direct forms of community benefit, exemplified by the local discount tariffs being made available by companies such as RES and Good Energy.

10.12. Community projects should be supported at the planning and consenting stage through a combination of pooled financial support and bundled planning.

10.13. Community projects should be supported at the pre-planning stage through provision of access to wind and solar resource maps, geotechnical, planning and other environmental mapping resources.

10.14. For grant awards to renewable energy projects (of all scales), an effective system of due diligence checking should be implemented.

10.15. Government and local authorities should explore how neighbourhood planning and the role of neighbourhood forums could:

10.15.1. Establish partnerships between communities, local authorities, developers and businesses to enable communities to take a lead in liaising with and establishing relationships with the role of local energy production and supply in their area;

10.15.2 Help leverage in funding for their own projects, particularly in the pre-planning stages; and

10.15.3. Ensure that 'social value' and long-term sustainable revenue for the community is a primary outcome of a more decentralised system.

10.16. Local authorities should encourage developers, businesses, public services and other local groups to advertise spare back office space, legal and financial expertise, and make all planning applications and associated environmental scoping work publicly available. Local authorities should also seek to advertise opportunities for communities to come in on renewable projects on public buildings (housing associations, hospitals, universities) and broker/ manage links with community projects and high intensity users, to more directly connect production to supply. This could also be promoted as an opportunity through collaborative buying initiatives.