Environmental Pillar
WORKING FOR A SUSTAINABLE FUTURE

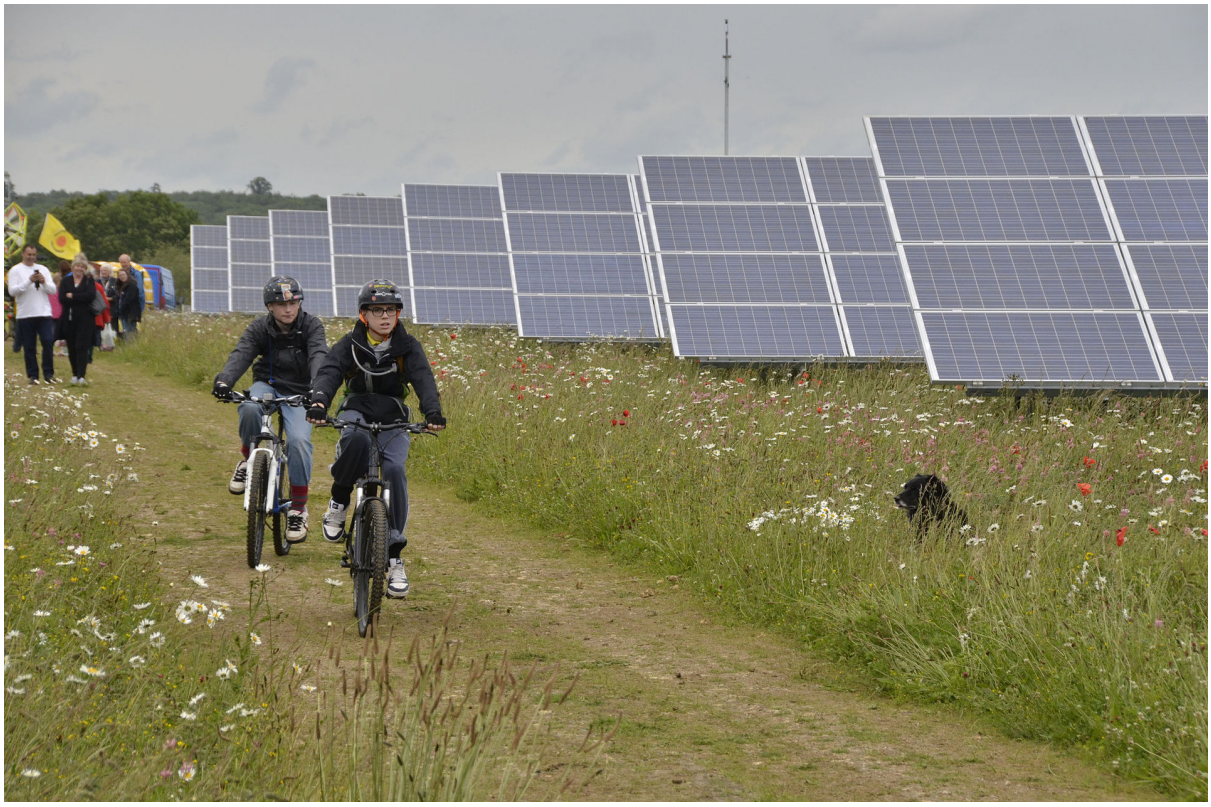

Photo: Westmill Solar Co-operative, Ben Cavanna

Environmental Pillar Policy on Community Energy

March 2015

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Executive Summary

Community energy is a broad term that describes citizen and local ownership and participation in renewable energy generation, distribution and energy efficiency. It is about embracing the advantages that our natural resources provide for generating energy, and allowing the benefits, economic, social and environmental to flow to all of our people in our communities.

Communities all over Europe are creating projects where they own and are actively involved in running an energy resource. This could be a wind farm near the area, solar panels on the roof of local buildings, a biomass fed district heating system, an anaerobic digester fed from local farms, or a collective insulation project, the list is extensive. In Ireland, there is a small but growing industry of community and transition groups. Unfortunately there are significant barriers which hinder the success of these groups and projects, and as a result community led or community owned renewable energy in Ireland represents only a tiny fraction of overall energy generation and potential.

This 'Policy on Community Energy' has been developed to outline some of the main barriers to the development of Community Energy projects in Ireland. Recommendations for removing these barriers are presented, and suggestions for national supports are provided.

The recommendations in this policy have been developed in consultation with practitioners, consultants, researchers and community workers in Ireland and around Europe who are actively working on community energy, energy efficiency, renewable energy policy and community engagement.

The main barriers to the development of Community Energy in Ireland could be removed by implementing the following measures;

- Facilitating access to the National Grid for communities, micro-generators and auto generators.
    - A bias towards community owned projects, and priority access to connect to the grid within Gate 3 & 4 where existing grid capacity holders do not have planning permission or have 'speculative' developments or where capacity has been released where financial contributions have not been completed.
    - Mandate electricity utility companies to enter into Power Purchase Agreements (PPAs) with small generators, with a low cost / admin model, so that small generators can receive payments for the electricity they export to the grid.
- Fair and secure payments to support community energy, micro-generation and auto generation, at a price that balances the long term socioeconomic costs of this

generation with the total net metering price and ensures the Public Service Obligations (PSO) levy is maintained at close to current levels:

  - A dedicated REFIT scheme for community owned renewable energy, micro-generation and auto-generation;
  - REFIT scheme for solar electricity (solar PV); and
  - REFIT 3 should be amended to further incentivise renewable heat installations, biomass, biomass fed CHP and Anaerobic Digestion.

- Funding and Finance Support to support community groups in initial stages of development, feasibility, planning and construction – in particular to bridge the gap during first round financing between feasibility and planning.
  - Grant and grant to loan funding structures for Community Energy projects to fund initial development costs;
  - Support access to finance through discounted credit, special Government guarantees, or by facilitating local loans through appropriate investment vehicles (green funds/ strategic investment funds or credit unions etc. or similar to the KfW Bank in Germany which provides low cost financing to community and farm energy schemes
  - Encourage tax efficient structures and incentives for local ownership of renewable energy for the installation/construction of developments or as per the Danish model where income earned up to a point from Community Renewable Energy is tax free. Currently, the Irish Revenue Commissioners allows people to write off tax when investing in “business expansion” or for energy efficiency upgrades in businesses. This could be a significant additional incentive for community owned energy generation projects;
  - Grant aid from the Sustainable Energy Authority of Ireland through Better Energy Homes, Better Energy Communities etc. should not be limited to energy efficiency measures, and should include renewable energy generation, particularly solar energy, wood energy and heat pumps, with a dedicated portion reserved exclusively for supporting community centred organisations developing renewable energy generation and energy efficiency.
- Facilitate the development of Community Microgrids through the smart grid program.

In addition, there are a number of proactive steps that could be taken in order to encourage, incentivise and facilitate the development of Community Energy in Ireland. The

White Paper on Energy Policy (expected this year, 2015) is an ideal opportunity to ensure some key policy supports allow the community energy industry to reach its full potential.

- Develop a National Community Energy Strategy that includes;
    - Specific targets for Community Energy ownership, as in Scotland where there is a target to generate 500 MW of renewable energy from community owned projects
    - Co-ownership models, between developers, communities and local people, with a requirement that a minimum proportion of all renewable energy projects are owned locally. This could be modelled on the Danish system where 20% of all wind energy development must be locally owned. The take up of local ownership shares (with safeguards to ensure diversity of owners, and to prevent developers leveraging communities out at future dates) should be a condition after which the development can proceed, and without which the development cannot and should be sufficient to ensure community consultation and acceptance is a key consideration from the outset.
    - Funded competent intermediary bodies that can support and empower Community Energy projects with feasibility, technical, practical and finance advice and support, such as the Local Energy Agencies, or Local Energy Scotland.

Facilitated public engagement and public participation in national energy policy is also considered fundamental for the required energy transition, including information, workshops, public meetings and debates around the country. For a transition of this scale to take place, it needs to be an endeavour that all the citizens of Ireland play an active role in. A defining feature of those countries in Europe where successful energy transitions are underway, is the public and political space that is provided to rational and responsible debate of the challenges, options and solutions to making this energy transition happen smoothly and efficiently.

In Ireland, the Green Paper/White Paper process offers the opportunity for a national debate on energy policy, giving people the opportunity to play an active role in developing meaningful solutions to answer the big picture question on energy policy: *How do we achieve security of supply, reduce fuel poverty and efficiently transition to a decarbonised energy system in a way that is mindful of communities and the environment?*

Introduction

What is this paper about?

The purpose of this paper is to outline some of the main barriers to the development of community energy projects in Ireland. Recommendations for removing some of these barriers are presented, in addition to recommendations for national policy to support community energy projects.

What is Community Energy?

Community energy is a broad term that describes citizen and local ownership and participation in renewable energy generation, distribution and energy efficiency. It is about embracing the advantages that our natural resources provide for generating energy, and allowing the benefits, economic, social and environmental to flow to all of our people and our communities.

Communities all over Europe are actively supporting and investing in energy projects where they own and are actively involved in managing an energy resource. This could be a wind farm near the area, solar panels on the roof of the local school and local buildings, a biomass fed district heating system, an anaerobic digester fed from local farms, or a collective insulation project, the list is extensive.

There are many different types of community energy projects, with varying ownership and financial models depending on individual situations. It is important to note that there is no 'one size fits all' or even 'best practice models' for a community energy development. Each development will be unique to each location and of appropriate scale depending on the available resources and desires of each individual community group. Best practice legal models for community energy are detailed in *Roberts et al 2014*[1] where it is stated that if possible, communities should be able to utilise a combination of different ownership models, with a mix between public, community foundation, and/or commercial ownership. Such models of community ownership promote wide participation in ownership and management, engender local support, are inclusive and deliver tangible and intangible local benefits, particularly for individuals that do not have sufficient funds to invest.

It is important to distinguish between 'community ownership' and 'participation' in a local project versus 'community benefit'. In Ireland, for wind energy developers, the Irish Wind Energy Association of Ireland (IWEA) has developed guidelines on Community Benefit[2] which provide advice on payments or benefits made by commercial developers to local

1 Roberts, J; Bodman, F; Rybski, R (2014) Community Power: Model Legal Frameworks for Citizen Owned Renewable Energy, Client Earth

2

communities upon the development of a wind farm. Such payments can be perceived as goodwill, compensation or "payoffs" and while they can be very beneficial to communities, they continue to treat citizens as passive consumers of energy, rather than active contributors. This is not the model to be pursued exclusively. Community ownership and participation, on the other hand, is about active engagement by communities in energy generation, distribution and efficiency. Community energy models suggest that the community itself is choosing to accept responsibility for some or all aspects of the development or project[3] and is very significantly more powerful than 'benefit' alone.

Why is Community Energy important?

The transition to sustainable low carbon energy production requires that we design a more cooperative and secure energy system that acknowledges and accepts that citizens and communities will be more involved in moving together towards a sustainable energy future. Until now, policy and law in Ireland, and in countries across Europe, has been built to support an energy system based on centralised production using fossil fuels. This system has by and large regarded citizens as passive consumers, with no active role to speak of.

Internationally it is accepted and understood that the transition to low carbon sustainable energy generation is only possible with the incorporation of significant decentralised generation and distributed energy resources. It has also been recognised that the traditional centralised generation-distribution model is outmoded and major structural changes are required to transform the energy sector to a smarter, resilient and more active and responsive system incorporating local generation and local consumption. Community energy is by definition, self-motivated decentralised generation and distributed energy resources.

National energy policy should acknowledge the short time frame and the significant societal challenge energy transition presents to everyone. It should also acknowledge the necessity to mobilise all our national assets to implement a smooth and expeditious energy transition. Other countries have recognised this is manifest and have benefited significantly from citizen and community involvement in their energy transition. Our National energy policy should also recognise and incorporate the positive contribution citizens and the community energy movement can make, through local energy management, local energy generation and use in the transition to our low carbon sustainable energy future.

Irish Wind Energy Association of Ireland, (2013) Good Neighbour IWEA Best Practice Principles for Community Engagement and Community Commitment

3

Roberts, J; Bodman, F; Rybski, R (2014) Community Power: Model Legal Frameworks for Citizen Owned Renewable Energy, Client Earth

Ireland has excellent renewable energy resources. With the right policy framework, Ireland could become a centre of excellence for renewable energy and energy efficient production, design and manufacturing with an active and growing job market in clean technologies and communities at the very heart of the transition.

Cutting Carbon Emissions

Cutting carbon emissions and combating climate change is the biggest challenge of this century. The *2014 Intergovernmental Panel on Climate Change (IPCC) report*[4] states that within the energy sector, we need to significantly reduce our reliance on fossil fuels and triple the contribution of renewable energy to the energy mix. Community energy projects bring forward sustainable, renewable solutions to energy use and often result in overall lowering energy demand.

Recent policy and communications from the Department of the Environment and the Department of Communications, Energy and Natural Resources (DCENR) point to adopting a low carbon vision for the energy sector. Specifically, The Green Paper on Energy Policy in Ireland[5] states '*Climate change is possibly the most fundamental existential issues of our time. Over the next decades Ireland's economy will need to shift from one predominantly dependent on imported fossil fuels to a more indigenous, low carbon economy based on renewable energy, energy efficiency and smart networks'*. Further draft policy from Government, The Scoping Report on Low Carbon Road Mapping for the Built Environment Sector[6] and the 2050 Low Carbon Road Map Electricity Sector Scoping Report[7] both outline the importance of moving to low carbon fuel sources and buildings.

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4 Intergovernmental Panel on Climate Change (IPCC) 2014 Working Group III, Mitigation of Climate Change https://www.ipcc.ch/report/ar5/wg3/

5 Green Paper on Energy Policy in Ireland, 2014 Department of Communications, Energy and Natural Resources (http://www.dcenr.gov.ie/NR/rdonlyres/DD9FFC79-E1A0-41AB-BB6D-27FAEEB4D643/0/DCENRGreenPaperonEnergyPolicyinIreland.pdf)

6 The Scoping Report on Low Carbon Road Mapping for the Built Environment Sector, 2014 Department of Environment, Community and Local Government (http://www.environ.ie/en/Publications/Environment/Atmosphere/FileDownLoad,37849,en.pdf)

7 The 2050 Low Carbon Road Map Electricity Sector Scoping Report, 2013 Department of Communications, Energy and Natural Resources (http://www.dcenr.gov.ie/NR/rdonlyres/CE5C855E-3646-4528-BBA1-49ABC1DBBBA7/0/ScopingReport.pdf)

Local and National Economic Benefits

Per head of population, Ireland is one of the most energy intensive countries in Europe. We import approximately 89% of our energy and spend approximately €6.7 Billion a year importing energy. This leaves us very exposed to economic and geopolitical risk and price volatility. Economic growth is dependent on energy costs; low energy costs increase economic growth and GDP, high energy costs reduce economic growth and GDP. Addressing the co-relationship between economic growth and energy costs is fundamental to ensuring the future growth of our economy. At the national and local level, public education and active citizen participation in the further modernisation of the country's energy infrastructure will strengthen and secure our national capability to deliver an integrated energy policy and provide an essential key to our economic recovery.

In addition to reducing energy use and cutting carbon emissions, there are also significant financial benefits which can arise from community energy projects. Community energy projects provide and stimulate local investment opportunities, generate local jobs and keep money in communities supporting local people, local activities and local businesses. In addition, community energy projects help to stabilise energy costs, help people save money on their bills and help those in fuel poverty. Nationally, we spend €6.7 billion importing fossil fuels, and at a household level, energy costs can represent a significant portion of expenditure. Community energy projects keep local money in local economies, and create jobs for local people.

Strong Community Networks

In Ireland, one of our biggest assets is our sense of place and the level of participation in local community activities. From well-established community groups, to newly formed entities, every day people across the country are working to make their communities better places to live.

Experience shows community energy projects strengthen community networks, help build resilient communities and empower people to make informed decisions on their energy choices. In general with greater understanding of energy generation, greater awareness of energy use follows and with that increased energy efficiency, better and smarter energy use.

Meeting our Renewable Energy Targets

Ireland has an obligation to generate 16% of its gross energy consumption from renewable resources by 2020. It is likely that post 2020 our renewable obligations will increase. In 2013 only 7.8% of our energy was generated from renewable sources[8], and a significant amount of this was renewable electricity from wind. In addition the recently announced EU ambition to improve energy efficiency to 30% by 2030 present significant new challenges to national energy policy. The considerable challenge of achieving 30% energy efficiency by 2030 will require a faster, wider and more inclusive national energy policy, which will necessitate active citizen and community participation to implement our strategic energy goals.

Recent media and public discourse suggests that there is growing and increasingly structured public resistance to the development of large scale renewable energy projects in Ireland and in recent months communities have organised themselves to stand up to and resist the development of new infrastructure and renewable energy, particularly wind energy in their local areas where they perceive little or no benefit, and little or no control. In order to transition to a low carbon future, communities need to be allowed to take up a central role, to stand behind and embrace the development of the renewable energy projects that are appropriate to their areas. Community owned renewable energy developments have the potential to stimulate investment in and facilitate the growth of a positive and productive renewable energy sector with positive support from communities rather than resistance in both rural and urban locations.

An analysis of our progress towards meeting our EU 2020 greenhouse gas emissions targets by the Environmental Protection Agency (EPA)[9] suggests meeting our 2020 targets will be extremely difficult. Encouraging community ownership of renewable energy will have a positive impact on and increase renewable energy development, which will contribute to meeting our EU 2020 targets and 2030 targets.

In addition to renewable electricity, community owned projects could greatly contribute to a more balanced variety of renewable generation including renewable heat in Ireland, which is currently generated at very low levels.

8 Sustainable Energy Authority of Ireland (2014) Energy in Ireland, 1990-2013

9 Environmental Protection Agency (2014) Ireland's Greenhouse gas emissions projections 2013 – 2030

Barriers to Community Energy

Community owned renewable energy in Ireland is a small, but rapidly growing and increasingly popular industry. Compared to our European counterparts, Ireland is uniquely noteworthy for the almost total absence of community energy projects. There are currently less than a handful of community energy projects in operation In Ireland which account for a tiny fraction of renewable energy production. We compare very badly to other EU countries. In Denmark up to 90% of wind turbines and c. 50% of district heating are cooperatively owned, while Germany and Sweden are not far behind. In Germany, the national figure is about 48% (or c. 30,250 MW) of total renewable energy is locally owned by citizens and communities. The German district of North Frisia has set the pace with some 90% of installed wind capacity (around 700 MW) community owned. In Belgium Energy Coop Ecopower has 43,000 members who have over 50 million Euro invested in wind turbines, co-generation, hydro power and solar panels.

It is well established that there are some significant barriers to the development of community energy projects in Ireland. The following section seeks to make suggestions on national and local measures that could incentivise and encourage community energy projects and indeed overcome some of the significant barriers that currently exist.

These recommendations to remove some of the most significant barriers to community ownership of renewable energy informs the thinking behind the second set of recommendations which are provided in the section below 'Supports for Community Energy'.

Recommendation

Access to the National Electricity Grid for communities and micro-generation

Securing access to the National Electricity Grid for community energy projects is complicated, expensive and prohibitively risky. At present the time between application and connection is too long for community groups to wait, the costs for application are too high, and the uncertainty associated with connection is too risky. This presents a major barrier for community groups. Templederry, a 4.6 MW wind farm in Tipperary is the only community energy project currently connected to the National Grid in Ireland. From project inception to operation took over ten years. In addition to securing appropriate financing, the group maintain that the costs and uncertainties associated with grid connection presented the biggest barrier to the project.

The new grid infrastructure proposed by Eirgrid is currently being met across the country with fierce opposition from community groups. Whilst visual, health and environmental impacts are often cited as the main reasons for opposition. It is important to note that at

present communities have little or no access to the grid, to use for their own benefit, even as it passes through their areas. Allowing communities to access the grid could result in easier acceptance by communities of infrastructure upgrades (once necessity can be demonstrated).

Connection applications for renewable generators are grouped together for processing through a series of successive 'Gates'. Applications within Gate 3 are currently being processed in turn. Gate 3 is closed to new offers. Only once all connection offers in Gate 3 have been processed will the selection process for the next Gate begin. While applications for Gate 4 are currently being accepted, there is no guidance yet as to how the Gate 4 process will be operated or when connections will be made available. This lack of certainly of connection is a significant barrier to potential community energy groups.

The process is simpler for Micro Generators. Micro wind generators[10] do not need to apply through the Gate process and may apply for grid connection directly with a simple application form which is routinely processed in a timely manner. Micro solar installations are also exempt from the Gate connection process, however for medium sized installations (i.e. for PV over 6kW) a connection fee of €6,000 is imposed. Solar PV installations over 6 kW and less than 30 kW are as a result not considered an economically attractive investment, and as a result there are no community solar developments in Ireland, in comparison to the growing number of solar PV developments in the UK and Europe with similar solar irradiance levels to Ireland.

In addition, in order to receive the Feed in Tariff, a renewable energy developer must register as a licensed supplier (for developments over 1 MW)[11] and enter into a Power Purchase Agreement with an electricity utility company. The process of becoming a licensed supplier of electricity is extremely expensive, risky, and complicated and again presents a barrier to community groups. Community Renewable Energy Supply (CRES), associated with Templederry Wind Farm is the only fully community funded company in Ireland to enter into the Irish market. The process of becoming a licensed supplier for this group took three years, and cost in excess of €20,000. The process was extremely complex and risky for such a small operator. Until now, electricity utility companies were unwilling to enter into power purchase agreements (PPA) with community energy producers because of their size and as a result community energy suppliers did not have the option to sell their power. Although now one company has become a licensed supplier, it does suggests a positive step forward

10 Defined as developments less than 11kW when connected to the three phase distribution grid (400V) or 6 kW if connected to the single-phase distribution grid (230V)

11 Under the Electricity Regulation Act 1999 Section 14 1 A Order 2008 S.I. No. 383 of 2008 and S.I. No 384 of 2008 electrical generation up to 1 MW is allowed and exempt from being a licensed supplier.

for communities. However, it is unlikely that many groups will have the resources or determination that the Templederry Group have had.

Recommendations:

- A bias towards community owned projects should be developed. A precedent for this currently exists, whereby the Commission for Energy Regulation (CER) can direct that a grid offer be given for 'innovative' developments. The definition of 'innovative' projects should be widened to include for community energy projects, thereby facilitating easier access for community energy projects onto the grid.
- Within Gate 3, for developers with connection offers, but where planning permission has not been achieved/has expired or where offers have been withdrawn for non-completion of financial payments, community groups should be given priority access to the grid in their areas.
- Clear and transparent procedures for grid connection should be established for community energy or small scale projects, with guaranteed connection, and reasonable connection times, such as the process for micro generation connections. This should apply to all community energy projects within Gate 4 and future applications.
- Costs associated with Grid connection should not be prohibitive, and should be in line with the Renewables Directive[12] which prohibits grid connection charges from being discriminative against producers of renewable energy. Connection fees should be appropriate to the scale of the installation, to ensure small to medium size installations do not bear a disproportionate level of cost.
- Mandate electricity utility companies to enter into Power Purchase Agreements (PPAs) with small generators, with a low cost / admin model, so that small generators can receive payments for the electricity they export to the grid.
- Community or small scale energy producers should not be required to become licensed suppliers of electricity in order to receive payment for the electricity they provide, or the licensing process for small groups should be simplified.

Recommendation

Fair and secure payments for all Renewable Energy generated

In order to ensure community energy projects proceed, there needs to be greater financial security and financial benefits to investors and those dedicating their time to developing

12 Renewable Energy Directive 2009/28/EC Article 16 (3)

community energy projects. The potential to stimulate new investment opportunities at local levels and potentially create new local streams of revenue. Where communities and investors can receive financial returns on local investments they are often much more tangible and attractive. Local investment keeps money local, and supports jobs and communities. A secure and reliable return on investment should be prioritised.

At present only electricity generated by wind is eligible for the Feed in Tariff under REFIT 2, and biomass combustion, biomass CHP and Anaerobic Digestion is eligible for payments under REFIT 3. There are no additional or more attractive payments for community projects or local developments. As mentioned above only licensed suppliers of electricity are eligible to receive payments for generating electricity (above 1 MW)[13], and currently existing utility companies do not routinely enter into Power Purchase Agreements with small scale developers such as community scale developments which facilities these groups to get paid for the energy they generate.

There is no guaranteed Feed in Tariff offered for generating solar electricity and exporting it to the grid. As a result our solar electricity resource is considerably underused (a voluntary payment scheme is currently operated for Electric Ireland customers generating solar electricity). There is great potential for community solar energy projects and CHP fed with renewable resources to develop in urban and rural areas. In Ireland renewable energy generation in urban areas is extremely small scale.

Similarly, payments under REFIT 3 have not delivered the expected level of renewable heat installations, biomass CHP, Anaerobic Digestion or biomass combustion. Renewable heat can be generated locally and shared across boundaries in a way that is entirely accessible for community heat schemes to develop. Renewable heat developments, particularly district heating systems can be used to increase flexibility within variable renewable energy systems by i) using waste heat from power plants and industry in buildings with large constant heat demands such as swimming pools, glasshouses etc., ii) converting renewable electricity to heat and thermal storage iii) using less fuel by sharing a common boiler instead of the approximately 2 million individual heat boilers. Connolly D [14] calculates that 37% of Irish heat demand for buildings can be converted to district heating (15% in small towns, 22% in large cities). Heat would be supplied by CHP with thermal storage and peak load boilers in urban areas, and in rural areas, air/ground source heat pumps would be replace oil/gas boilers.

13

Under the Electricity Regulation Act 1999 Section 14 1 A Order 2008 S.I. No. 383 of 2008 and S.I. No 384 of 2008 electrical generation up to 1 MW is allowed and exempt from being a licensed supplier.

14

Connolly, D (2014) Green Plan Ireland (http://dconnolly.net/greenplanireland/)

Recommendations:

- Clarity should be provided on Feed in Tariff rates for post 2017 when the Renewable Energy Feed in Tariff (REFIT) scheme expires.
- Fair and secure payments to support community energy, micro-generation and auto generation, at a price that balances the long term socio-economic costs of this generation (including reduction in transmission losses, the long term costs[15] of CO_2 and the balance of trade improvements) with the total net metering price and ensures the Public Service Obligations (PSO) levy is maintained at close to current levels. This will ensure renewable energy generators will get paid for the electricity they export to the grid.
    - REFIT scheme for community owned renewable energy, micro-generation and auto-generation. The Community REFIT scheme should be designed to incentivise development in this significantly under represented sector and allow reasonable pay back rates;
    - REFIT scheme for solar electricity (solar PV); and
    - REFIT 3 should be amended to further incentivise renewable heat installations.

Recommendation

Funding and Finance supports

Securing finance for community energy projects is often one of the biggest barriers that a community group must overcome. In practice community groups struggle with securing appropriate financing at all stages of project development however it is particularly difficult for communities to secure first round financing in order to bridge the gap between feasibility and planning stages.

In Scotland progress towards meeting their target of 500 MW of community and locally owned renewable energy is support by the Community and Renewable Energy Scheme (CARES), which provides loans towards the high risk, pre-planning consent stages of renewable energy projects which have significant community engagement and benefit. In Germany KfW Bank provides affordable financing to communities and farmers for renewable energy schemes.

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The Department of Public Expenditure and Reform estimates the cost of carbon post 2015 as €39/$tCO_{2\,e}$ (2009) http://www.per.gov.ie/reports/ . In the UK the Department of Energy and Climate Change estimates the price of carbon in £70/tCO_{2e} in 2030 and in £200/tCO_{2e} https://www.gov.uk/government/collections/carbon-valuation--2

Across Europe EU Structural Funds are currently allocated to fund community energy projects, under Thematic Objective 4: Shift to a Low Carbon Economy. In Ireland there is no specific funding line from EU structural funds to support community energy projects. While funds are available for energy efficiency projects, the scope of the activities eligible are limited and do not encompass the wide variety and diversity of scope that could potentially be developed with community energy and energy efficiency projects.

Recommendations:

- Grant and grant to loan making facilities should be developed to provide funding to groups in initial stages of development and pilot stages, from feasibility studies through to planning applications and grid connections applications. For example, grants would be offered to groups in the early stages of planning, and if successful the grant would become a loan which would be paid back.
- Support the access to finance through cheap credit, special Government guarantees, or by facilitating local loans through appropriate investment vehicles (green funds/ strategic investment funds or credit unions etc.)
- Encourage tax efficient structures for local ownership of renewable energy, as per the Danish model where income earned up to a point from Community Renewable Energy is tax free. Currently, the Irish revenue allows people to write off tax when investing in "business expansion" and companies investing in energy efficiency through Accelerated Capital Allowances and other schemes. This could be a significant additional incentive for community owned energy projects.
- Community energy projects should be promoted through special tax incentives for the installation/construction of installations.
- Funds from the SEAI Better Energy Communities, which currently provides funding for energy efficiency upgrades within communities, should be expanded to enable funding for community initiated and led schemes to generate and distribute their own energy, particularly solar electricity, wood and biomass energy and heat pumps.
- Solar energy (including solar PV) should be eligible for grant aid from the Sustainable Energy Authority of Ireland for building upgrades and home improvements.

Recommendation

Facilitate the development of Community Micro Grids

It is currently not possible for a community group to generate its own electricity and use it for its own needs. Private electricity lines are not routinely permitted, nor are off grid or 'island' communities.

The Irish Government's Road Map[16] drawn up jointly with the Sustainable Energy Authority of Ireland and the International Energy Agency highlights the urgency of converting our electricity system into a highly efficient and dynamic Smart Grid. Smart grids are built from the bottom up and not from the top down. Smart grids rely on the active involvement of communities and citizens, and the technological capabilities to create smart local area electricity pools is now a reality.

The technological capability to create virtual smart local area electricity pools is now a reality. Smart grids are built by grafting new kinds of sensors and meters on existing electricity infrastructure with the active involvement of communities and citizens, as energy producers and consumers. These new technologies partnered with willing communities, can enable smart power matching of locally embedded clean generation in local areas that is fully harmonised with national grid networks.

<u>Recommendations:</u>

- The barriers preventing self-sufficiency, local grids, off grid communities and electricity sharing should be removed.
- There should be no pressure to connect every installation to the national grid.
- Research and Development funding should be made available to support the development of a number of demonstration or test areas in Ireland (for example to support the ongoing work of MEGA (Micro Electricity Grid Association) and the Aran Island's Energy project).

16 The Smart Grid Road Map 2011 – 2050, Sustainable Energy Authority of Ireland

Supports for Community Energy

In addition to removing some of the main barriers to Community Energy in Ireland. There are a number of proactive steps that could be taken in order to encourage, incentivise and facilitate the development of community energy in Ireland.

The development of the White Paper on Energy Policy is an ideal opportunity to ensure some key policy changes occur to allow the community energy industry to reach its full potential.

A National Community Energy Strategy for Ireland

There is currently no national strategy for community energy in Ireland. National energy policy[17] gives little more than passing regard to the potential of community energy, and provides no clear policy steer to support the community energy industry and increase the number of community energy projects, groups, partnerships.

In the UK, the Department of Energy and Climate Change has developed a *Community Energy Strategy.* This strategy lays out the Government's plans for how it intends to develop greater support for community energy in the coming years. The strategy was developed with input from Community Energy Contact Groups, a platform whose members represent community energy stakeholders in the UK.

A National Community Energy Strategy for Ireland is proposed. This National Community Energy Strategy will help the Government to develop focussed support to community energy in Ireland. It is recommended that the National Community Energy Strategy should outline the following;

- A requirement for the establishment of intermediary bodies (nationally and locally), and information on how these intermediaries will be facilitated to support communities to generate renewable energy, reduce energy use, manage energy demand and purchase energy.
- Targets for community energy generation.
- A requirement for a minimum proportion of community and individual ownership of developer-led renewable energy projects, based on equity shares should be introduced.
- Mechanisms to support local generation of all forms of renewable electricity, renewable heat and combined heat and power developments.

17

The National Renewable Energy Action Plan, The National Energy Efficiency Action Plan, Government White Paper, Delivering a Sustainable Future for Ireland.

- Assign clear roles and responsibilities for the development of advice and guidance to communities on technology, finance and legal matters for the development of community energy projects.
- Mechanisms to ensure that Government grant making bodies have capacity to support community energy projects, including straightforward grant structures and grant to loan structures.
- A framework that ensures all Local Authorities develop local 'Energy Action Plans' with genuine public consultation and participation at a local level in energy policy and individual energy developments.
- A framework that ensures facilitated public engagement and participation in national and local energy policy and planning
- Mechanisms to support and develop local distribution of renewable electricity through SMART micro grids and renewable heat through district heating infrastructures.

The following recommendations are considered fundamental to any Community Energy Strategy and are therefore described in further detail.

Recommendation:

Targets for Community Energy Ownership and Co-ownership

There are no National or Local targets for community ownership or local ownership of renewable energy in Ireland. Targets are a very successful way of focussing Government policy and providing security for investors.

In Scotland, the Scottish Government has committed itself to achieve "*500 MW of community and locally-owned renewable capacity in place by 2020".* This has helped to grow a movement explicitly recognised by the Government and the development of specific mechanisms to provide support to community energy.

In Denmark, the *Promotion of Renewable Energy Act* requires developers to offer 20% of overall ownership shares of wind projects larger than 25 m tall to eligible persons entitled to make an offer. The law provides a preferential right to residents within 4.5 km to buy the first 50 shares, and the remaining shares must then be offered to residents that reside in the local municipality. This law was brought forward following a fall in support for renewable energy developments in the early 2000's when a number of large commercial renewable energy developers began to direct the renewables market in Denmark.

In Belgium, a number of provinces (Oost Vlaandered, Limburg, and Walloon) have a requirement that wind projects must include direct participation of the local population and

the local municipality. These models were largely motivated by the perceived need to reallocate burdens and benefits of wind energy developments to benefit communities.

For co-ownership models to work effectively, there needs to be an openness and level of engagement between communities and developers that at the moment in Ireland is not common. It is well established that the current approach to consultation is not appropriate and consultation models are often not implemented effectively. To ensure appropriate development in appropriate locations, plans for renewable energy development must be designed to ensure that communities and local environments are protected. An effective co-ownership model would ensure developers act within the bounds of agreed Local Energy Action Plans[18] (which should be developed with effective participation and consultation with the local communities and local authorities), and must comply with all planning and environmental legislation. The spirit of this legislation must also be adhered to which is in place to protect communities and the environment from inappropriate development.

In Ireland, it is considered that both approaches to community ownership should be explored, entirely community led renewable energy development, and developer led with community part ownership. The following are recommended:

- A national target for community led and community owned renewable energy developments.
- Within developer-led projects, a requirement that a minimum proportion of each development is owned by individuals and communities local to the development.

  As in Denmark this ownership could be based on the purchase (at a reasonable cost) of equity shares in the project and a financial return through the payment of dividends. The take up of local ownership shares should be a condition after which the development can proceed, and without which the development cannot. Clear demonstration that the development complies with the objectives of planning, environmental and public participation legislation in order to achieve the most appropriate solution for the community and environment is a necessary precursor to this recommendation.

  Safeguards must be included to ensure transparency and diversity of owners/share-holders i.e. to avoid one or two vested interests holding all shares. The percentage of community share in the project must be sufficient to ensure public acceptance of a project is a key consideration from a developer's perspective from the outset.

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See page 17 for our recommendations on how Local Energy Action Plans should be developed.

Thus in addition to allowing local people and communities to benefit from the financial return a renewable energy projects offers, the local people must be engaged and consulted in a meaningful way with throughout the life of the project in order to ensure their continuing support.

Local authorities should also be encouraged to set targets for community ownership of renewable energy which should be stated within these Local Authorities 'Energy Action Plans'.

Recommendation:

Intermediary bodies

Laws and policies alone can be insufficient to create a favourable environment for local community energy.

Guidance and support provisions to community groups and actors designing and developing community energy projects are extremely important for all stages of a community energy project. This can be provided to community groups through intermediary bodies, which provide a combination of expertise, entrepreneurship, community engagement and mediation.

In Scotland, the 'one stop shop' Local Energy Scotland, supports community renewable energy projects through the provision of free advice on developing renewable energy schemes, advice on funding streams and support on accessing development and pre-planning loans (administered through the related Community and Renewable Energy Scheme (CARES) programme).

There are a number of Energy Agencies in operation in Ireland, with varied capacity to support community energy projects and groups. It is widely recognised that at present there are too few agencies with limited resources to deliver support to communities at the scales required.

It is recommended that funding for Energy Agencies is increased so that each Local Authority area is serviced adequately with support. Energy Agencies should be developed to offer a 'one stop shop' support service with hands on assistance for communities developing community energy projects. Local Energy Agencies should work collaboratively with each other and with the Sustainable Energy Authority of Ireland, to ensure good practices are shared and resources are maximised.

These agencies should be staffed with experts who can guide and advise community groups and offer information on financing, legal and technological issues and advice on navigating regulatory and other hurdles. Advice on the full suite of renewable energy options should be provided, so that communities are facilitated to choose and achieve the optimal sustainable energy solution for their community and the receiving environment.

The agencies should also promote awareness of renewable energy locally, highlight success stories and ensure good communication with the public and other communities groups involved with community energy projects.

Recommendation

Local Energy Action Plans

There is currently no requirement for Local Authorities to develop plans on how energy in their areas will be generated, distributed and used. While a number of Local Authorities have developed Local Authority Renewable Energy Action Strategies (LAREAS) to identify zones or areas for renewable energy developments, not all Local Authorities have prepared such a strategy. Clare County Council's Renewable Energy Strategy 2014-2020 is a good example of a local renewable energy strategy[19]. It provides an analysis of the energy profile of the county and a list of strategic aims for the county within each renewable energy technology.

Local Energy Actions plans should be developed by each Local Authority, to guide local energy planning within the Local Authority Area. Thus with the context of National Policy, local perspectives on energy matters can be provided. It is important that urban areas are also supported in renewable energy developments, and included within local area planning as target areas for generation.

A fully participative consultation process should precede the adoption of any plans to allow communities, individuals and interest groups to engage with energy policy in their local areas and to help shape solutions to achieving a sustainable energy future. The following information should be included within the Energy Action Plans, and disseminated to the people of the Local Authority area for comment.

- the energy needs of the Local Authority Area,
- the natural resources that the area possess and what options are available, such as renewable energy (and the various renewable technologies), fracking, nuclear energy,
- the potential for energy savings and energy efficiency,
- the costs associated with fossil fuels including subsidies, the costs associated with renewable technologies,
- what a transition to a low carbon future means in terms of the number of solar panels, renewable heat installations and wind turbines that will be required,
- How community energy projects will be supported.

A set of sustainable energy solutions should be posed, and a plan to achieve a sustainable energy area should be developed, including integration of community energy projects.

19 Clare County Council Renewable Energy Strategy 2014-2020
http://www.clarecoco.ie/planning/planning-strategy/renewable-energy-strategy-2014-2020/

Spatial planning within Local Development Plans etc. will then be in a position to take into consideration renewable energy and community energy requirements and will be able to respond accordingly.

With Local Energy Action Plans in place, Local Authorities can then use local planning and development plans to promote community renewable developments within their jurisdictions. For example, within cities it could be a requirement that all new buildings meet a set of minimum requirements for solar energy generation, or within industrial areas, minimum requirements for wind energy and solar energy could be set. Local non-binding targets for community energy developments may also be set to encourage community energy groups to develop.

Recommendation:

Facilitated Public Participation and Engagement with National and Local Energy Policy

There is yet to be a fully participative debate on national energy policy in Ireland, where our future energy needs, options and opportunities are thrashed out. This opportunity is currently upon us, with the release of the Green Paper on Energy Policy[20].

Recent media and public discourse suggests that there is growing public resistance to the development of large scale renewable energy projects in Ireland and communities have organised themselves to stand up to and resist the development of renewable energy, particularly wind energy in their local areas where they perceive little or no benefit, and little or no control. However, very often, individuals and communities respond to individual developments, having had little opportunity to engage with the policy choices that underpin them. It needs to be accepted that new energy generation and infrastructure cannot be seen as something that is done to or imposed on a community. Communities and individuals must be part of the process, part of the discussion and have an active role in the solution.

A defining feature of those countries in Europe where successful energy transitions are underway, is the public and political space that is provided to debate the challenges, options and solutions to making this transition happen and the economics, environmental and social implications of the choices that are available. One of the best examples of this is the German Energiewende[21]. In consultation with the citizens of Germany a long term vision of a low carbon energy system by 2050 was agreed, short term implementation plans are thus viewed in the context of this long term vision which is generally accepted by Germans. For

20 Department of Communications, Energy and Natural Resources, May 2014, Green Paper on Energy Policy in Ireland (www.dcenr.gov.ie/greenpaper)

21 Energiewnede (The German Energy Transition) (http://energytransition.de/)

Ireland, this approach, or setting a intentionality is supported in the recent National Economic and Social Council (NESC) research[22].

The Green Paper consultation needs to openly engage people on the very significant scale of the challenge that we face, and give the people of Ireland the opportunity to play an active role in developing meaningful solutions to answer the big picture question:

> *How do we achieve security of supply, reduce fuel poverty and efficiently transition to a decarbonised energy system in a way that is mindful of communities and the environment?*

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NESC 2014 Wind Energy – Building Community Engagement and Social Support, available at http://www.nesc.ie/en/publications/publications/nesc-reports/wind-energy-in-ireland-building-community-engagement-and-social-support

Whilst this Policy was developed using the Environmental Pillar processes it does not necessarily represent the policies of all of its members.

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