

Research Partners



PHILIP LEE



Comhairle Contae Thiobraid Árann
Tipperary County Council

DUBLIN | BRUSSELS | SAN FRANCISCO

Document Information

Title:	<i>'Legislative Mechanisms for Local Community Ownership and Investment in Renewable Energy Infrastructure'</i>
Lead by:	Tipperary Energy Agency
Prepared by:	Paul Kenny, Sean Finn, Stephen Walsh
Reviewed by:	Clare Lee, Alice Whittaker, John Kehoe, William Hynes
Release*:	CO
Due date:	17.10.2016

This research has been funded by the Sustainable Energy Authority of Ireland's Energy Research, Development & Demonstration Programme

*PU = Public

PP = Restricted to other programme participants (including the SEAI).

RE = Restricted to a group specified by the consortium (including the SEAI).

CO = Confidential, only for members of the consortium (including the SEAI).

Contents

Executive Summary	iii
Option One.....	iii
Option Two	iii
Option Three	iv
Proposed Model	iv
Next Steps	vi
1.0 Introduction.....	1
1.1 Project Overview	1
1.2 Research Methodology.....	1
1.3 Community Renewable Energy (CRE)	2
1.3.1 Community RE as a “Common”/ “Public” Good.....	2
1.3.2 Impetus for the Development of a CRE Sector in Ireland	3
1.4 Energy Policy Context	5
1.4.1 European Policy	5
1.4.2 National RE Policies	5
1.5 Literature Review on CRE in an Irish Context	7
1.6 Community RE in Ireland- Strengths, Opportunities, Weaknesses, Threats Analysis	10
1.7 Summary	10
2.0 Community RE Case Study Jurisdictions	12
2.1 Denmark.....	12
2.2 Germany.....	16
2.3 United Kingdom.....	19
2.4 Devising Models of CRE for Application in the Republic of Ireland.....	22
2.5 Affordability for Citizens	25
2.6 Affordability for the developer	25
2.7 Summary	25
3.0 Project Consultation.....	26
3.1 Overview	26
3.2 Consultation Methodology	26
3.3 Stakeholder Feedback	27
3.3.1 Option One.....	28
3.3.2 Option Two	28
3.3.3 Option Three	29
3.4 Post Consultation Review	29
3.5 Summary	30
4.0 Implementing The “Option to Purchase” Scheme	31

4.1	Overview: The “Option to Purchase” Scheme	31
4.2	Trusted Intermediary	31
4.3	Mandatory Implementation	32
4.4	Eligibility	32
4.5	Applicable Technologies	34
4.6	Legislative Analysis	36
4.6.3	‘Community Gain’ Type Conditions	40
4.6.4	Financial Conditions	41
4.7	Ministerial Guidelines issued under Section 28	42
4.7.1	‘Specific Planning Policy Requirements’	42
4.8	Legislative Amendments	47
4.9	Summary	48
	References	50
	Appendix One: Case Study Countries Energy Policy Chronology	52
A.1	Denmark	52
A.2	Germany	53
A.3	United Kingdom	55
	Appendix Two: Consultation Presentation	57
	Appendix Three: Constitutional Protections Relevant to Community Shares in Renewable Resources	64
	Appendix Four: Part V – Planning & Development Act, 2000: The Structure and Scheme of Part V (As Amended)	66
	Appendix Five: Irish Renewable Energy Policy	71
	Appendix Six: Constitutional Protection of Private Property	79
	Is it in a Legitimate Social Objective in the Common Good	80
	Is the Proposed Measure Rationally Connected to this Objectiv	83

Executive Summary

This research paper was kindly granted aided by the Sustainable Energy Authority of Ireland (SEAI) and was prepared having consideration to a call from Tipperary County Council (during the preparation of their Renewable Energy Strategy 2016), for the identification of measures to assist local persons and communities to invest in and benefit from large scale renewable energy development in their areas.

The objectives of this research are;

- To provide investment opportunities for local communities, providing them with a share of the benefits from renewable energy resources harnessed in their localities.
- To encourage citizens to become energy 'prosumers' by having a direct stake in Ireland's energy transition.
- To accelerate the transition to a low carbon economy, with the ultimate goal of mitigating the worst effects of climate change.
- To facilitate the attainment of national and international renewable energy targets.
- To comply with Government policy objectives as set out in the White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015-2030'.

Having consideration to the research objectives above, three options for a 'Community Investment Framework in Renewable Energy (RE)' were considered on the basis of a study of established precedent in RE markets where community ownership mechanisms already exist. These options were then discussed with a selection of stakeholders with key strategic roles in the development of RE developments. The options are set out below.

Option One

It was submitted that those living very close to large scale RE installations experience them most intensely; therefore, it was proposed in this Option that the developer would be required to give a mandatory stake in the development, to any resident living within a 1km zone of an energy installation such as a wind turbine. This mechanism has two facets; firstly it incentivises developers to locate in areas with low residency. Secondly, it offers some return to those living within the 1km zone. This proposal would require legislative change in order to bring it into effect as current property law would not support such an imposition on private development rights. It may also render certain developments of RE unviable from a developer / funder perspective.

Option Two

It was proposed that Ireland partially imitate the Danish model "option to purchase" scheme. This model places an obligation on developers of RE installations above a certain threshold to offer investment shares in the development within a pre-determined radius of the development. The obligation to offer shares would be attached by planning condition on the development and the details of the share scheme would be agreed prior to the commencement of development, in accordance with proposed Ministerial Guidelines under section 28 of the Planning and Development Act 2000, as amended. This proposal would not necessarily require an amendment to current legislation in order to be implemented; however, detailed Ministerial guidance would be required in order to provide the necessary legal basis for imposing planning conditions and to ensure consistency of implementation on a national basis. Whilst a condition would attach to a development on the basis of the above, a proposal to operate a community investment scheme would not be a material consideration in the decision to grant or refuse planning permission.

Option Three

It was proposed in this Option, subject to affordability and consultation, to encourage the adoption of a formalised mechanism to support a 'community gain' approach for all projects both above and below SID thresholds. There are a variety of ways a community gain scheme can be implemented, as documented in the IWEA "being a good neighbour" document. The principle of local control, both strategically in terms of what it should be spent on at fund inception and an objective, transparent and fair administration process (e.g. by a trusted intermediary) in terms of individual project approval should be core to the development of this process. This proposal would not require legislative change as it non-mandatory and non-binding on the developer, and indeed is generally accepted as common practice. Effective implementation would require the development of detailed guidelines and the identification of a trusted intermediary.

Proposed Model

After consultation with a selection of stakeholders and a considered analysis of the key findings and having consideration to the objectives of this research project, it is concluded that a Community Investment Framework 'option to purchase' scheme to be regulated through the planning system would be most effective in Ireland (Option two). The scheme, if implemented, would be supported through detailed Section 28 Ministerial Guidelines, which in addition to setting thresholds for RE developments, would provide specific, technical, financial and legal criteria to be applied in the case of each individual project. Therefore, the planning system should in this respect provide a participatory mechanism and fair and transparent evaluation of proposals giving certainty to developers and the community. Based on national and international best practice, the creation of a **trusted intermediary**, to manage, regulate and support the implementation of a community ownership models in an Irish context should be considered.

A breakdown of this proposal is outlined below. The details of the preferred model, including legislative background and detail specifications is set out in the main document.

Summary of selected community investment model

- Mandatory offer of shares for local people to allow them invest in local projects.
- Focussing on people **in close proximity to** developments, with option to roll-out to a wider radius if uptake is poor.
- Option to purchase approximately 20% of project equity which equates to 3% - 5% of total capital cost.
- Built around a model of a community co-operative (approach) as co-investor in main project.
 - Shares sold back to co-op;
 - limitation to sale within initial years;
 - open to new local entrants;
- Inclusion of a post office/ credit union scheme for persons of limited means (dividend repays loan, before share passes on).
- Potential of tax break on investment or income for local shareholders.
- Trusted Intermediary to be established to ensure appropriate governance on a national basis.
- Does not place an excessive burden on RE developers as they will gain local investors.

- Applicable to Solar and Wind Energy development above pre-set thresholds, the nature of which would need to be determined through further research and with input from stakeholders at government and industry level.

The mechanism by which the selected model is achieved is outlined below.

- The applicant/developers issues an Initial local community investment prospectus at preplanning and consultation stage.
- Final investment prospectus with 15%-25% of project offered.
- Investment held in trust until “financial close” – can’t be withdrawn or utilised until safeguards in place.
- Initial offering to a limited area (to be decided)
 - If greater subscribers than required, then all treated equally.
 - Maximum value per individual (5k estimated)
 - If equity not raised, then boundary increases
 - Small incremental value of shares (e.g. €250).
 - Third boundary increase to municipal district where very large farms in depopulated areas.

In terms of the eligible area, the proposed model would apply to the stages below:

- Initially open to the electoral division (ED) where the RE infrastructure is located, or any within 2km of any turbine/solar array, alternatively consideration could be given to the use of GIS models to identify qualifying households within pre-determined radius of the development
- If investment not reached, then expanded to any DED touching the original DED’s.
- Third level to whole municipal district.

The core supports required to effectively implement this proposal are set out below;

- The identification and set up of a ‘Trusted Intermediary’ to apply on national basis;
- The preparation and publication of draft Section 28 Ministerial Guidance;
- Effective public and stakeholder consultation, including within the process of Strategic Environmental Assessment (SEA) screening and regulatory impact analysis (RIA) if necessary;
- Legislative supports (if it is considered necessary to place community ownership on a statutory footing); and
- Consideration of economic, infrastructural and financial supports to incentivise the development of RE in Ireland.

As noted above, new legislation may not be required to give legal effect to the proposal. It may be sufficient to include the proposal by way of a specific planning policy requirement in Ministerial guidelines issued under S.28 of the Planning and Development Act 2000, as amended (**PDA**), including sufficient detail within the guidelines to ensure that citizens, including local communities, potential applicants for planning permission, and decision makers understand fully the scope and implementation requirements for the proposal.

Whilst new legislation may not be essential, the Department for Housing, Planning, Community and Local Government might consider seeking the advice of the Attorney General’s office as to whether it

might be appropriate or desirable to implement or further reinforce the proposal through legislative amendments, for example:

- A new section or subsection of the PDA, similar to S.48 PDA, providing planning authorities and An Bord Pleanála (**the Board**) with an express power to impose a condition requiring the applicant to reserve a specified percentage of the development for local investment in renewable energy projects above a certain specified threshold.
- A new article or sub-article inserted in the Planning and Development Regulations 2001, as amended (**PDR**) specifying the information to be provided with an application for planning permission (or an appeal in relation to same), strategic infrastructure development (**SID**) consent, or other such application as may be relevant.

It might also be considered appropriate for the Minister for Communications, Climate Action and Environment to include the proposal as set out in S.28 Ministerial guidelines as one of a number of measures in the National Mitigation Plan under the Climate Action and Low Carbon Development Act 2015.

From a Constitutional law perspective, the ‘option to purchase’ proposal necessarily involves an interference in private property rights, to some extent akin to the interference previously provided for under Part V of the Planning Acts to address the need for social housing and greater social integration in housing developments. Whilst the Part V interference was justified on well-established ‘public good’ grounds in favour of housing provision, the ‘option to purchase’ proposal is based on the less well established but (arguably equally) important need for urgent and equitable transition to a low carbon energy system.

To ensure that the implementation of the proposal is robust from a Constitutional perspective, the detailed criteria must be established through effective consultation and engagement with key stakeholders as well as the public, to ensure that the relevant thresholds are reasonable and proportionate, in other words, to ensure that they constitute the minimum necessary interference in private property rights to achieve the desired ‘public good’ objective.

Therefore, underpinning all of the above will be the need for early and effective consultation and engagement with the public, relevant statutory bodies and public and private stakeholders. Such consultation might take place within the context of Strategic Environmental Assessment (SEA) and Regulatory Impact Analysis (RIA).

Next Steps

This proposal is now for submission to the SEAI as a research paper. It is thereafter proposed that consultation be carried out with the Department of Communications, Energy and Climate Action and the Department of Housing Planning Community and Local Government in order to ascertain their views. Clearly the proposal needs further development to bring about its implementation on a national basis. There is potential for the proposal set out in this research to be refined and tested in the context of the Request for Tenders (RTD) published by the SEAI which relates to the design of models for community renewable energy schemes, as advertised on the 14th October 2016.

1.0 Introduction

The purpose of this research therefore is to explore the manner in which community ownership and investment in the development of RE infrastructure can be accomplished in an Irish context. This research has been funded by the Sustainable Energy Authority of Ireland (SEAI) under its Research, Development & Demonstration (RD&D) Call. This research responds to the Department of Communications, Climate Change and Energy's White Paper on energy which was published in 2015. The White Paper signalled a shift toward the mobilisation of Ireland's communities as active agents in the decarbonisation of Ireland's energy sources. At present, there is an absence of engagement and involvement of community actors in the RE sector in an Irish context. Notable exceptions exist, in the form of the first community owned windfarm at Templeberry in County Tipperary. Beyond this however, scale remains an issue in terms of building a vibrant, viable and involved presence in the development of RE infrastructure in an Irish context.

1.1 Project Overview

The purpose of the '*Legislative Mechanisms for Local Community Ownership and Investment in Renewable Energy Infrastructure*' project is to investigate how communities can become actively involved in the decarbonisation of Ireland's energy systems through investment and ownership of renewable energy (RE) infrastructure in an Irish context. Growth and investment in RE is highly dependent on externalities such as legislation, investment and finance, local community acceptance, expertise and government supports and incentives. There is currently little opportunity for local communities to make an investment in energy projects, which could be viewed as an additional motivator of objections to the development of RE infrastructure. This research will examine existing planning and other legislative frameworks and financial models in order to assess the role they can play in mandating the incorporation of community ownership and investment in the development of Community Renewable Energy (CRE) in Ireland. This report contains a comprehensive assessment of community ownership and investment enhancing practices, models and approaches from a series of case study jurisdictions, which are outlined below;

- Denmark;
- Germany; and
- United Kingdom.

The case study jurisdictions were identified on the basis of academic and industry definition of best practice in relation to the enhancement of community ownership and investment whilst delivering viable and financially robust RE schemes. Canada was originally included in the case study selection however on review of its RE market, it was found that CRE has not developed to a sufficient degree to provide meaningful insights to this research.

1.2 Research Methodology

The proposals for community investment and ownership advanced in this report have been derived on the basis of a comprehensive desk research and stakeholder consultation exercise. The desktop research was conducted using a range of sources produced by international, European and Irish subject matter experts including the review of over 40 academic papers evaluating the basis of and effectiveness of several different jurisdictions energy transitions and the societal acceptance of same. The consultation phase incorporated a wide range of stakeholders in the field of RE and community development. The presentation used to guide the consultation process is outlined in Appendix Two. Once the consultation stage concluded, an examination of the insights received was undertaken. On consideration of those inputs, the preferred proposal was selected. The practical implication of that proposal was then examined and a consideration of the requisite actions needed for implementation was undertaken.

1.3 Community Renewable Energy (CRE)

“Community based energy generation can play an important part in job creation, local income generation, enhancing support for renewable projects and ensuring community involvement in Ireland’s transition to a low carbon society.”

Comhar et al, 2011

The creation of a viable and vibrant CRE sector is a requisite step in order to further engage society with the need to decarbonise Ireland’s energy sources. By actively seeking the participation of the community in Ireland’s energy transition, greater strides toward the creation of a low carbon society can be made, while attracting the requisite levels of investment required to support sustainable rural development across the State.

The development of viable and vibrant CRE sector in an Irish context comes at a vital juncture. The deployment of RE technology in an Irish context is becoming increasingly contentious. The most common backdrop of this contention is the Irish planning system, where applicants and objectors frequently clash over the deployment of wind energy technology and energy infrastructure developments required to support energy intensive industries. It should be noted that opposition to the deployment of RE technology extends beyond wind energy to solar energy developments. In a study undertaken in January 2016¹, a number of grounds for objection were identified as being consistently raised by communities to development proposals for commercial, utility scale ground mounted solar farms. This paper proposes the deployment of RE technologies of all types and crucially, in a manner which creates opportunities for those communities to shape their own energy future through the deployment of their own low carbon energy sources.

Opposition to the deployment of RE developments is not a uniquely Irish phenomenon, as Ellis², 2012 notes. Addressing the issue in an effective manner required “extended mutual engagement of the main parties involved” (ibid, p6). Ellis cites Wustenhagen³ et al (2007) who posited that the adoption of RE technology is composed of three elements as described below;

- market acceptance: adoption and support of the technology by investors and consumers;
- socio-political acceptance: broad public opinion in favour of wind energy technologies; and
- community acceptance: acceptance of specific siting decisions by local residents.

The creation of “extended mutual engagement” of the kind outlined at a high level above could be achieved through the creation of a dedicated community ownership/investment apparatus offering the community in which a RE development of a certain type and threshold which may be located. The mechanism for the application of this approach will be considered in detail in this report. Consultation as to the architecture of such a system will be undertaken with key representatives of the sectors of society which will be influenced by its implementation.

1.3.1 Community RE as a “Common”/ “Public” Good

The purpose of this section is to advance a number of arguments which will support the contention that the delivery of an effective policy and, if necessary, legislative backing for CRE aligns with considerations relating to the “common” or “public” good. Some thoughts in terms of “public good” objectives might include:

¹ Walsh, S (2016) “Emerging Issues in Planning: Objections to Solar Photovoltaic Scheme of Scale in Ireland” Future Analytics Consulting, Dublin

- While action on climate has not been a long-standing policy objective and focus of the State, it is also a recent phenomenon on which scientific evidence has only recently been established. International and EU commitments¹ to prevent global warming from reaching temperatures above 1.5 degrees have been integrated in national policy and legislation including the DCENR Energy White Paper 2015 and the *Climate Action and Low Carbon Development Act, 2015*². Timely and cost-effective action on climate to avoid costly repercussions will also require community acceptance of a wide range of new measures and infrastructure to ensure fast-paced energy transition on a national scale. *Community ownership of and investment in RE projects will advance the climate objective of a “just transition” outlined in national, regional and international law and policy within the short-time frame required by urgent action on climate.*
- Natural resources (including wind, marine and solar energy) are vested in the State for the benefit of all of its citizens under the Constitution, and it may be appropriate for the State to allocate through the planning process a proportion of those resources on a fair and proportionate basis. One way to do this is potentially through taxation (rates, corporate tax etc.), another way is potentially through community ownership and investment.³
- Local communities are entitled to a fair share of the energy harnessed or generated in their local area. This might be facilitated through reduced energy charges on their electricity bills or potentially through direct revenue payments through ownership and investment in projects.
- It is in the interests of the State and all of its citizens that the State progresses towards a just transition to a climate resilient future as promoted in the former Department of Communications, Energy and Natural Resources (DCENR) White Paper on Energy, and in accordance with Ireland’s commitments to international and EU climate agreements, and community ownership and investment in RE is one means of accelerating that process.

1.3.2 Impetus for the Development of a CRE Sector in Ireland

According to the Fifth Assessment Report conducted by the Intergovernmental Panel on Climate Change, it is now undeniable that the warming of the planet is the result of human behaviour⁴. This is a result of the fact that our economies have been predominantly fuelled by carbon-intensive energy sources, meaning increased productivity has brought dangerously high levels of GHG concentration in the atmosphere. The same report outlined two troubling insights; firstly, climate change is already evident in all corners of the globe, which if unchecked threatens irreversible damage to the ecosystems of the planet and by continuation the integrity of the global economy. Secondly, the report notes that we are currently “ill-prepared for the consequences of a changing climate”⁵

The acceptance of the science associated with climate change and its causes as they are currently understood has given rise to a concentrated effort on the part of the international community to move away from carbon intensive sources of energy. Renewable energies create less GHG emissions than fossil fuels and as a result Ireland must ensure that by 2020 RE makes up 40% of the country’s electricity consumption, and 16% of final energy consumption⁶. Currently, RE constitutes 22.7%, and 8.6% respectively, meaning Ireland needs to approximately double its current capacity in less than three and a half years⁷. It also bears mentioning that final energy consumption is made up of energy consumed as electricity, transport and heating. Therefore, depending on the technological trajectory

⁴ Department of Communications, Energy and Natural Resources (2015) “Ireland’s Transition to a Low Carbon Energy Future 2015-2030” Government of Ireland

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

of clean energy, decarbonised electricity may be a crucial component in facilitating decarbonised transport and heating; both of which will require a carbon-free primary energy source.

RE is fundamental to the decarbonisation of Ireland's energy sources. CRE has the potential to garner support and investment for the deployment of RE infrastructure while also creating the conditions for the generation of economic growth in communities where such growth is needed to counteract the decline in traditional industries or processes. The necessary investment in Irish renewable energies would naturally create jobs, and potentially boost the economy, provided such a mechanism is employed in a manner which does not jeopardise the viability of investment in RE infrastructure.

There are fiscal risks associated with a legally binding EU Effort Sharing Decision on climate change covering the 2013-2020 period. Ireland is obliged to achieve a 20 per cent Greenhouse Gas emissions reduction (compared to 2005 levels) in certain sectors. Current EPA projections estimate that Ireland will not achieve this reduction and failure to comply may incur costs of hundreds of millions through the purchase of carbon credits until such time as the target is complied with. Similarly, further new costs may arise in the context of a new EU climate and energy framework for the period 2020-2030, which will set new emissions reduction targets.

The quote above has been extracted from the "Stability Programme Update" (2016, p28) published by the Department of Finance in early 2016. It asserts that there is a substantial fiscal risk posed to the National Exchequer due to the failure of the State to make sufficient progress on the reduction of GHG emissions, both through the retrofit of existing building stock to facilitate energy efficiency and the generation of RE. It is likely that the State will be obligated to acquire a significant amount of carbon credits in order to offset noncompliance with our emissions targets, as set out in 2009 Renewable Energy Directive 2009/28/EC.

Under the European Commission's "20-20-20" Strategy, Ireland is committed to a 20% reduction in Final Energy Consumption (FEC), as compared to average energy use in the period 2001-2005, a 20% reduction in Green-House Gas (GHG) emissions from 2005 levels in the Non-Emissions Traded Sector (Non-ETS), and an increase in the contribution of RE to FEC to 16% by 2020, with an increase in the overall share of energy from RE sources in transport to 10%. At present, Ireland is not on track to meet these targets, which presents an issue to policy and decision makers as failure to achieve these targets will result in fines and expenditure in the form of carbon credits. Creating a CRE sector would enable communities to respond to this pressing issue in a manner which ensures financial viability for those communities as they decarbonise.

At present, while opinion polls have consistently showed general public support for wind energy, Bertsch et al.⁸ (2016) shows that at local level support for renewable energy infrastructure declines for a variety of reasons, largely due to 'landscape modification'. While these insights are based on German case studies, work by Ellis and others confirm the applicability of the concept to the Irish context. In particular, there is a strong correlation between negative local responses to windfarms and a sense of imposition arising from a lack of any appreciable benefits accruing to the community. Community responses to the development of RE technology manifest in the form of objections lodged against RE infrastructure through the Irish planning system. Examining the means by which communities may actively participate in the energy transition as part owners of the infrastructure located in their environs may engender greater cooperation and enhance societal acceptance.

This research project was to a large extent driven by the findings of the public consultation processes behind the preparation of the Tipperary County Council Renewable Energy Strategy 2016. It was proposed by Tipperary County Council that further research is necessary in order to set out a meaningful solution to community engagement in RE development in Tipperary and nationally. It was

⁸ Bertsch, V, Hall, M, Weinhardt, C, Fichtner, W (2016) "Public Acceptance and Preferences Related to Renewable Energy and Grid Expansion Policy: Empirical insights for Germany"

proposed that communities would benefit from an opportunity to actively invest in RE development locally and it was proposed that this opportunity to give return to communities would also proactively assist in the achievement of RE targets.

1.4 Energy Policy Context

The purpose of the section is to outline the energy policy context in which this research is situated.

1.4.1 European Policy

European policy has a high level influence on Irish energy policy and as such, exploring the most pertinent components of the Union's energy policies situates the proposals advanced in this research in their appropriate policy context.

Directive 2009/28/EC of the European Parliament

Directive 2009/28/EC on the promotion of the use of energy from renewable sources establishes the basis for the achievement of the EU's 20% RE target by 2020. Under the terms of the Directive, each Member State is set an individually binding RE target, which will contribute to the achievement of the overall EU goal. Under the EU's "20-20-20" Effort Sharing Decision, Ireland is required to meet the following targets by 2020;

- A 20% reduction in Final Energy Consumption (FEC), as compared to average energy use in the period 2001-2005;
- A 20% reduction in GHG emissions from 2005 levels in the Non-ETS sector; and
- An increase in the contribution of RE to FEC to 16% by 2020 and an increase in the overall share of energy from renewable sources in transport to 10%.

The State is expected to miss the 2020 targets allotted to it which has the potential to cost the State a significant amount in fines and carbon credits.

1.4.2 National RE Policies

The purpose of this section is to highlight the relevant energy policies with which this research intersects. In addition, this section provides a high level overview of energy policy which has shaped Ireland's approach to the energy transition to date.

Energy White Paper Ireland's Transition to a Low Carbon Energy Future 2015-2030

"Community-level energy efficiency and RE projects, using a range of technologies, will play an important role in the energy transition."

Department of Communications, Energy and Natural Resources 2015

The White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015-2030' is a complete energy policy update which implicitly establishes a role for the CRE sector in an Irish context. It sets out a framework to guide policy and the actions that Government intends to take in the energy sector from now up to 2030. The paper takes into account European and International climate change objectives and agreements, as well as Irish social, economic and employment priorities. In relation to CRE, the White Paper outlines the following policy initiatives which will be explored by a number of stakeholders in order to "widen the opportunity for participation by [communities]";

- supporting community participation in RE and energy efficiency projects, via the SEAI, to share best practice, provide information and ensure that local strategies align with broader Government policy;
- facilitating access to the national grid for designated renewable electricity projects, and developing mechanisms to allow communities to avail of payment for electricity, such as the ability to participate in power purchase agreements;
- providing funding and supports for community-led projects in the initial stages of development, planning and construction. These will be defined using criteria such as scheme size and degree of community ownership;
- providing a new support scheme for renewable electricity which will be available from 2016
- developing a framework for how communities can share in the benefits of substantial new energy infrastructure which is located in their area;
- establishing a register of community benefit payments;
- examining shared-ownership opportunities for RE projects in local communities;
- supporting, in particular, the emerging energy co-operative movement as one means of facilitating community participation;
- exploring the scope to provide market support for micro generation. This will be informed by an SEAI analysis of the potential of technologies in the field of small-scale wind, solar, micro-CHP and small-scale hydro; and
- engage with local government on advising consumers on energy efficiency initiatives and clean energy options, integrating energy options, scoping the opportunities for demand and supply related local energy action through integrating energy issues into local area planning, and bringing stakeholders together to find locally appropriate solutions that bridge the gap between demand and supply (E.g. biomass fuel, district heating solutions).

The White Paper also explores the concept of the “energy citizen” in detail. A key prerequisite in the creation of this model of engaged citizenry centres on devising mechanisms of meaningful engagement, which enable people to invest and own a share in RE schemes deployed in proximity to them.

If Ireland is to succeed in its ambition to become a viable low carbon society, then active public participation will be crucial. Examples of this approach are considered in case studies contained in Section 3.0 of this report. Economic incentives for citizens and developers are set out, thereby creating the conditions to provide communities with tangible benefits arising from the deployment of RE infrastructure in their environs.

Shared ownership, has been outlined as having a number of key advantages; it can increase social cohesion, boost citizen mobilisation, ensure positive behavioural change, and offer local communities the option to participate in projects which otherwise would be far out of reach. Both the Danish case study, and a study conducted in the UK illustrate that it can also serve to boost acceptance, offer developers local knowledge, and often, by virtue of the equity process, go a long way towards procedural and distributive justice (as described below) while creating the possibility for local investment and returns to benefit rural development.

- Procedural justice –is concerned with the fairness of the decision making process, and includes the level and tone of public discourse, how much the local community was consulted, and how genuinely this consultation was perceived to be.
- Distributive justice –pertains to the way in which costs and benefits are distributed among stakeholders. The local community experiences the presence of new energy infrastructure most intensely, whilst the majority of direct benefits are accrued by individuals residing outside of the community; a situation which is viewed as unjust in a distributive sense. This is

predominately concerned with a lack of investment opportunities for local community members.

This research therefore aligns with the impetus behind the development CRE in energy policy terms.

2.2.2 National RE Action Plan (NREAP)

The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive 2009/29/EC.

As can be seen from the list of RE policies, initiatives and legislation outlined in Appendix Five, there is a lack of effective mobilisation of communities as proactive partners in Ireland's energy transition and the decarbonisation of Ireland's energy sources. As can be seen below, policy has been primarily focused on various sectors associated with energy. Where community level initiatives or schemes available to the general public are outlined, they are predominantly soft in nature and relatively confined in scope.

As can be seen from Appendix Five, the policies and initiatives pursued to date in an Irish context have not directly engaged with the concept of community ownership. This research moves toward addressing this policy gap by devising a proposal which may serve to advance and implement the concept in an Irish context.

1.5 Literature Review on CRE in an Irish Context

Previous research into the application of CRE in an Irish context has uncovered a number of challenges and obstacles to the creation of a vibrant and diverse research environment for CRE. A summary of this research is outlined below in order to inform the key issues facing the sector, with a view to establishing a list of research questions which will be addressed through the interrogation of practice in the four case study jurisdictions outlined in section 1.1 above.

Western Development Commission "Communities and Renewable Energy: A Guide" (2007)

The Western Development Commissioned this guide on foot of its interactions with a community in rural Mayo, elements of which sought to construct a community owned windfarm in Killala, Co. Mayo. The financing of the project was facilitated through a partnership between a private development company and direct community investment. The guide contains a number of "lessons learned", which are summarised below;

- a professional to act as project facilitator and coordinator in providing project management expertise and knowledge of the RE sector;
- a professional financial advisor to guide the community group through the project process and to negotiate with the lead developer, and also to advise on the most appropriate investment option;
- time allocation from key personnel within the organisations involved;
- an awareness of risk factors on the part of the project partners; and
- a realisation that such projects are long term and that benefits will take time to come to fruition; thus it is important to maintain the interest of the community via frequent written communications and meetings.

Western Development Commission, 2007

Comhar Sustainable Development Council & Trinity College Dublin "Community Renewable Energy in Ireland: Status, barriers and potential options" (2011)

The aim of this research was to examine the status of CRE in an Irish context in order to scope out the possible obstacles and challenges facing the development of a vibrant and viable CRE sector in an Irish context. This research was derived through desktop research and stakeholder consultation. Table 2 below summaries the obstacles and potential solutions determined by this study of the CRE sector outlined below.

Table 2 Barriers and Opportunities for CRE in Ireland

Issue	Barrier	Potential Options to Address Barriers
Policy Framework	There is no explicit policy supports to actively encourage CRE.	<ul style="list-style-type: none"> Set targets for CRE and publish measures to achieve these.
	Procedures and time frames are not aligned and developers have to report to a number of different bodies and departments at different stages.	<ul style="list-style-type: none"> Introduce a simplified process which aligns different stages and ensures co-ordination between the various departments and organisations involved. Streamline administrative procedures. Support initiatives that link stakeholders at different stages of the bioenergy supply chain. Introduce mechanisms that engage community actors and prevent reliance on the drive of a single individual.
Support Structures	Many communities do not have the capacity, skills and expertise to allow them to develop a RE project.	<ul style="list-style-type: none"> Establish a support structure for communities wishing to invest in RE. The support structure should address market challenges, ensure long-term support and assist disadvantaged communities. Provide information on natural resources.
Access to Finance	Securing equity finance can be very difficult and community groups are perceived as inherently high risk.	<ul style="list-style-type: none"> Financing options include investment subsidies, low interest loans, loans from green banks or funds and tax instruments, such as investment tax credits, tax exemptions, carbon taxes and accelerated depreciation.
	The role of local and community projects are not formally recognised in REFIT.	<ul style="list-style-type: none"> Consider a system of tariffs to incentivise small scale and community low carbon electricity generation.
Grid Connection and Planning Permission	The grid is a key reason for delays in projects.	<ul style="list-style-type: none"> Allow community projects to connect to the grid more easily. Consider connection to the national grid for communities at no cost to the project.
	Planning is another major reason for delay. There must be consistency and objectivity with regards to planning decisions.	<ul style="list-style-type: none"> Introduce planning rules specifically tailored for small scale projects that aim to speed up and lower the cost of obtaining planning approval. Maintain clarity for CRE in the planning process.

The findings of the report outlined above are framed largely from the perspective of community developers seeking development consent for RE infrastructure. A synthesis approach of soft policy supports and legislative amendments, in relation to planning in particular appear to indicate the direction in which this report believes that actions should be taken toward the creation of optimum conditions for CRE in an Irish context.

Queens University Belfast “A review of the context for enhancing community acceptance of wind energy in Ireland” (2012)

This report was commissioned by the Sustainable Energy Authority of Ireland (SEAI) and is commonly cited in works relating to the study of community acceptance and wind energy deployment. It explores the issue of community acceptance, citing Wustenhagen et al (2007) who broke the concept into three components;

- *Socio-Political acceptance*; Broadly defined as the degree of public support for RE, as indicated by the “tone of debate in the media and politics about the value and viability of wind as an energy source”
- *Market Acceptance*; The degree to which financial institutions and investors view wind as commercially viable. This also includes consumers’ willingness to accept wind energy as part of their consumption bundle.
- *Community acceptance*; this reflects the willingness of those living in the local vicinity of a potential wind project to accept the construction of a wind farm, and accompanying infrastructure. This has been misunderstood as a synonym for societal acceptance, hence explaining initial complacency on behalf of Irish developers regarding engagement with local communities.

The report also explores the concept of “distributive justice”, which pertains to the way in which costs and benefits are distributed among stakeholders. The local community experiences the presence of new energy infrastructure most intensely, whilst the majority of direct benefits are accrued by individuals residing outside of the community; a situation which is viewed as unjust in a distributive sense. This is predominately concerned with a lack of investment opportunities for local community members.

National Economic & Social Council (NESC) “Wind Energy in Ireland: Building Community Engagement and Social Support” (2014)

This report was commissioned in order to explore models and practices from two case study jurisdictions which could be used to build community engagement and social support for the development of, in the case of this report, wind energy development. While the remit of the report is not directly tied to the development of CRE per se, it posits a number of key principles arising from its study of practices from other jurisdictions which will be required in order to build support and engagement for the deployment of RE infrastructure (i.e. wind) regardless of development as it is likely that the development of community owned wind will encounter some opposition within communities. The three elements of “success and failure” as per the NESC report are outlined below;

1. An overarching energy-transition process that facilitates and guides society-wide efforts to transform energy systems: An dedicated participatory and problem-solving process which secures the involvement of citizens underpins German and Danish experience of the energy transition to date. An integral component of the process is a national discussion, informed by international best practice, about how to design an energy strategy in line with society’s goals.
2. An effective and inclusive process of public participation that helps to shape and share local value: A genuine and open participatory process for wind energy that brings expertise together, facilitates exploration and executes possibilities is critical. Communities that contribute to and shape the local value of energy are more likely to be supportive of future developments.
3. **Enabling organisations, and, in particular, intermediary actors, which support the kind of problem-solving and entrepreneurialism necessary to initiate renewable-energy**

developments: Intermediary actors have contributed to the successful development of wind-energy projects in other countries and in Ireland.

NESC, 2014

1.6 Community RE in Ireland- Strengths, Opportunities, Weaknesses, Threats Analysis

The definition of what constitutes “Community RE” in an Irish context, as in international comparators is fluid. Comhar advanced the definitions outlined below (2011, p1);

“Community RE can be defined firstly by who develops a project and the level of engagement with the wider community and secondly by how the benefits of a project are spatially and socially distributed. Community projects are those in which these dimensions are to some degree local, collective and participatory.”

The table below contains the outputs of a SWOT analysis undertaken by way of baseline analysis of the CRE as a concept and practice in an Irish context.

Table 3 CRE SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Enterprise focused stakeholder operating in rural environments. • Well defined sense of community in rural areas. • Existing CRE project in an Irish context to serve as example of CRE in action. • Local authority network to serve as enablers and facilitators of CRE. 	<ul style="list-style-type: none"> • Historical focus on large scale energy generators as primary pillar of Irish energy market. • Energy policy to date has not created meaningful community engagement. • Rural depopulation • Rural deprivation potentially impeding the uptake of a CRE system predicated on the acquisition of shares.
Opportunities	Threats
<ul style="list-style-type: none"> • Late Adopter, can harness the insights of forerunner jurisdictions who’ve gone before. • Ability to deploy RE faster in advance of “2020” deadlines. • Capitalise on existing administrative and regulatory structures to implement CRE (i.e. the Irish planning system). 	<ul style="list-style-type: none"> • Societal skepticism/resistance toward the deployment. • Unresponsive developer sector • Financial implications of CRE “obligations” if overly onerous. • Integrity of private property rights.

1.7 Summary

This section has established the objectives and rationale for this research. In addition, it has outlined a number of sources which have examined various aspects of CRE in an Irish context. The manner in which the research in this report has been framed varies from a high level. Historically in Ireland, energy policy has been focused predominately on large operators in the drive to decarbonise Ireland’s energy systems. The publication of the Energy White Paper in 2016 marked a shift in focus toward considerations around what constitutes an “energy citizen”, and has begun the journey toward realising the potential economic and climatic benefit associated with the mobilisation of communities as active agents in the decarbonisation of Ireland’s energy resources.

While national energy policy has recognised the role which communities can play, there are significant challenges facing the deployment of RE technologies in an Irish context. The academic works cited in the section above go some way toward the quantification of this complex area. Social acceptance is a broad and complex topic, however, the most commonly cited understanding was put forward by Wustenhagen et al (2007) as cited in Ellis (2012) and can be broken into three categories;

- *Socio-Political acceptance*; broadly defined as the degree of public support for RE, as indicated by the “tone of debate in the media and politics about the value and viability of wind as an energy source”⁹.
- *Market Acceptance*; the degree to which financial institutions and investors view wind as commercially viable. This also includes consumers’ willingness to accept wind energy as part of their consumption bundle¹⁰.
- *Community acceptance*; this reflects the willingness of those living in the local vicinity of a potential wind project to accept the construction of a wind farm, and accompanying infrastructure. This has been misunderstood as a synonym for societal acceptance, hence explaining initial complacency on behalf of Irish developers regarding engagement with local communities¹¹

Despite high levels of public support for renewable energy and clear commercial opportunities, renewable projects have often failed to secure local support, indicating that community acceptance is the final hurdle for the Irish RE sector. Beyond the obvious concerns regarding the physical presence of these developments, a lack of community acceptance has coincided with a lack of citizen involvement, both in terms of the process of deployment, and the possibilities for local investment and return. It is the latter which is of interest to this report, i.e. how we can enhance local financial involvement in RE infrastructure, offering local community members a strong economic incentive to participate in Ireland’s energy transition. This is an unprecedented opportunity to encourage the decarbonisation of our atmosphere, whilst simultaneously ensuring the sustained economic vibrancy of our communities. The subsequent sections of this report will consider how matters relating to the above have been engaged with in order jurisdictions, in terms of how these jurisdictions have built the capacity to harness the investment and community engagement elements

⁹ Consulting, S.L.R., G. Ellis, and P. Devine-Wright, Wind Energy: “*The Challenge of Community Engagement and Social Acceptance in Ireland*”. 2014: National Economic and Social Council, Ireland.

¹⁰ National, E., et al., “*Wind Energy: International Practices to Support Community Engagement and Acceptance*”. Vol. 139. 2014: National Economic and Social Council, Ireland.

¹¹ Wüstenhagen, R., M. Wolsink, and M.J. Bürer, “*Social acceptance of RE innovation: An introduction to the concept*.” Energy policy, 2007. 35(5): p. 2683-2691.

2.0 Community RE Case Study Jurisdictions

This section reviews best practice models for community ownership/investment in RE infrastructure as applied in other jurisdictions and considers and explores the implications of;

- different financing and ownership models;
- role of planning and development system;
- scale of projects;
- implications arising from different RE technologies; and
- Investment levels and the role of external backers/funders;

For the purpose of our analysis we have decided to focus on the RE frameworks in Germany, Denmark and the UK. As two early adapters of renewable energies, and countries which have to date been highly successful in their energy transition, the policy frameworks in Denmark and Germany offer a depth of experience which can serve to inform Irish RE legislation. This is especially true when we consider the fact that the enormous growth in renewable energies in these two countries has been largely attributable to citizen involvement, which has been facilitated by strong economic incentives; thus their policy frameworks may greatly contribute to Irish policy, especially concerning the enhancement of community investment opportunities. Germany has not mandated a co-ownership framework; however, due to the broad availability of their Feed-In Tariff scheme, community ownership has largely been devoid of developer involvement.

In 2008, following a slump in renewable deployment, Denmark mandated a co-ownership mechanism for the enhancement of local ownership and participation in the country's energy transition; albeit this was only applicable to wind energy infrastructure. These policies were implemented in circumstances very similar to the current state of affairs in Ireland; increased local resistance, resulting in falling renewable deployment, at a time of a growing need for renewable deployment. It was identified that the lack of local investment opportunities had a significant role to play in the stagnation, and a number of measures were introduced; outlined below.

Despite using different legislative mechanisms, both of these countries provide a clear example of how an economic incentive can encourage citizen participation, simultaneously enhancing local investment opportunities, whilst achieving greater RE deployment; and therefore provide interesting case studies which can inform our analysis.

The UK offers a fitting point of comparison, due its cultural, social and political parallels with Ireland. In each case study we will look at the planning and regulatory frameworks, the community investment frameworks, the roles of government (local and national), the role of planning processes, and the countries financial and investment models, before concluding with some analysis of what may be appropriate for transposition into Irish legislation.

2.1 Denmark

Denmark is an early adopter of wind energy arising from that country's reaction to the implications and consequences of the Oil Crisis¹². A comprehensive list of Denmark's RE policies is provided in Appendix A.1 of this report.

The Danish model of community participation in RE arose from growing discontent with the role of the community in relation to the deployment of RE infrastructure, particularly wind energy. Correspondingly, the predominant focus of community engagement processes and mechanisms in the

¹² Government of Denmark (2015) "A World Leader in Wind Energy". Available from: <http://denmark.dk/en/green-living/wind-energy/>

area of CRE focus on wind energy specifically. Notwithstanding the high standing of the CRE advanced in this jurisdiction, objections are prevalent.

2.1.1 Different Financing and Ownership Models

Wind

Since the 1970's wind power has received considerable financial support, due to an inability to compete with conventional energies since the early 1990's support has taken the form of a feed in tariff; although removed in 2000, it was reinstated in 2009. Currently, Energinet.dk pays a supplement the market price by recouping it from electricity consumers as a PSO; which tends to average at about €0.01 per kW. The supplement to the market price for wind generated energy is €0.25 per kWh, and applies for the first 22,000 hours. An additional €0.03 per kWh is paid to cover costs over the turbines lifetime. The financial mechanism concerning community investment in wind is outlined below.

Solar

Solar energy in Denmark is sponsored by purchasing power agreement. There are no legislative mechanisms in place in Denmark which mandate developers to offer a share of the equity in solar developments to the local community.

Biomass

Biomass is subsidised by a feed-in tariff when used by electricity generation, and only indirect supports such as tax exemptions for heat production. There are no legislative mechanisms in place in Denmark which mandate developers to offer a share of the equity in biomass developments to the local community¹³.

The only regulatory policy mechanisms which were specifically implemented to enhance the ownership opportunities for local communities, was enacted in 2009. This policy only incorporated wind energy developments¹⁴. These policies were put in place following a slump in wind deployment, which was due to laws implemented in the early 2000s; these laws relaxed ownership creation and reduced local ownership.

"The Green" Scheme

This is a fund which is dedicated to financing projects which will improve the local landscape or provides recreational activities to the municipalities. Energinet.dk is the administrative body for the scheme and contributes €0.01 cents per kWh for the initially 22,000 full load hours, which is funded by a PSO contribution. The fund contributions depend on the size and number of turbines associated with the project. e.g. a 2MW turbine generates a total of €23,587. Applications to draw on the fund can be made in the development stages, but the can only be offered once grid connection is secured¹⁵.

"The Guarantee" Scheme

Energinet.dk has a fund of €1,340,210 available to help local initiatives. Factors are said to have been very influential in encouraging local support, however, community acceptance remains the greatest barrier to wind energy. This has a number of explanations, relaxed ownership criteria, which has reduced the number of coops, negative media coverage of some large scale projects, and the level of windfarm installation which has taken place in Denmark over the last number of decades has resulted in a cumulative effect. However, one key finding from the Danish energy transition is that high public

¹³ John Fitzgerald, A.O.M., Eleanor Denny, (2013) "An enterprising wind: an economic analysis of the job creation potential of the wind sector in Ireland"

¹⁴ Sperling, K., F. Hvelplund, and B.V. Mathiesen, "Evaluation of wind power planning in Denmark – Towards an integrated perspective". Energy, 2010, 35(12): p. 5443-5454.

¹⁵ National, E., et al., "Wind Energy: International Practices to Support Community Engagement and Acceptance". Vol. 139. 2014: National Economic and Social Council, Ireland.

involvement and co-ownership has a positive effect on community acceptance¹⁶. The Danish transition was initially characterised as largely a bottom-up approach, however, the country's extraordinarily ambitious targets, the use of larger turbines, and relaxed ownership regulations has reduced local ownership, and increased local opposition; this has resulted in a call for increased local ownership¹⁷

3.1.2 Role of Planning and Development System

The central government is responsible for setting long term national RE targets and developing planning guidelines under two bodies. The Department of Climate Change and Energy, which deals with the financial incentives, and all economic aspects, and the Ministry for the Environment, which acts as the planning regulator and the setting up of an overall planning arrangements.

The majority of Danish municipalities have voluntarily taken part in "strategic planning", and "energy planning" at the local level, incorporating national level plans on micro level, in an attempt to synthesise top down and bottom up approaches. Municipalities have sole planning control over wind energy, and "district heating is usually managed by municipal utility companies"¹⁸. The Danish Task Force advises municipalities on their RE plans, and is specifically important regarding wind energy deployment.

Wind

Denmark's wind farm planning procedure is characterised by strong citizen involvement. In 1994 Denmark adapted a policy which obliged municipalities to have full control planning procedures under Danish legislation and have the right to "establish" utility companies to produce wind energy; receiving preferential financing from their own financial institution – KommuneKredit¹⁹. This represents an opportunity to install local value through regionally owned, regionally financed wind turbine projects.

The Danish Wind Task Force

Intermediaries have been shown to be central players in the interaction between developers and local communities. As communication gateways between the two groups, bodies like the Danish Wind Task Force (DWTF) provide a trusted channel of interaction, offering unbiased impartial advice and meditating the interaction between the communities and the. The DWTF performs a number of key roles with regard to wind energy, helping to identify potential sites, informing public meetings about noise and other impacts and provides information on how best to engage with citizens. This body serves as a trusted agency which is seen to provide impartial expert advice, having no vested interest in any particular wind development.

3.1.3 Scale of Projects

"Adjacent Residences" Scheme

When constructing wind turbines of 25 metres or more, those behind the project are required to pay a fee to the residences adjacent to the windfarm / Turbine. See below for further details.

"Option to Purchase" Scheme

Under this scheme, the construction of wind turbines of 25 metres or higher, at least 20% of the equity must be offered to any permanent resident above the age of 18 living within 4.5 km of the project site. See below for further details.

¹⁶ Ibid.

¹⁷ Hvelplund, F., B. Möller, and K. Sperling, *Local ownership, smart energy systems and better wind power economy*. Energy Strategy Reviews, 2013. 1(3): p. 164-170.

¹⁸ Sperling, K., F. Hvelplund, and B.V. Mathiesen, "Centralisation and decentralisation in strategic municipal energy planning in Denmark". Energy Policy, 2011. 39(3): p. 1338-1351.

¹⁹ Sperling, K., F. Hvelplund, and B.V. Mathiesen, "Evaluation of wind power planning in Denmark – Towards an integrated perspective". Energy, 2010. 35(12): p. 5443-5454.

3.1.4 Implications Arising from Different RE Technologies

Wind is the predominant technology to which CRE obligations are applied. There is no legislative mechanism which mandates co-ownership for solar or biomass projects.

3.1.5 Investment Levels and the Role of External Backers/Funders

“Adjacent Residences” Scheme

Prior to construction, developers must invite neighbours within a radius of six times the height of the turbines to a public meeting where they will be provided with information about the intended project²⁰. Energinet.dk, an independent state body, oversees the details, ensuring that the developers provide adequate information and notice. Any household that believes their property should be considered for a payment must apply within four weeks, and anyone outside the radius outlined above, must pay an application fee of €536, which can be reimbursed if the application is successful. The developer could also voluntarily compensate the applicant. However, should they decide not to, and the application is upheld, then they must pay the costs of evaluation plus the loss in value. In the case of an unsuccessful application the fee is kept and any additional property appraisal costs are born by Energinet.dk, which ultimately fall to the consumer through a PSO contribution²¹. It has been argued that this mechanism raises local suspicion²².

“Option to Purchase” Scheme

For the construction of wind turbines of 25 metres or higher, at least 20% of the equity must be offered to any permanent resident above the age of 18 living within 4.5 km of the project site. This equity is sold at cost price, and should the equity not be sold within the 4.5km radius, it is expanded to anyone residing within the municipality. There have been calls to increase the equity share on offer, some even recommending a majority stake (60%) so as to engender a feeling of local control²³.

To inform decision making, developers must also provide a detailed overview of the project’s financial information, including the company’s “articles of association”, a thorough construction and operation budget which must include the financing of the project, the liability per share, and the share price²⁴. A review of this mechanism conducted by the Danish Energy Agency which looked at 15 developments between 2009 and 2011 outlined a number of key insights.

- The total number of buyers was 335, with an average of 22 per project and a range of between 5 and 60 participants.
- The total value of the shares purchased was €36,289,986, with an average buy in of €108,029
- 68% of offered shares were purchased, eight with 100% buy-in, and only 3 projects sold between 1-2%
- The report noted a general demand for an expansion of the scheme.
- Those in the industry outlined a discomfort with putting publishing commercially sensitive information

“The Green Scheme”

²⁰ National, E., et al., *Wind Energy: International Practices to Support Community Engagement and Acceptance*. Vol. 139. 2014: National Economic and Social Council, Ireland.

²¹ *ibid*

²² *ibid*

²³ Hvelplund, F., B. Möller, and K. Sperling, “Local ownership, smart energy systems and better wind power economy”. *Energy Strategy Reviews*, 2013. 1(3): p. 164-170.

²⁴ National, E., et al., “*Wind Energy: International Practices to Support Community Engagement and Acceptance*”. Vol. 139. 2014: National Economic and Social Council, Ireland.

This is a fund which is dedicated to financing projects which will improve the local landscape or provides recreational activities to the municipalities. Energinet.dk is the administrative body for the scheme and contributes €0.01 cents per kWh for the initially 22,000 full load hours, which is funded by a PSO contribution. The fund contributions depend on the size and number of turbines associated with the project. e.g. a 2MW turbine generates a total of €23,587. Applications to draw on the fund can be made in the development stages, but they can only be offered once grid connection is secured²⁵.

2.2 Germany

Germany's CRE market is predicated on an institutional framework which strives to balance corporate social responsibility with energy efficiency. This contextualises the operation of a viable and vibrant CRE sector in that jurisdiction.

The RE Act (2000) is widely recognised as Germany's most influential renewable policy reform; it has paved the way for the decentralisation of Germany energy, which characterises the "Energiewende", and has ensured a thriving RE sector. This act mandated that smaller producers were prioritised over large corporations, and renewable energies were subsidised so as to ensure competitiveness with conventional fuels; this has resulted in renewable energies becoming extremely attractive to investors seeking to avoid market risk. The feed-in tariffs served to give German citizens the option to become "prosumers", or "simultaneously producers and consumers", something which was "particularly supportive of civic participation" and acceptance of wind energy^{26 27 28}.

2.2.1 Different Financing and Ownership Models

"Bürgerenergie"

In a German context, Leuphana University²⁹ utilises a number of different criteria to assess RE projects as "Bürgerenergie", which translates as citizen energy.

The criteria used are set out below

- **Actors:** Private persons and/ or small agricultural businesses (along with other legal entities) invest individually or together into RES installations;
- **Form of participation:** actors invest equity in the project so have voting rights and rights of control; - Participation quota: Citizens hold at least 50% of voting rights; and
- **Regionality:** Investing company members come from or live in one region, although that region can cross administrative boundaries.

"Co-operative/Local Ownership"

RE cooperatives are extremely prevalent in Germany, constituting 21% of the 34GW of "installed capacity under citizen ownership" by 2016³⁰. In 2013, €1.2 billion euros was invested in the renewable sector by approximately 130,000 individual citizens³¹. In 2012, the total installation of RE in Germany was 53GW, of which 51% was owned by citizens or farmers³². In northern Germany locally initiated wind farms are the norm, for example, in northern Frisia 90% of wind projects are locally owned. Local

²⁵ Ibid.

²⁶ The German Feed-in Tariff. Futurepolicy.org.

²⁷ Morris, C. and M. Pehnt, (2012) "Energy Transition: The German Energiewende". Heinrich Böll Stiftung.

²⁸ Hall, S., T.J. Foxon, and R. Bolton, "Financing the civic energy sector: How financial institutions affect ownership models in Germany and the United Kingdom." Energy Research & Social Science, 2016. 12: p. 5-15.

²⁹ IEA-RETD (2016), "Cost and financing aspects of community RE projects. Volume II: German Case Study". Ricardo Energy & Environment and Ecologic Institute, IEA-RETD Operating Agent, IEA Implementing Agreement for RE Technology Deployment (IEA-RETD), Utrecht

³⁰ Ibid

³¹ Morris, C. and M. Pehnt, "Energy Transition: The German Energiewende". Heinrich Böll Stiftung, 2012.

³² Hall, S., T.J. Foxon, and R. Bolton, "Financing the civic energy sector: How financial institutions affect ownership models in Germany and the United Kingdom". Energy Research & Social Science, 2016. 12: p. 5-15.

ownership is said to increase local identification “with their community energy policy”, thereby increasing involvement and acceptance. The community business tax also means 70% of the tax revenue is kept locally, and thus provides an incentive for local municipalities to work with developers³³. As of the end of 2014, there were 973 registered energy cooperatives in Germany³⁴.

“Closed End Partnerships”

This type of ownership model is used for larger RE developments.

“Combined Cooperative and Closed-End Fund”

This model is a synthesis of the co-operative and closed end approach. The manner in which this combination takes place is outlined in section 3.2.5 below.

“Civil Law Partnership”

This form of ownership structure is employed in the case of smaller RE projects. It can consist of as little as two citizens.

“Feed in Tariff (FIT)”

Feed-in Tariffs (FIT) have been “designed to encourage new scales and ownership models of RE by bringing renewable electricity generation into the communities around the country... to promote social innovation by increasing public engagement and behavioural change”³⁵.

Evidence from both the German and Danish case study would suggest one key insight, citizen involvement and acceptance of windfarms is highly correlated with some form of ownership, or payoff. In Germany, just 6.5% of renewable capacity is owned by the largest four utility companies and 51% by citizen schemes³⁶. The large scale of citizen investment in wind and solar has been partly facilitated by the availability of low interest loans from state owned banks, such as KfW.

Whilst it is important to remain conscious of the fact that Germany has an entirely different sociological profile to Ireland, the FIT scheme, and the principles on which it was founded, have potential to greatly inform our analysis. Germany’s FIT scheme has been attributed to an enormous increase in renewable deployment. However, due to the nature of our analysis, it is the foundational reasoning behind the FIT scheme, an initiative which actively supports citizen mobilisation, which is of particular interest. German policy makers have offered each individual citizen the opportunity to personally benefit from the countries energy transition, and this has been a key factor contributing to the increase in renewable capacity³⁷ ³⁸. The FIT scheme, well established grid access, and the availability of low interest loans from KfW, a state owned bank allows for citizen investment in RE devoid from developer involvement. Solar PV, wind energy and biomass are all supported by a feed-in tariff in Germany. There exists no legislative mechanism mandating developers to offer equity to the local community for any RE development.

2.2.2 Role of Planning and Development System

The German building code was revised in 1996 so that turbine construction would be permitted in the countryside. Turbines were from then on to be listed as “privileged projects”, and local authorities were required by law to identify “preferential areas” for wind projects. In a more general sense, the

³³ Ibid

³⁴ Haggett, C., Aitken, M., Rudolph, D., van Veelen, B., Hammeijer, J. and Markantoni, M. “*Supporting Community Investment in Commercial RE Schemes: Final Report.*” ClimateXChange. December 2014

³⁵ Zoellner, J., P. Schweizer-Ries, and C. Wemheuer, “*Public acceptance of renewable energies: Results from case studies in Germany.*” Energy policy, 2008. 36(11): p. 4136-4141.

³⁶ Nolden, C., “*Governing community energy—Feed-in tariffs and the development of community wind energy schemes in the United Kingdom and Germany.*” Energy Policy, 2013. 63: p. 543-552.

³⁷ Ibid

³⁸ National, E., et al., Wind Energy: International Practices to Support Community Engagement and Acceptance. Vol. 139. 2014: National Economic and Social Council, Ireland.

German planning system is viewed as transparent and efficient. The legislation governing the planning of wind turbines is “clearly defined”, which allows for judgments to be reached in a time efficient manner³⁹. The approach taken is characterised as a happy synthesis of bottom up and top down approaches. Regional bodies designate areas of suitability for wind development, a process which varies among Germany's 16 federal states⁴⁰. On a local level, local authorities designate “building zones”, for the construction of turbines which have to be adjusted in accordance with the regional plan; essentially this means that the local authorities have control over the specific designations of wind turbines. The Federal Regional Planning Act and Building Code provide the framework for regional and local authorities⁴¹.

There is no planning legislation for the purpose of implementing a co-ownership regime under Germany federal legislation for any RE technology.

On a national level there are two main governing institutions with responsibilities relating to RE technologies. There are a number of other state ministries which have influence in the development of renewable energies, however the following the most prominent.

- *The Federal Ministry of Economics and Technology* This ministry is responsible for ensuring a constant “reliable energy supply”, promoting energy efficiency, grid expansion and access. In essence it serves to oversee the electricity market in its entirety.
- *The Federal Ministry for Environment and Nuclear Safety*; This body is tasked with environmental protection, the promotion of renewable energies, and ensuring the safe production of Nuclear energy.

In terms of the interactions between central bodies and local authorities, the nature of Germany's political system, as a federal state, makes governance of the “energiewende” slightly complex. Germany consists of sixteen states, which have a great deal of autonomy concerning RE. This autonomy can often complicate federal plans, for example, Bayern, a state in northern Germany has recently expressed an interest in becoming more self-sufficient in terms of renewable capacity, whilst areas in the south, such as Brandenburg have wish to increase their supply to service the energy needs of the industrial south; if both were to be realised, then the country would have an issue of oversupply

2.2.3 Scale of Projects

There is no legal require for co-ownership in Germany, therefore there is no scale at which community investment/co-ownership is included or excluded. The financial implications of projects of scale are outlined in section 3.2.5 below.

2.2.4 Implications Arising from Different RE Technologies

There is no legal require for co-ownership in Germany, therefore there is no differentiation between the applicability of co-ownership in relation to specific RE technologies. The ownership and financial models outlined in this section are applicable to any RE technology.

2.2.5 Investment Levels and the Role of External Backers/Funders

“Co-Operatives”

Under the co-operative system, a citizen acquires shares to become a member. The funds generated are used to fund RES projects or to acquire shares of a larger shared ownership RE development. The

³⁹ Ibid

⁴⁰ Strom-Report. “Wind Power Factsheet Germany 2015; Recent Data and Facts about Wind Power in Germany. 2015”; Available from: <http://strom-report.de/renewable-energy/>.

⁴¹ Bruns, E. and D. Ohlhorst, “Wind Power Generation in Germany.” The Journal of Transdisciplinary Environmental Studies, 2011. 10(1).

number and costs of shares are individually determined by the co-operative dependant on the project size and the required financial equity. The average financial equity varies. The average financial contribution to energy cooperatives which are members in the German cooperative association Deutscher Genossenschafts- und Raiffeisenverband (DGRV), is €3,298 per member in 2014 and around €5,500 according to a survey of Leuphana University⁴². The share of equity used in finance is 54% on average, with the remainder being debt financed. However, the debt: equity ratios vary quite markedly; with for example 23% of cooperatives are 100% equity financed. Nearly two thirds of debt capital is sourced from cooperative banks⁴³.

“Closed End Partnerships”

This type of ownership model is used for larger RE developments. A number of investors may become involved in this type of ownership vehicle. Due to the relatively large investment volumes, closed-end funds are the most common legal business model for citizen participation in wind farms in Germany⁴⁴.

“Combined Cooperative and Closed-End Fund”

Co-operatives may collaborate with Closed End funds in three ways according to Degenhart and Holstenkamp. These are outlined below;

- The cooperative purchases shares as an investor. In this model the cooperative is only involved as capital source, management is carried out by the general partner (GmbH);
- The cooperative purchases shares of the management. This enables the cooperative to participate in management; and
- The cooperative buys out the management of a GmbH & Co. KG, therefore, becoming fully responsible for management. This legal structure might be useful in cases where cooperatives decide to purchase shares in existing projects or completely take over an existing project. It might also be a solution for two cooperatives that decide to create a project together.

“Civil Law Partnership”

This form of ownership can apply with as little as two citizens. It is usually employed in the case of small RE operations with an investment value of circa €100,000⁴⁵.

2.3 United Kingdom

The United Kingdom has not seen large scale mobilisation of a CRE sector for a variety of reasons. The market orientated approach taken by the United Kingdom has resulting is severely limited ownership and scale diversification, with the policy structure traditionally serving to centralise ownership among large utilities and developers. This is clearly reflected in the ownership statistics; the four largest companies in the UK own 99.7% of the generating capacity, versus 90% in Germany. Regarding renewable capacity just 10% is community owned in the UK, as against 51% citizen ownership in Germany⁴⁶. In terms of community benefit policy, there is no official legislation in operation; developers are under no obligation to provide the local community with any sort of social dividend⁴⁷. That being said, it is common practice for developers to offer a benefit package to local communities. However, these packages are often not discussed prior to development, and research suggests that they usually consist of less than 1% of the total profit. The Department of Energy and Climate Change defines community ownership as; *“community interest company; or a community*

⁴² Degenhart, H., Nestle U. *“Marktrealität von Bürgerenergie und mögliche Auswirkungen von regulatorischen Eingriffen”*. April 2014

⁴³ Deutscher Genossenschafts- und Raiffeisenverband e.V. (DGRV). *“Energiegenossenschaften – Ergebnisse der Umfrage des DGRV und seiner Mitgliedsverbände”*. Spring 2014, p.11.

⁴⁴ Degenhart, H., Holstenkamp, L. *“Bürgerwindparks als genossenschaftliche Kooperationsprojekte – Eine Projektstudie”*. February 2013

⁴⁵ IEA-RETD (2016), *“Cost and financing aspects of community RE projects. Volume II: German Case Study”*. Ricardo Energy & Environment and Ecologic Institute, IEA-RETD Operating Agent, IEA Implementing Agreement for RE Technology Deployment (IEA-RETD), Utrecht, 2016.

⁴⁶ Nolden, C., *“Governing community energy—Feed-in tariffs and the development of community wind energy schemes in the United Kingdom and Germany”* Energy Policy, 2013. 63: p. 543-552

⁴⁷ Jones, C.R. and J. Richard Eiser, *“Understanding ‘local’ opposition to wind development in the UK: How big is a backyard?”* Energy Policy, 2010. 38(6): p. 3106-3117.

benefit society or co-operative society, or a registered charity or a wholly owned trading subsidiary of a registered charity, other than such a company or society with more than 50 employees.”⁴⁸

2.3.1 Different Financing and Ownership Models

Due to the relatively underdeveloped nature of the CRE sector in the UK, the IEA-RTD posits the following arrangements for the ownership of RE infrastructure⁴⁹.

“Shared Revenue Projects”

This arrangement is based on the co-operative model. Communities invest in the development of a RE project and in return, receive a share of revenues or net cash flows.

“Joint Ventures”

This mechanism entails the investment of funds by communities into a Special Purpose Vehicle which is partly owned by the community and a developer. Each shareholder thereby owns a portion of the RE infrastructure.

“Split Ownership”

This form of ownership entails outright community ownership of part of a RE asset, with the developer owning the remaining part.

“Renewable Obligation”

The UKs feed-in tariffs are restricted to projects below 5 MW, and act as a secondary policy mechanism to the Renewable Obligation (RO). The RO scheme is a legislative mechanism which obliges electricity suppliers to source a certain percentage of their electricity from renewable sources⁵⁰. No price or contract criterion is specified as part of the RO, rather the terms are to be negotiated between the developer and electricity supplier^{51,52}. The RO creates high levels of uncertainty about the level of demand, and the price to be paid; thereby inhibiting community based initiatives. This scheme also includes tradable “Renewable Obligation Certificates” (ROC), with one ROC being equal to 1MW of RE⁵³. ROCs can be obtained in a number of ways; by purchasing them from renewable generators or from a trading market. The supplier also has the option to “buy-out”, by which they pay a set amount for every Kwh they should have purchased in renewables, which is adjusted annually for inflation. This Buy-out fund is used to compensate individuals who have honoured their renewable requirements, and traded in their ROC. These incentives the acquisition of ROCs, as to take buy out option would mean subsidising ones’ competitors. The RO scheme contributed to an increase of renewables from 1.8% in 2002, to 6.8% in 2010⁵⁴. This policy offered no differentiation between the various types of renewables, each receiving the same level of support per kWh⁵⁵. Solar energy and Biomass are supported by a feed in tariff

2.3.2 Role of Planning and Development System

There are no dedicated planning related mechanisms relating to the support of community ownership.

2.3.3 Scale of Projects

⁴⁸ Department of Energy and Climate Change “*Guidance on community ownership models under the Feed-in Tariffs scheme.*” March 2015, p.23. Retrieved from: <https://www.gov.uk/government/publications/guidance-on-community-ownership-models-under-the-feed-in-tariffs-scheme>

⁴⁹ IEA-RETD (2016), “*Cost and financing aspects of community RE projects. Volume II: United Kingdom Case Study*”. Ricardo Energy & Environment, IEA-RETD Operating Agent, IEA Implementing Agreement for RE Technology Deployment (IEA-RETD), Utrecht, 2016.

⁵⁰ IEA, “*Non-Fossil Fuel Obligation*”, 2013, International Energy Agency.

⁵¹ EA, “*Renewable Obligation Plan, Non-Fossil Fuel Obligation*”. 2015.

⁵² Mitchell, C. and P. Connor, “*RE policy in the UK 1990–2003*”. Energy Policy, 2004. 32(17): p. 1935-1947.

⁵³ *ibid*

⁵⁴ IRENA, “*30 Years of Policies for Wind Energy; Lessons from 12 Wind Energy Markets*”. 2012.

⁵⁵ *Ibid*

There are a limited number of CRE projects with a generating capacity of over 5MW⁵⁶.

2.3.4 Implications Arising from Different RE Technologies

There is no threshold at which it becomes obligatory to allocate a community share of a large scale of the ownership of a RE generating installation.

2.3.5 Investment Levels and the Role of External Backers/Funders

There are a number of national programmes within the UK for the promotion of CRE.

A suite of these programmes are outlined below.

- In England the Rural Community Energy Fund (RCEF) (£15 million) and Urban Community Energy Fund (UCEF) (£10 million) provide development support, grants and loans to community developers;
- In Scotland a target has been set for 500 MW of RE to be generated 'locally' (distributed generation) by 2020. This is supported by the Community and RE Scheme (CARES), which provides free expertise as well as grants, attractive loans and support to access other grants and local funding;
- In Wales the Ynni'r Fro programme offers social enterprises grant aid, loans and free, independent, hands-on advice and information to help develop their own community-scale RE schemes.

Accredited community groups can access the Government's Enterprise Investment Scheme (EIS), the Seed Enterprise Investment Scheme (SEIS) and the Venture Capital Trust Scheme (VCTS). However, these schemes are now being overhauled with the Social Investment Tax Relief (SITR) scheme, which will offer 30% tax relief.

⁵⁶ IEA-RETD (2016), "Cost and financing aspects of community RE projects. Volume II: United Kingdom Case Study". Ricardo Energy & Environment, IEA-RETD Operating Agent, IEA Implementing Agreement for RE Technology Deployment (IEA-RETD), Utrecht, 2016.

2.4 Devising Models of CRE for Application in the Republic of Ireland

Building from the analysis of CRE in the case study jurisdictions, this section will set out proposals which would facilitate the creation of a vibrant and viable community ownership and investment model in the Republic of Ireland. The overarching objective of the proposal put forward herein will be to explore how “communities can share in the benefits of substantial new energy infrastructure located in their area”⁵⁷.

2.4.1 Overview

The policies which have been enacted in other jurisdictions are largely the products of their socio-political contexts. Notwithstanding the above, the Feed in Tariff scheme is a clear example of a policy which has been successfully imitated by several other jurisdictions, representing a precedent for how well structured policies with a clear end state in mind (promotion of RE coupled with a desire to increase community ownership and investment) can be transposed between jurisdictions.

Denmark’s societal resistance to wind energy after widespread acceptance is most relevant to Ireland’s current situation. Increasingly, there are signs in an Irish context to indicate that resistance is growing toward other forms of RE development (i.e. solar energy) and supporting energy grid infrastructures. In terms of the policies and approaches applied in Denmark, its “option to purchase” scheme is an effective mechanism for the facilitation of community investment and the allocation of a share of ownership, in whose proximity the RE infrastructure will be located.

On foot of the above, and on consideration of the contextual similarities between the issues which caused the “option to purchase” scheme to be derived in Denmark and the current issues facing the further deployment of RE infrastructure in Ireland, the proposals posited herein for consultation will be based on the Danish “option to purchase scheme”.

It has been argued that the Danish corporate acceptance of the “Option to Purchase Scheme” is largely due the fact that developers and funders recognise the costs involved in lengthy delays resulting from local opposition, and see equity distribution as a way to minimise these delays, promote acceptance, and building “a good long term relationship with the local communities”^{58 59}. What can clearly be observed from the Danish model is that a mechanism mandating a compulsory social dividend, once implemented, becomes just another cost to be factored into a developers’ production function⁶⁰. It has also been argued that local buy-in can be a positive factor for a developer, spreading risk and providing alternative revenue sources⁶¹.

In addition to the above, the proposals for consultation outlined in this section will draw on pertinent examples of practice and procedure arising from the other case study jurisdictions.

The German model is influenced on a policy decision to decentralise the countries energy system, by empowering individual citizens to become “prosumers”, making use of economic incentives within a cultural context of social responsibility for the purpose of ensuring populous mobilisation^{62 63 64}. This aligns with the “energy citizen” concept espoused by the Irish White Paper on Energy in 2015.

⁵⁷ Department of Communications (2015) “Ireland’s Transition to a Low Carbon Energy Future 2015-2030”.

⁵⁸ ⁵⁹ *ibid*

⁵⁹ Wróżyński, R., M. Sojka, and K. Pyszny, “The application of GIS and 3D graphic software to visual impact assessment of wind turbines. *RE*”, 2016. 96, Part A: p. 625-635

⁶⁰ National, E., et al., “Wind Energy: International Practices to Support Community Engagement and Acceptance.” Vol. 139. 2014: National Economic and Social Council, Ireland

⁶¹ Goedkoop, F. and P. Devine-Wright, Partnership or placation? The role of trust and justice in the shared ownership of RE projects. *Energy Research & Social Science*, 2016. 17: p. 135-146.

⁶² Hvelplund, F., B. Möller, and K. Sperling, “Local ownership, smart energy systems and better wind power economy”. *Energy Strategy Reviews*, 2013. 1(3): p. 164-170.

⁶³ Morris, C. and M. Pehnt, “Energy Transition: The German Energiewende”. Heinrich Böll Stiftung, 2012.

⁶⁴ Hall, S., T.J. Foxon, and R. Bolton, “Financing the civic energy sector: How financial institutions affect ownership models in Germany and the United Kingdom”. *Energy Research & Social Science*, 2016. 12: p. 5-15.

One of the most important aspects of the “energiewende” has been widespread awareness, and a sense of social togetherness in an effort to radically change the country’s energy system. If the Irish citizen is to become an “energy citizen”, as called for in the White Paper, a great deal can be learned from the way Germany has mobilised its population. However, in essence the German “energiewende” has been a planned transition spanning a number of decades, and clearly demonstrates the benefits of strong citizen involvement through time; as a result, Germany has largely avoided the local resistance experienced in many other countries. German policy makers ensured that citizens were made aware of the benefits from energy production and therefore engendered a culture of local involvement in the development of RE infrastructure, whether autonomously or through partnership with external developers.

Our analysis of the UK offers a number of insights for Irish energy policy; policies must be internally consistent, and provide clear long term commercial signals, top-down approaches engender local opposition, and market orientated policies seem to create a lack of production diversity^{65 66 67}.

The options set out below are predicated on the Danish model of community ownership. These options were considered appropriate for exploration through consultation as they were derived to counter the issues which Ireland is currently experiencing in terms of opposition to renewable energy deployment.

Option One

It was proposed that those living within a 1km radius zone of a wind farm experience the presence of a wind turbine most intensely^{68 69}. Therefore, this option would entail giving a mandatory stake holding of one half of one percent of the value of each individual turbine located on the proposed site, to any resident living in this zone. This mechanism has two facets, firstly it incentivises developers to locate in areas with low residency by adding an additional 500m of cost incentive to the existing 500m minimum setback distance. Secondly, it enables residents to invest in infrastructure in their proximity so any sense of imposition is mitigated.

Definition of “resident”; The resident should be defined as the primary resident.

Equity share; each household should be offered 0.25 % per turbine, with a cap of 0.75% after which point the financial dividend offered to each household becomes diluted.

It is recognized that the 1km radius zone may not be appropriate for every type of RE project, e.g. solar, where the zone of perceived or potential impact is likely to be much more limited.

Option 2

This option would entail the adoption of the “Option to Purchase” Scheme which mandates at least 20% of the equity must be offered by the developer to any permanent resident above the age of 18 living within 4.5 km of the project site, plus a visibility tier⁷⁰. There is a justifiable argument to keeping

⁶⁵ Keay, M., “UK energy policy – Stuck in ideological limbo?” Energy Policy, 2016. 94: p. 247-252.

⁶⁶ Holburn, G., K. Lui, and C. Morand, “Policy Risk and Private Investment in Ontario’s Wind Power Sector. Canadian Public Policy”, 2010. 36(4): p. 465-486.

⁶⁷ Fast, S., et al., “Lessons learned from Ontario wind energy disputes”. Nature Energy, 2016. 1: p. 15028.

⁶⁸ Jones, C.R. and J. Richard Eiser, “Understanding ‘local’ opposition to wind development in the UK: How big is a backyard?” Energy Policy, 2010. 38(6): p. 3106-3117

⁶⁹ Brennan, N. and T.M. Van Rensburg, “Wind farm externalities and public preferences for community consultation in Ireland: A discrete choice experiments approach” Energy Policy, 2016. 94: p. 355-365.

⁷⁰ If an individual household can see the wind turbine site from their household then they ought to have an option to purchase equity at cost price; with a maximum radius of 12km. As part of the development process a GIS system maps out all the areas in which a turbine is visible, providing a pre-existing document to allocate buy in options between 4km and 12km. 12km has been selected as the scientific literature

the fixed distance for transparency and simplicity of application. A third consideration that is of concern is the population density within this area, as it could vary widely. It appears logically consistent to offer equity to the local community in order to ensure participation, whilst simultaneously creating a commercial incentive for developers to locate in areas where population is sparsely distributed.

Equity; 25%

Equity method

Equity should be elicited on at cost basis; if a wind turbine development costs €5 million, the likely equity required will be €1,000,000, and 25% of that is €250,000 that should be offered to the local community. We have selected 25% because there has been a populous call for more equity share in Denmark, with one project offering 50%, whilst the Shared Task Force in the UK has recommended that developers offer somewhere between 5-25%⁷¹. This 25% would be made up of a portion of the project in freely issued equity to those within 1km and an additional funded equity portion. In Denmark, if for example, there are 4 shares on offer, individual one and two applies for a single share, whilst a third and fourth apply for 3 and 4 shares respectively, in order to prohibit the fourth individual from receiving the entire allocation the distribution is done on a round by round basis: Round one, everyone that applied for one or more shares receives one share, round two, anyone who applied for two or more shares, receives a second, and so on until all the shares that are demanded are purchased; this serves as an equitable way to distribute shares.

Option 3

There exists in Denmark, UK and in Ireland on a voluntary basis, the precedent of establishing a community benefit scheme where local community facilities (e.g. Sports facilities, schools, playgrounds etc) can access funding from local wind developments. In addition, there are specific provisions in the PDA for 'community gain' type conditions to be imposed in SID consents, which require developers (in the case of where a specific condition is attached to that effect) to provide a facility, or service, or financing of same, for the benefit of local communities. This Option is considered appropriate where the opportunity for community ownership and investment does not arise, for example in connection with essential State-owned and operated energy infrastructure.

There are a number of models of implementation of this type of fund as documented in the IWEA "being a good neighbour" document⁷². The principle of local control, both strategically in terms of what it should be spent on at fund inception and an objective, transparent and fair administration process (e.g. by a local authority) in terms of individual project approval should be core to the development of this process.

The current widely used figure of €1,000 per MW per annum is lower than its UK counterpart, however as the feed in tariffs in the UK have been significantly higher, it is worth considering through consultation what the appropriate value of this payment should be. As this payment is essentially a fixed payment and is a project cost, it has significantly higher impact than that of an equity share provision. Consideration could be given to have a local fund with an equity share, financed by the developer instead of a fixed payment; this would, in principle, reduce the impact for financing and affordability, but increase the benefit to local communities in the long term.

outlines this distance as the point after which the visibility of a turbine of 150m falls to just 0.02% of the total visual spectrum; deemed to be inconsequential⁷⁰.

⁷¹ Goedkoop, F. and P. Devine-Wright, "Partnership or placation? The role of trust and justice in the shared ownership of RE projects" Energy Research & Social Science, 2016. 17: p. 135-146.

⁷² IWEA, "Good Neighbour: IWEA Best Practice Principles in Community Engagement & Community Commitment". 2013, Irish Wind Energy Association. p. 1-15.

2.5 Affordability for Citizens

One of the main issues with the Danish model is the affordability of shares; with one study noting the average buy in was over €100,000. Under no circumstances can this be viewed as fair in a distributive sense, as there is no correlation between wealth and the externalities associated with wind farms.

It is therefore recommended the creation of a financial mechanism for funding individuals who have expressed an interest in equity, but are unable to purchase due a lack of means. The setting up of a mandated loan scheme is recommended, whereby individuals without means to self-purchase, can avail of a loan, centrally underwritten, to purchase shares in a local energy project. The dividend from these shares would be utilised to re-pay the cost of the share before an individual would receive a benefit. This could be achieved through local credit unions or post office, with a state underwriting to reduce the risk cost to the credit union or post office. This would go a long way towards mitigating this issue. This loan would be serviced by the return to the equity stake, until fully repaid. After this point there it is recommended that a 5% levy on any future return, which shall go to a central fund for the purpose of providing future loans, hence creating a multiplier effect. This ought to be means tested, and possibly tied into the national fuel allowance scheme for simplicity.

Public awareness

It is absolutely central that the community, and indeed wider society, is aware of the equity scheme, and has sufficient time to invest. Ideally this would be completed by a local trusted intermediary, e.g. Local Energy Agency or Local Authority and would be central to the success of the scheme.

2.6 Affordability for the developer

The provision of funded equity for a developer will reduce the cost of provision of equity and should ensure that the overall funding of a wind project does not increase in difficulty. However, the return on the finance invested at pre-close (i.e. risk finance) would decrease. It would be essential for developers to receive a lower risk development to match this lower return to ensure continued wind energy development in Ireland. Notwithstanding this risk/ return, the authors note that this complexity will not be without cost. It has been noted in the White Paper that the decarbonisation of our energy systems must occur, and the potential increase in cost of development should be considered in the context of securing societal support for this decarbonisation an integral cost of achieving decarbonisation. Any future re-evaluation of REFIT⁷³ or feed in premium mechanism should therefore take into account the potential for small increases in costs of development based on the final choices for mechanisms.

2.7 Summary

This section focused on the development of three options which may be appropriate for the implementation of a CRE in an Irish context. The outputs of this section are a set out policy options derived on the basis of the community ownership model pursued in Denmark. The background context of that system mirrors the issues which have emerged in relation to the perception of renewable energy development is comparatively similar to the societal acceptance issues facing the deployment of such infrastructure in an Irish context. The Danish model therefore lends itself to further consideration in the context of appropriate models for application in an Irish context.

⁷³ Evidenced by the renewable energy support scheme related RFT published by the SEAI for the development of models for community renewable energy schemes, published on the 14th October 2016.

3.0 Project Consultation

3.1 Overview

The purpose of this section is to explore the views and opinions of a number of key stakeholders, who were consulted with on the three proposals arising from a study of practice in the case study jurisdictions. The list below outlines the list of participants in this research project's consultation process. A number of other organisations were invited but were unable to meet within the consultation window or were not inclined to participate for a variety of other reasons.

- Allied Irish Bank
- Bank of Ireland
- Bord na Móna
- Coillte
- Friends of the Earth
- Gaelectric
- Irish Planning Institute
- Irish Solar Energy Association
- Irish Wind Farmers Association (Meitheal na Gaoithe)
- National Economic Social Council (NESC)
- Tipperary County Council
- Tipperary Public Participation Network (PPN)

The proposal summaries, as they were illustrated during the consultation process are outlined in the subsections below. Given the time and resources available to the research team, it was concluded that the perspective of the community sector could be derived with consultation with representatives of the Public Participation Network (PPN). In addition, the perspectives of the elected members of Tipperary County Council were sought in order to gauge their views as to the applicability of the options for community ownership in an Irish context. It is envisaged that any proposals taken forward will be subject to early and effective public and stakeholder engagement and consultation to ensure a broad set of viewpoints is taken into account.

3.2 Consultation Methodology

The consultation exercise took place in the offices of Future Analytics Consulting Ltd at 23 Fitzwilliam Square and Tipperary County Council, Municipal District offices, Tipperary Town. The consultation meetings were scheduled for the 29th and 31st of August, 1st of September and 4th October. In order to facilitate the input of expertise from a number of consultees, a number of telephone interviews were facilitated. A semi structured interview process was followed throughout. A PowerPoint presentation was also prepared and this has been appended to this report in Appendix Two. In addition, a number of key questions were utilised in order to provoke discussion. These questions are outlined below.

1. Should a Community Renewable Energy (CRE) model differentiate between urban and rural RE developments?
2. Will the same model of CRE ownership/investment apply to development in both urban and rural areas?
3. Should the same model CRE ownership/investment apply for all technologies?
4. What scale of technological deployment (ha for solar, turbines for wind) should trigger the requirement for community involvement of some form?
5. Should the thresholds for application be based on MW output (or other metric)?
6. Who should be offered to partake in community investment scheme?
7. What limit to the investment should be considered?
8. How should a CRE model include socially disadvantaged persons?

9. What is the lowest level of community investment permitted?
10. How can safeguards be put in place to ensure that model will not make investment in RE unviable?
11. What incentives/supports should be put in place for developers?
12. What intermediate bodies are required based on international experience?
13. What should be the role of the local authorities in the process?
14. At what stage in planning and development process should investment be offered?
15. Should community owned schemes exempt from offering a share?
16. Is it excessively complicated to attempt to apply same model in low population density areas and high density areas?
17. What are the greatest obstacles to the application of a CRE model in an Irish context?
18. Is there scope (in the consultee's opinion) for the implementation of effective CRE model within the confines of existing legislation?
19. What should the role of subsidies and incentives for communities undertaking a CRE development of their own?
20. How should investment vehicles for CRE be structured?
21. What sort of footing should a CRE model be put on in order to ensure that it gains the trust of the community?

Discussion was not constrained to the questions above as the insights and experiences of the stakeholders gave rise to additional perspectives on appropriateness of the application of the proposals.

3.3 Stakeholder Feedback

In terms of general comments arising from the consultation, the following summarises the key considerations to which the consultees felt regard should be had if any one of the proposals were to be implemented.

- A dedicated regulatory and cost-benefit analysis is required in order to determine the impact of one (or all) proposals on the RE sector. Clearly the potential cost imposed needs to be ascertained within any state support or auction process under the future support scheme. This must be included in the genuine cost of the roll out of on-shore wind.
- Voting rights and expectations on the part of communities need to be aligned with the proportion of ownership in a particular RE development.
- The consultee strongly supported the idea of a trusted intermediary fulfilling the role. The LEADER structure was recommended as one possible option; LA's or local energy agencies were also suggested as possible templates.
- The consultees detailed if any of the proposals are to be implemented in terms of planning conditions, there should be consistency across counties via detailed and mandatory guidance in advance.
- The degree to which the proposals are implemented by trusted intermediaries and the context in which citizens have genuinely engaged in the debate about the energy transition will *"make a big impact on the likelihood of success of the proposals. i.e. if they don't accept the need for RES nor trust the person selling the investment, then it will not succeed. The NESCC consultee suggested that genuine community deliberation of their energy future (like that which happened in Templederry) is critical to the success of the plan"*.
- The implementation of these proposals will require the support of a strong philosophical model.
- Three pillars of development, **Planning, Grid and Market**. Possible attention in the structure of the final proposal should have regard to these factors.
- Any proposal for 'co-ownership' should be predicated on the developer's ability to accommodate the cost.

3.3.1 Option One

In general, this proposal was considered as being too close to compensation, which in the view of some stakeholders was found to be contrary to the ethos of the planning system which would deem the location of renewable energy infrastructure in a particular area as an 'acceptable impact'. One consultee indicated that this proposal would be extremely difficult to implement in practice.

Notwithstanding the basis of the 'Adjacent Residences' scheme in Denmark, establishing such a regime in an Irish context would be difficult for a number of reasons. These reasons are tied to issues around the administration of a 'compensation' regime, the fact that such a compensation regime does not apply to any other development sector, and the potentially negative impacts of introducing a compensatory scheme without any retrospective element. The consultees suggested trying to achieve the same buy in through a different mechanism like a matched share, a higher equity value etc. rather than any 'give away' benefit.

A number of stakeholders indicated that informal arrangements exist between developers and residents residing close to renewable energy infrastructure (predominantly wind energy related). "Good Neighbour" approach has some developers making payments to residents living in close proximity to a wind farm. Indicatively, the payment might amount to an annual amount (equivalent to annual ESB bill or higher) or a once off payment. These payments in those cases would be tied to the house⁷⁴. The figure which may be paid to residents in proximity would be contingent on a number of factors associated with the characteristics of the specific site.

3.3.2 Option Two

Overall, consultees were positively disposed towards this option. A number of points were raised in relation to its operation.

- If the radius of eligibility for participation intersects with a village or town, the population of the urban area becomes eligible.
- In terms of SPV structure, the community member of the board will be constrained by company law in order to work in the best interests of the holding. This was found to be desirable in order to counteract antagonism toward the development.
- The maximum value provision needs to be scalable and contingent on the financial profile of the renewable energy development to which it is applied. The loan guarantee provision was welcomed as being socially positive. In addition, the potential for this provision to diversify the service provision of rural post offices and credit unions was acknowledged by all stakeholders.
- Consultees outlined that the costs of the system would have to be considered in detail as it may be counterproductive to place this burden on the developer in addition to requiring the sale of equity at cost.
- There should be a provision against the selling on of shares. If shares are to be sold then the co-operative entity that houses the rest of the community shareholders should have first preference, followed then by the developer.
- There is precedent for a voluntary share offer scheme for solar PV in the UK. 25% of developments with a capacity 2MW and 5% of larger schemes. Difficulties in acquiring the desired level of investment were encountered. There were also significant costs associated with the administration and management of the scheme.
- There is a need for strong financial regulation to implement this proposal.
- All stakeholders believed that a 'trusted intermediary' would be required to oversee and maintain the fair and effective operation of this option.

⁷⁴ For example, registered as a burden or caution on the title.

3.3.3 Option Three

- It was considered that ‘subthreshold’ community gain measures are already being implemented by developers in some circumstances with varying community satisfaction. There was concern that this approach may be seen as a placatory measure rather than real community involvement
- Some consultees indicated that this should be linked with profitability/debt ratio. €1,000 /MW is the current normal rate applied, however, whether this was sufficient depended on whether the consultee was from the developer / funder sector or a community representative
- Consultees from the development sector indicated that a reduction of commercial rates should be considered if this proposal were to be actioned. This consideration was advanced by the RE sector in response to all of the above options.
- If the fund is administered by local authorities, then this might cause issues if the finance is used on works in another part of the LA’s functional area and not on infrastructure or services for the benefit of the community in proximity to the development.
- Lack of legislative framework and guidance on implementation make this proposal difficult to implement.
- Lack of statutory framework for trusted intermediary makes community gain schemes difficult to manage and implement.

3.4 Post Consultation Review

A post consultation review was undertaken on completion of the consultation process. This exercise explored the feedback of the consultees in detail and considered matters relating to the context into which the chosen proposal would be implemented. Arising from the meeting, it was considered that **Option Two** was the most appropriate in order to achieve the objectives set out. Option 1 was discarded for a number of reasons. Stakeholder reaction was consistently negatively disposed towards the principles and practical implications of its implementation. It was also considered that the acquisition of an equity share for free would not effectively build an active sense of participation on the part of the member of the community concerned. In addition, through further study of the literature and with the input of the consultees, it was considered that the offer of a free equity share in a RE development might be construed as an attempt to ‘buy off’ opposition rather than provide investment opportunities of real and long term benefit to communities.

The informal adoption of the Option Three proposal by the renewable energy sector already, with mixed results, was considered by the project team in terms of considering whether it merits mandatory implementation in the development consent process. On balance, it was considered that, if this initiative was already taking place in a voluntary capacity and is not effectively enhancing societal acceptance of RE projects, there is no strong case in favour of imposing it as a mandatory requirement at this time.

A number of changes were implemented arising from the feedback of the consultees, such as determining eligibility thresholds. A breakdown of this proposal is outlined below:

- Mandatory requirement on RE developers to offer investment shares to local people to invest in local projects.
- Focussing on people **near** developments.
- Option to purchase approximately 20% of project equity which equates to 3% - 5% of total capital cost. Built around a model of a community co-operative (approach) as co-investor in main project.

- Shares sold back to co-op;
- limitation to sale within initial years;
- open to new local entrants;
- Inclusion of a post office/ credit union scheme for persons of limited means (dividend repays loan, before share passes on).
- Potential of tax break on investment or income (including local authority rate, development contributions, grid connection fees etc).
- Intermediary to be established to ensure appropriate governance.

The mechanism by which the above is achieved is outlined below.

- Initial memorandum will issue potential equity offering at preplanning and consultation stage.
- Final prospectus with 15%-25% of project offered.
- Investment held in trust until “financial close” – can’t be withdrawn or utilised until safeguards in place.
- Initial offering to a limited area.
 - If greater subscribers than required, then all treated equally.
 - Maximum value per individual (€5k estimated)
 - If equity not raised, then boundary increases
 - Small incremental value of shares (e.g. €250).
 - Third boundary increase to municipal district where very large farms in depopulated areas.

In terms of the eligible area, the proposed model would apply to the stages below:

- Initially open to the electoral division (ED) where the windfarm is located, or any within 2km of any turbine/solar array.
- If investment not reached, then expanded to any DED touching the original DED’s.
- Third level to whole municipal district.

It was concluded that a study on the requisite supporting features and legislative measures to implement the above will be contained in Deliverable Two of this research project.

3.5 Summary

Through consultation with a cross section of energy industry and sectoral stakeholders and a thorough post consultation review process, Option Two, the “*option to purchase scheme*” was chosen as being the optimum solution for application in an Irish context and to achieve the objectives set out.

4.0 Implementing The “Option to Purchase” Scheme

In terms of framing the proposal, it was concluded that wind and solar energy technologies would be most suited for inclusion under the provisions of this scheme. Notwithstanding the above, the proposal could be extended to apply to other RE technologies. An overview of the implementation framework necessary to give effect to this proposal is outlined in Section 4.0 of this report.

4.1 Overview: The “Option to Purchase” Scheme

The proposal arising from this research favours the transposition of the Danish ‘Option to Purchase’ scheme into practice in an Irish context, on foot of an analysis of the schemes’ operation in Denmark in addition to the considered opinion of the consultees to which the proposal was put. Applying this model would require some adaptations in order to function effectively alongside the existing components of the State’s regulatory framework which is further elaborated upon in Section 4.6.

In terms of the eligible area, the proposed model would apply to the stages below:

- Initially open to the electoral division (ED) where the windfarm is located, or any within 2km of any turbine/solar array.
- If investment not reached, then expanded to any ED touching the original ED’s.
- Third level to whole municipal district.

4.2 Trusted Intermediary

The NESC, 2014 report on *Wind Energy in Ireland: Building Community Engagement and Social Support*, considered how social support for the energy transition, and particular for wind energy can be achieved. While the focus of this research paper is to present a best practice model to implement a community investment framework, the NESC report in a broader context outlined many key themes and mechanisms to ensure the engagement of local communities in energy projects including ownership and investment opportunities.

Based on national and international best practice, in particular German and Danish models, the report advocated the creation of a **trusted intermediary**, to manage, regulate and support the implementation of a community ownership models in an Irish context.

The Community Investment Framework ‘option to purchase’ scheme is primarily proposed to be regulated through the planning system. The scheme, if implemented, would be supported through detailed Section 28 Ministerial Guidelines, which in addition to setting thresholds for RE developments, would provide specific, technical, financial and legal criteria to be applied in the case of each individual project. Therefore, the planning system should in this respect provide a participatory mechanism and fair and transparent evaluation of proposals giving certainty to developers and the community.

However, it is recognised that it is critical that a **trusted intermediary** is established in order to facilitate effective engagement between the community and developers to ensure that:

- (a) The requirements of the planning process and compliance with any planning conditions in respect of investment models are met and;
- (b) Provide support and guidance with respect the financial models to be applied, and;
- (c) To provide advice and support to communities and increase local knowledge capacity and;
- (d) To ensure a streamlining of the process and the timely delivery of projects.

The need for such a body was considered during the stakeholder engagement process and it was found that stakeholders supported the idea of a trusted party to act as an intermediary between local

communities and private developers. This report advocates that such a **trusted intermediary** would have a national remit which would oversee Community Investment Agreements, and would offer a range of supports to communities and developers including acting as a liaison, and offering technical and financial advice.

Key Principles of a Trusted Intermediary are as follows:

- Independent Body with a National Remit
- Nationally Funded
- Accountable & Transparent
- Expertise and Knowledge
- Mediation and Negotiation

Section 5.4 of the NESC report examined a number of international and national examples of 'Intermediation' bodies. It was noted that currently in Ireland, for the most part, the type of expert advice enabling intermediation is more in evidence in local and regional bodies, including Local Energy Agencies. It is considered that existing appropriate national and local corporate structures and bodies, should be considered further in terms of suitability for this trusted intermediary role, which could include, for example, opportunities for a 'shared services' approach to implementation.

4.3 Mandatory Implementation

The imposition of the proposal put forward by this research on a mandatory basis is predicated on the contention that such as basis would facilitate greater societal acceptance.

4.4 Eligibility

In terms of the eligible area, the proposed share offer would be open to the spatial scales outlined and would be based on the location of households located within each of these spatial scales. National GIS based datasets such as the An Post Geodirectory will act as useful tools to select qualifying households. The examples of the application of this proposal geographically have been focused on the wind energy sector. While interest has emerged with regard to solar energy, no schemes have been developed in an Irish context as of yet. Notwithstanding policy commitments associated with the implementation of a support for the sector, it was considered that the use of wind energy to illustrate how the 'option to purchase' would be applied would be best as this is the form of RE generation that most in a community context would be accustomed to dealing with on a day to day basis. The mechanism for determining eligibility for the 'option to purchase' scheme in relation to solar energy development at utility scale may be considered in subsequent research.

The following distances could be applied in the case of a wind farm:

- First Level - Initially open to the households located within 2.5km radius of any turbine.

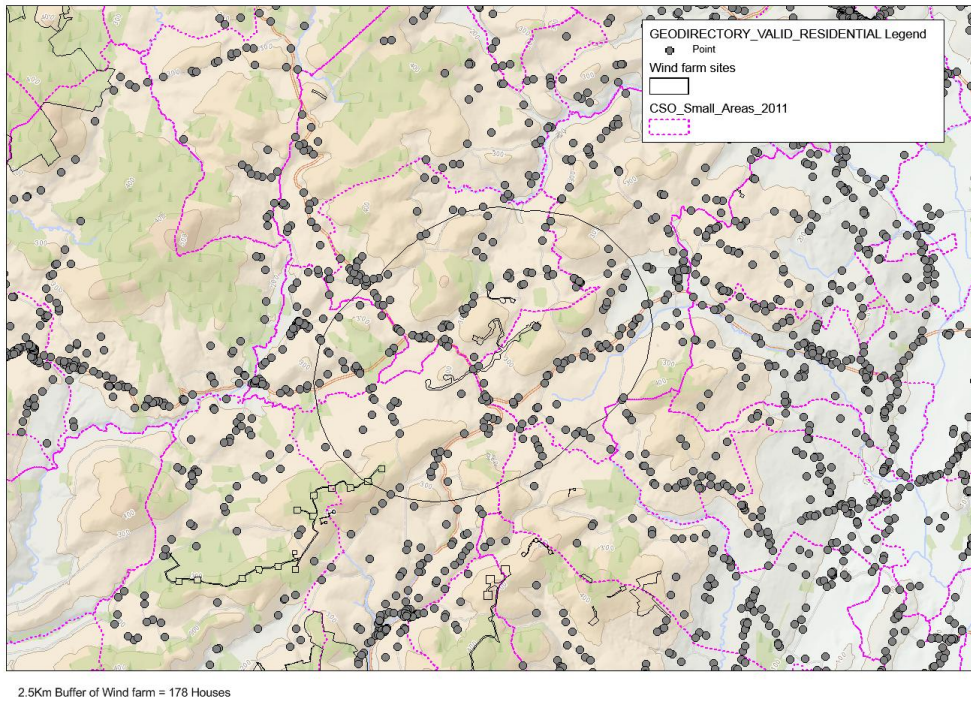


Figure 1 Example of selection of qualifying households within 2.5km of wind turbines

- Second Level - If investment not reached, then expanded to households located within 5km of any turbines.

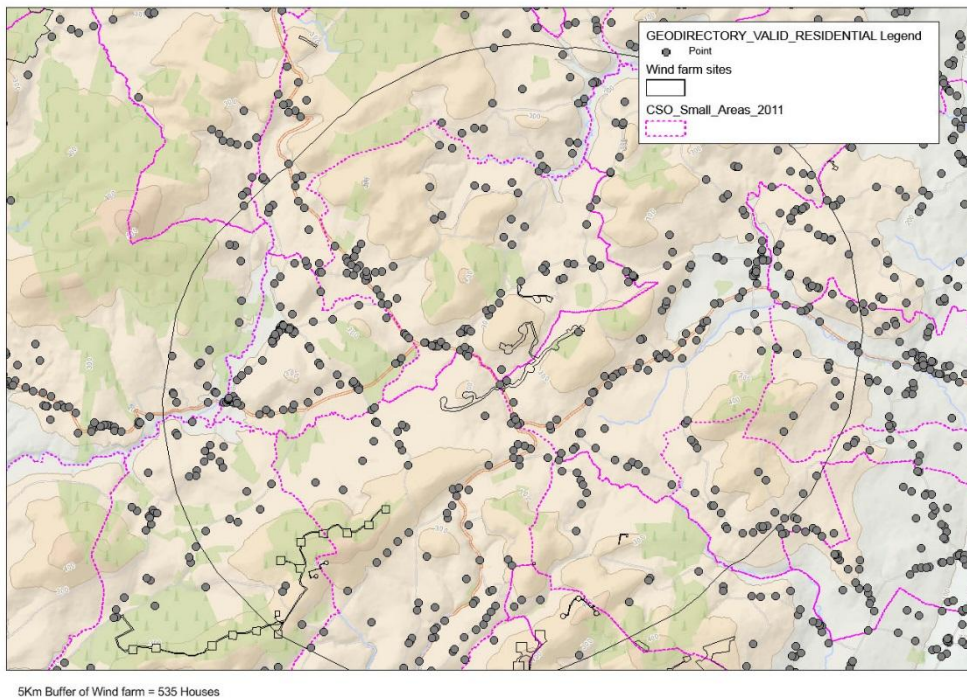


Figure 2 5km Buffer Example

- Third Level- to households located within 10km of any turbine

A similar process could be applied with respect to selection of qualifying local investors for solar farms, however, it is suggested that smaller radius areas are applied as the visual characteristics of this form of development are potentially lower impact in the landscape.

4.5 Applicable Technologies

The team has considered appropriate technologies with which to base the research proposals on. While international practice has focused on wind, it is appropriate, given the potential investment opportunity in solar energy that it is included in the initial proposals. Consideration was given to other technologies and it is suggested:

- Biomass heat generation will be more focussed on auto generation for heat consumption
- Biomass CHP will likely still carry a significant self-consumption/ auto generation.
- Anaerobic digestion will likely heavily interact with the local agricultural economy and the economic benefit of the development will likely be spread around the wider community and a higher threshold is appropriate to consider.

The figures provided below are high level estimates relating to the implications of the application of the “option to purchase” scheme. Wind and solar energy technologies have been focused on for the purpose of this study. In terms of the solar energy sector, the final determining factor relating to the viability of the ‘option to purchase’ scheme in relation to the sector will be predicated on the nature of the financial support which is implemented.

Technology	Capacity	Cost per MW	Assumed Capacity factor	Annual Running cost per MW	Income per MWh	Annual MWh production	Income (€M)	Surplus for Debt/ profit (€M)	Total Debt (80%) (€M)	Debt repayments (1-14) (€M)	Net income (1-15) (€M)	Total equity (€M)	20% community equity (€M)	Typical Return for 5k investor (Y1-15)	Typical Return for 5k investor (Y15-30)
Wind	3	1.5	32.0%	0.07	77	8,409	0.65	0.44	3.6	0.34	0.10	0.9	0.18	564	1,129
Wind	20	1.4	31.0%	0.065	75	54,312	4.07	2.77	22.4	2.09	0.68	5.6	1.12	610	1,220
Wind	70	1.35	30.0%	0.06	75	183,960	13.80	9.60	75.6	7.05	2.54	18.9	3.78	672	1,345
Solar	5	1.1	9.4%	0.008	130	4,117	0.54	0.50	4.4	0.41	0.08	1.1	0.22	385	770
Solar	20	1.05	9.4%	0.008	130	16,469	2.14	1.98	16.8	1.57	0.41	4.2	0.84	492	984

4.6 Legislative Analysis

This section outlines the requisite legislative intervention required in order to give effect to the “option to purchase” scheme in an Irish context. The project team has considered various methods of implementation through incentives and through legislation. It is clear that the approach to the proposed revision of the incentive scheme presents an opportunity to quickly and easily be implemented. However this “supports” approach will, on its own, not impact the societal acceptance of planning applications or the governing statutory development plans. It is therefore determined that the proposal may be effectively brought into operation through the planning process.

It is recommended that planning authorities and the Board will be required to impose the requirement for local investment as a planning condition in all new renewable energy projects of a prescribed class above a certain specified threshold.

In summary, new legislation may not be required to give legal effect to the proposal. It may be sufficient to include the proposal by way of a specific planning policy requirement in Ministerial guidelines issued under S.28 of the Planning and Development Act 2000, as amended (**PDA**), including sufficient detail within the guidelines to ensure that citizens, including local communities, potential applicants for planning permission, and decision makers understand fully the scope and implementation requirements for the proposal.

Whilst new legislation may not be essential, the Department for Housing, Planning, Community and Local Government might consider seeking the advice of the Attorney General’s office as to whether it might be appropriate or desirable to implement or further reinforce the proposal through legislative amendments, for example:

- A new section or subsection of the PDA, similar to S.48 PDA, providing planning authorities and An Bord Pleanála (**the Board**) with an express power to impose a condition requiring the applicant to reserve a specified percentage of the development for local investment in renewable energy projects above a certain specified threshold.
- A new article or sub-article inserted in the Planning and Development Regulations 2001, as amended (**PDR**) specifying the information to be provided with an application for planning permission or related appeal, strategic infrastructure development (**SID**) consent, or other such application as may be relevant; and/or

It might also be considered appropriate for the Minister for Communications, Climate Action and Environment to include the proposal as set out in S.28 Ministerial guidelines as one of a number of measures in the National Mitigation Plan under the Climate Action and Low Carbon Development Act 2015.

From a Constitutional law perspective, the ‘option to purchase’ proposal necessarily involves an interference in private property rights, to some extent akin to the interference previously provided for under Part V of the Planning Acts to address the need for social housing and greater social integration in housing developments. Whilst the Part V interference was justified on well-established ‘public good’ grounds in favour of housing provision, the ‘option to purchase’ proposal is based on the less well established but (arguably equally) important need for urgent and equitable transition to a low carbon energy system.

To ensure that the implementation of the proposal is robust from a Constitutional perspective, the detailed criteria must be established through effective consultation and engagement with key stakeholders as well as the public, to ensure that the relevant thresholds are reasonable and

proportionate, in other words, to ensure that the constitute the minimum necessary interference in private property rights to achieve the desired ‘public good’ objective.

Therefore, underpinning all of the above will be the need for early and effective consultation and engagement with the public, relevant statutory bodies and public and private stakeholders. Such consultation might take place within the context of Strategic Environmental Assessment (SEA) screening and Regulatory Impact Analysis (RIA).

The following potential legislation might be considered by the Department and/or the Attorney General’s office:

New section in the PDA:

[xx]. (a). A planning authority or the Board shall, when granting permission under this Act for certain prescribed classes of development [], include a condition requiring the reservation or allocation of shares in the proposed development for a specified class or classes of person, in accordance with criteria specified in guidelines issued by the Minister under section 28.*

* The relevant class or classes of development would need to be prescribed in the PDR or other regulations, and described more fully in the proposed Ministerial guidelines.

New article in the PDR (or sub-paragraph of article 22) setting out the information to be provided with a relevant application for development,

*(xx) in the case of an application for permission for the development of [*insert prescribed class of development*], details of how the applicant proposes to comply with a condition [*under section [xx] /requiring the reservation or allocation of shares in the proposed development*], to which the permission, if granted, would be subject, including:*

*[*specify detailed information that would be required to evaluate compliance with the guidelines and PDA.*]*

4.6.1 Existing Legislative Framework In order to implement the ‘option to purchase’ as a mandatory requirement for new developments, it will be necessary to ensure that planning authorities or An Bord Pleanála (the Planning Board) have the power (or an obligation) to impose the requirement as a condition of planning. Having assessed existing legislative provisions, our conclusion is that the proposal for a mandatory ‘option to purchase’ requirement on all new developments above a certain threshold or scale may not require new legislation or legislative amendments, despite the fact that existing legislation does not currently provide for such a requirement.

The table below highlights that there is currently no legal basis for such a condition under the PDA or PDR.

Relevant provisions of Planning Acts	Power / obligation to impose conditions
Section 28(1) and (2)	Planning authorities and the Planning Board are required to have regard to Ministerial guidelines, where applicable
Section 28(1C)	Ministerial guidelines may contain specific planning policy requirements that planning authorities and the Planning Board are required to apply. The term ‘specific planning policy requirements’ means such policy requirements identified in the Ministerial guidelines to support the consistent application of Government or national policy and principles by planning authorities, including the Board, in securing overall proper planning and sustainable development
Section 34(1)	Planning authorities and the Planning Board may grant permission subject to

	conditions
Section 34(2)(a)	When determining an application, planning authorities and the Planning Board shall be restricted to considering the proper planning and sustainable development of the area,
Section 34(2)(a)	When determining proper planning and sustainable development, the planning authorities and the Board may have regard to (<i>inter alia</i>): <ul style="list-style-type: none"> • Development plan (which may include a LARES) • Ministerial guidelines issued under section 28 • Government and Ministerial policies • The conditions which may be imposed in accordance with section 34(4) • Any other relevant provision of the Planning Acts and Planning Regulations.
Sections 34(2)(aa) and (ba)	Planning authorities are required to apply specific policy requirements set out in Ministerial guidelines issued under section 28, and where there is a conflict between the guidelines and the Development plan, the guidelines shall be applied.
Section 34(4)	Conditions which may be imposed by planning authorities and the Planning Board – none of the listed conditions provide for the proposed ‘option to purchase’ requirement.
Schedule 5	Further conditions which may be imposed by planning authorities and the Planning Board without attracting compensation - none of the listed conditions provide for the proposed ‘option to purchase’ requirement.
Section 37(G)(7) and (8)	Community gain conditions specifically for SID and local authority developments – providing facilities or services or both.
Sections 48 and 49	Financial contribution and special financial contribution conditions which may be imposed by planning authorities and the Planning Board in accordance with pre-published LA schemes
Part V	Conditions specifically for housing developments, which may be imposed by planning authorities and the Planning Board in accordance with pre-published Part V housing strategies.
Planning Regulations	
Article 22	Sets out the information to be included with a planning application, including specific requirements for specified classes of development.

It does not necessarily follow from the above that new legislation or legislative amendments are required to implement the proposal as a mandatory obligation. As noted above and explained more fully below, it may be possible to implement the proposal through detailed Ministerial Guidelines under s.28 PDA.

4.6.2 General Planning Conditions Planning authorities and the Board have existing powers to grant permission with or without conditions.

In relation to non-SID applications, planning authorities and the Board have a general power to impose conditions under S.34(1) PDA, and further powers to impose specific conditions under S.34(4) and Schedule 5 PDA, and financial conditions under S.48 or S.49 PDA (or both).⁷⁵

In relation to SID applications, the Board has the same power to attach conditions as it would have in non-SID applications, a further general power to attach conditions under S.37G(3) PDA, and further powers under S.37G(7) PDA to attach conditions requiring a financial contribution in accordance with S.48 or S.49 PDA (or both), or requiring the applicant to submit further information to any specified body, or condition requiring the financing or construction of a facility, or the financing and provision of a service, that would constitute a substantial ‘community gain’. Any such community gain must be proportionate to the value of the development and must not *‘require such an amount of financial resources to be committed for the purposes of the condition being complied with as would substantially*

⁷⁵ S.34(1) PDA, S.37(1)(b) PDA

*deprive the person in whose favour the permission operates of the benefits likely to accrue from the grant of the permission’.*⁷⁶

Planning authorities and the Board do not currently have any express legal power to impose a planning condition requiring a mandatory requirement for local investment in renewable energy projects above a certain specified threshold. In order for such a requirement to be imposed by way of planning condition, the following steps would need to be taken:

- Either, legislation would need to be adopted (see above), and/or
- S.28 Ministerial guidelines would need to be adopted, in which case planning authorities and the Board could rely upon their general powers to impose planning conditions, under S.34(1) PDA and S.37G(3) PDA.

The further powers of planning authorities and the Board to impose specific conditions under S.34(4), S.37G(7) and Schedule 5 PDA are all stated to be ‘without prejudice to the generality of’ their general powers to impose planning conditions. Planning authorities and the Board do not have an entirely free hand – they must have regard to the specific considerations listed in S.34(2)(a), (aa) and (ba) PDA in relation to non-SID, and any other relevant considerations in relation to SID applications. And most significantly, they are required to apply any ‘specific planning policy requirements’ contained in S.28 Ministerial guidelines.

Therefore, if the proposal for a mandatory requirement for local investment in renewable energy projects above a certain specified threshold is adopted as a specific planning policy requirement in S.28 Ministerial guidelines, and on the basis that such a policy requirement constitutes a proper planning and sustainable development consideration (a key legal issue to be determined), planning authorities and the Board will be required to apply those requirements when determining whether to grant or refuse or grant with conditions permission for the proposed development.⁷⁷

The extent to which planning authorities and the Board can rely on S.34(1) PDA to impose planning conditions not specified in S.34(4) or Schedule 5 PDA was considered by the High Court in *Weston v An Bord Pleanála*⁷⁸. The Court held that planning authorities may not rely upon their general power to impose planning conditions under S.34(1) PDA in order to impose more severe or stringent conditions than would otherwise be expressly permissible having regard to the specified conditions set out in S.34(4) PDA. Outside of those specified conditions, other ‘general’ conditions may be imposed without restriction.⁷⁹

The Court concluded in *Weston* that “*the power to impose a ‘non-specified’ condition lawfully exercised by the Board through the Regulations outlined earlier, is one authorised by the general power vested in the Board pursuant to s. 34(1) and (4) of the Act of 2000*”.⁸⁰

The Court further concluded that “[u]nless the power exercised comes within the scope of any one of the [section 34(4)] ... specified circumstances (when it will require to be strictly construed), the power otherwise, and the jurisdiction vested, is a ‘general’ one, provided it is lawfully and rationally imposed in the interests of proper planning and sustainable development. Thus, such a condition to be justified

⁷⁶ according to S.37G (8) PDA

⁷⁷ Pursuant to S.34(1) PDA and S.37G(3) PDA

⁷⁸ [2008] IEHC 71

⁷⁹ The Court in *Weston* referred in the judgment to *Ashbourne Holdings v. An Bord Pleanála* [2003] 2 I.R. 114 in which Mr Justice Hardiman held that a condition under S.34(1) PDA could be imposed, subject to the objectives of the Planning Acts (proper planning and sustainable development) and rational justification (i.e. giving reasons), despite not being listed within the scope of S.34(4) PDA.

⁸⁰ Paragraph 33.

in law must rationally accord with the stated objectives of proper planning and sustainable development.”

The PDA and the decision in *Ashbourne Holdings v An Bord Pleanala*⁸¹ confirm that planning authorities and the Board may only impose or induce other requirements which amount to planning gains on developers except as indicated expressly by the legislature. The burden of justifying the imposition of what might otherwise be planning gain without express statutory authority should lie with the planning authority which should be required to justify it in the reasons for its decisions⁸².

Thus, before any proposed community investment condition may be imposed by a planning authority or the Board pursuant to s.28 Guidelines, the condition must rationally accord with the stated objectives of proper planning and sustainable development, concepts which are discussed more fully below.

4.6.3 ‘Community Gain’ Type Conditions

The Planning and Development (strategic infrastructure) Act, 2006 amended Section 34(4) of the PDA by inserting a new type of condition for regulating the development or use of any land which adjoins, abuts or is adjacent to the land to be developed and which is under the control of the applicant if the imposition of such conditions appears to the planning authority to be;

- i. expedient for the purposes of or in connection with the development authorised by the permission, or
- ii. appropriate, where any aspect or feature of that adjoining, abutting or adjacent land constitutes an amenity for the public or a section of the public, for the purposes of conserving that amenity for the public or that section of the public (and the effect of the imposition of conditions for that purpose would not unduly burden the person in whose favour the permission operates).

This provision allows for ‘community gain’ type conditions to be attached to any permission, to provide off-site amenities for local communities. The Strategic Infrastructure Act also established a new ‘SID’ consenting process, whereby certain classes of development would be determined directly by the Planning Board. The classes of project are listed in the 7th Schedule to the PDA, as amended, and include:

- a thermal power station or other combustion installation with a total energy output of 300 megawatts or more;
- an industrial installation for the production of electricity, steam or hot water with a heat output of 300 megawatts or more;
- an industrial installation for carrying gas, steam or hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables, where the voltage would be 220 kilovolts or more, but excluding development referred to in Section 182A(1);
- an installation for hydroelectric energy production with an output of 300 megawatts or more, where the new or extended superficial area of water impounded would be 30 hectares or more, or where there would be a 30% change in the maximum, minimum or mean flows in the main river channel;

⁸¹ [2003] IESC 18; [2003] 2 IR 114

⁸² Page 173, at 2-320. Yvonne Scannell, *Environmental and Land-Use Law*, Thomson Round Hall, 2006

- an installation for the harnessing of wind power for energy production (a wind farm) with more than 50 turbines or having a total output greater than 100 megawatts.
- Environmental infrastructure including waste disposal installations (incineration and chemical treatment facilities) and installations for the disposal, treatment or recovery of waste with a capacity for an annual intake greater than 100,000 tonnes.

No reference is made in the 7th Schedule to renewable energy projects other than large-scale onshore wind projects.

The thresholds for SID mirror and in some cases exceed the national thresholds for environmental impact assessment of projects³. Where SID projects are concerned, the Planning Board has the power under section 37G (7) to attach a condition to a SID permission requiring:

- the construction or the financing, in whole or in part, of the construction of a facility, or;
- the provision or financing in whole or in part of the provision of a service,

in the area in which the proposed development is situated, being a facility or service that, in the opinion of the Planning Board, would constitute a substantial gain to the local community.

Section 37G (8) makes it clear that the cost of providing the facility or service cannot substantially deprive the developer of the benefits likely to accrue from the permission. These SID processes and provisions apply equally to projects for the provision of electricity transmission and gas infrastructure under sections 182A and 182C of the PDA, and to local authority projects requiring EIA under section 175 of the PDA.

4.6.4 Financial Conditions

A planning authority may impose financial conditions under sections 48 and 49 PDA. Section 48 relates to the general infrastructure, facilities and services which are of benefit to the development site. The planning authority must publish a section 48 development contribution scheme which sets out the details and costs of such infrastructure and the contribution to be made by different classes and size of developments within that planning authority area.

A section 48 scheme may also make provision for the payment of special contributions by particular development where exceptional costs may be incurred in order to deliver the necessary infrastructure and services.

The planning authority in establishing the section 48 scheme must have regard to the actual estimated cost of providing the infrastructure and facilities and must set out the basis for determining the contributions to be paid.

Section 49 deals with supplementary development contribution schemes. These relate to any public infrastructure service or project which is specified in the Section 49 scheme and which is to be carried out by the planning authority or any other person or authority in conjunction with the planning authority, and which will benefit the development to which the permission relates when carried out. Public infrastructure in this context means rail, light rail or other public transport, car parks and ancillary development including new roads, new sewers, waste water and water treatment facilities, drains, water mains and ancillary infrastructure. The supplementary development contribution scheme must set out the contribution to be paid for particular classes of project in advance. Where the relevant public infrastructure is not carried out, within the specified timeframe, the planning authority

must reimburse the developer. Notably, neither sections 48 nor 49 refer to energy infrastructure such as grid transmission and distribution systems or other renewable energy developments.

4.7 Ministerial Guidelines issued under Section 28

The Minister for Housing, Planning, Community and Local Government (the **Minister**) may at any time issue guidelines to planning authorities regarding any of their functions, pursuant to S.28(1) PDA. Planning authorities are obliged to have regard to such guidelines in the performance of their functions. The **Board** is obliged to have regard to such guidelines ‘*where applicable*’.

The obligation to ‘*have regard to*’ in this context does not require planning authorities or the Board to comply with or apply any such guidelines, either in the preparation of Development Plans⁸³ or in the determination of planning applications.⁸⁴

However, S.28(1C) PDA⁸⁵ provides that Ministerial guidelines may contain ‘specific planning policy requirements’ that, notwithstanding subsection (1), are required to be applied by planning authorities and the Board in the performance of their functions generally.

For example, when determining a planning application under S.34 PDA, a planning authority shall apply, where relevant and in accordance with S.34(2)(aa) PDA, specific planning policy requirements prescribed by Ministerial guidelines. S.34(2) (ba) PDA provides that, to the extent that there may be a difference or conflict between the guidelines and a development plan, the guidelines shall take priority.

S.28(1A) PDA⁸⁶ provides that, in connection with the preparation of a draft or final development plan, a planning authority shall be obliged to consider the policies and objectives of the Minister and include a statement with the draft or final development plan setting out, in accordance with S.28(1B) PDA, how the planning authority implemented the Minister’s policies and objectives, or explaining why the policies or objectives were not implemented, giving reasons.

In conclusion, Ministerial planning guidelines under S.28 PDA may include ‘*specific planning policy requirements*’ which planning authorities and the Board are required to apply when determining applications, in the adoption of plans, and in the carrying out of all of their functions under the PDA. The key consideration, therefore, is whether the ‘Option Two’ proposal could constitute a ‘specific planning policy requirement’.

4.7.1 ‘Specific Planning Policy Requirements’

The term ‘*specific planning policy requirements*’ is defined for the purposes of S.34(2) PDA as ‘*such policy requirements identified in guidelines issued by the Minister to support the consistent application of Government or national policy and principles by planning authorities, including the Board, in securing overall proper planning and sustainable development.*’⁸⁷ This definition requires further analysis

⁸³ Judgment of Mr Justice Quirke delivered in *McEvoy and Smith v Meath County Council* on 2 September, 2002 – “*Whilst reason and good sense would dictate that it is in the main desirable that planning authorities should, when making and adopting development plans, seek to accommodate the objectives and policies contained in relevant regional planning guidelines they are not bound to comply with the Guidelines and may depart from them for bona fide reasons consistent with the proper planning and development of the areas for which they have planning responsibility.*”

⁸⁴ Judgment of Mr Justice Peart in *O’Grianna v An Bord Pleanála* delivered 12 December 2014 - “*It cannot in my view be said that the Board failed in its statutory duty in this regard by not slavishly adhering to the Guidelines recommendation in relation to a low noise environment. It was entitled to see the Guidelines as just that, i.e. guidelines.*”

⁸⁵ As inserted by the Planning and Development (Amendment) Act 2015

⁸⁶ As inserted by the Planning and Development (Amendment) Act 2010

⁸⁷ S.34(2)(d) PDA. It is unclear why the definition of ‘*specific planning policy requirements*’ is stated to be for the purposes of S.34(2), as presumably said definition should also apply to the term as it is used in s.28(1C) PDA.

'identified in guidelines'

The proposed S.28 Ministerial guidelines must clearly set out the rationale for the proposal, why it is required to ensure a consistent application of identified Government or national policy and principles in securing overall proper planning and sustainable development, and the precise measures required to achieve that aim. The guidelines must provide clarity, certainty and consistency for all parties, including citizens, local communities, applicants and decision-makers. The level of detail provided for Part V Social Housing requirements, or S.48 Financial Contribution Schemes, might be considered by way of examples of models or schemes which permit all interested parties to know in advance what their likely entitlements and obligations will be should permission be granted. The guidelines would need to specify, as a minimum:

- Relevant classes of development
- Development thresholds
- Methods for identifying potential investors
- Investment vehicles
- Criteria for planning authorities to evaluate proposals
- Standard conditions to be imposed in planning decisions
- Any other relevant and necessary details, in particular the requirements as to information to be submitted in support of an application for planning permission for a relevant development.

There must be no potential for the investment opportunity to influence the outcome of the planning process, nor should the investment opportunity curtail the rights of citizens to express concerns and observations on the proposed development. It is a fundamental principle that *"planning permissions cannot be bought and sold"*⁸⁸. A further consideration is that a planning authority cannot impose a public duty on the shoulders of private developers. For example, in the English case *Hall v Shoreham by Sea UDC*⁸⁹ an attempt to impose a condition in order to secure the provision of a public road at the expense of private developers was deemed invalid, as this is ultra vires the powers of the planning authority.

Developers also cannot "purchase" permission by providing a benefit to a local authority that has no connection to the dis-amenity caused by the proposed development. In *R (Wright) v Forest of Dean District Council*⁹⁰ even if the developer's contributions will directly benefit the local community, they cannot be considered a material consideration for the purposes of an application for planning permission. This case is particularly relevant as the developer aimed to provide an 'opportunity' for the community to invest (7%) in a windfarm project, along with a donation of an annual return of 4% of gross revenue. These donations were to be distributed without specification to community projects by appointed members of the community. Aspects of construction and materials were also to be purchased from local suppliers where possible. The planning authority's consideration of these gains as "material" was held to violate the principle of planning law that *"planning consent cannot be bought or sold"*. A condition requiring development for this purpose is not necessarily ultra vires if it is proportionate⁹¹.

⁸⁸ Page 169, paragraph 2-315, Yvonne Scannell, *Environmental and Land-Use Law*, Thomson, Round Hall, 2006. Also, as Lloyd LJ put it in *City of Bradford Metropolitan Council v Secretary of State* [1987] 53 P&CR 55

⁸⁹ [1964] 1 WLR 240

⁹⁰ [2016] EWHC 1349

⁹¹ Page 170, para. 2-315

Relevant Government and national policy and principles

The 2015 Energy White Paper and the 2016 Programme for Government contain explicit Government policy objectives in favour of community ownership of and investment in renewable energy projects, and in energy infrastructure generally.

The **2015 Energy White Paper**⁹² includes the following Government policy objectives:

- *developing a framework for agreeing how communities share in the benefits of substantial new energy infrastructure located in their area, and establishing a register of community benefit payments*
- *examining shared ownership opportunities for renewable energy projects in local communities*
- *supporting community participation in renewable energy and energy efficiency projects*
- *facilitating access to the national grid for designated renewable electricity projects, and developing mechanisms to allow communities receive payment for electricity*
- *providing funding and supports for community-led projects in the initial stages of development, planning and construction*
- *engaging with local government on scoping the opportunities for demand and supply related local energy action through integrating energy issues into local area planning*
- *ensuring that grid connection policy has due regard to current and future renewable energy policy, including in relation to community renewable energy projects*⁹³.

The 2015 Energy White Paper provides that *“our vision of a low carbon energy system means that greenhouse gas (GHG) emissions from the energy sector will be reduced by between 80% and 95%, compared to 1990 levels, by 2050, and will fall to zero or below by 2100”*.

The 2015 White Paper recognises that *“the energy transition will require improved community engagement in policy making and planning”*⁹⁴.

The **2016 Programme for Government** outlined, for the first time, specific policy objectives to tackle climate change through greater community acceptance. It includes the following Government policy objectives: -

- *as part of the transition to a low carbon society, that citizens and communities are active participants in the energy transition, with robust public and stakeholder engagement in energy policy, and effective community consultation on energy infrastructure developments.*
- *that there is community participation in renewable energy and energy efficiency projects as it is in both the national and local interest.*
- *establish a register of community benefit payments, and examine shared-ownership opportunities for renewable energy projects in local communities supporting, in particular, the emerging energy cooperative movement as one means of facilitating community participation.*

The 2016 Programme for Government *acknowledges* that *‘Climate change is the global challenge of our generation, and requires radical and ambitious thinking to respond to a changing environment’* and that Ireland is to be *‘repositioned to give global leadership in this area’*.

Whilst both the 2015 Energy White Paper and the 2016 Programme for Government provide explicit Government policy support for community ownership of and investment in renewable energy and

⁹² page 9

⁹³ Ibid., p. 10

⁹⁴ Page 9, Energy White Paper (2015), DCENR. Accessible at:

<http://www.dcenr.gov.ie/energy/SiteCollectionDocuments/Energy-Initiatives/Energy%20White%20Paper%20-%20Dec%202015.pdf>

energy infrastructure, they do not specify any policy measures for achieving those objectives, such as for example a requirement for local investment to be imposed as a planning condition for new renewable energy projects above a certain specified threshold. It is clear, however, that the proposal is consistent with and supports Government and national policies as articulated in the 2015 Energy White Paper and 2016 Programme for Government.

There is a further and growing body of international, national and regional legislation, policies and agreements pressing for action on climate change and a just transition to a low carbon economy, and the proposal is considered to be consistent with and supportive of those measures, as described more fully in Appendix Five. In particular, it is considered that the proposal might be incorporated into the National Mitigation Plan to be proposed by Minister for Communications, Climate Change and the Environment and approved by Government in accordance with the Climate Action and Low Carbon Development Act 2015, as one of a number of sectoral measures to achieve a just transition to a low carbon economy.

Proper Planning and Sustainable Development

There is no statutory definition of the term ‘proper planning and sustainable development’ yet it arises in a number of contexts within the planning legislative framework. For example, when determining an application for permission, S.34(1) PDA provides that, when determining whether to grant or refuse a planning application, planning authorities and the Board are restricted to considering the proper planning and sustainable development of the area.⁹⁵ This obligation is articulated further by S. 34(2) PDA which requires a planning authority and the Board to consider, where appropriate:

- The Development Plan, Local Area Plan or equivalent
- Any European site, NHA, or special amenity area
- Policies and objectives of the Government or Ministers
- Ministerial guidelines issued under S.28 PDA
- Any planning conditions which may be attached
- Any other relevant provisions of the PDA or PDR

Section 10 (1) PDA provides that a development plan shall set out an overall strategy for the proper planning and sustainable development of the area, and S.10(2) PDA provides that, *without prejudice to the generality of S.10(1)*, the development plan shall include objectives for a number of specified matters. The list of proper planning and sustainable development objectives in the PDA which may be included within a development plan is therefore non-exhaustive. Further objectives are listed in the First Schedule, PDA, and the Minister is empowered under S.10(4) to prescribe additional objectives for the purposes of S.10(2) or for the purposes of the First Schedule, PDA.

The specified objectives include, for example

- the provision or facilitation of the provision of infrastructure including⁹⁶ transport, energy and communication facilities,
- the integration of the planning and sustainable development of the area with the social, community and cultural requirements of the area and its population.⁹⁷
- The promotion of sustainable settlement and transportation strategies in urban and rural areas including the promotion of measures to⁹⁸ –
 - reduce energy demand in response to the likelihood of increases in energy and other costs due to long-term decline in non-renewable resources,

⁹⁵ S.37G provides, in relation to SID applications, that the Board may consider ‘any relevant information before it or any other matter to which, by virtue of this Act, it can have regard.’

⁹⁶ S.10(2)(b), PDA

⁹⁷ S.10(2)(d), PDA

⁹⁸ S.10(2)(n), PDA

- reduce anthropogenic greenhouse gas emissions, and
- (address the necessity of adaptation to climate change; in particular, having regard to location, layout and design of new development;
- Regulating, promoting or controlling the exploitation of natural resources⁹⁹.

In his textbook on planning law¹⁰⁰, Garrett Simons SC suggests other proper planning and sustainable development considerations, including.

- Amenity
- Public health and safety
- Common Good
- Prematurity
- Precedent
- Res judicata
- Planning history of lands
- Existing development rights
- Alternative sites
- Private interests
- Planning gain
- Compulsory purchase order

In *Eircell Ltd v Leitrim County Council*¹⁰¹ the Court held that vague concepts such as fear and apprehension and general opposition to a proposed development do not constitute proper planning and sustainable development considerations, but individual elements or factors of the development which provoked such concerns would likely constitute proper planning and sustainable development considerations.

The list of proper planning and sustainable development considerations in the PDA and PDR do not currently include any express provisions for the 'Option Two' proposal, however it is clear that the list is non-exhaustive and may be amended by the Minister from time to time.

A measure or development proposal intended to achieve a just transition to a low carbon economy *arguably* constitutes a proper planning and sustainable development consideration, particularly where such measure is fully supported by Government policies and legislation in the area of climate action. The current proposal, involving a requirement for local investment in renewable energy projects above a certain specified threshold, has not been legislated for, expressly, and has not been adjudicated on to date as a matter of proper planning and sustainable development. That case will have to be made out, very clearly, in the proposed S.28 Guidelines.

Clearly any specific planning policy requirements in S.28 Ministerial guidelines will need to constitute a proper planning and sustainable development consideration, as would any relevant development objectives specified in the development plan, local area plan, or local authority renewable energy strategy (LARES) forming part of a development plan.

It is of central importance, therefore, that any s.28 Ministerial Guidelines specifying the 'option to purchase' for certain specified classes of development as a policy requirement set out why such policy

⁹⁹ First schedule, PDA

¹⁰⁰ Page 168, at 4-05. Garrett Simons, *Planning and Development Law*, Second Edition, Thomson Round Hall, 2007. He notes that "[i]t would seem that in order for a consideration to come within the concept of proper planning and sustainable development it must be rooted in some factual basis."

¹⁰¹ [2000] 1 IR 479; [2000] 2 ILRM 81 – the case related to telecommunications infrastructure

is a matter of proper planning and sustainable development, and why it is an appropriate and proportionate measure to achieve a just transition to a low carbon economy.

4.8 Legislative Amendments

As noted above, new legislation may not strictly be required to give legal effect to the proposal. It may be sufficient to include the proposal by way of a specific planning policy requirement in Ministerial guidelines issued under S.28 PDA, including sufficient detail within the guidelines to ensure that citizens, including local communities, potential applicants for planning permission, and decision makers understand fully the scope and implementation requirements for the proposal.

Whilst new legislation may not be essential, the Department for Housing, Planning, Community and Local Government might consider seeking the advice of the Attorney General's office as to whether it might be appropriate or desirable to implement or further reinforce the proposal through legislative amendments.

The existing legislation specifies types of planning condition which may be imposed under S.34(4) and Schedule 5 PDA. Planning authorities and the Board may also impose financial planning conditions under S.48 and S.49 PDA, where applicable and in accordance with pre-published schemes. It is notable that these planning conditions are not specific to any particular type of development or industry or activity. They are therefore capable of being imposed on all types of development, depending on the circumstances. The current proposal, on the other hand, is intended to apply only to certain classes of renewable energy projects meeting a prescribed threshold. For that reason, it is not considered appropriate to simply add a further 'condition' type to S.34(4) or Schedule 5 PDA to provide for the proposal. Planning authorities and the Board do have the power to impose special conditions in relation to specific development types under other provisions of the PDA, for example:

- Part V PDA – a condition shall be imposed requiring housing developers to provide land, housing or financing equivalent to X% of the proposed housing development, as a proportionate deduction of the 'planning gain' in the common interest.
- S.37G (7) and (8) – a condition may be imposed requiring SID developers to finance or construct a facility, or finance or provide a service, of significant benefit to the community, the cost of which must be reasonable having regard to the benefit to be gained from the development.¹⁰²

An analysis of these provisions together with the current proposed requirement for community ownership conditions and their Constitutional law implications is set out in Appendix Five. The following potential legislation might be considered by the Department and/or the Attorney General's office:

New section in the PDA:

[xx]. (a). A planning authority or the Board shall, when granting permission under this Act for certain prescribed classes of development [], include a condition requiring the reservation or allocation of shares in the proposed development for a specified class or classes of person, in accordance with criteria specified in guidelines issued by the Minister under section 28.*

* The relevant class or classes of development would need to be prescribed in the PDR or other regulations, and described more fully in the proposed Ministerial guidelines.

¹⁰² These SID processes and provisions apply equally to projects for the provision of electricity transmission and gas infrastructure under sections 182A and 182C of the PDA, and to local authority projects requiring EIA under section 175 of the PDA

New article in the PDR (or sub-paragraph of article 22) setting out the information to be provided with a relevant application for development,

*(xx) in the case of an application for permission for the development of [*insert prescribed class of development*], details of how the applicant proposes to comply with a condition [*under section [xx] /requiring the reservation or allocation of shares in the proposed development*], to which the permission, if granted, would be subject, including:*

*[*specify detailed information that would be required to evaluate compliance with the guidelines and PDA.*]*

4.9 Summary

In summary, new legislation may not be required to give legal effect to the proposal. It may be sufficient to include the proposal by way of a specific planning policy requirement in Ministerial guidelines issued under S.28 of the Planning and Development Act 2000, as amended (**PDA**), including sufficient detail within the guidelines to ensure that citizens, including local communities, potential applicants for planning permission, and decision makers understand fully the scope and implementation requirements for the proposal.

Whilst new legislation may not be essential, the Department for Housing, Planning, Community and Local Government might consider seeking the advice of the Attorney General's office as to whether it might be appropriate or desirable to implement or further reinforce the proposal through legislative amendments, for example:

- A new section or subsection of the PDA, similar to S.48 PDA, providing planning authorities and An Bord Pleanála (**the Board**) with an express power to impose a condition requiring the applicant to reserve a specified percentage of the development for local investment in renewable energy projects above a certain specified threshold.
- A new article or sub-article inserted in the Planning and Development Regulations 2001, as amended (**PDR**) specifying the information to be provided with an application for planning permission, strategic infrastructure development (**SID**) consent, energy or gas infrastructure consent, or other such application as may be relevant.

It might also be considered appropriate for the Minister for Communications, Climate Action and Environment to include the proposal as set out in S.28 Ministerial guidelines as one of a number of measures in the National Mitigation Plan under the Climate Action and Low Carbon Development Act 2015.

Underpinning all of the above will be the need for early and effective consultation and engagement with the public, relevant statutory bodies and public and private stakeholders. Such consultation might take place within the context of Strategic Environmental Assessment (SEA) screening and Regulatory Impact Analysis (RIA). 5.0 Conclusion

Having consideration to the objectives of this research project, it is concluded that a Community Investment Framework 'option to purchase' scheme to be regulated through the planning system would be most effective in Ireland. The scheme, if implemented, would be supported through detailed Section 28 Ministerial Guidelines, which in addition to setting thresholds for RE developments, would provide specific, technical, financial and legal criteria to be applied in the case of each individual project. Therefore, the planning system should in this respect provide a participatory mechanism and fair and transparent evaluation of proposals giving certainty to developers and the community. Based

on national and international best practice, the creation of a **trusted intermediary**, to manage, regulate and support the implementation of a community ownership models in an Irish context should be considered.

New legislation may not be required to give legal effect to the proposal. It may be sufficient to include the proposal by way of a specific planning policy requirement in Ministerial guidelines issued under S.28 of the Planning and Development Act 2000, as amended (**PDA**), including sufficient detail within the guidelines to ensure that citizens, including local communities, potential applicants for planning permission, and decision makers understand fully the scope and implementation requirements for the proposal.

Whilst new legislation may not be essential, the Department for Housing, Planning, Community and Local Government might consider seeking the advice of the Attorney General's office as to whether it might be appropriate or desirable to implement or further reinforce the proposal through legislative amendments, for example:

- A new section or subsection of the PDA, similar to S.48 PDA, providing planning authorities and An Bord Pleanála (**the Board**) with an express power to impose a condition requiring the applicant to reserve a specified percentage of the development for local investment in renewable energy projects above a certain specified threshold.
- A new article or sub-article inserted in the Planning and Development Regulations 2001, as amended (**PDR**) specifying the information to be provided with an application for planning permission, strategic infrastructure development (**SID**) consent, energy or gas infrastructure consent, or other such application as may be relevant; and/or

It might also be considered appropriate for the Minister for Communications, Climate Action and Environment to include the proposal as set out in S.28 Ministerial guidelines as one of a number of measures in the National Mitigation Plan under the Climate Action and Low Carbon Development Act 2015.

Underpinning all of the above will be the need for early and effective consultation and engagement with the public, relevant statutory bodies and public and private stakeholders. Such consultation might take place within the context of Strategic Environmental Assessment (SEA) screening and Regulatory Impact Analysis (RIA).

References

- Brennan, N. and T.M. Van Rensburg, "Wind farm externalities and public preferences for community consultation in Ireland: A discrete choice experiments approach". Energy Policy, 2016. 94: p. 355-365.
- Bruns, E. and D. Ohlhorst, "Wind Power Generation in Germany." The Journal of Transdisciplinary Environmental Studies, 2011. 10(1).
- Comhar Sustainable Development Council (2011) "Community Renewable Energy in Ireland: Status, barriers and potential options"
- Consulting, S.L.R., G. Ellis, and P. Devine-Wright, Wind Energy: "The Challenge of Community Engagement and Social Acceptance in Ireland". 2014: National Economic and Social Council, Ireland.
- Degenhart, H., Nestle U. "Marktrealität von Bürgerenergie und mögliche Auswirkungen von regulatorischen Eingriffen". April 2014
- Department of Communications Energy and Natural Resources (2010) "National Renewable Energy Action Plan" Government of Ireland, Dublin
- Department of Communications, Energy and Natural Resources (2015) "Ireland's Transition to a Low Carbon Energy Future 2015-2030" Government of Ireland
- Department of Energy and Climate Change "Guidance on community ownership models under the Feed-in Tariffs scheme." March 2015, p.23. Retrieved from: <https://www.gov.uk/government/publications/guidance-on-community-ownership-models-under-the-feed-in-tariffs-scheme>
- Deutscher Genossenschafts- und Raiffeisenverband e.V. (DGRV). "Energiegenossenschaften – Ergebnisse der Umfrage des DGRV und seiner Mitgliedsverbände". Spring 2014, p.11.
- EA, "Renewable Obligation Plan, Non-Fossil Fuel Obligation". 2015
- Fast, S., et al., "Lessons learned from Ontario wind energy disputes". Nature Energy, 2016. 1: p. 15028
- Goedkoop, F. and P. Devine-Wright, Partnership or placation? The role of trust and justice in the shared ownership of RE projects. Energy Research & Social Science, 2016. 17: p. 135-146.
- Government of Denmark (2015) "A World Leader in Wind Energy". Available from: <http://denmark.dk/en/green-living/wind-energy/>
- Haggett, C., Aitken, M., Rudolph, D., van Veelen, B., Harnmeijer, J. and Markantoni, M. "Supporting Community Investment in Commercial RE Schemes: Final Report." ClimateXChange. December 2014
- Hall, S., T.J. Foxon, and R. Bolton, "Financing the civic energy sector: How financial institutions affect ownership models in Germany and the United Kingdom." Energy Research & Social Science, 2016. 12: p. 5-15.
- Hall, S., T.J. Foxon, and R. Bolton, Financing the civic energy sector: How financial institutions affect ownership models in Germany and the United Kingdom. Energy Research & Social Science, 2016. 12: p. 5-15.
- Holburn, G., K. Lui, and C. Morand, "Policy Risk and Private Investment in Ontario's Wind Power Sector. Canadian Public Policy", 2010. 36(4): p. 465-486.
- Hvelplund, F., B. Möller, and K. Sperling, Local ownership, smart energy systems and better wind power economy. Energy Strategy Reviews, 2013. 1(3): p. 164-170.
- IEA, "Non-Fossil Fuel Obligation". 2013, International Energy Agency
- IEA-RETD (2016), "Cost and financing aspects of community RE projects. Volume II: United Kingdom Case Study". Ricardo Energy & Environment, IEA-RETD Operating Agent, IEA Implementing Agreement for RE Technology Deployment (IEA-RETD), Utrecht, 2016.
- "IEA-RETD (2016), "Cost and financing aspects of community RE projects. Volume II: German Case Study". Ricardo Energy & Environment and Ecologic Institute, IEA-RETD Operating Agent,

- IEA Implementing Agreement for RE Technology Deployment (IEA-RETD), Utrecht
- IRENA, *"30 Years of Policies for Wind Energy; Lessons from 12 Wind Energy Markets"*. 2012
- IWEA, *"Good Neighbour; IWEA Best Practice Principles in Community Engagement & Community Commitment"*. 2013, Irish Wind Energy Association. p. 1-15.
- John Fitzgerald, A.O.M., Eleanor Denny, (2013) *"An enterprising wind: an economic analysis of the job creation potential of the wind sector in Ireland"*
- Jones, C.R. and J. Richard Eiser, *"Understanding 'local' opposition to wind development in the UK: How big is a backyard?"* Energy Policy, 2010. 38(6): p. 3106-3117
- Jones, C.R. and J. Richard Eiser, *"Understanding 'local' opposition to wind development in the UK: How big is a backyard?"* Energy Policy, 2010. 38(6): p. 3106-3117.
- Keay, M., *"UK energy policy – Stuck in ideological limbo?"* Energy Policy, 2016. 94: p. 247-252.
- Mitchell, C. and P. Connor, *"RE policy in the UK 1990–2003"*. Energy Policy, 2004. 32(17): p. 1935-1947
- Morris, C. and M. Pehnt, (2012) *"Energy Transition: The German Energiewende"*. Heinrich Böll Stiftung,
- National Economic and Social Council (2014) *"Wind Energy in Ireland: Building Community Engagement and Social Support"*
- National, E., et al., *"Wind Energy: International Practices to Support Community Engagement and Acceptance"*. Vol. 139. 2014: National Economic and Social Council, Ireland.
- Nolden, C., *"Governing community energy—Feed-in tariffs and the development of community wind energy schemes in the United Kingdom and Germany."* Energy Policy, 2013. 63: p. 543-552.
- Queens University Belfast (2012) *"A review of the context for enhancing community acceptance of wind energy in Ireland"*
- Sperling, K., F. Hvelplund, and B.V. Mathiesen, *"Centralisation and decentralisation in strategic municipal energy planning in Denmark"*. Energy Policy, 2011. 39(3): p. 1338-1351.
- Sperling, K., F. Hvelplund, and B.V. Mathiesen, *"Evaluation of wind power planning in Denmark – Towards an integrated perspective"*. Energy, 2010. 35(12): p. 5443-5454.
- Strom-Report. *"Wind Power Factsheet Germany 2015; Recent Data and Facts about Wind Power in Germany. 2015"*; Available from: <http://strom-report.de/renewable-energy/>.
- The German Feed-in Tariff. Futurepolicy.org
- Western Development Commission (2007) *"Communities and Renewable Energy: A Guide"*
- Wróżyński, R., M. Sojka, and K. Pyszny, *"The application of GIS and 3D graphic software to visual impact assessment of wind turbines. RE"*, 2016. 96, Part A: p. 625-635
- Wüstenhagen, R., M. Wolsink, and M.J. Bürer, *"Social acceptance of RE innovation: An introduction to the concept."* Energy policy, 2007. 35(5): p. 2683-2691.
- Zoellner, J., P. Schweizer-Ries, and C. Wemheuer, *"Public acceptance of renewable energies: Results from case studies in Germany"*. Energy policy, 2008. 36(11): p. 4136-4141.

Appendix One: Case Study Countries Energy Policy Chronology

A.1 Denmark¹⁰³

Key Danish Policy Frameworks	
Dansk Energipolitik (1976)	Following the oil crisis in the 1970's, the focus of this policy was to reduce dependency on imported energy. In 1979 the first commercial wind turbine was installed, the Vestas 30kW
Energiplan81 (1981)	The aim was to rapidly grow indigenous energy supplies; the plan included oil and natural gas explorations in the North Sea, Taxes on coal and oil to increase the competitiveness of renewables and the "introduction of subsidies for the construction of wind turbines and biomass plants"[15]. Nuclear energy was rejected in 1985, increasing the importance of wind energy. Capital grants of 30% the initial cost was provided for windfarm construction, which was progressively reduced, and following improved turbine cost effectiveness, later repealed. Capacity reached 300MW by 1990, three times the national target
Energi 2000 (1990)	The target for this phase was to reduce GHG emissions by 20% on 1988 levels by 2005, and a specific electricity consumption target of 10% from the wind sector. In 1992 a "fair price" for wind energy was set at 85% of retail electricity rates, and planning procedures were reformed to include "directives for local planners". This directive stipulated that prior to an application for siting turbines a public hearing was to be mandatory; this greatly contributed to public acceptance. A fix feed-in tariff for electricity was also introduced in 1993. Wind energy projects were to receive a full refund on the carbon tax, and a partial energy tax refund. This effectively increased payments to wind projects by 100% for their first five years in operation
Energi 21 1996	A target of 12-14% of total energy consumption, and 35% of electricity consumption was set for 2005 and 2030 respectively. In 1996 over 2100 cooperatives were in place throughout the country, and according to the IWEA, they had installed 86% of the total turbines constructed by 2001. A number of reports also state that the Danish tradition of co-ops provided a bedrock of social capital which has been central to the level of participation and engagement with renewable energies
Market Liberalisation 1999-2008	In 2000 Denmark discontinued the feed in tariffs, and instead implemented the RE portfolio standard mechanism, along with a tradeable system of green certificates. Previous restrictions on who could invest in a wind farm were relaxed, and planning regulations were tightened. This was part of a conscious effort to increase the competitiveness of the energy sector, renewables in particular, and thus reduce the rising costs of wind power supports through market force based policy. Between 2004 and 2006 just 40 MW of wind energy was added to the countries capacity, and by 2008 the wind energy sector had almost completely stalled. This period also witnessed an unprecedented growth in local opposition, as wind turbines were growing in size. In 2008 the "Energy Policy Agreement" was signed, which set ambitious goals for the development of renewable energies, and energy efficiency.
Rejuvenation and strengthening of the wind sector; 2009 –	In 2009 Denmark witnessed a drastic increase in capacity, with 116MW of additional onshore wind energy; 90% of the additional capacity for the entire period 2004-2008. In 2011 the government published a report titled "energy strategy 2050: from Coal, Oil, and Gas to green energy", which sets out the countries aim to become completely independent from fossil fuels by 2050. This was an extraordinary ambitious policy framework, and the main targets are as follows; <ul style="list-style-type: none"> ➤ 100% of electricity and heat consumption to come from renewable sources by 2035 ➤ A 40% reduction in GHGs by 2020 ➤ Half of electricity consumption to come from wind by 2020

¹⁰³ IEA-RETD (2016), Cost and financing aspects of community renewable energy projects. Volume II: Danish Case Study. Ricardo Energy & Environment and Ecologic Institute, IEA-RETD Operating Agent, IEA Implementing Agreement for Renewable Energy Technology Deployment (IEA-RETD), Utrecht, 2016.

A.2 Germany¹⁰⁴

Key German Policy Frameworks	
Oil Crisis (1973)	Germans politicians realised the countries exposure to imported energy and immediately implemented regulations to improve energy efficiency.
Studies on Energiewende (1980)	Academic research conducted by the Institute for Applied Ecology, titled “Energiewende; Growth and Prosperity Without Oil and Uranium” was one of the first to highlight the possibility of growth with reduced energy consumption. At this time the German electricity market was dominated by large coal and nuclear utilities.
Speech in Parliament (1987)	In March 1987 the then chancellor Hermut Kohl gave a speech in parliament outlining the “threat of grave climate change from the greenhouse effect”.
Feed-in-Tariff (1991)	Feed-in-tariffs are first implemented; mandating that renewable energies have priority access to the grid, and renewable investors receive adequate return on their investment. The feed-in tariff was set at 90% the average electricity rate; this ultimately served to decentralise Germanys energy production
Eco-tax (1999-2003)	Gasoline and fossil fuel electricity prices are increased by a few cents, resulting in greater fuel efficient cars and marginally lower overall energy consumption. By 1999 Germany had the second largest wind turbine industry in the world
RE Act (REG) 2000	This replaced the Electricity Feed-In act, and updated the feed-in tariff mechanism. Payments were to be made on the basis of covering costs plus a sufficient rate of return, usually between five and seven percent, and payments were to be guaranteed for 20 years. Previously payments were linked to a percentage of the average retail price. However, rates were to fall over time in order to ensure that manufacturers were conscious of reducing cost and thus becoming more efficient. The act also mandated that smaller renewable operations get priority grid access over corporations, which has reportedly increased community ownership and acceptance. The extra costs are borne by a surcharge levied on consumers.
EU ruling on Feed in tariffs (2001)	Preussenelektra, a German electricity provider challenged the FID scheme in court. Following escalation to the European Court of Justice, FIDs were deemed not to constitute “state aid” and were thus not an illegal mechanism.
Lowering tariffs (2002)	Any installation after this point was to receive progressively lower tariffs, depending on the type of installation. Wind was to receive 2% less each year, which was subsequently revised to 1%, in order to mirror the learning curve of the technology, and encourage producers to remain conscious of reducing costs.
Community Business Tax (2009)	Prior to 2009 100% of a wind farms tax liability was paid by the company’s headquarters, and thus cities like Berlin received greater tax revenues. This policy mandated that 70% of the tax be paid locally, which served to redistribute some of the benefits locally
Amendment to the REG act (2009)	The aim was to bring the renewable sector closer to the market by trying to encourage wind power producers to sell directly onto the power exchange. By doing so they would no longer qualify for the feed-in Tariff, and instead would receive a “marketing bonus”. Producers only took part in this scheme if it could yield a greater profit than the status quo.
Energy Concept (2010)	This detailed Germanys long term energy transition and abatement plan. It outlined the aim of securing a reliable energy supply that is environmentally friendly and economic sound. The targets are listed below; <ul style="list-style-type: none"> - A phased reduction in GHG’s based on 1990 levels <ul style="list-style-type: none"> • 40% (2020) • 55% (2030) • 70% (2040) • 80-95% (2050)

¹⁰⁴ IEA-RETD (2016), Cost and financing aspects of community renewable energy projects. Volume II: German Case Study. Ricardo Energy & Environment and Ecologic Institute, IEA-RETD Operating Agent, IEA Implementing Agreement for Renewable Energy Technology Deployment (IEA-RETD), Utrecht, 2016.

	<ul style="list-style-type: none"> - 60% of final electricity consumption to be derived from renewable sources by 2050 - A reduction in primary energy consumption of 20% by 2020 and 50% by 2050 based on 2008 levels.
<p>Fukushima disaster (2011)</p>	<p>Germany was an early adapter of Nuclear energy, a contentious and divisive decision that culminated in the 2000 agreement, which stipulated that nuclear plants were to be decommissioned by 2022. In 2010 Chancellor Angela Merkel’s coalition decided to extend this deadline for up to 14 years. However, following the Fukushima disaster this decision was reversed, and forty percent of the remaining plants were switched off within a week. The implication is that wind will play a more central role</p>
<p>REG amendment (2012)</p>	<p>This amendment increased the percentage reduction in the wind tariff from 1% to 1.5%. In accordance with the previous Energy Concept, minimum targets for renewable electricity were set;</p> <ul style="list-style-type: none"> • 35% (2020) • 50% (2030) • 65%(2040) • 80% (2050) <p>As the share of renewable energies grew, the importance of market system and grid integration also grew in importance. Other measures include;</p> <ul style="list-style-type: none"> • A Market Premium, which tries to orientate individual producers towards the market by allowing them to keep the market price of the electricity, plus the difference between the forgone feed in tariff and the electricity price, and a “management premium” • A rebate payment for utility companies who sell a minimum of 50% renewable electricity was also incorporated into Germanys policy
<p>RE act (2014)</p>	<p>The motivation for this reform was to reduce the consumer costs of RE, which had risen to €19.37 billion by 2013. This act mandates a switch in the financial support mechanism for renewable energies, from a feed in tariff to an auction mechanism by 2017, in an effort to allow market pressures reduce costs. The first round for 140MW of renewable energies seen 40% secured by just one firm, and an increase in the price support for solar. It has been argued that this may “dissuade” local initiatives due to increased risk. This policy also mandates wind farms constructed after the first of August 2014 must sell directly on the wholesale markets. This increased risk has been seen to directly reduce cooperative activities</p>

A.3 United Kingdom¹⁰⁵

Event	Description
“Free Lunch”	Co ² emissions fell by 90 million tonnes without any policy intervention, largely as a result of the use of gas instead of coal in the UKs energy mix. At this time the UK was allowing the free market forces govern in the energy sector.
Privatisation of Electricity distribution	The 12 companies in charge of the country’s electricity distribution, and the two power generators, National power and PowereGen, which constituted 70% of the market share, were privatised. As part of this act the first piece of legislation mandating financial support for “non-fossil” fuel energy, through a “Non-Fossil Fuel Obligation” (NFFO) was introduced. This meant that energy producers were obliged to purchase a certain proportion of their electricity from renewable and nuclear sources at a “premium price”. The difference between the market price, and the premium price was to be financed through a fossil fuel levy, which was dispersed among all electricity consumers. This mechanism had five phases and was purposed to allow market forces minimise costs through competitive bidding. Auctions were held to determine who got the contracts for the provision of the renewable capacity. There were five phases to this process
Electricity Act	<p>1. NFFO1</p> <p>Capacity was ultimately filled by established producers who had been campaigning for financial support. Prices were agreed before the Auction, resulting in minimal competition. Whilst the program had no target initially, it was later set at 600MW</p> <p>2. NFFO2</p> <p>Unlike the first phase, NFFO2 brought new capacity, and thus increased competition. It has been argued that these two initial rounds of NFFO, by virtue of the fact that they were quite rushed, resulted in a certain level of “anxiety” about wind energy among locals, and the formation of an “anti-wind movement”. This same argument continues to blame these initial NFFO’s for engendering an anti-wind sentiment which remains the greatest barrier to wind energy</p>
Announcements of three more NFFO rounds	For the latter phases of NFFOs the rules were changed slightly; wind energy was split into bands, large projects and small projects, in an effort to increase accessibility. The contract structure was also altered to include a 5-year grace period in order to get planning permission, preceded by a 15 year “index-linked premium payment”.
Election of the Labour party	The labour party outlined their desire to open up discussion about the “future of RE policy”, and set a target of 10% renewable electricity by 2010. Contracted capacity for the NFFO4 and NFFO5 were also announced in 1997, at 1700MW and 1177MW respectively.
Changing Climate report	Published by the Royal Commission on Environmental Pollution this report called for a target of 60% reduction in GHGs by 2050, and increased the pressure for intervention in the electricity market. This led to the publication of the 2003 white paper, the first energy policy in over 20 years.
The Renewable obligation (RO)	The RO scheme is a legislative mechanism which obliges Electricity suppliers to source a certain percentage of their electricity from renewable sources. No price or contract criterion is specified as part of the RO, rather the terms are to be negotiated between the developer and electricity supplier. The RO creates high levels of uncertainty about the level of demand, and the price to be paid.
	This scheme also includes tradable “Renewable Obligation Certificates” (ROC), with

¹⁰⁵ IEA-RETD (2016), Cost and financing aspects of community renewable energy projects. Volume II: United Kingdom Case Study. Ricardo Energy & Environment, IEA-RETD Operating Agent, IEA Implementing Agreement for Renewable Energy Technology Deployment (IEA-RETD), Utrecht, 2016.

	<p>one ROC being equal to 1MW of RE. ROCs can be obtained in a number of ways; by purchasing them from renewable generators or from a trading market. The supplier also has the option to “buy-out”, by which they pay a set amount for every Kwh they should have purchased in renewables, which is adjusted annually for inflation. This Buy-out fund is used to compensate individuals who have honoured their renewable requirements, and traded in their ROC. These incentives the acquisition of ROCS, as to take buy out option would mean subsidising ones’ competitors. The RO scheme contributed to an increase of renewables from 1.8% in 2002, to 6.8% in 200. This policy offered no differentiation between the various types of renewables, each receiving the same level of support per kWh.</p>
<p>The Energy Challenge Report</p>	<p>This report indicated that the gap between emissions and targets for 2020 had almost doubled since 2003, indicated that policies implemented in 2003, had been ineffective</p>
	<p>By 2007 wind constituted the largest proportion of the UKs RE capacity, which made up “2.2% of the country’s electricity supply”</p>
<p>Climate Change Act</p>	<p>This explicitly outlined the UK targets of reducing the countries emissions by 80% by 2050, and 34% by 2020 (1990 levels). This obviously meant an increased requirement for renewable energies.</p>
<p>Feed-in Tariff and Alterations to RO</p>	<p>Renewable Obligation Scheme was extended to include new projects, from 2027, to 2037. This served to offer greater security to investors, and provided more support for offshore wind. In April the UK introduced a feed-in tariff for projects below 5MW to in order to allow for smaller producers.</p>
<p>Community Energy Strategy(CES)</p>	<p>The CES was published by the UK government and encourages developers to offer ownership to the local community, so as to “help the deployment of RE, increase understanding and engagement, be cost-neutral, and inclusive”. The “Shared Ownership Task Force” (SOTF) was set up in order to look at the prospect of shared ownership in more detail. The task force ultimately recommended that developers offer between 5-25% of the projects value to the local community for projects above £2.5 million. Although non-binding, a review will be conducted and if it is clear that the recommendations have not been implemented, then it will become an official regulation.</p>

Appendix Two: Consultation Presentation

Comhairle Contae Thiobraid Árann
Tipperary County Council

FutureAnalytics
Planning • Research • Economics

TIPPERARY
energy
AGENCY

PHILIPLEE
DUBLIN | BRUSSELS | SAN FRANCISCO

Co-Ownership of Renewable Energy Projects

Consultation Discussion
August/ September 2016



This research is funded by The Sustainable Energy Authority of Ireland under their research development and demonstration program for 2016.

The research and proposals contained herein do not represent the opinion or policy of the SEAI or the Irish Government.

Context/ Drivers

Challenge is to put into practice the following government policy objective:

Implementation of “share in the benefits of substantial new energy infrastructure... located in their area.” White Paper Pg45

- Focusing on engaging citizens in the energy transition through a positive investment opportunity.
- Focussing on distributive justice and local ownership
- Excluding: Procedural justice;

Germany

“We’re really democratising the energy system by allowing everyone in Germany the opportunity, or giving everyone the opportunity to participate in the system. And that’s something that has put the Energiewende at the heart of political priorities.”

- Planned citizen engagement in advance
- Devolved responsibility for area designation.
- Easy methods of connection & planning.
 - >51% res is community / farmer owned.
 - Farmers: Shall I develop or just let someone else?
- FIT (as Ireland)
- No real extra requirements as 120,000 citizens invested in 2014.
- We can’t start here, as this was planned, undermined argument against RES.

UK

- Community benefit fund of £3k-£5k/MW per annum.
- Slowly dying on-shore wind in England. <30% projects approved.
- Community projects heavily supported in Scotland (Local Energy Scotland).
 - Supports for experts to work with developers for co-ownership (Viking 370MW – 49% Co. owned)
- Significant community opposition; little support for developer led.
- Some community co-ops, however recent regulatory changes decreasing this. (needs to be more than just an investment vehicle)
- Scotland's community policy is worth copying for community led.
- Existing UK model not a "model" worth copying.
- Task force on co-ownership currently examining models.

Denmark

- Denmark hit a wall of social acceptance with larger and developer led farms. Changes:
 - Local house loss of value scheme – application process, transparent deals.
 - Option to purchase
 - Green Scheme – Community benefit 12k/MW over 7 years.
 - Guarantee scheme (help community projects – local energy Scotland – PSO funded)
 - Independent trusted intermediary to work on issues that arise.
- Similar to Ireland as similar problem to our current challenge.
- Will the "Danish" solution work in Ireland and what changes are needed?



Proposal #1 of 3

Need to reflect distributive justice or perceived imposition of RE infrastructure.

- A provision of value to neighbours
 - Either a share of each turbine to houses within 500m-1km. (Proposal is % of equity value of each turbine within km (~ equivalent of full development).
 - Could be completed with a payment for electricity
 - Equivalent to an annual income of about €1000 <1km; but on wind park return, not guaranteed payment.
 - Or alternative model?
- Initial memorandum pre-planning should be issued
 - Detail likely revenue that will accrue for first 25 years.
 - Not impacting statutory rights.
 - Needs to be transparent, fair, just and certain.

Proposal #2 of 3

Need to reflect Danish option to purchase to allow citizens participate in the energy transition:

- Initial memorandum will issue potential equity offering at preplanning and consultation stage.
- Final prospectus with 15%-25% of project offered.
- Prospectus at project close through covenant, with full due diligence. i.e. de-risked and drawn at financial close.
 - Maximum value per individual
 - Loan guarantee scheme for people on fuel allowance to purchase. (income pays back loan, then ownership reverts + levy for future development)
 - Small incremental value of shares (e.g. €50).
- Initially open to limited area.
- Further opening if subscription not achieved to larger area.
- Flexibility needed Owinhinny Vs typical.

Proposal #3 of 3: Wider Community Benefit Scheme

- Bringing down SID community benefit fund to smaller projects. (currently voluntary) - Danish Green scheme – community benefit fund.
 - Would apply to LA decisions
 - Academic literature details this is not often useful for acceptance at pre-development stage.
 - Currently €1k/MW per annum
 - Seen as hugely constructive for Lisheen and other communities. – It feels like a good idea.
 - Managed by LA in many cases.
 - Widely used at present, but not mandatory.

Legal Mechanism #1: Investment opportunity.

- A legislative amendment of PDA to allow planning authority to impose a planning condition under section 34.
- Proportionate infringement of developer property rights is justified in the name of the public good
 - *In the matter of Article 26 of the Constitution and in the matter of Part V of the Planning and Development Bill, 1999*
- Planning Authority requires the developer to offer the opportunity to the public to invest in a renewable energy development.
- Intermediary body (DCCA/E/ SEAI/ LEA/ LA/ LEO) agree guidelines for implementation of a Community investment scheme.
 - Trusted intermediary could act as facilitator.

Legislative mechanism #2: Constitutionality of a “give away” infringement.

- Proportionate infringement of developer property rights is justified in the name of the public good
 - *In the matter of Article 26 of the Constitution and in the matter of Part V of the Planning and Development Bill, 1999*
- We propose that action on climate is a stated policy and legislative objective with a long history of targeted state, EU and international investment and intervention in market forces. These provide support for a “legitimate social objective” of climate action for the common good.
- It is established by significant case-law and policy guidance that such climate action cannot take place without protection for communities. Developers benefit from public action, PSO levies etc. in this regard.

Legal Mechanism #3

- Mandatory community investment scheme through section 37(G) (7) and (8) requiring application of a condition for community gain as part of SID developments.
- Scheme to be extended to be applied to LA decisions.

Appendix Three: Constitutional Protections Relevant to Community Shares in Renewable Resources

Article 1:

The nation has an inalienable, indefeasible, and sovereign right to determine its future and develop its life, political, economic and cultural, in accordance with its own genius and traditions.

Article 2:

This nation comprises itself of all those qualified in accordance with law to be citizens of Ireland.

Article 6:

All powers of Government derive from the Irish people and it's their sovereign right to elect rulers. Government, organs and rulers of the State must decide all questions of national policy according to the requirements of the common good.

Article 10:

The state claims all natural resources and "all forms of potential energy" for the people, subject to any pre-existing claims for the time being. These resources include renewable energy. The state may, at its discretion, provide in law for a means of managing and alienating these resources.

The state has no right to assign the value of energy to any individual or group except to its rightful beneficiaries – the Irish people on the island of Ireland referred to under Article 2. Laws that manage and alienate resources must be created in accordance with "the requirements of the common good" under Article 6. The "common good" should be interpreted by the Oireachtas

Article 11:

All revenues of the State are to be placed into one fund that will be distributed in a manner, and for those purposes, laid out in law. According to Article 6, there is a strong presumption that those purposes and manner of distribution will be in the public good.

Article 40:

All human persons are equal before the law in their capacity as human persons. However, the state must have regard for differences of capacity, physical and moral, and of social function.

Article 43

Man has a natural right, antecedent to positive law, to private property. This is a strong right, more powerful than the Article 40 recognition of equal rights before the law. However, the right is qualified by regulation in accordance with the "principles of social justice" and delimitation in order to reconcile the use of private property "with the exigencies of the common good". This means that the arms of state, which are bound to operate for the public good, can infringe upon these rights, particularly if rights are asserted in law over natural resources. All natural resources under Article 10 are only "for the time being" subject to existing rights that may be overcome in time by the state's inherent right of ownership for the people.

Article 45:

The Directives of Social Policy, listed under Article 45, provide guidance to the Oireachtas in terms of what constitutes the "public good" which guides the manner of implementing the sovereign will under Article 6 and the legitimate infringement of property rights under Article 40.2.2. These articles also provide guidance on what might result from the people's sovereign right to create their own society in keeping with their values, traditions and culture under Article 1.

Article 45.2, in particular requires State policy to direct itself towards securing the equitable distribution of ownership and control of the material resources of the community. This distribution must be done in a manner that best serves the common good. Citizens also have a right to an adequate means of livelihood.

Appendix Four: Part V – Planning & Development Act, 2000: The Structure and Scheme of Part V (As Amended)

Part V¹⁰⁶ requires each planning authority (or two or more planning authorities working together) to prepare and include in their development plans a **strategy** to meet the social and affordable needs of the relevant area within the lifetime of the plan.¹⁰⁷ The strategy must be based on a recent assessment of the housing needs of the area, present and future, to ensure that adequate housing is available for people of different levels of income, social background, different sizes and housing types, and housing for the elderly and those with special needs such as disability. Part V has regard to the socio-economic impacts of the housing strategy, with the aim of ensuring against undue segregation of people from different social backgrounds. The housing strategy shall include an estimate of the amount of housing required for either social or affordable purposes within each area, having regard to:

- The supply of and demand for houses generally, or houses of a particular class or classes, in the whole part or part of the area of the development plan.
- The price of houses generally, or houses of a particular class or classes, in the whole or part of the area of the development plan.
- The income of persons generally who have a particular class or classes of person who require houses in the area.
- The rate of interest on mortgages for house purchases.
- The relationship between the price of housing, incomes of relevant persons and rate of interest for mortgages, for the purpose of establishing the affordability of houses in the area for the development plan; and
- Any such matters as the planning authority considers appropriate or as may be prescribed by regulations.

The strategy must provide that a certain percentage (no more than 20%) of land zoned for residential or mixed residential use shall be reserved for social and affordable housing.¹⁰⁸ Part V expressly states that nothing in the legislation shall prevent any person, including a local authority, from using more than 20% of zoned land for that purpose.

The development plan must include specific objectives to ensure the implementation of the housing strategy. Specific objectives may be indicated in respect of each area zoned for residential use and different specific objectives may be indicated in respect of different areas.

The local authority is also obliged to ensure that sufficient land is zoned generally for housing purposes (not just for social and affordable housing) so as to avoid a shortage of housing.¹⁰⁹

Section 95 (1) (d) provides that in order to counteract undue segregation in housing between persons of different social backgrounds, the planning authority may indicate in respect of any particular area that there is no requirement for housing under the strategy or that a lower percentage than that specified in the housing strategy may instead be required.

Section 95 (3) provides that the County Manager (now Chief Executive) is required to report on progress in achieving the objectives of the housing strategy, and where the report indicates that new or revised housing needs have been identified, the manager may recommend that the housing strategy be adjusted and the development plan be varied accordingly.

¹⁰⁶ Amended by 2002, 2006, 2010 and 2015 Planning Acts.

¹⁰⁷ Section 94.

¹⁰⁸ Section 94(4)(b)

¹⁰⁹ Section 95

Section 96 is the key section in terms of planning conditions. Section 96 provides that, where a planning application is made for permission for the development of houses, or for a mixture of housing and other development, the part of the application which relates to the development of housing shall be subject to Section 96.

Section 96 (2) provides that *“a planning authority or the Board on appeal may require as a condition of a grant of permission that the applicant, or any other person with an interest in the land to which the application relates, enter into an agreement with the planning authority, concerning the development for housing of land to which a specific objective applies in accordance with Section 95 (1) (b).*

As originally enacted, section 96 (3) (a) provided that an agreement under section 96 may provide for:

- (i) The transfer to the planning authority of the ownership of the land required by the agreement to be reserved for the provision of housing referred to in Section 94 (4) (a).
- (ii) Instead of the transfer of land referred to in sub-paragraph (i), the building and transfer, on completion, to the planning authority or to persons nominated by the authority in accordance with this Part, of houses of such number and description as may be specified in the agreement at a price determined on the basis of –
 - (I) site cost of the houses being calculated as if it were equal to the cost of land transferred to the authority under sub-paragraph (i) and
 - (II) the building and attributable development costs as agreed between the authority and the developer, including profit on the costs, or
- (iii) Instead of the transfer of land referred to in sub-paragraph (i), the transfer of such number of fully or partially serviced sites as the agreement may specify to the planning authority or to persons nominated by the authority in accordance with this part, at a price determined on the basis of –
 - (I) The site cost of the sites being calculated as if it was equal to the cost of the land transferred to the authority under sub-paragraph (i), and
 - (II) The attributable development costs as agreed between the authority and the developer, including profit on the costs.

The Planning and Development (Amendment) Act 2002 introduced a more flexible set of potential arrangements for complying with a Part V condition; instead of the transfer of the land required for the housing development, the developer could agree with the planning authority to:

- transfer *any other land* within the same local authority area,
- build and transfer housing on any other land,
- transfer fully or partially serviced sites on any other land, within the functional area of the planning authority,
- make a payment in such amount as may be agreed between the developer and the planning authority.
- do a combination of transfer of land and one or more such alternative arrangements, or a combination of two or more of the above arrangements.

The Urban Regeneration and Housing Act 2015 amended the list of alternatives for Part V agreements. Firstly, it removed both the option of transferring fully or partially serviced sites on ‘other lands’ and the option of making a financial payment in lieu of land, houses or serviced sites. Secondly, it

introduced the option of providing housing under lease¹¹⁰ either on the development site or on other lands within the functional area of the planning authority.¹¹¹

The combined value of each element of the agreement must be equivalent to the monetary value of the land had it been transferred under the default arrangement. Where the Part V agreement involves rental property, the value of the lease shall be balanced against the value of the land that would have been transferred to the planning authority under the default Part V arrangement.

(b) Where an agreement provides for the transfer of land, houses or sites in accordance with paragraph (a), the houses or sites or the land, whether in one or more parts, shall be identified in the agreement.

Section 96 (3) (d) provides that nothing in the sub-section shall be construed as requiring the applicant or other person to enter into an agreement to transfer houses or sites instead of transferring land. Anything over and above the basic transfer of land must be done by way of agreement with the landowner, in accordance with the housing strategy and the Part V scheme adopted by the relevant planning authority.

Section 96 (3) (f) disappplies the public procurement guidelines in respect of a Part V agreement except insofar as the agreement is subject to the procurement rules relating to the award of public contracts.

Section 96 (4) provides that the applicant when applying for planning permission shall specify the manner in which he or she would propose to comply with a Part V condition, were the planning authority to attach such condition to permission on foot of the application, and where the planning authority grants permission to the applicant subject to any such condition it should have regard to the applicant's proposals.

The Planning and Development (Amendment) Act 2002 introduced a set of criteria to be taken into account by the planning authority when entering into a Part V agreement with a developer:

- Whether the Agreement will contribute effectively and efficiently to the achievement of the objectives of the housing strategy;
- Whether such Agreement will constitute the best use of the resources available to it, to ensure an adequate supply of housing and any financial implications of the Agreement for its functions as a housing authority;
- The need to counteract undue segregation in housing between persons of different social background in the area of the Authority;
- Whether the Agreement is in accordance with the provisions of the Development Plan;
- The time within which the housing is likely to be provided as a consequence of the Agreement.

The Urban Regeneration and Housing Act 2015 now provides that a Part V agreement / condition may be amended at any time prior to the lodgement of a commencement notice under the Building Control Regulations, with the consent of the parties to the agreement and subject to continuing compliance with the provisions of Part V.¹¹²

Subsection 96 (5) provides that, where there is a dispute between the planning authority or any other body in respect of any aspects of the Part V arrangement, the matter may be referred by the planning authority or the applicant to the planning board for determination.

Subsection (6) provides that, where the ownership of land is transferred to the planning authority the planning authority shall pay compensation to the owner of the land equivalent in value to the value of

¹¹⁰ Under the Housing Act 1966, as amended

¹¹¹ Section 33, Urban Regeneration and Housing Act 2015

¹¹² Section 33(2) Urban Regeneration and Housing Act 2015

the land purchased by the applicant before 25 August 1999, when the Planning Bill was first published, or pursuant to any agreement to purchase the land prior to that date, or in the exercise of an option to purchase the land required before that date, or, in other circumstances, the value of the land calculated by reference to its existing use on the date of transfer of ownership of the land to the planning authority concerned, on the basis that on that date it would have been, and would thereafter continue to be, unlawful to carry out any development in respect of that land other than exempted development.¹¹³ Subsections (7), (8) and (9) set out the mechanisms for resolving any disputes in relation to the operation of the scheme, or the assessment of compensation.

Subsection (12) (a) provides that, where for reasons of the size, shape or other attribute of the site, the planning authority or the board on appeal considers that a Part V agreement is not practical, the planning authority or board on appeal may as a condition of the grant of planning permission require the payment of an amount equivalent in value to the transfer of 20% of the land to the planning authority. Any sums so accruing to the planning authority must be used by it for the purposes of carrying out its housing functions.

Subsection (14) dis-applied the provisions to development of housing by housing bodies, and more significantly under subsection (14) (b) the conversion of an existing building or the reconstruction of a building to create one or more dwellings, provided that 50% or more of the existing external fabric of the building is retained, or, under sub-section (c) the carrying out of works to an existing house.

Subsection (15) included withering provisions, such that, any permission granted prior to 25 August 1999, or after that date, such that a Part V Agreement would have been necessary had the relevant strategy been included in the development plan any such grant of permission shall wither on 31 December 2002, or on the expiration of two years from the date of grant of permission, whichever is the later, assuming the development has not commenced by that date, or any portion of the development has not been constructed involving the external walls etc.

Section 97 of the Act provides, in subsection (3) that a person may apply for a Certificate stating that the social and affordable housing provisions do not apply in respect of a particular type of development. Such development included where the development comprised four (4) houses or less, or housing on less than 0.2 hectares of land. Under the Planning and Development (Amendment) Act 2002, the threshold of 0.2 hectares was reduced to 0.1 hectares.¹¹⁴ Under the Urban Regeneration and Housing Act 2015 the threshold of four houses was increased to nine (9) houses.¹¹⁵

To avoid evasion / avoidance of Part V, subsection (5) provided that the applicant must when seeking certification for an exemption, provide a statutory declaration confirming that the proposed development is the only development for housing and that the applicant is not acting in concert with any other developer in the vicinity of the site.¹¹⁶

Section 98 deals with the allocation of social and affordable housing obtained by the planning authority under Part V. Under this provision potentially eligible persons apply to the planning authority and are qualified in accordance with criteria set down by the planning authority as part of its housing scheme. Section 98 (6) provides that, a planning authority may from time to time set aside such specified number or proportion of affordable houses for such eligible persons or classes of eligible persons as it considers appropriate.

¹¹³ In other words, compensation is calculated on a 'no scheme' basis.

¹¹⁴ Planning and Development (Amendment) Act 2002, section 5.

¹¹⁵ Section 36 Urban Regeneration and Housing Act 2015

¹¹⁶ Section 97. The whole thrust of the section is to ensure that developers do not apply for a series of below-threshold developments either individually or in concert in order to avoid Part V obligations.

Under Section 99, the planning authority may restrict the sale or lease of houses allocated or provided under the Part V scheme, and where houses may be sold or leased, the section provides a formula for calculating clawback of sale proceeds.

Section 100 provides that the Minister may make regulations specifying the detailed criteria for determining the size of accommodation required by eligible persons, including minimum and maximum requirements, the criteria for the income thresholds for social and affordable housing, for the detailed terms and conditions to be applied to any particular allocation of housing, and the housing needs within an area to be specified in the strategy.

Appendix Five: Irish Renewable Energy Policy

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
1. Biofuels Mineral Oil Tax Relief (MOTR) Schemes	Fiscal Measure	Increased production and use of Biofuels on Irish transport fuels market.	Biofuel Producers	Existing	2005 to end 2010
2. Biofuel Obligation	Regulatory	Increased production and use of Biofuels on Irish transport fuels market.	Biofuel Producers	Existing	Jul-10
3. ReHeat	Financial	Increased deployment of renewable heating technologies in the commercial, industrial and public sectors. Provides financial assistance for boilers fuelled by wood chips and wood pellets, solar thermal collectors, and heat pumps.	Commercial, agricultural, industrial and service sectors, as well as energy supply companies.	Existing	2006 onwards
4. CHP Deployment grant scheme (30% on equipment purchase and 40% for feasibility studies)	Financial	Aims to increase the deployment of small scale (<1MWe) biomass CHP systems across Ireland in accordance with requirements of EU Directive on CHP.	Commercial, agricultural, industrial and service sectors as well as energy supply companies (ESCOs).	Existing	2006 onwards
5. Greener Homes Scheme	Financial	Facilitates the wider deployment of renewable-energy heating technologies in the residential sector and supports the development of a sustainable market, resulting in reduced dependence on fossil fuel and lower CO2 emissions.	Homeowners	Existing	2006 onwards
6. Bioenergy scheme for the production of non- food crops	Financial	Grant support for the planting of perennial biomass crops (willow and miscanthus) – contributes to biomass needs of RE sector	Agriculture sector	Existing	Since 2007
7. Electric Vehicles	Financial	Increased use of electric vehicles in Ireland.	General Public	Existing and Planned	2011 onwards

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
8. Alternative Energy Requirement (AER) Programmes I- VI	Financial	Increase in RES-E following six separate calls for tender. There is 532MW of renewable generation in AER.	Generators of electricity from renewable sources	Existing but closed for new applicants	There were 6 separate calls for tender beginning in the mid-1990s. The last call for tender was in 2003.
9. RE Feed-in Tariff scheme (REFIT)	Financial	Increase in electricity from RE sources via a feed in tariff mechanism.	Generators and suppliers of electricity from renewable sources	Existing	2007 onwards
10. Rollout and implementation of Gate 3 renewable generation grid connection offers	Soft	Under Gate 3, 3900MW of renewable generation are receiving grid connection offers over 18 months from December 2009.	Generators of RES- E	Existing	December 2009 onwards
11. Rollout of Grid 25 strategy	Financial / Infrastructural	Grid 25 provides the framework to build a more cost effective and efficient system to cater for the integration of increasing amounts of renewable generation and will necessitate €4 billion investment in the grid. An SEA will be carried out on the implementation programme for Grid25.	Generators of RES- E	Existing and planned (Grid 25 is in the implementation and rollout phase.)	2008 onwards
12. All Island Grid Study	Technical	The study examines a range of generation portfolios for Ireland, the ability of our power system to handle various amounts of electricity from renewable sources, the investment levels required, and the climate change and security of supply benefits that would accrue.	TSO, regulator, policy makers, industry	Existing	2008

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
13. East West Interconnector	Financial / Infrastructural	A 500MW interconnector between Ireland and the UK due to be operational by 2012 which will allow for electricity exports from Ireland to the UK and facilitate integration of renewable generation on the Irish electricity system. It is noted that a policy framework will have to be implemented around use of the interconnector.	Transmission System Operator, Generators of RES- E	Existing	2009-2012
14. Small, Renewable, Low carbon generation connecting to the grid outside the 'Gate' process	Soft /infrastructural	A policy that facilitates renewables by providing for grid connections outside the gate process for certain small, renewable, low carbon generators	Small, renewable and low carbon generators such as small bio-energy, wave, tidal generators	Existing	July 2009 onwards
15. Revised application procedures for authorisations to construct and licences to generate	Regulatory	SI 383 and 384 of 2008 simplify the granting of authorisations and licenses to generating stations with installed capacity of 10MW or less. CER/10/098 introduced a simplified procedure for generators with installed capacity up to 40MW.	Those constructing generating stations with installed capacity not exceeding 40MW and generating electricity	Existing	2010
16. Principles of Dispatch and the Design of the Market Schedule in the Trading & Settlement Code	Regulatory	The Single Electricity Market (SEM) Committee is currently undertaking a consultation in this field. The policy will have important implications for how renewable generation is to be treated in the SEM.	Those operating in the Single Electricity Market	Existing / Planned	2010 / 2011

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
17. Relief for investment in RE generation – Section 486B, Tax Consolidation Act (TCA) 1997	Financial (Tax relief)	The relief for investment applies to corporate equity investments in solar, wind, hydro or biomass technology generation projects. The relief is given in the form of a deduction from a company's profits for its direct investment in new ordinary shares in a qualifying RE company.	Companies paying corporation tax, Generators of solar, wind, hydro and biomass generation	Existing	1999-2011
18. Small and Micro Scale Generation Pilot Programme (Grants).	Financial	The pilot is expected to inform on the technical, market and regulatory issues associated with the installation, network connection and operation of small and micro scale generation technologies.	Micro renewable generators	Existing (closed for new applications)	Launched in February 2009. Initial results from the monitoring programme are expected within the 3rd quarter 2010, with monitoring continuing through 2011.
19. Part L of the Second Schedule of the Building Regulations 1997- 2011	Regulatory	In relation to Dwellings, Part L 3(b) requires that “a reasonable proportion of the energy consumption to meet the energy performance of the dwellings is provided by RE sources”. This provision is expected to increase use of RE in dwellings	Domestic (dwellings)	Existing	2011
20. SI 666 of 2006 Part 2 Alternative Energy Systems	Regulatory	Shall ensure before work commences that consideration is given to the technical, environmental and economic feasibility of installing alternative energy systems: this measure should help increase renewables in large buildings	Owners / Designers of Large new buildings (over 1000m2)	Existing	2006 onwards

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
21. Statutory Instrument (SI) 83 of 2007 and SI 235 of 2008	Regulatory	Conditional planning exemptions for renewable technologies that meet specified criteria – expected to encourage uptake of energy from renewable technologies.	Domestic, business and agricultural sectors	Existing	2007 and 2008 onwards
22. Foreshore consent process for offshore energy projects	Regulatory	The Minister for Environment intends to streamline and modernise the consent process for certain developments in the offshore environment, including offshore RE projects such as wave, wind and tidal technologies on a phased basis in order to ensure service continuity in relation to the processing of offshore applications and providing an improved timeline for making decisions on these projects.	Generators of RES- E operating in the offshore environment	Existing / Planned	2010 onwards
23. Planning and Development (Strategic Infrastructure) Act 2006 (No. 27 of 2006)	Legislative/Regulatory	The Act provides for, among other things, the establishment of a streamlined consent procedure for certain types of major infrastructure and a specialised division within the planning board to take decisions.	Transmission System Operator (for strategic projects)	Existing	2006 onwards
24. Planning & Development (Amendment) Bill 2009	Legislative / Regulatory	The Bill provides for changes to the planning system and proposed changes will have certain implications for the RE sector.	Developers who have to go through the planning process	Planned	The bill has been moving through the legislative process since 2009
25. Accelerated Capital Allowances (ACA) for Energy Efficient Equipment (SI 393 of 2009)	Financial (Tax Relief)	Specifies certain technical standards to be met by RE products to be eligible for the ACA tax relief. Technologies covered include wind turbines >5kw, solar PV and CHP.	Companies paying corporation tax	Existing with biomass boilers to be added in 2010	2009 onwards

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
26. Ocean Energy	Financial / Soft	Government target of 500MW installed by 2020. The Ocean Energy Prototype Development Fund is aimed at stimulating the development and deployment of Ocean Energy (OE) devices and systems. The Ocean Energy Development Unit is working on a grid connected test facility for wave energy devices. A strategic environmental assessment (SEA) on offshore wind, wave & tidal development scenarios are underway.	Developers of wave and tidal devices for the Offshore wind industry	Existing	2008 onwards
27. RE RD &D Programme	Financial support is available in a number of categories.	Programme primarily focused on stimulating the deployment of RE technologies that are close to market, and on assessing the development of technologies that are close to market, and on assessing the development of technologies that have prospects for the future.	Developers of RE technologies	Existing	July 2002 onwards
28. Operational and Technical Research	Soft / Technical	Studies expected to assist increasing renewable generation on the grid e.g. Facilitation of Renewable Studies; Offshore Network Research; Wind Security Assessment Tool	Transmission system operator, renewable generators	Existing	Ongoing
29. RE Information Office (under the Sustainable Energy Authority of Ireland)	Soft	This is an information service on RE that provides the public with a service whereby they can easily obtain practical information on RE	General public, industry, business	Existing	Ongoing

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
30. Local energy agencies	Soft	The network of local energy agencies collective goal is to support the development and implementation of energy policy. Information, advice and skills provided through the local agencies can enhance knowledge on options for increased RE at local level.	General public, industry, business	Existing	Ongoing
31. Tree Felling Policy for Wind Farm Development	Soft	The Department of Agriculture, Fisheries and Food recently introduced a tree felling policy for wind farm development. This is to align the two policy areas. Industry and DAFF are in discussion on the policy.	Wind Farm Developers/ Forestry sector	Existing	2009 onwards
32. Smart metering pilot programme	Technical /Soft	The results of the smart metering pilot will inform an analysis of the feasibility of implementing smart meters throughout Ireland. Electricity and gas smart meter trials are underway.	Electricity and Gas consumers, policy makers	Existing	2007 onwards
33. Charles Parsons Energy Research Awards	Financial / Soft	The objective of the awards (overseen by Science Foundation Ireland) is to stimulate and develop energy research in Ireland by providing funding for research groups to undertake energy research particularly in priority areas. A specific aim is to increase significantly overall research capacity and in particular attract more engineers into energy research.	Energy researchers, universities, industry, policy makers	Existing	2006
34. Draft Geothermal legislation	Legislative / Regulatory	Bill being drafted to facilitate geothermal development.	Industry, policy makers	Planned	2010

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
35. Guidelines for Planning Authorities on Wind Energy Development (DEHLG)	Soft	Facilitate a consistency of approach by planning authorities, both in identifying areas suitable for wind energy development and having regard to potential impacts, inter alia on nature and diversity.	Planning authorities	Existing	1996 onwards
36. Draft Guidelines on Wind Energy Development and EU Nature Conservation (European Commission)	Soft	Looks at how wind energy targets can be met in ways that minimise adverse impacts on nature and biodiversity.	Responsible authorities in Member States	Existing in draft	Final draft March 2010
37. Offshore licensing and leasing	Regulatory	Offshore RE projects are governed by the Foreshore Acts 1933 to 2009. In the future the foreshore consent system will be much closer aligned to the existing land planning system in order to provide for a more streamlined consent process.	Offshore energy industry; planning authorities	Existing	Ongoing
38. BES (Business Expansion Scheme)	Financial	A tax relief incentive scheme that provides tax relief for investment in certain corporate trades. There is no tax advantage for the company in receipt of the BES, but securing this funding may enhance their ability to attract other external funding.	RE Developments meeting the qualifying conditions	Existing	Ongoing

Appendix Six: Constitutional Protection of Private Property

In seeking to create an effective and viable model of community ownership in an Irish context, along the lines of the proposals advanced herein, it is necessary to consider the legal and legislative implications. The purpose of this section is to explore this area in order to frame the legal foundations of a community ownership proposal.

The 2015 Energy White Paper and 2016 Programme for Government include as stated Government policy objectives that they will ensure communities “*share in the benefits of substantial new energy infrastructure... located in their area.*”¹¹⁷

The current proposal is to implement these policy objectives through the mandatory imposition of a planning condition in relevant grants of planning permission, requiring developers to allocate a certain percentage share of the development for investment by local residents and community members.

It has been suggested¹¹⁸ that that the State has no right to assign the value of renewable energy to any individual or group except to its rightful beneficiaries, Irish citizens, and that all of the value of natural resources should be recouped through taxation, rates and fees. This recuperation should be less the minimum necessary incentive to develop and maintain the technology to access the energy and less the portion that recognizes existing private property rights (such as the rights of landowners on whose lands projects are developed). Such an approach has some merit and clearly addresses the equity issue, however it fails to recognise that energy infrastructure does occasionally impose a greater burden on those living closest to it. These issues were recognised in the 2015 Energy White Paper and 2016 Programme for Government.

This appendix is focused on whether such a planning condition is a legitimate and justifiable infringement of the Constitutional protection of private property, under Article 43 of the Constitution.¹¹⁹

All planning conditions, and indeed the very requirement to obtain planning permission for development of privately owned lands, constitute an infringement of private property rights to some degree. It is recognised that private property rights are not absolute, and may be infringed upon in certain circumstances. An infringement of private property rights may be justified in accordance with the exigencies of the common good. There are numerous examples of where the ‘common good’ has been used to justify the appropriation of private property, including compulsory acquisition of land, the requirement for planning permission, the imposition of planning conditions, and by way of specific example, the requirement under Part V of the Planning and Development Act, 2000 (as amended) (PDA) to provide land, funds or developed houses for social housing.

Part V – Referral to the Supreme Court

The Planning and Development Bill 1999, including the proposed Part V Social and Affordable Housing provisions, was referred by the President to the Supreme Court for a ruling on its Constitutionality¹²⁰.

¹¹⁷ Same quote is stated in both the Department of Communications, Energy and Natural Resources,(2015) Ireland’s Transition to a Low Carbon Energy Future 2015 – 2030 (The Energy White Paper), p. 9 and A Programme for a Partnership Government, Merrion Street, May 2016, p. 125.

¹¹⁸ <http://eosfuturedesign.com/?p=213>

¹¹⁹ In this context we are limiting our consideration to the potential infringement of the private property rights of developers and any party with a financial interest in the development.

¹²⁰ In the matter of Article 26 of the Constitution and in the matter of Part V of the Planning and Development Bill, 1999

The Supreme Court noted that the purpose of Part V, as it was then formulated, was to enable more people to own and occupy homes, and to minimise, to the extent possible, the negative effects of economic and social segregation.

The Court recognised the private property rights of landowners under Article 43 of the Constitution, and that those rights were already interfered with in the case of any landowners who acquired or inherited land since the coming into force of the Local Government (Planning and Development) Act 1963, when the first planning laws were introduced.

Planning laws were adopted in the interest of the common good. The development of land is subject to development zoning and planning permission, both of which may either enhance or diminish the value of land. Landowners bear the risks and rewards of fluctuations in land values.

The Court recognised that the zoning of land for housing enhances its value, and the granting of permission for housing development allows the landowner to realise this value. This, the Court identified, as the concept of 'betterment'.

Part V, as it was originally devised, was intended to ensure that a share of this 'betterment', or enhanced value, was allocated to the provision of social and affordable housing, in the common good. The Court accepted that this purpose of Part V was clearly an important objective which merited the interference in private property rights.

Keane C.J. referred in his Supreme Court judgment to the test laid out by Costello J in *Heaney v. Ireland*¹²¹, to determine whether a proposed infringement in private property rights is *proportionate* (and thereby justified) in the common good, i.e.

- is the purpose or objective of the measure a legitimate social or other measure in the common good?
- Is it of such 'pressing and substantial' concern to warrant interference with rights?
- is the measure rationally connected to the objective it is intended to achieve?
- is the measure arbitrary, unfair or based on irrational considerations?
- insofar as it impairs any Constitutional rights, does it do so to the minimum extent necessary to achieve the objective?

Is it in a Legitimate Social Objective in the Common Good?

In an interesting paper, Edmund Honohan (Master of the High Court) has stated that¹²²

*"... the notion of 'public interest' is extensive. In particular, the decision to enact laws expropriating property or affording publicly funded compensation for expropriated property will commonly involve considerations of political, economic and social issues. The Court has declared that, finding it natural that the margin of appreciation available to the legislature in implementing social and economic policies should be a wide one, it will respect the legislature's judgments as to what is 'in the public interest' unless that judgment is **manifestly without reasonable foundation.**"* (Broniowski v. Poland

¹²¹ [1994] 3 I.R. 593 at p.607 (p.349).

¹²² Presentation by Edmund Honohan, S.C., the Master of the High Court to the Committee on Housing and Homelessness on Tuesday, 10th May 2016 - *"There is no shortage of material and commentary on the practical measures adopted by public authorities over the last one hundred and fifty years to improve the living conditions of the population. It is this history that allows the Oireachtas to interpret "the exigencies of the common good" as including the real consequences of any failure (caused by marketplace dysfunction or previous government omission) to provide an adequate number of subsidized public or affordable private housing for its populace*

(App. No. 31443/96), Judgment of the Grand Chamber of the 22nd June, 2004; (2005) 40 E.H.R.R. 495, para. 149.)

Arguably, therefore, it is for the Oireachtas to legislate on the issue¹²³, i.e. whether the need for rapid and just transition to a low carbon economy is of such pressing and substantial concern that it requires the imposition of a planning condition providing for mandatory community ownership of renewable energy projects, or energy projects. In some ways, this argument goes against logic, insofar as it appears to constitute a taking of resources from the RE sector when in fact the intention is to support RE so as to fast-track the decarbonisation of the energy sector.

As noted above, however, there is some evidence from other jurisdictions that, by providing communities with the opportunity to invest in a fair, transparent and equitable manner in new RE projects, there is likely to be a significant reduction in the cost and delivery time-frame for such projects over the longer run.

It does not follow, however, that everything that might be considered of general benefit to the population (or to certain classes of population) is in the *common good*. It is necessary to identify a clear rationale to justify the infringement of constitutionally protected rights.

The Courts have, to a limited extent, recognised the public interest in ensuring the further decarbonisation of Ireland's energy system:

In *William Henry Bailey v Kilvinane Wind Farm Ltd.*¹²⁴, for example, Hogan J explicitly stated at 108 that the situation of shutting down windfarms was not as serious as the shutting down of Shannon Airport, as in *Leen v. Aer Rianta c.p.t.*¹²⁵:

"It is true that there is a public interest in ensuring that alternative, non-carbon based renewable energy sources are brought to the market, but this cannot give this wind farm – or, for that matter, any other wind farm – a licence to breach the planning laws."

Similar concerns for local environmental considerations were highlighted in *Kelly v An Bord Pleanála*, where Finlay Geoghegan J at 75, quotes the inspector's report in that case at para 11.1: -

"International and national policies actively support and encourage the growth of renewable energy sources and wind energy in particular. However, the government's guidelines on wind energy development state that the implementation of renewable energy policies must have regard for the environment, specifically the legally binding requirements of the EU Directives on Birds and Habitats"

In *People Over Wind, Environmental Action Alliance Ireland v An Bord Pleanála*¹²⁶ Haughton J noted the commercial reality of windfarms was a contributing factor in the dismissal of their importance as contributors to climate change mitigation. Stating at 30 and 32 respectively:

"The force of Coillte's argument is somewhat undermined by the fact that the proposed windfarm development is a commercial development. Ultimately it is primarily intended to produce profit for Coillte. The fact that it may contribute to Ireland meeting its renewable energy

¹²³ The Supreme Court in the Part V case held "... the objectives sought to be achieved by Part V of the Bill are clear: to enable people of relatively moderate means or suffering from some form of social or economic handicap to buy their own homes in an economic climate where housing costs and average incomes make that difficult ... It can scarcely be disputed that it was within the competence of the Oireachtas to decide that the achievement of these objectives would be socially just and required by the common good."

¹²⁴[2016] IECA 92

¹²⁵[2003] 4 I.R. 394

¹²⁶[2015] IEHC 393

targets is not necessarily proven, but even if that is assumed, the primary objective is that of a successful commercial enterprise and the public benefit to the State would seem to be secondary”

“In weighing these matters and in balancing the competing public interests, it is my view that the public interest in the desirability of an appeal is greater than the risk of damaging delay in the commencement of the proposed development”

Is it of Such Pressing and Substantial Concern that they Warrant Interference with Private Property Rights?

The current proposal is put forward on the basis that, without local ownership of and investment in indigenous energy generation and resources, it will not be possible to achieve a just and rapid transition to a low carbon economy, which is not in the common good.

There are well established principles that the provision of housing is a public good. While the right to housing is recognised and provided for in the Universal Declaration of Human Rights, the right to access, use or benefit from energy resources is not given any particular recognition.¹²⁷ The well-established social objective and imperative nature of increasing the volume and availability of social and affordable housing was a key part of the Court’s reasoning in the Part V case. There are no such well-established principles in connection with a right to own and invest in energy generation and infrastructure.

It may be inappropriate to compare the body of law applicable to housing rights against the lack thereof in connection with rights of access to energy resources and the need for climate action, as energy and climate issues have really only come to the fore over the last decade or so.

Ireland has entered into International and EU commitments¹²⁸ to prevent catastrophic global warming, to try to maintain global temperature rises to 1.5 degrees, while at the same time many governments and agencies are acknowledging the reality that maintaining global temperature rises even below 3-4 degrees will be a significant challenge, requiring immediate and substantive action.

The need to rapidly decarbonise Ireland’s energy systems in a manner that is fair and equitable is identified as a central tenet to the Government’s energy policy as identified in the 2015 Energy White Paper and the 2016 Programme for Government. Further legislative commitments towards a national mitigation plan (including sectoral plans) are found in the *Climate Action and Low Carbon Development Act, 2015*. These represent significant public policy drivers identifying the urgent and pressing need to take significant action to decarbonise the economy in the common good.

Article 10 of the Irish Constitution provides that all natural resources, including all forms of potential energy, belong to the State, and all revenues of the State, from whatever source, shall form one fund to be used in accordance with the law for the benefit of all citizens. This is not quite the same as providing that all citizens have an individual right to access or own the State’s energy resources, but it

¹²⁷ The right to adequate housing is provided for in the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the European Social Charter. The right to housing is recognised in Europe in the Constitutions of Belgium, Finland, Greece, the Netherlands, Portugal, Spain and Sweden and in the legislation of Austria, France, Germany, Luxembourg, and the United Kingdom. The right to housing is included in 81 Constitutions. Kenna, P., (2005) *Housing Rights and Human Rights*, FEANTSA, National University of Ireland Galway., p.4. *Why the right to housing should be enshrined in the Irish Constitution*, Maeve Regan of the Mercy Law Resource Centre, 25 August 2015, The Irish Times. Available at: <http://www.irishtimes.com/opinion/why-the-right-to-housing-should-be-enshrined-in-the-irish-constitution-1.2327427>.

¹²⁸These commitments include the United Nations Framework Convention on Climate Change (UNFCCC), The UNFCCC Paris Agreement 2015, the EU Climate and Energy Framework and Climate and or a list of these commitments plea

strongly suggests that the Article 43 rights of persons harnessing the State's energy resources are subject to potentially competing rights of the State and its citizens.¹²⁹

The Law Society, with regard to Article 43 rights, has commented that *"the decisions of the Superior Courts have in fact been strongly supportive of sensible and equitable policy making in areas involving property rights and ... compulsory acquisition ... (and) appear in fact to pave the way for future legislative innovation to tackle the problems."*¹³⁰

Is the Proposed Measure Rationally Connected to this Objective?

It is considered that the proposed measure is rationally connected to the proposed objective of a just transition to a low carbon economy that engages "energy citizens". The proposed measure is the adoption of S.28 Ministerial guidelines setting out specific planning policy requirements which must be applied by planning authorities and the Board in determining planning applications, including the imposition of a condition requiring a portion of the development to be offered to local community shareholders. This measure may be supported by legislative changes, depending on the advice of the Office of the Attorney General.

Is it Arbitrary, Unfair or based on Irrational Considerations?

It will be necessary to ensure that the proposal, as articulated in S.28 Guidelines, is not arbitrary, unfair or based on irrational considerations. The nature and size of renewable energy project will need to be specified based on rational criteria, and the potential beneficiaries (local community investors) will need to be identified with sufficient precision and clarity to ensure that no arbitrage opportunities arise. In addition, the timeframes and processes whereby the CRE scheme is set up should not delay or complicate the overall project.

The founding principles of the UNFCCC require climate action to be pursued by each State *"on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities"*¹³¹.

In terms of fairness, at least two issues arise. Firstly, is it fair to impose the requirement on the RE sector at all? Or if it is imposed on the RE sector, should it also be imposed in connection with other forms of energy generation and infrastructure? Does it arbitrarily or unfairly single out one sector to its detriment, reducing investment in RE and thereby undermining the very purpose of the measure?

Secondly, does the investment opportunity favour those on higher incomes with available resources to invest? Does it reduce or increase economic and social inequality? The issue of equity needs to be very carefully considered in the implementation of the measure, to ensure that the proposal does not give rise to greater inequality.

It will be important to engage more fully with stakeholders and, in particular, with the public in connection with the proposals. All potentially interested parties should be engaged and have an opportunity to comment on and influence the proposal, to ensure that it is equality and fairness proofed prior to adoption. A regulatory impact analysis and Strategic Environmental Assessment (SEA) screening may be advisable.

¹²⁹ Energy law, according to Raphael Heffron *"has almost always delivered, and continues to deliver, social inequality, ensuring that those managing energy resources receive large profits, while those paying to use resources suffer most of the negative effects"* Heffron, R. Energy Law, 2015, Round Hall Thomson Reuters., p.22

¹³⁰ Law Society Submission to the All-Party Oireachtas Committee On The Constitution, Ninth Progress Report Private Property, Page A206. Available at: <http://archive.constitution.ie/reports/9th-Report-Property.pdf>

¹³¹ Article 3, UNFCCC

Does it Impair Constitutional Right to Private Property to the Minimum Extent Necessary?

This question goes to the level of equity or ownership to be allocated to local communities. The first issue is whether it is necessary to impose a condition of this nature at all, in order to achieve the desired outcome. The alternative of allowing developers to provide for voluntary community ownership schemes has the potential to be inequitable and somewhat ad hoc.

The second issue is whether the percentage share for community ownership is appropriate, whether it is sufficient to achieve the desired outcome or whether it is excessive for that purpose. It has been proposed based on international experience and limited consultation with certain stakeholders, however a wider consultation will be required to determine whether the level has been set appropriately. Whether the measure will be considered a proportionate interference in private property rights to achieve a legitimate and pressing social good, or a disproportionate and unconstitutional infringement of rights, is likely to depend on the level of community investment required the threshold at which projects become subject to the requirement and the processes by which the CRE scheme is managed.

The Energy White Paper states that the costs of the energy transition will primarily be funded by commercial and household investment and charges on energy use, supported by Government initiatives and EU funding¹³². Due to this heavy burden on public taxation and PSO Levies in particular to drive the transition, infringement on property rights of renewable energy developers may be deemed legitimate.

The National Grid is created through PSO Levies which are paid by the general public. The PSO levy is a subsidy charged to all electricity customers in Ireland. It is designed by the Irish Government and consists of various subsidy schemes to support its national policy objectives related to renewable energy, indigenous fuels (peat) and security of energy supply. It may be argued that the development site is enhanced by grid infrastructure because the cost of connecting it is a developer cost that is instead borne by society as a whole. Grid creation and maintenance is also borne by society as a whole in the public interest.

Arguably, shares in a property equivalent to the amount saved due to grid connection/building or the equivalent of the PSO Levy may be transferred to the local community in consideration of the “betterment” added by Government. This is because the taxes of the general public create the PSO Levy and build the grid connection. As the developer benefits from the input of the general public he/she should not benefit from that “betterment” to the detriment of the general public.

There could also be an argument that RE benefit from substantial subsidies – these are given to them at the behest of the State to support the development of RE on a competitive basis. The worth of these subsidies, funded by the taxpayer, could be allocated to the public to invest in further renewable energy projects. Taxation which enables state aid is created through the principle of solidarity, which might therefore be a basis for justifying an infringement on property rights.

All such infringements will also have to be proportionate. It is highly unlikely that an infringement on property rights to ensure community acceptance, based on the pressing need to act on climate, could legitimately penalise the very people taking action to mitigate climate change – developers of renewable energy. There is no comparable mandatory requirement envisaged for other renewable or fossil fuel producers and no widely accepted legitimating factor proposed to enable such a restriction.

¹³²Department of Communications, Energy and Natural Resources,(2015) Ireland’s Transition to a Low Carbon Energy Future 2015 – 2030 (The Energy White Paper), p. 13

The case *R (Wright) v Forest of Dean District Council*¹³³ must also be kept in mind as it affirmed a fundamental principle of planning law that “planning consent cannot be bought or sold”¹³⁴, even if such contributions will directly benefit the local community. In this case, an ‘opportunity’ for the community to invest (7%) in a windfarm project was provided along with a donation of an annual return of 4% of gross revenue. Aspects of construction and materials were also to be purchased from local suppliers where possible. These donations were to be distributed without specification to community projects by appointed members of the community.

Dove J found that a planning authority was not entitled to take into account as a material consideration in a planning decision, the offer of the local community donation made by a windfarm developer as part of their proposal for planning permission.

Summary

The Option Two ‘option to purchase’ proposal is a novel proposal not currently provided for in planning legislation. It necessarily involves an interference in private property rights, to some extent akin to the interference previously provided for under Part V of the Planning Acts to address the need for social housing and greater social integration in housing developments. Whilst the Part V interference was justified on well-established ‘public good’ grounds in favour of housing provision, the ‘option to purchase’ proposal is based on the less well established but (arguably equally) important need for urgent and equitable climate action.

To ensure that the implementation of the proposal is robust from a Constitutional perspective, the detailed criteria must be established through effective consultation and engagement with key stakeholders as well as the public, to ensure that the relevant thresholds are reasonable and proportionate, in other words, to ensure that they constitute the minimum necessary interference in private property rights to achieve the desired ‘public good’ objective.

¹³³ [2016] EWHC 1349

¹³⁴ Lloyd LJ put it in *City of Bradford Metropolitan Council v Secretary of State* [1987] 53 P&CR 55