

*September 2013*

# ***The Community Renewables Economy***

*Starting up, scaling up and spinning out*

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**ResPublica**  
*changing the terms of debate*

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*The authors would like to thank Anna Harnmeijer, who designed SCENE Connect's research methodology, and oversaw its co-ordination and implementation. Charlie Loyd, Stanislav Manilov and Maithu Venkatesh coded on-line surveys, databases, and GIS functionality. Surveys were conducted by Rebecca Reeve, Ciorstaidh Couston and Christina Man. Neil Mearns and Darcy Pimblett maintained the database, and Vijay Bhopal offered management support. Vital advice was provided by Nicola McEwen and Elizabeth Bomberg. Most of all, we are grateful to the hundreds of community members who have worked with us over the past 24 months.*

*This paper was edited by Caroline Julian with the assistance of Adam Wildman. The editors would also like to thank Gemma Grimes, Nik Perepelov and Rob Norris at RenewableUK, Alison Hood at Airvolution Energy, Marlies Koutstaal at Infinergy, Paul Monaghan at Co-operative Energy, Becky Willis at Co-operatives UK for all of her insightful comments and James Edmondson for his assistance. As well all of those who participated in our Advisory Group, particularly Laura Sandys MP.*

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*The ResPublica Trust (which operates under the trading name ResPublica) is an independent, non-partisan think tank. We focus on developing practical solutions to enduring socio-economic and cultural problems in the UK.*

*Our ideas are founded on the principles of a post-liberal vision of the future which moves beyond the traditional political dichotomies of left and right, and which prioritise the need to recover the language and practice of the common good.*

*Based on the premise that human relationships should once more be positioned as the centre and meaning of an associative society, we aim to foster a 'one nation' approach to social and economic inequality so that the benefits of capital, trade and entrepreneurship are open to all. A vibrant democracy and market economy require a stronger focus on virtue, vocation and ethos. Consequently our practical recommendations for policy implementation seek to strengthen the links between individuals, institutions and communities that create both human and social capital, in order to achieve a political space that is neither dominated by the state nor the market alone.*

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*We intend Green Papers to spark debate and more extensive work and research. We hope that this publication does just this.*

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# Foreword

*by Greg Barker MP, Minister of State for Energy and Climate Change*

The UK's transformation to a low-carbon economy will require a huge national shift in the way we generate, buy, and distribute our energy. With the world-leading reforms to our electricity market, large centralised low-carbon infrastructure, such as nuclear power stations or offshore wind farms, will continue to play a major role in our energy system well into the future. However, large-scale technologies such as these are an important part of a diverse energy mix, not an entire recipe. Our move to a sustainable society will be a local revolution too. The growth in decentralised and community renewables, as this report shows, has the potential to reap huge dividends for the UK.

Community energy has not always featured strongly in the approaches taken by successive governments to energy and climate change policy. But the Coalition Agreement recognised its potential and committed to encourage community-owned energy schemes. In Government, we have made great progress.

The number of small scale energy systems in homes and businesses has leapt from a few thousand to over half a million and is continuing to grow all the time.

Greener, cleaner and with falling costs, there are a whole range of locally deployable low-carbon energy technologies that can now be exploited economically. From Combined Heat and Power systems, solar PV, geothermal, coppiced bio mass and a range of energy from waste technologies, right through to hydro and micro hydro schemes and more; the UK is bursting with innovation and potential.

We want to continue to help communities spot and unlock the exciting opportunities in their area, and successfully grow projects from planning through to implementation. This means enabling communities to take more control over local generation projects, while also empowering them to reduce their energy demand, tackle fuel poverty, and – crucially, at a

time of a rising cost of living – get the best deal on their energy supply.

Our Community Energy Strategy, to be published later in the year, will set out our vision for the next steps for community energy together with a clear set of actions to help make that vision a reality. But change won't happen with top-down government action alone. We will need to work closely with communities at the grassroots and other partners such as local authorities and the private sector.

I welcome the ideas in this report on helping communities navigate the planning system, and on forming productive partnerships so that they are better able to take an active role in their own local projects. Our aim is to help communities and local businesses seize this exciting opportunity.

# Foreword

*by RenewableUK Chief Executive Maria McCaffery*

The growth of renewable energy projects owned wholly or partly by local community groups in the UK has been remarkably swift over the last decade, increasing from just over 4 MW in 2003 to nearly 60 MW today. Wind energy projects account for 80% of this installed capacity, with solar PV providing 10% and smaller contributions from other technologies including biomass, hydro, ground source heat pumps and anaerobic digestion.

This report highlights the fact that although this fourteen-fold increase in installed capacity over the last ten years represents an excellent start, the UK has the potential to expand community ownership of renewables significantly; we could reach at least 550 MW by 2020.

However, we should not consider it a foregone conclusion that this level can be achieved in the current policy environment. As this report clearly identifies, there are barriers to the deployment of community energy which need to be addressed.

A more positive attitude from local authorities is needed to encourage community involvement in renewable energy projects, as well as improving access to funding, financial know-how and legal expertise for community groups.

One of the most striking findings of this report is that two-thirds of communities reinvest, or intend to reinvest, revenue gained from renewables in further energy generation projects or energy efficiency technology, thus creating a virtuous circle. On a wider level, there is a social benefit which is less easy to quantify, but nonetheless significant. Generating clean power also generates a positive sense of empowerment, as local people work closely together on a valuable environmental project.

The report rightly highlights the need to ensure that local authorities have sufficient knowledge about the importance of renewable energy, so that they can make fully informed decisions. As a result of planning reforms, DECC has recently

published practical guidelines which will assist greatly in this. The Government has asked the onshore wind industry to increase the amount it pays in local community benefits fivefold, as an acknowledgement of the role communities play in hosting wind energy projects. It's also worth pointing out that local authorities in England retain the business rates generated by renewable energy projects, providing a much-needed extra source of income.

An effective way to overcome these barriers involves, as this report suggests, using a joint ownership approach, in which communities work with renewable energy project developers, and/or local businesses and local authorities towards a common goal. Using this socially- and economically-inclusive model, we have an opportunity to redefine the relationship between developers and communities to unlock significant growth in community energy.

# Executive Summary

*“On current trends, and with a significant joint ownership component, we estimate that by 2020 the UK could have a combined potential community capacity for all onshore technologies of 5.27 GW...This represents almost a fifth of total renewable energy capacity. What is needed is a step-change in attitude from policy makers on the potential for community energy.”*

The UK has a large and growing renewable energy market and world-class wave, tidal, wind and hydro resources. Even solar thermal and photovoltaic technologies, sources of renewable energy that you would not normally associate with the UK, are rapidly being deployed across much of the country.

Amidst these unfolding opportunities, many developments that include an element of community involvement have brought important advantages beyond those of purely commercial projects. These advantages include economic and cultural multipliers that, in addition to enabling sustained local development, positively feed back into the broader economy. So dramatic is the effect of these ‘community accelerators’ that it is unlikely that renewable energy and climate change objectives can be met without them. This echoes the experiences of other countries that

have successfully developed into ‘renewable energy economies’.

But despite widely acknowledged social and economic benefits, there remain very limited opportunities for communities to participate in energy generation, to the frustration of increasingly ambitious and driven community groups. Most community groups seeking to explore community energy regularly encounter the two most common barriers to entry into this market: overbearing planning restrictions and a dearth of external private investment.

There are several emerging models that could aid community groups attempting to overcome these problems. The most promising of these are joint venture or joint ownership arrangements, which could very quickly become the primary vehicle for growth for community energy projects. As well as

these joint venture models, this report also highlights that space remains for innovations in community benefit arrangements and partnership agreements with local government.

Truly grasping these opportunities could reap huge dividends for the UK. On current trends, and with a significant joint ownership component, we estimate that by 2020 the UK could have a combined potential community capacity for all onshore technologies – wind, solar photovoltaic and hydro – of 5.27 GW – up from 58.9 MW today. This represents almost a fifth of total renewable energy capacity. What is needed is a step-change in attitude from policy makers on the potential for community energy.

Despite promising signs from policy makers in Westminster over recent months, there still remain substantial barriers to expansion for community energy projects. Existing hurdles at all stages of the development process – from project conception to securing grid connectivity – are very high, and will need to be overcome if we are to get the energy mix we need. UK community renewables are growing exponentially. Policy makers need to make sure that this burgeoning sector is enabled to reach its full potential.

Key recommendations of this report are:

### **1. Incentivise the joint ownership of community energy**

The Department for Energy and Climate Change (DECC) has recently announced that it is planning to increase the threshold for community projects under the feed-in tariff (FiT) to enable larger community energy projects to benefit.<sup>1</sup> We recommend that DECC should permit jointly-owned community energy projects, other than just those wholly-owned by the community, to be included within this extension. This should significantly incentivise the starting-up and scaling-up of community energy projects.

### **2. Extend the planned register of community benefit to include a portal for developer-community 'match-making'**

In response to the recent call for evidence,<sup>2</sup> DECC has proposed that the department will work with community and industry stakeholders to establish a register of community engagement and benefits. We recommend that, once established, such a register should include a specific portal where developers can express an interest in developing partnerships with communities. Likewise, communities should in turn be able to express interest in owning or co-owning renewable energy developments. Such a platform would perform an informal 'match-

making' service, where either the community or developer could easily seek local opportunities and establish direct contact. If a match is made, there should be a duty on the local authority and local planning authority to respond and advise. Advice and independent brokers, like Community Energy Scotland, should also play a key role in facilitating such partnerships.

We also recommend that this register include the appropriate space and platform for developers to upload, or provide links to, their own environmental data and any other supporting documents required for their initial planning application. The register could also encourage developers to advertise, where appropriate, any other enabling services, such as additional provision of advice and expertise for local ambitious community groups who are looking to develop or invest in renewable energy production.

### **3. Establish partnerships with leading 'pathfinder' local authorities to develop models of co-operation<sup>3</sup>**

Local authorities are in a strong position to implement positive, enabling policies that could support the development of community renewable energy partnerships. We encourage local authorities to take a more positive view of community involvement, particularly ownership, in renewable energy developments and to give greater consideration to the positive benefits

of community support and involvement when making planning decisions. We recommend that DECC and DCLG establish partnerships with leading 'pathfinder' local authorities to develop models of co-operation between developers, communities and local authorities.

### **4. Encourage local authorities to act as financial intermediaries**

Given the new rights granted through the Localism Act 2011 to borrow and invest, local councils are well placed to begin to both invest and financially benefit from community energy projects. Local authorities should establish links with local housing associations, businesses and churches, as well as social finance organisations like Big Society Capital, and its intermediaries, to explore these opportunities. A further incentive for local authorities is the potential revenue that could be generated through the business rates retention scheme in England. If community share of onshore renewables was increased to one-fifth, England could have 2.6 GW of community energy capacity by 2020, with a mean installation size of 2.5 MW; this would generate approximately £30m of revenue through the business rates retention scheme per year – an additional incentive for local authorities to engage with community energy projects.

### **5. Pilot local energy development plans and a planning fast-track for community renewables projects**

Through new powers granted by the Localism Act, communities are now able to take a lead in setting the priorities for local development in their area. We recommend that DECC work with the Department for Communities and Local Government (DCLG) to establish closer links with neighbourhood planning advice and support services, such as Locality and the Centre for Sustainable Energy, to pilot local energy development plans. In producing such plans, neighbourhood forums should highlight opportunities for communities to develop and own new local energy projects, either as a sole developer or in partnership with others. Where significant community ownership is involved, additional support should be offered to the community as it embarks on the planning application, and such developments should be fast-tracked through the planning process. As argued previously by ResPublica, the social value of community energy must also be recognised in this process.<sup>4</sup> Where local opportunities for renewables development do not exist, neighbourhood forums and parish councils should play a crucial role in co-ordinating community investment in similar co-operative or crowd-funded projects.

We also recommend that DCLG work with DECC to nationally standardise all planning and consent application forms, processes and corresponding paperwork for local energy projects. Forms to be completed should be accompanied with guidance notes that recognise the difficulties

often faced by small start-up projects and include pointers to the appropriate advice portals, support services or individuals who could provide additional support.

### **6. Pilot Community Commissions**

To further address problems in the planning process, including lack of knowledge, we propose that DECC, in partnership with DCLG, consider piloting a series of 'Community Commissions' to assist with highlighting development and investment opportunities in community renewables. This model could innovate further on participatory planning activities already established within many local authorities whilst also learning from international examples, including Australia's use of 'citizens' juries', in opening up community-wide discussion on the potential for community energy. These 'Commissions' would be independent, randomly-selected representative bodies made up entirely of local residents, which could and should be given a short pathway to planning power, with a delegated authority to approve community energy schemes. 'Community Commissions' should be integrated into both the neighbourhood and the local authority planning process, but would act as an addition tool for local authorities to excite interest in community-owned energy. In addition, such pilots could further popularise existing neighbourhood planning forums and encourage others to form.



# 1. Introduction

*“Despite the fact that communities across the country face significant challenges, interest in the role that communities play in starting up, owning or investing in energy production assets has grown, particularly within the past year.”*

The community energy sector has grown dramatically over recent years, with three times as many new community projects conceived in 2011 as in 2005. Yet community energy projects face significant barriers to their development and growth. Recurrent problems accessing the grid, uncertainty around the support mechanisms available and pre- and post-consent delays all add to the general challenge of securing long-term investment for community energy projects – a task made that much more difficult by the present economic climate.

These factors impact significantly on communities and community renewables. By ‘community renewables’ in this paper, we refer specifically to models and partnerships where a community - local or national - has a financial

investment in a renewable energy project, whether this be wholly owned by them, or in partnership with others.

Despite the fact that communities across the country face significant challenges, interest in the role that communities play in starting up, owning or investing in energy production assets has grown, particularly within the past year. Government has made moves to support the growth of this sector through, most recently, the development of a Community Energy Strategy, which is due to be published in Autumn 2013, and provisions in the Energy Bill to incentivise larger community energy projects through the feed-in tariff (FiT). But there still remain significant barriers to growth of the sector, and much more that government and policy-makers can do to dissolve these.

We outline in this paper that the total operational capacity of community renewables in the UK has grown from 4.1 MW in 2003 to 58.9 MW in 2013 – a fourteen-fold increase (an increase of over 1300%). Community renewables capacity has therefore grown almost three times faster than the total renewable energy capacity in the UK, which has risen from 3,500 MW to 17,600 MW in the same time period. Previous research has concluded that the total capacity for community energy in the UK could reach 3.5 GW – 10% of total onshore renewable capacity. Based on the findings of our research and historical data, we highlight that, if certain barriers are dissolved and the appropriate policy framework put in place, this level of capacity could be achieved by 2027, and expand far beyond this in the decades to follow.

Drawing on our research, we highlight that one of the most prominent barriers faced by communities with the ambition to set up or invest in local renewable energy production is the planning process – in the broadest sense. Guidance and access to data, legal and financial expertise and financial cost are particularly significant hurdles for communities that often prevent them from entering into the market. Although there is huge potential for increased capacity for community energy in this country, such difficulties prevent this growth from being realised.

We highlight in this paper one particular opportunity that could both respond to such barriers and catalyse growth in the sector: the joint ownership model. Joint venture or joint ownership models, where communities or local authorities have established fruitful partnerships with renewable energy developers, other local businesses or existing community groups, reveal untapped opportunities for communities with the ambition to enter into the market and take their projects to scale. Where communities cannot go it alone, such partnerships can provide a platform, the data, expertise, investment, the assets - land and existing developments - needed to start up and scale up.

We argue that policy makers, national, local and hyper-local, could do more to incentivise this vehicle for growth, where the community holds a financial investment in the project, and establish mechanisms to highlight, facilitate and support such partnerships. Government has accepted and supports the principle of community benefit schemes; the next step, where appropriate, is to support and promote community ownership of energy.

## 2. The Nature of the Sector:

### *Capacity for Development and Scale?*

*“To date, 27% of all community renewables projects have been developed through wholly community-led energy co-operatives, with a further 34% developed using other community-led structures.”*

Although we have seen increased interest in community energy from a number of UK-based research units in recent years, little by way of consolidated data currently exists on present capacity, range of technologies, geographical spread and business model.

Based on our research, which is drawn from comprehensive online surveys and telephone interviews conducted between January 2011 and December 2012, and supplemented with SCENE's on-line user-editable database, we outline in this section the current state of community renewables in the UK, and how fast this market is growing.<sup>5</sup> We also point to the sector's significant theoretical potential.

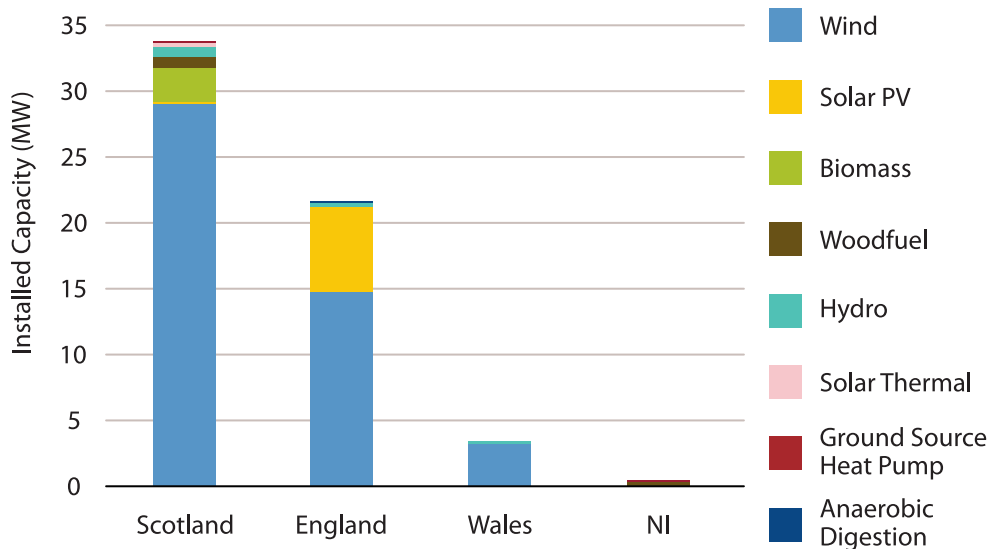
#### *2.1 Capacity and technology*

We calculate that there is 58.9 MW of total operational community energy capacity in the UK.<sup>6</sup> This is the summed capacity of 146 separate installations, 50 of which are located in England

(21.6 MW); 83 in Scotland (33.7 MW) and a further 13 installations with a combined capacity of 3.7 MW across Wales and Northern Ireland. By way of comparison, Ofgem reports that the current capacity of community projects using feed-in tariffs (FiTs) amounts to 26.5 MW – this is a significant under-report compared with our data.<sup>7</sup> There are eight different technologies represented, but the vast majority of community renewables capacity is made up from wind turbine and solar photovoltaic installations: together, these constitute 91% of total capacity.

By comparison, across the entire UK renewable sector, wind and solar make up only 46% of total installed capacity.<sup>8</sup> This disparity reflects the great versatility and scalability of these two technologies; wind and solar can achieve effective distributed generation at capacities down to very small scales, whereas an anaerobic digester thermal plant, for example, must be built at much larger scale with regard to both efficiency and centralisation.

Fig. 1 UK Community Renewables Capacity by Country and Technology



Source: SCENE Connect (May 2013)

## 2.2 Investment and ownership

A growing diversity of arrangements through which communities participate in renewable energy generation can be found in the UK: Figure 2 represents the key models.<sup>9</sup> Broadly speaking, total community capacity in the UK can be split up into projects that are wholly owned (36.6 MW,

or 62%) by the community, and those that are part-owned (22.3 MW, or 38%), usually in partnership with an energy developer.

The business models are diverse, but in general they can be classified as follows:

- **Community-led Ownership:** The community organisation was responsible

for implementing and financing the project, either via a wholly community-led energy co-operative or other community-led structures. To date, 27% of all community renewables projects have been developed through wholly community-led energy co-operatives, with a further 34% developed using other community-led structures.

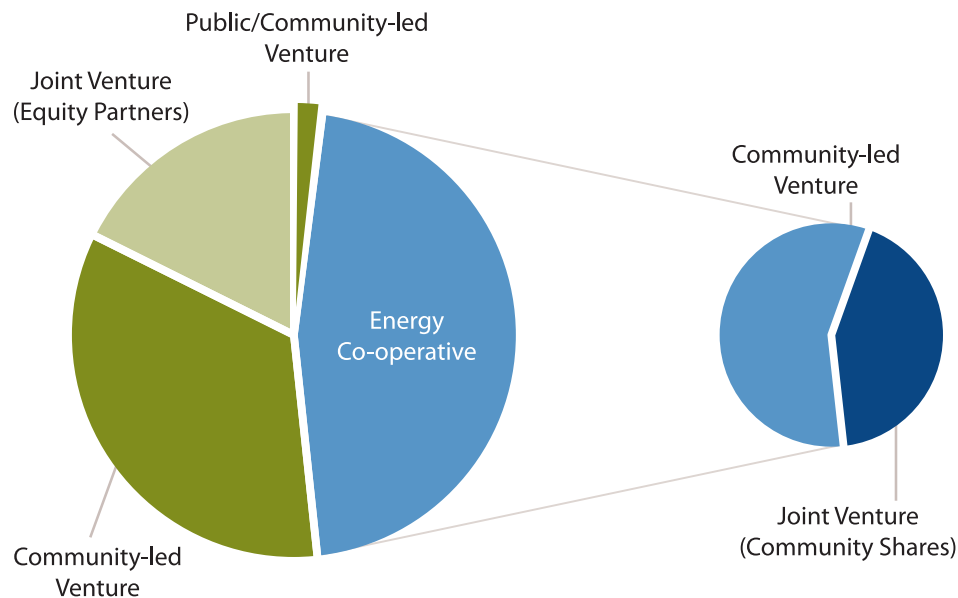
- **Joint Ownership:** An energy developer was responsible for implementing the project. These take two forms -

**Equity partners:** For example, a community-benefit organisation purchases a stake in the project. This segment currently comprises 18% of all community renewables projects.

**Community shares:** A community-owned organisation (e.g. an energy co-operative) purchases a stake in the project. This segment currently comprises 20% of all community renewables projects.

- **Public/Community-led Ownership:** A public body was involved in the implementation or financing of a project and the community also has part or full ownership of the project (e.g. Udney<sup>10</sup>). This segment currently comprises 1% of all community renewables projects.

Fig. 2 Community-owned Capacity in UK renewable Generation, Categorised by Business Model



Source: SCENE Connect (May 2013)

There is also a large division in capacity between energy co-operatives (47% of UK capacity, or 27.6 MW) and other types of organisation (53%). Energy co-operatives are generally formed as Industrial & Provident Societies, and are associated with share offers to raise investment for part or all of a planned project's capital spend. This model dominates

capacity in England and Wales with 23.4 MW or 93% of total capacity. Conversely, in Scotland they are a distinct minority (4.2 MW / 12%),<sup>11</sup> and instead development organisations own the majority of Scottish community capacity, with 54 such bodies owning 22.0 MW of capacity - 65% of the Scottish total.

[See Fig.3 - page: 12]

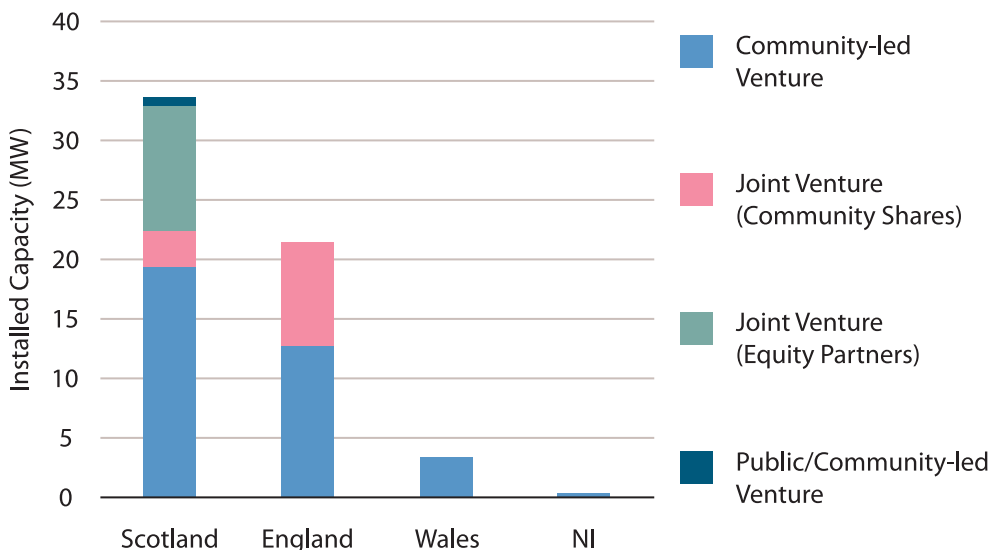
The fact that communities presently play a relatively small role in the UK energy mix (< 0.5% of total renewable capacity)<sup>12</sup> makes this multiplicity of business and legal models all the more noteworthy. In fact, both the high variety and low capacity - compared to Denmark and Germany, for example - are partly explained by the fact that there has been such a limited focus on the community sector in energy policy so far.

### 2.3 Potential capacity

In terms of identifying potential community renewables capacity, local planning authorities have a prominent role to play. However, there exists large variation in how planning policy is interpreted and enacted - both from council to council and election to election. This makes it particularly difficult to arrive at an estimate for the theoretically realisable UK community renewables capacity.

A 2011 study concluded that the UK community-led projects could potentially provide around 3.5 GW, or 10% of total onshore renewable capacity.<sup>13</sup> However, though carefully executed, this study has two major limitations. Firstly, Cambridgeshire was used as a model to extrapolate and make projections for overall UK capacity, despite the fact that this county has a relatively low wind resource by comparison

Fig. 3 UK Community Renewables Capacity by Ownership Type



Source: SCENE Connect (May 2013)

with other parts of the country. Secondly, the study did not aim to account for the additional potential for joint ventures or joint ownership arrangements on larger-scale developer-led projects. Rather than repeat the work of this paper, we will point to the recent history of this new and emerging sector, of which joint ventures play a key part.

On the basis of the last 5-10 years, the growth outlook for community renewable energy seems bright. Community energy capacity has grown from 4.1 MW in 2003, to 58.9 MW in 2013, a fourteen-fold increase. In that same time period, the total renewable energy capacity of the UK has grown from 3,500 MW to 17,600 MW; therefore, community energy capacity during that time period has grown almost three

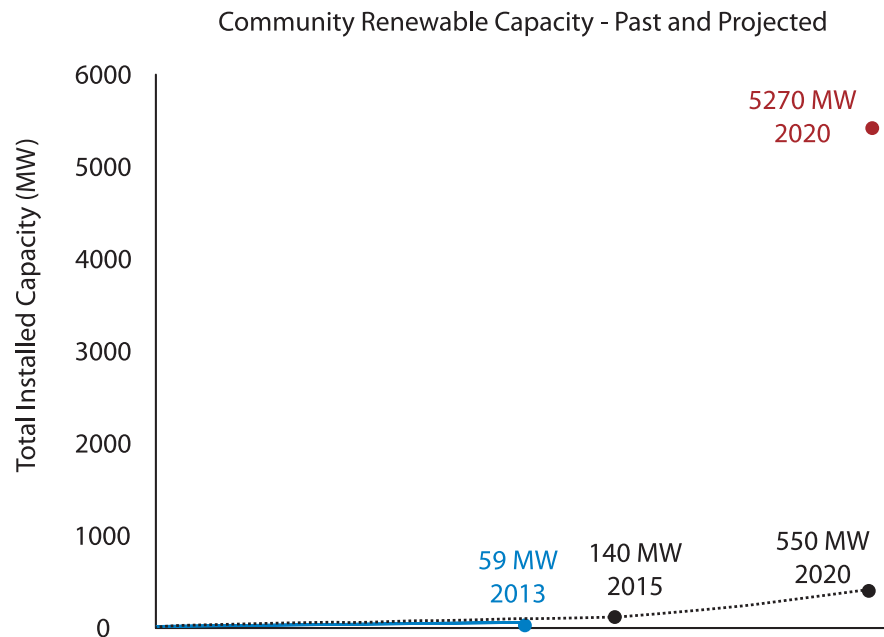
times faster than overall renewables capacity.<sup>14</sup> If this exponential growth continues, we would expect community renewables to reach approximately 140 MW of capacity by the end of 2015.

[See Fig.4 - page: 13]

Despite this rapid growth, the market penetration of community projects is still very limited, simply because community energy has taken off from an extremely low baseline of installed capacity. Furthermore, though we are confident that rapid growth will continue for the next two years, we would expect this growth to begin to slow down from 2015, as state-aid regulations (introduced in 2010)<sup>15</sup> make themselves felt.<sup>16</sup> If the market is sufficiently agile to find effective ways around the loss of large pre-planning grants, then a simple extrapolation of the current exponential growth rate would put the community renewable sector on a total operational capacity of 550 MW by 2020.

This 550 MW figure represents a significant increase, but is far below the genuine potential of community renewables. The Department for Energy and Climate Change estimates that by 2020, the UK will have 10 – 19 GW<sup>17</sup> of installed onshore wind capacity and 7 – 20 GW<sup>18</sup> of solar photovoltaic, while hydro power could potentially contribute 3.12 GW.<sup>19</sup> Our data shows that the relative contribution to

Fig. 4 Total Operational UK Community Renewable Capacity, 2006 - 2013



*“Community energy capacity has grown from 4.1 MW in 2003, to 58.9 MW in 2013, a fourteen fold increase. In that same time period, the total renewable energy capacity of the UK has grown from 3,500 MW to 17,600 MW; therefore, community energy capacity during that time period has grown almost three times faster than overall renewables capacity.”*

Source: SCENE Connect (May 2013)

community energy capacity through joint-owned projects in the UK is 38%, so given the baseline target for community market share is 10% – not including joint ownership – we can revise that target up to 17.6%. With this target, using the DECC roadmap figures we estimate a combined potential community capacity of

all onshore technologies – wind, solar PV and hydro – of 5.27 GW. Clearly, without the input of jointly-owned community energy projects – as the graph above demonstrates – the growth in community energy capacity up to 2020 almost flat-lines.

### 3. Central Barriers to Growth of Community Energy

*“Categories of commonly recognised sector-wide barriers include continued uncertainty around support mechanisms, problems accessing the grid, and pre-and post-consent delays.”*

Many of the barriers to the growth of renewables are now relatively well understood by practitioners, although their relative roles and import remain poorly quantified.<sup>20</sup> Issues that impact on the renewables sector at large also affect community developments, which are often more vulnerable than private sector initiatives.

Categories of commonly recognised sector-wide barriers<sup>21</sup> – those affecting developers and communities alike – include continued uncertainty around support mechanisms, problems accessing the grid, and pre- and post-consent delays. The lack of clarity over long-term support through feed-in tariffs and the forthcoming contracts-for-difference system is partly responsible for increasing the difficulty of securing equity investment. However, an equal portion of the difficulty in attracting equity and especially debt finance can be ascribed to

systemic issues in the UK investment market. In the last 2 years, lending to small non-financial enterprises has fallen by 3% each year, while interest rates on those loans have risen by over 30% since 2009. In general, lending by financial institutions into the productive economy has fallen from 20% of total investment in 1998, to 10% in 2012.<sup>22</sup>

Many barriers are specific to a particular phase of project development, which thus provide a useful framework for discussion. The most significant barriers, for the vast majority of projects, present themselves at the planning phase.

#### 3.1 Planning

The planning phase is where all of the at-risk (and potentially non-recoverable) investments of time and capital will be made; all inputs to



the project at this stage are completely at risk. This is where most community projects come unstuck attempting to offset or minimise their risk, or make the decision not to proceed. This is an important consideration, as prior to 2010, most of the money available to communities to carry out feasibility studies and pre-planning assessments came in the form of development grants.<sup>23</sup> This grant money was intended to leverage investment from the private sector to aid in the commissioning of community energy projects. However, where projects fail to reach the planning stage, or are refused planning permission, this grant money is lost. As an additional complication, new EU state aid rules now preclude the use of grants in combination with state subsidy (i.e. feed-in tariff payments). Because of this, some renewable funds and schemes have converted from a grant system to a loan system – for example CARES in Scotland.

Amongst EU nations, the UK is anomalous in terms of the risk, cost and time associated with obtaining planning permission for energy generation projects, especially relative to countries that implement a pro-active spatial planning framework.<sup>24</sup> Even for commercial projects, the average time taken for planning decisions to be made is still close to a year, and rejection rates are high.<sup>25</sup> In 2010-11, the onshore wind approval rate in England was just 45% by project, and 25% by MW capacity.<sup>26</sup>

Such risks impact even more significantly on community energy projects: the securing of planning permission in the UK presents the single largest hurdle to communities. The unavoidable fixed costs of the planning process disproportionately affect smaller projects; for a community wind installation, the proportion of project costs spent on feasibility and planning is 70% higher, than for a commercial installation, largely due to the fact that community schemes are often much smaller in scale. Therein lies one of the major reasons that communities collectively own only 0.5% of UK renewable generating capacity.<sup>27</sup>

### *3.2 Lack of guidance and access to data*

Community energy projects often fail simply because they have not been sufficiently informed and advised as to the requirements of the planning process. Equally, a good grasp of the planning process may be hamstrung by a lack of access to crucial data to determine project viability. Our research indicates that guidance at a local level, and in particular at the level of the local authority, has a strong impact on project success.

It is often claimed that “projects are more likely to succeed if they have broad support and the consent of local communities”.<sup>28</sup> We have looked into this matter in detail, by studying planning rejection rates for councils as a function of time, technology, presence of community

involvement and scale. In certain councils, under certain conditions, the involvement of community groups has a significant positive influence on planning outcomes. In others, it plays a statistically insignificant role. Findings such as these corroborate circumstantial reports of a highly politicised and ad hoc planning process. In other words, the level of knowledge of local authorities and their attitude towards local energy is a strong determinant of success or failure.

Survey data from communities with successful projects across the UK reveals that there is a striking bias in communities’ opinion of their local authority.<sup>29</sup> Of communities involved in at least one successful energy project, community members are five times more likely to report that their council was supportive than not, and three times more likely to report that the council was knowledgeable. Cross-correlation of the results also reveals that if a council was reported to be knowledgeable, it was twice as likely to be supportive. Although these results do not imply causality, they do indicate a troubling relationship between perceived local authority stance and project success.

A recent example in support of the effect of local authority attitudes and levels of awareness concerns the Totnes Renewable Energy Society (TRESOC) wind farm. The Totnes Community Wind Farm, a project that Jonathan Porritt of Forum for the Future described as “one of the

most well-designed and well-supported we've ever seen,<sup>30</sup> was denied planning permission early in 2013. The opinion of TRESOC was that "Local planning authorities don't yet have the tools to balance parochial concerns against national strategic objectives for deployment of renewable energy." This suggests that greater information and training for decision makers – both planners and councillors – would be beneficial.

### 3.3 Lack of financial support and investment

Communities must make difficult financial decisions, very early on in the process, on how they will fund a fledgling energy project. Community energy projects on average spend 17% of the total project cost in the pre-installation phase, much of which is spent in the pre-planning phase.<sup>31</sup> A project with a total budget of £1m might require £100,000 of money *in advance* of the planning application. This money is entirely at risk, therefore commercial bank loans and even community shares are very difficult to obtain. These costs have traditionally been funded through grant schemes but, as of 2010, grants have become less flexible due to EU-enforced regulations over the provision of state aid for capital costs.<sup>32</sup>

In Scotland, the main source of pre-planning finance for communities is the CARES loan, a state-funded and privately administered pot from which projects can apply for loans, on the

understanding that should the project fail to pass through planning, the loan is written-off. However, the interest rate on this loan is 10%, effective immediately. This can potentially lead to a perverse incentive: given that community projects take on average 5 years to reach completion,<sup>33</sup> projects can reach a point where even if planning permission is granted, it makes more financial sense to abandon the project and write-off the loan. This was not the case under the grant system, where the pre-planning finance was gifted.

Liquidity constraints in UK and European markets also continue to make their effects felt, and debt finance for small (below £1m in capital costs) community projects is notoriously hard to come by, made uneconomical to debt providers because of the costly due-diligence required. Here, a process economists call 'adverse selection' has given rise to a situation where viable projects have trouble distinguishing themselves from non-viable projects, to the detriment of the former. It is common knowledge that private and institutional investors see community projects as too high risk, due to the uncertainty and high upfront cost of the planning process.

### 3.4 Lack of legal, financial and technical expertise

Community projects are more likely to be successful if the community has access to a significant pool of professionals or qualified people, most likely in the areas of law, finance, science and engineering. This was shown to be a statistically significant effect in a 2012 study,<sup>34</sup> and one of the major factors for success. In support of this, a recently completed 3-year research project conducted jointly between the Universities of Sussex and East Anglia revealed that one of the main factors for success of community energy was 'a strong organising group with key skills and commitment'.<sup>35</sup>

Overall project financial viability is highly sensitive to the level of pre-planning and planning costs, because of the level of risk attached to these costs.<sup>36</sup> Expertise at this stage, be it free or discounted, is therefore multiplied in terms of its value to the community compared to, for example, voluntary construction work offered in the construction phase of a project. Communities that lack access to this expertise may be able to obtain free advice from a national or local source of advice or voluntary organisation, but these are thin on the ground and do not constitute an effective replacement for an on-hand expert member or associate of the community.

## 4. An Untapped Opportunity: *The Joint Ownership Model*

*“As outlined in this paper, not all communities have access to the needed legal, financial, technical and project management expertise ‘in-house’ to develop projects on their own...Where time or expertise is missing, much of the gap could in principle be met by commercial developers working in partnership with communities.”*

A crucial and popular question that has been increasingly raised by government and other national and third sector bodies is: how can community energy achieve scale? We argue here that there is one particular ‘untapped opportunity’ that could provide a key to the immediate growth of community energy, by enabling communities to more easily enter into the market and overcome the barriers that we highlight above. This opportunity is the joint ownership model, where communities have forged successful partnerships with private businesses, such as developers, or public bodies, such as the local authority or housing associations, and importantly, where the community holds a financial stake.

If the growth of UK community energy capacity is to be maintained, it is clear that future

developments will have to be built to a larger scale, and indeed this is the trend we observe. In the period 1996-2012, the median community project capacity was just 20 kW, while in the 12 months leading up to June 2013, a total of 17 MW of capacity came online, split with 16.7 MW split between just four projects.

One way to achieve such scale is for ambitious communities to go it alone. The UK currently boasts two wholly community-owned projects with capacity above the FiT cut-off: these are the Lochcarnan Community Windfarm at Stora Uibhust on South Uist (6.9 MW) and the Westmill Wind Farm Co-operative in Oxfordshire (6.5 MW). The planning application for what would have been the UK’s largest community renewables project - the 11.5 MW Cove Community Windfarm in Rosneath, Argyll - was recently retracted.

These community-led initiatives are tremendous achievements, particularly considering that volunteers typically carry out much of the hard work. However, in many cases community-led development is infeasible. As outlined in this paper, not all communities have access to the needed legal, financial, technical and project management expertise 'in-house' to develop projects on their own. Projects below 5 MW typically rely on the FiT, rather than the Renewables Obligation (RO) as the preferred financial incentive mechanism, as it is less complex than the RO,<sup>37</sup> however, this is a complexity divide that will widen further with the impending phasing out of Renewables Obligation Certificates (ROCs) in favour of Contract-for-Differences (CfD) in 2017. Such projects need to be taken forward by specialist developers, but preferably with room for genuine engagement with affected communities.

Where time or expertise is missing, much of the gap could in principle be met by commercial developers themselves, working in partnership with communities. Projects in which communities have an ownership stake, and in which they are partnered with one or more other stakeholders, are known as joint ventures or joint ownership arrangements. In the UK, these community or non-community partnerships make use of a wide and growing diversity of legal structures, including limited liability partnerships,

such as Neilston Community Wind Farm, in addition to the more usual private limited companies. Examples include partnerships in which community shares are held by trading companies that are themselves subsidiaries of charitable community development trusts limited by guarantee, such as the Fintry Development Trust based in Stirlingshire, and others where co-operatives receive streams of project revenue on a contractual basis without owning *bona fide* equity in project vehicles, such as Baywind Energy Co-operative Ltd in Cumbria and Boyndie Windfarm Co-operative Ltd in Aberdeenshire.

UK renewable energy partnerships involving communities remain relatively rare. Nevertheless, community equity held in several projects already accounts for a surprising share of total community renewables capacity, with 20.6 MW of community owned projects being owned jointly with commercial developers, through shares in projects of under 50 MW. When completed, the very sizable 370 MW Viking Windfarm, 45% of which is owned on behalf of the community by the Shetland Charitable Trust, will be the third largest onshore windfarm in Scotland. The appetite for partnership is clearly there. It is the success of these large joint ownership projects that have not been considered in previous estimates of UK community renewable capacity, and which could provide further impetus for

communities to partner with developers and deliver projects at scale.

There is further evidence that widespread appetite exists for such investment and partnership. Our research indicates that, where communities have the choice of how to use project revenue much may be re-invested into the renewables economy. Almost two-thirds (62%) of communities invest or plan to invest generation revenue into the planning and construction of further energy generation or energy efficiency technology. Remarkably, this represents the single-most common use of renewables revenue, more common even than covering running costs of community activities (52%). Popular destinations for this investment are insulation and other efficiency measures, ground source heat pumps, and other - local and non-local - generation projects. This self-propelling 'sectoral synergy' makes a formidable policy case for supporting co-ownership, community-led projects and smart benefit arrangements.

Joint ownership arrangements can also take place with public sector entities. The growth of community renewables in many European countries has been greatly facilitated through collaboration and co-ordination with municipal and other local government bodies. Consider Danish co-operatives such as the Middelgrunden Wind Farm outside of

Copenhagen, where members jointly own equity equivalent to 20 MW of generation capacity, in an equal partnership with a local municipal utility. Partnerships between community groups and public bodies hold great promise for the UK, as do partnerships between commercial developers and local authorities on behalf of the local community, as increasing numbers of government bodies and public agencies are looking to renewable energy for revenue streams.

Yet a further variant of a community joint venture is the community/housing association partnership model. In this model, the housing association may use the proceeds of generation revenue to support housing developments; one example being the recently consented joint venture project between Berwickshire Housing Association and Community Energy Scotland.

There remains ample room for innovation in the UK joint venture space, and we foresee that much of the future growth of the UK renewables sector will be realised in conjunction with private sector stakeholders. Consider that six years on, the partnership arrangement between Falck Renewables and Fintry Development Trust (FDT) has still not been replicated,<sup>38</sup> though several developers and communities are presently seeking to implement similar community investment opportunities. New models continue to be

put forward, as evidenced by the novel legal structure used in the recent Carbon Free Development and Neilston Development Trust partnership.<sup>39</sup>

*“Joint ownership arrangements can also take place with public sector entities. The growth of community renewables in many European countries has been greatly facilitated through collaboration and co-ordination with municipal and other local government bodies.”*

## 5. Scaling Up the Community Energy Market

*“Incentivising such joint venture models is crucial to ‘scaling up’ community energy projects, and in enabling communities to play a significant role in the UK’s energy market.”*

Government should review the opportunities to promote and incentivise partnerships that can enable communities to achieve scale. We have highlighted in this paper one particular opportunity – the joint venture, or joint ownership model – as a potential key to immediate growth. In order to actively advocate this model, government should explore how opportunities for such partnerships can be supported, brokered and highlighted. We recommend that this be considered within the Department for Energy and Climate Change (DECC) Community Energy Strategy, in partnership with other government departments and industry stakeholders, and warn that if this model is not proactively promoted and supported, the growth of community energy within the UK will stall.

### *5.1 Supporting joint ownership*

DECC has recently announced that it is planning to increase the threshold for community projects under feed-in tariffs (FITs) to enable larger community energy projects to benefit.<sup>40</sup> Support for community renewable projects over 5 MW is currently available under the Renewables Obligation (RO) and will migrate to the CfD after 2017. As we have highlighted in this paper, there are currently only three community energy projects (between 5 and 50 MW) that are wholly community-owned, which make up 47% of current operational capacity in this class, with the remainder (53%) coming from joint ventures with developers. The projects that are wholly community-owned have also managed to achieve this status and scale because

of negotiations with existing and incoming developers at the outset.

Incentivising such joint venture models is therefore crucial to 'scaling up' community energy projects, and in enabling communities to play a significant role in the UK's energy market. While there are some reservations regarding a proposed extension to the FiT capacity threshold, especially given the limited funds available for existing FiT scale projects, DECC should use this as an opportunity to carefully consider how government can incentivise community and particularly joint venture schemes, where communities hold a financial investment in a project. **We recommend that joint ownership models, rather than those wholly-owned by the community alone, should be included within the FiT extension.**

Such incentives must be carefully explored and the increased funds required anticipated appropriately through the Treasury's Levy Control Framework in order to ensure that there is a long-term, stable and clear commitment to supporting small scale renewables, community energy projects and joint ventures. The option to enter into the Renewable Obligation/Contract for Difference should also remain available for the relevant projects, should they wish to pursue this route rather than the FiT.

## 5.2 Brokering joint venture arrangements

Apart from the initiative of ambitious community groups, and pioneering developers and local authorities, little by way of national or local intermediary platforms or organisations exist to broker connections between communities and their potential partners. Independent registries have recently emerged to fill this gap and should be supported to facilitate knowledge exchange and development of best practice.

One further opportunity to establish such a platform at a national level has also emerged through DECC's consultation on onshore wind and community engagement.<sup>41</sup> In response to the recent call for evidence, DECC has proposed that the department will work with community and industry stakeholders to establish a register of community engagement and benefits, which 'will provide a tool to record publicly the range of benefits offered from different projects in a transparent manner and will help support communities in engaging and negotiating benefit packages that best suit their needs.'<sup>42</sup>

**We recommend that the community benefit register, once established, should include a specific portal where developers can express interest in principle for forging a joint venture partnership with a community. Likewise, communities – be they specific groups, established community energy initiatives,**

**neighbourhood forums or other local bodies – should in turn and in response have the opportunity to express interest in owning or co-owning renewable energy developments. If a match is made, there should be a duty on the local authority and local planning authority to respond and advise.** Such a platform would perform an informal 'match-making' service, where either the community or developer could easily seek local opportunities and establish direct contact. Such a service would build on the existing work of a number of initiatives such as the Communities for Renewables Network.<sup>43</sup>

Because lack of access to the environmental data needed to determine project viability has been highlighted as a major barrier for communities, **we also recommend that this register include the appropriate space and platform for developers to upload, or provide links to, their own available environmental data and any other supporting documents required for their initial planning application.** The register could also encourage developers to advertise, where appropriate, any other enabling services, such as additional provision of advice and expertise for local ambitious community groups who are looking to develop or invest in renewable energy production. Further support would then be offered to the community if a partnership arrangement were to be agreed.

A recent example of such an arrangement can be seen in the partnership between the Bristol Energy Co-operative and REG Windpower. The Bristol Energy Co-operative had spotted the planning application of an incoming wind farm developer and approached them immediately to scope out the possibility for partnership. Having met in December 2012, they have now come to a legal agreement with REG Windpower, the developer, which gives the Bristol Energy Co-operative an exclusive option to the buy the entire M48 wind farm, should it be built. These are exactly the kind of connections and opportunities such a portal could initiate.

### *5.3 Developing models of co-operation*

Experience and other research clearly shows how important the role of true local buy-in is in fostering a 'community renewables economy'.<sup>44</sup> However, genuinely encouraging community investment in renewables will require a change in mind-set for many local authorities. The structure of the planning process does not prohibit local authorities from becoming partners in the development of renewable energy schemes, however, many local councils, as arbiters of the planning system, feel greatly restricted in their ability to act as potential facilitators, co-ordinators or investors in community energy proposals. Developers, meanwhile, technically may have little to gain from opening joint venture negotiations

or bringing innovative community benefit arrangements to the table, as it is not always clear as to the material weight that will be given to such partnership arrangements when the projects are determined. As a result, it has been difficult for communities to gain access to the market and take their projects to scale through co-operative working.

In practice, however, some pioneering councils such as Bristol are leading the way in the development of renewable energy partnerships, planning policy and guidance.<sup>45</sup> In other words, the desire for genuine partnership amongst councils, communities and developers is already there, it simply needs to be harnessed. Experiences such as this also indicate the potential benefits of greater information and training on renewable energy matters, for local decision makers including those councillors involved in planning committees.

**To profile and encourage such models, we recommend that DECC establish partnerships with leading 'pathfinder' local authorities to develop models of co-operation between developers, communities and local authorities. We also recommend that this must include models of working that include neighbourhood planning.**<sup>46</sup>

### *5.4 Encouraging local institutions to act as financial intermediaries*

Attracting sustainable and long-term financial investment through other means will also be crucial to the starting up and scaling up of community energy projects. **Given the new rights through the Localism Act to borrow and invest, and to retain uplifts from business rates, local authorities are well placed to begin to explore such opportunities.** Local councils should also play a central role, in partnership with neighbourhood forums to scope out opportunities for additional seed funding and available assets. Establishing links, for example, with local housing associations, landowners, public services and businesses; and local funds, such as the Local Government Pension Fund and additional seed funding that has been made available, such as through Big Society Capital, should be part of this.

A further consideration for local authorities is the revenue that will be generated through the business rates retention scheme in England. We estimate that England could have 2.6 GW of community energy capacity by 2020, with a mean installation size of 2.5 MW; this could generate approximately £30m of revenue through the business rates retention scheme per year.



A handful of local authorities have within the past year taken a leadership role in encouraging and mediating 'collective buying' initiatives,<sup>47</sup> which have enabled groups of people to negotiate cheaper energy bills. **We recommend that local authorities must now push beyond this to specifically promote and support not only short-term and possibly unsustainable reductions in energy bills, but the opportunities for more long-term, secure and sustainable investments in renewable energy through local community ownership.**

### *5.5 Highlighting local planning opportunities: Neighbourhood Plans*

We have highlighted in this paper that the planning process presents a series of significant barriers for the growth of community energy. But it also presents a series of significant opportunities. Through new powers granted by the Localism Act 2011, communities are now able to take a lead in setting the priorities for local development in their area. They have the power to define for planning purposes their own neighbourhood and draw up their own neighbourhood development plans. As part of this, they can also issue neighbourhood development orders, which give communities the ability to authorise new developments. These new local development pathways hold particular promise for the UK, where local authorities have larger populations (average: 150,000) and

less elected-councillors-per-citizen than any other Western European country.<sup>48 49</sup>

It is early days for many neighbourhood plans, but they already represent one of the most popular opportunities opened up by the Localism Act. As of the beginning of July 2012, over 550 communities have taken up the right to create a legally binding neighbourhood plan for their area.<sup>50</sup> By virtue of its 'hyper-local' point of engagement, the neighbourhood development plan represents an excellent vehicle for groups and the wider community to either support ambitious community energy projects, or engage with a series of local bodies – public services, businesses, developers, local churches and clubs – to scope out additional opportunities. But such opportunities must be first recognised, then encouraged and finally incentivised.

**We recommend that DECC work closely with DCLG to establish closer links with neighbourhood planning advice and support services, such as Locality and the Centre for Sustainable Energy, to pilot local energy development plans.** This is currently not a required consideration, and thus far, very few neighbourhood plans have included local energy and sustainability as priorities for development.

In producing such plans, neighbourhood forums should highlight opportunities for communities to develop and own new local

energy projects, either as a sole developer or in partnership with others. **Where significant community ownership is involved, additional support should be offered to the community as it embarks on the planning application, and such developments should be fast-tracked through the planning process.** As argued previously by ResPublica, the social value of community energy must also be recognised in this process.<sup>51</sup> Where local opportunities for renewables development do not exist, local neighbourhood development forums and parish councils should also play a crucial role in co-ordinating community investment in similar co-operative or crowd-funded projects.

**We also recommend that DCLG work with DECC to nationally standardise all planning and consent application forms, processes and corresponding paperwork for local energy projects.** Forms to be completed should be accompanied with guidance notes that recognise the difficulties often faced by small start-up projects and include pointers to the appropriate advice portals, support services or individuals who could provide additional support.

### *5.6 Highlighting local opportunities for partnerships: 'Community Commissions'*

Further, **we propose that DECC, in partnership with DCLG, give consideration to piloting a series of 'Community Commissions' to assist**

**with highlighting such opportunities.** This model could innovate further on the inclusive and participatory planning activities already used by many UK local authorities. Developed in Australia,<sup>52</sup> Community Commissions seek to empower a wider range of citizens through what they term 'citizens' juries'.

Citizens' juries are made up of around 25-35 voters drawn randomly from the electoral roll in a given area, and selected through a stratified sample to reflect the local demography. Seeking to escape from engagement driven purely by private interest, this approach allows a wide range of members belonging to a given area to meet within a given period of time (usually across a series of weekends over the course of a few months) and participate in decisions that they perhaps would not have previously sought to engage with. They do not require that their participants have any particular expertise; only simply that they be a resident in the community and are interested enough to agree to long term engagement with the project.

Crucially the best results are obtained in terms of engagement and participation if the body that calls for a citizen jury agrees before the onset of the process to abide by the decision of the jury whatever that may be. This is particularly suitable in respect of planning decisions that require wide community engagement. Citizens' juries are tasked with responding to a definitive

question, and then proceed to meet over a series of months to become fully briefed on the issues and then propose a series of recommendations as the solution. Rather than being presented with a published consultation document, to which communities can agree or disagree on a set of issued proposals, the citizens' jury sets out its own proposals, which they develop whilst in close contact with the leaders of the local authority who, The newDemocracy Foundation report, are often fully persuaded and engaged with their recommendations by the end of the process. Part of the success of these meetings is that they are facilitated by experienced convenors that marshal the discussion forward and prevent antagonistic groups forming in the jury.

In developing such recommendations, citizens' juries are encouraged to begin from scratch, with no presumptions or anticipated conclusions, and are given the opportunity to select and invite those whom they feel would best be able to brief and advise them on the issue and their proposals. Because recommendations must also include an indication as to where the money and resources might come from to support them, careful consultation and support is offered to enable the jury to achieve this. The newDemocracy Foundation have reported that such briefings have been delivered from the likes of the local transport officer to Chief Executives of national

organisations. The participants from the community can invite anyone to appear.

Crucially, in Australia local authorities cannot 'cherry pick' the recommendations proposed by the citizens' jury; they must consider and respond directly to them all, and enact them all. This is in sharp contrast to the UK where neighbourhood plans are currently developed by the community but have to be approved by the local authority. This model would see a shift from a model of community rights to community responsibilities, and put the community in ultimate control. The newDemocracy Foundation report that this model has promoted real bottom-up decision-making, and has often produced a series of truly innovative recommendations. Fears of 'nimbysism' can be headed off by the nature of the question that is referred to these bodies; development is not able to be opposed, rather it is its shape and composition that is the subject of the jury's deliberations.

We recommend that a similar model – 'Community Commissions' – be piloted in England, to act as a platform for participatory planning. Just as participatory budgeting has encouraged communities to work with local government and public service providers to determine where public money is best spent and invested, so too would this process encourage a model of transparency for matters that encompass a wider range of issues and local stakeholders.

Community Commissions should take place at a neighbourhood level – even more local than the Australian ‘citizen jury’ model, which currently operates on the equivalent of a regional or local authority scale – but they should nonetheless ensure that council leaders and representatives from the local authority and local planning authority and neighbourhood forums remain closely engaged throughout the whole process. Community Commissions should be initiated either from the community, through parish or town councils or neighbourhood forums, or the local authority, but remain independent. The Community Commissions should also remain closely connected and engaged with all parties – especially the community and local authority – and include, where appropriate, specific recommendations to both.

We suggest that the proposed pilots ask the question of Community Commissions, ‘How can communities become more engaged with local energy production?’. The Community Commission would be encouraged to be briefed by existing local and community energy projects within the area, and draw on the expertise of leading local and national practitioners, investors and thought leaders on the matter.

Opportunities that could be considered as part of responding to this question could include: engagement with existing community energy

projects within the area; engagement with developers and existing or incoming energy production assets and connected community benefit provisions; and the possibilities to harness local legal and financial expertise. There already exists a wealth of resources available to support and inform local authorities and neighbourhood planning forums with regards to promoting sustainable energy within the local area, which should be harnessed, available through the Centre for Sustainable Energy, Energy Savings Trust and PlanLoCal’s websites.<sup>53</sup>

*“We recommend that ‘Community Commissions’ be piloted in England, to act as a platform for participatory planning. Just as participatory budgeting has encouraged communities to work with local government and public service providers to determine where public money is best spent and invested, so too would this process encourage a model of transparency for matters that encompass a wider range of issues and local stakeholders.”*

## 6. Summary of Recommendations

*"Joint venture or joint ownership models are natural vehicles to expand community renewable capacity. Facilitating and incentivising joint venture models is therefore crucial to 'scaling up' community energy."*

In the UK's large and fast-growing renewable energy market, community energy projects are fast becoming a major component of our energy mix. Registers and databases, like those managed by SCENE and others, demonstrate the significant levels of demand for community-led renewable energy projects.

But there still remain significant obstacles in the way of satisfying this demand. The planning system is currently non-conducive to community financed or community organised energy developments; further there is a noticeable lack of investment in the community energy section of the economy and there is no easy way for community groups to co-ordinate their actions with other community bodies or with outside investors.

The Government must take action on this if we are to meaningfully enable communities to assume ownership of their own energy needs.

Only then will we be able to match the success of all those other European countries that have successfully made the transition to a citizen-led 'community renewable energy economy'.

The below recommendations illustrate how the Government could successfully instigate this transition.

### **1. Incentivise the joint ownership of community energy**

The Department for Energy and Climate Change (DECC) has recently announced that it is planning to increase the threshold for community projects under the feed-in tariff (FiT) to enable larger community energy projects to benefit.<sup>54</sup> We recommend that DECC should permit jointly-owned community energy projects, other than just those wholly-owned by the community, to be included within this extension. This should significantly

incentivise the starting-up and scaling-up of community energy projects.

## **2. Extend the planned register of community benefit to include a portal for developer-community 'match-making'**

In response to the recent call for evidence,<sup>55</sup> DECC has proposed that the department will work with community and industry stakeholders to establish a register of community engagement and benefits.<sup>56</sup> We recommend that, once established, such a register should include a specific portal where developers can express an interest in developing partnerships with communities. Likewise, communities should in turn be able to express interest in owning or co-owning renewable energy developments. Such a platform would perform an informal 'match-making' service, where either the community or developer could easily seek local opportunities and establish direct contact. If a match is made, there should be a duty on the local authority and local planning authority to respond and advise. Advice and independent brokers, like Community Energy Scotland, should also play a key role in facilitating such partnerships.

We also recommend that this register include the appropriate space and platform for developers to upload, or provide links to, their own environmental data and any other supporting documents required for their initial

planning application. The register could also encourage developers to advertise, where appropriate, any other enabling services, such as additional provision of advice and expertise for local ambitious community groups who are looking to develop or invest in renewable energy production.

## **3. Establish partnerships with leading 'pathfinder' local authorities to develop models of co-operation<sup>57</sup>**

Local authorities are in a strong position to implement positive, enabling policies that could support the development of community renewable energy partnerships. We encourage local authorities to take a more positive view of community involvement, particularly ownership, in renewable energy developments and to give greater consideration to the positive benefits of community support and involvement when making planning decisions. We recommend that DECC establish partnerships with leading 'pathfinder' local authorities to develop models of co-operation between developers, communities and local authorities.<sup>58</sup>

## **4. Encourage local authorities to act as financial intermediaries**

Given the new rights granted through the Localism Act 2011 to borrow and invest, local councils are well placed to begin to both invest

and financially benefit from community energy projects. Local authorities should establish links with local housing associations, businesses and churches, as well as social finance organisations like Big Society Capital, and its intermediaries, to explore these opportunities. A further incentive for local authorities is the potential revenue that could be generated through the business rates retention scheme in England. We estimate that England could have 2.6 GW of community energy capacity by 2020, with a mean installation size of 2.5 MW; this would generate approximately £30m of revenue through the business rates retention scheme per year – an additional incentive for local authorities to engage with community energy projects.

## **5. Pilot local energy development plans and a planning fast-track for community renewables projects**

Through new powers granted by the Localism Act, communities are now able to take a lead in setting the priorities for local development in their area. We recommend that DECC work with the Department for Communities and Local Government (DCLG) to establish closer links with neighbourhood planning advice and support services, such as Locality and the Centre for Sustainable Energy, to pilot local energy development plans. In producing such plans, neighbourhood forums should highlight opportunities for communities to develop and own new local energy projects, either as a sole

developer or in partnership with others. Where significant community ownership is involved, additional support should be offered to the community as it embarks on the planning application, and such developments should be fast-tracked through the planning process. As argued previously by ResPublica, the social value of community energy must also be recognised in this process.<sup>59</sup> Where local opportunities for renewables development do not exist, neighbourhood forums and parish councils should play a crucial role in co-ordinating community investment in similar co-operative or crowd-funded projects.

We also recommend that DCLG work with DECC to nationally standardise all planning and consent application forms, processes and corresponding paperwork for local energy projects. Forms to be completed should be accompanied with guidance notes that recognise the difficulties often faced by small start-up projects and include pointers to the appropriate advice portals, support services or individuals who could provide additional support.

### **6. Pilot Community Commissions**

To further address problems in the planning process, including lack of knowledge, we propose that DECC, in partnership with DCLG, consider piloting a series of 'Community Commissions' to assist with highlighting development and investment opportunities

in community renewables. This model could innovate further on participatory planning activities already established within many local authorities whilst also learning from international examples, including Australia's use of 'citizens' juries', in opening up community-wide discussion on the potential for community energy. These 'Commissions' would be independent, randomly-selected representative bodies made up entirely of local residents, which could and should be given a short pathway to planning power, with a delegated authority to approve community energy schemes. 'Community Commissions' should be integrated into both the neighbourhood and the local authority planning process, but would act as an addition tool for local authorities to excite interest in community-owned energy. In addition, such pilots could further popularise existing neighbourhood planning forums and encourage others to form.

## 7. Appendix

*An overview of projects in our database is freely available at: <http://connect.scenetwork.co.uk>*

### *SCENE Connect Methodology*

The database used for our estimates of community renewable energy capacity was constructed through intensive telephone- and web-based surveying and follow-up research of individual community projects throughout the United Kingdom. The key criteria for inclusion of projects in our study were the involvement of a place-based or interest-based social enterprise, together with evidence for both actual participation and collective benefits. In the case of non-charitable organisations, articles of association were used to assess the presence of a motivation to generate collective benefits over and beyond company profit. Where the main business activity was based on an alternative economic activity, such as

housing, charitable status was a prerequisite for inclusion. For-profit housing associations with independent charitable arms espousing a social/environmental mandate, for instance, were also included. We included community councils in our definition of 'community', but not local authorities.

Estimations reported in our study<sup>60</sup> of Scottish community renewables, published in May 2012, closely matched a separate study<sup>61</sup> commissioned by the Scottish Government.

All data was correct at the time of writing.

An overview of projects in our database is freely available at: <http://connect.scenetwork.co.uk>

## Endnotes

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- 1 Department of Energy and Climate Change (2013) "More community energy projects to get support under Feed-in Tariffs"*Gov.uk* [Online]. Available at: <https://www.gov.uk/government/news/more-community-energy-projects-to-get-support-under-feed-in-tariffs> [Accessed 20<sup>th</sup> August 2013].
- 2 Department of Energy and Climate Change (2013) *Onshore Wind Call for Evidence: Government Response to Part A (Community Engagement and Benefits) and Part B (Costs)*.
- 3 This recommendation has been proposed by the Community Energy Coalition, as part of their submission to DECC's Community Energy call for evidence.
- 4 ResPublica (2012) "Re-thinking Neighbourhood Planning: From consultation to collaboration" [Online]. Available at <http://respublica.org.uk/publications> [Accessed 20<sup>th</sup> August 2013].
- 5 For further information about the background to the Sustainable Community Energy Network's (SCENE) research which is included within this paper, please see <http://scenetwork.co.uk>.
- 6 This section is specifically and exclusively concerned with generating capacity. Schemes that are limited to community benefits other than ownership are excluded.
- 7 This likely stems from the absence of what we term 'Joint Ventures', projects using the Renewable Obligation scheme instead of FiT, and from projects that did not identify as 'community' on Ofgem's FiT database, <http://www.renewablesandchp.ofgem.gov.uk>.
- 8 Department of Energy and Climate Change (2012) *Digest of UK Energy Statistics 2012*.
- 9 Data source: <http://www.scenetwork.co.uk/sceneconnect>.
- 10 For further information, please see: <http://udnytrust.wordpress.com>.
- 11 In total, there are 31 energy co-operatives in England, Wales and Scotland, and an additional 23 co-operatives (for example, housing co-operatives) pursuing energy projects.
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- 14 Department for Energy and Climate Change (2013) *National Renewables Statistics*.
- 15 See section 3.3
- 16 Community projects have a 5-year average time-to-completion.
- 17 Department for Energy and Climate Change (2011) *UK Renewable Energy Roadmap*.
- 18 Department for Energy and Climate Change (2013) *UK Renewable Energy Roadmap: Update 2013*.
- 19 British Hydropower Association. England and Wales Hydropower Resource Assessment (2010) & Scottish Hydropower Resource Study (2008)



- 20 For a comprehensive review of the barriers faced by community and local energy projects see, for example: ResPublica (2012) "Re-energising Our Communities: Transforming the energy market through local energy production"; Co-operatives UK (2012) "Co-operative renewable energy in the UK: A guide to this growing sector"; and Energy and Climate Change Committee (6 August 2013) "Local Energy: Sixth Report of Session 2013-14".
- 21 Department for Energy and Climate Change (2012) *UK Renewable Energy Roadmap: Update 2012*.
- 22 Bank of England Statistical Database, 2013.
- 23 Grants include: The Big Lottery, Community and Renewable Energy Scheme (CARES), Local Energy Assessment Fund (LEAF), Rural Community Energy Fund (RCEF)
- 24 European Wind Energy Association (2009) *The Economics of Wind Energy* [Online]. Available at: [http://www.ewea.org/fileadmin/files/library/publications/reports/Economics\\_of\\_Wind\\_Energy.pdf](http://www.ewea.org/fileadmin/files/library/publications/reports/Economics_of_Wind_Energy.pdf) [Accessed 20<sup>th</sup> August 2013].
- 25 Renewable Energy Statistics [Online]. Available at: [restats.decc.gov.uk](http://restats.decc.gov.uk) [Accessed 20<sup>th</sup> August 2013].
- 26 RenewableUK (2012) *Wind: State of the Industry 2012* [Online]. Available at: <http://www.renewableuk.com/en/publications/reports.cfm/SOI2012> [Accessed 20<sup>th</sup> August 2013].
- 27 Harnmeijer, A. et al. (2012) *Report on Community Renewable Energy in Scotland*. Edinburgh Centre for Carbon Innovation, Sustainable Community Energy Network, UK Energy Research Centre.
- 28 Department for Energy and Climate Change (2011) *UK Renewable Energy Roadmap*.
- 29 Source: SCENE Connect (May 2013)
- 30 For further information about the Totnes Community Wind Farm, please see <http://www.tresoc.co.uk>.
- 31 Harnmeijer, A. et al. (2012) *Report on Community Renewable Energy in Scotland*. Edinburgh Centre for Carbon Innovation, Sustainable Community Energy Network, UK Energy Research Centre.
- 32 Department for Business, Innovation and Skills (2012) *State Aid* [Online]. Available at: <https://www.gov.uk/state-aid> [Accessed 20<sup>th</sup> August].
- 33 For example, please see Community Energy Scotland <http://www.communityenergyscotland.org.uk>
- 34 Harnmeijer, A. (2012) *From command and control to local democracy? A survival analysis approach to community-led renewable energy in Scotland*. MSc Thesis: Wageningen University.
- 35 Seyfang, G. et al. (2013) "A thousand flowers blooming? An examination of community energy in the UK". *Science, Society and Sustainability*. Norwich: University of East Anglia.
- 36 Harnmeijer, A. et al. (2012) *Report on Community Renewable Energy in Scotland*. Edinburgh Centre for Carbon Innovation, Sustainable Community Energy Network, UK Energy Research Centre.
- 37 The RO is available across Great Britain for projects above and below 5 MW in capacity. Post the introduction of the CfD, only the FiT will be available to projects under 5 MW and the RO will be closed to new entrants.
- 38 For further information, please see: <http://www.fintrydt.org.uk>
- 39 For further information, please see: <http://neilstonwindfarm.org>
- 40 Department of Energy and Climate Change (2013) "More community energy projects to get support under Feed-in Tariffs" *Gov.uk* [Online]. Available at: <https://www.gov.uk/government/news/more-community-energy-projects-to-get-support-under-feed-in-tariffs> [Accessed 20<sup>th</sup> August 2013].

- 41 Department of Energy and Climate Change (2013) *Onshore Wind Call for Evidence: Government Response to Part A (Community Engagement and Benefits) and Part B (Costs)*.
- 42 Department of Energy and Climate Change (2013) *Onshore Wind Call for Evidence: Government Response to Part A (Community Engagement and Benefits) and Part B (Costs)*.
- 43 For further information, please see: [http://communities4renewables.co.uk/inspiring\\_communities](http://communities4renewables.co.uk/inspiring_communities).
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- 46 This recommendation has been proposed by the Community Energy Coalition, as part of their submission to DECC's Community Energy call for evidence.
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- 49 Andrews, R., Boyne, G., Chen, A. and Martin, S. (2006) "Population size and local authority performance: Final research report" *Department for Communities and Local Government*.
- 50 Prisk, M. (2013) House of Commons Debate 11 July 2013, col. 394W. [Online] Available at: [http://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm130711/text/130711w0002.htm#130711w0002.htm\\_wqn30](http://www.publications.parliament.uk/pa/cm201314/cmhansrd/cm130711/text/130711w0002.htm#130711w0002.htm_wqn30) [Accessed 20<sup>th</sup> August 2013].
- 51 ResPublica (2012) "Re-thinking Neighbourhood Planning: From consultation to collaboration".
- 52 For further information, please see: <http://newdemocracy.com.au>.
- 53 Centre for Sustainable Energy (2013) "Localism and neighbourhood planning" *Centre for Sustainable Energy* [Online]. Available at: <http://www.cse.org.uk/news/view/1744> [Accessed 20<sup>th</sup> August 2013].
- 54 Department of Energy and Climate Change (2013) "More community energy projects to get support under Feed-in Tariffs" *Gov.uk*.
- 55 Department of Energy and Climate Change (2013) *Onshore Wind Call for Evidence: Government Response to Part A (Community Engagement and Benefits) and Part B (Costs)*.
- 56 Department of Energy and Climate Change (2013) *Onshore Wind Call for Evidence: Government Response to Part A (Community Engagement and Benefits) and Part B (Costs)*.
- 57 This recommendation has been proposed by the Community Energy Coalition, as part of their submission to DECC's Community Energy call for evidence.
- 58 UK Community Energy Coalition (2013) "DECC Community Energy Strategy".
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## **New Economies, Innovative Markets**

*This workstream seeks to provide practical solutions for a moral capitalism and sustainable economy. This includes encouraging new market entry, ensuring supply chain resilience through more localised control, promoting greater diversity of business models and facilitating wider asset distribution, in order to achieve an economy based on trust and reciprocity.*

*Current and forthcoming work will build upon the ideas outlined in our past output which have had a continuing impact on the British policy landscape. Examples of our successes in 2012 include ResPublica's report recommending a new community bond to unlock investment in infrastructure, and an on-going series of publications on diversifying the energy market by enabling community-led projects to go to scale, the recommendations of which were reflected in a private members' bill and endorsed by Friends of the Earth. In 2013 this workstream will encompass our research on financial institutions and intermediaries, re-defining economic competition, SMEs and social enterprise, and governance prerogatives for a more responsible form of capitalism.*

Despite the recession, the community renewables sector has grown dramatically over recent years - highlighting the significant appetite communities have for owning their local energy infrastructure. But despite this, many community projects face significant challenges on the path to ownership. Planning restrictions, a lack of external investment and deficits in skills and training all hamper the potential of this sector.

If communities are to really embrace the ownership revolution in energy production, these barriers must be removed. This paper highlights one particular opportunity that could both respond to such barriers and catalyse growth in the sector: the joint ownership model. *The Community Renewables Economy: Starting up, scaling up and spinning out* argues that such a model, where fruitful partnerships have been established between communities and developers, local authorities or other external partners, is crucial to accelerating our transition to a community renewables economy, and details what national and local government must do to secure this potential growth.

