Western Development Commission

Response to the Initial Consultation on Ireland's National Energy & Climate Plan 2021-2030

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Introduction

The Western Development Commission (WDC) is a statutory body promoting economic and social development in the Western Region of Ireland (the counties Donegal, Sligo, Leitrim, Roscommon, Mayo, Galway and Clare). The WDC[1] is involved in policy analysis and development, the promotion of regional initiatives and the operation of the Western Investment Fund.
The Western Region (the area under the WDC remit) is very rural. Using the CSO definition 64.7% in of the population live outside of towns of 1,500 or more. Using the definition in Ireland 2040 the National Planning Framework 80% of people in Western Region live outside of towns of 10,000. Thus WDC work has a particular focus on the needs of, and opportunities for, more rural and peripheral areas.

The WDC has been actively involved in the renewable energy sector since 2003 working to stimulate both community wind energy and the renewable heat market and delivering a range of development projects and policy analysis. The WDC has also led a number of EU renewable energy projects (RASLRES, BioPAD and GREBE) focusing on the Northern Periphery of Europe and is currently involved as a partner in REDIRECT and LECO (local energy communities) two other renewable European energy projects[2].

The WDC has promoted the wider use of bioenergy and increased awareness of the opportunities it provides, improving understanding of supply chains for a variety of bioenergy fuels and different ways of converting these fuels into sustainable energy. Developing local renewable bioenergy supply chains helps provide sustainable enterprise opportunities for individuals, communities, and municipalities. Through various project the WDC has aimed to

- build awareness of opportunities for rural communities to produce and supply locally produced biomass (wood, seaweed and energy crops) to towns and cities
- provide business development support to rural biomass producing communities
- support development of local biomass supply chains through direct business and community engagement

In the Western Region the WDC has focused on support to the wood energy sector by delivering practical services to market players and by informing policy development. We adopted a full supply chain approach - looking at the energy chain from supply (i.e. fuel producers/processors) to demand (i.e. energy users). The services to the sector included:

- provision of technical and business advisory support services to selected clients progressing wood energy projects in the region
- generation of market information and intelligence to support the sector e.g. resource
- forecasting from private sector forestry, assessment of energy crop potential
- accessing of international expertise and facilitation of networking with EU markets

[1] See www.wdc.ie for more information
[2] For more information on specific projects please see: www.raslres.eu; www.biopad.eu; http://grebeproject.eu/ ; http://leco.interreg-npa.eu/; Re-Direct.

Given the WDC experience in renewable and bioenergy we are pleased to respond to the initial consultation on a National Energy and Climate Plan (NECP) and we consider this engagement process a progressive action for the development of renewable energy and climate action in Ireland. Based on our experience we focus out answers on issues of relevance to the Western Region, in particular rural areas, and on areas where our experience or policy analysis can provide insight on issues of importance to development of renewable energy. In the submissions the answers are grouped under the topic headings.

Decarbonisation

Question 1: Taking into account the National Mitigation Plan, the National Development Plan 2018-2027 and Ireland's target under the Effort Sharing Regulation, what further measures to reduce non-ETS emissions do you believe Ireland should take?

As outlined above the Western Region is very rural, but it is important to remember that Ireland is one of the more rural members of the EU. It is critical, therefore, that the NECP takes this pattern of living into account, both with the opportunities with provides, but also the challenges. Climate action for rural areas is not often discussed in policy and there is no significant body of work (internationally or nationally) on climate change and emissions issues for rural areas in developed countries and yet there are important differences in energy use patterns and emissions in rural areas. While it is often acknowledged that rural dwellers have higher individual emissions the ways of addressing these are not usually explored, partly because emissions reductions may be more difficult to achieve in rural areas and partly because the focus is usually on larger populations and ways to reduce the emissions of individuals living in more densely populated areas.

In considering this it should be remembered that, as in other policy areas, urban/rural is a rather simplistic division, which ignores the 'suburban' and the differences between rural towns and the open countryside which all have distinctive emission patterns. It is also important to be aware that people's carbon footprints are closely linked to their incomes and consumption patterns and so do not necessarily relate directly to their location (urban or rural). In fact recent research in Finland has highlighted higher emissions from urban dwellers based on their higher consumptions patterns. Nonetheless, despite the difficulties with a simple urban/rural dichotomy, there are of course concerns specific to rural dwellers emissions that deserve consideration.

Electricity, heat and transport are the three forms of energy use and therefore the source of emissions, for residential and commercial users and so different urban and rural use patterns for each of these should be considered. Similarly, as the first step in tackling climate change should be to increase energy efficiency and so reduce the amount of energy being used (in both transport and heating) different housing types and efficiency characteristics for rural housing should also be considered.

There are not likely to be any significant differences among urban and rural dwellers in the way they use their electricity and in the associated emissions, but there are very significant differences in heating and transport patterns. However, while patterns of electricity use may not differ significantly, developments in electricity generation and storage which reduce or eliminate carbon

emissions from generation should, by 2050, have significant benefits for the heating sector and also, significantly, in personal transport with increased use of electric vehicles.

Heating

The differences in rural emissions from heating relate to type of housing, the age of housing and fuels used for heating. Rural areas have a higher proportion of single dwellings rather than apartments, terraces or semi-detached housing and the lack of shared walls will tend to give rise to higher heating needs.

The pattern of fuel usage in central heating is very different in the Western Region and the rest of the state. This is primarily due to the lack of access to natural gas across most of the region. Less than 5% of households in the Western Region use natural gas to heat their home compared with 40% in the rest of the state. It is likely that, low as this figure is, that it actually overestimates natural gas usage in the Western Region as a number of households in counties where no natural gas is available stated that they used natural gas. It is likely that these households actually use LPG (which also has lower emissions than oil).

Lack of access to natural gas makes the Western Region far more reliant on other fuels, many which have higher carbon emissions. Oil, peat and coal are used by a greater share of households in the Western Region than in the rest of the state. There are also urban/rural differences in fuel usage. In 2011 in the Western Region peat was used to power central heating in almost a fifth of all rural households, but only by 3% of urban households. Electricity meanwhile is far more common for heating in urban areas. Given its availability, natural gas was also more common in urban areas. Oil however is the dominant fuel source for both urban and rural households. Alternatives to higher emitting fuels like oil, coal and peat are readily available to rural consumers. These include solid biomass (wood chips, pellets and logs). In many rural situations as users have more space and fuel can be sourced locally with less transport required, so these options may be more suitable than for urban dwellers. Uptake could be improved with appropriate, targeted incentives.

Additionally, as the electricity generation decarbonises then electricity for heat will be another important option. At the same time as electricity storage methods develop further the options for storing energy from variable sources like wind, both at micro and network level, and improve possibilities for carbon free heating.

There is significant future potential for low carbon and renewable heat in rural areas, and for reducing emissions, but it should also remember than rural dwellers tend to have lower incomes than urban dwellers and already have higher levels of fuel poverty, so that despite the potential for change, many lack the financial resources to switch to low carbon or carbon free alternatives. This needs to be considered in formulation of both the NECP and any new Anti Poverty Strategy.

Transport

Rural people are more reliant on car based transport, they have less available public transport and tend to travel greater distances. Therefore clearly rural dwellers' transport demand patterns need to be central to planning for climate action. There must be detailed consideration of transport issues for smaller settlements and rural areas which currently account for 48% of all trips (compared with

32% for the four main cities)[3]. The majority of the population will continue to live in the historical settlement pattern and spatial planning will not change that pattern significantly even in the long term (to 2050). Thus the NCEP needs to focus on current spatial patterns as well as any future growth in demand.

In Ireland, a very high proportion of transport emissions are associated with rural and long-distance commuting. Analysis of travel and car ownership data conducted by NESC for "Towards a New National Climate Policy" [4] highlighted that Dublin accounts for approximately 28 per cent of the population (in 2006) and 26 per cent of cars (2010). It noted that Dublin drivers make shorter journeys, on average just under 13,000km per year, while in other parts of the country drivers travel on average 18,000km per year and NESC calculated that emissions from Dublin drivers are 948,153 Mt CO_2 eq and from drivers elsewhere are 3,719,868 Mt CO_2 eq. These estimates are based on kilometres driven and so do not take account of fuel use per kilometre travelled. NESC suggested that it in order to address the challenge of reducing emissions in Ireland there should be a focus on solutions that can address the needs of rural drivers and those making longer commutes to urban areas.

In addressing this issue it is important to consider the underlying presumption that employment will be concentrated in cities. There are opportunities for employment to be more dispersed, in line with current population patterns. Alongside more dispersed employment opportunities there is significant potential to make the most of the opportunities provided by trends in technology development, the growth of services employment, a move to more varied working hours , and greater remote and home working opportunities as well as incentives for enterprises to offer different work arrangements (timing of day, tele-working). These trends will change the way people work and how often they actually travel for work. The NECP should recognise that active policies to encourage and facilitate new work practices can help manage and reduce future travel demand in a sustainable and cost effective way that also has quality of life benefits.

But employment is only one factor generating trips. The 2009 National Travel Survey showed that 70% of all trips are *not* related to employment. The importance of these non-work trips and the potential for change in this demand needs to be more central to climate action planning.

There are also opportunities for reduction in emissions associated with current transport patterns with the increased use of electric vehicles. Uptake of EVs has been relatively low in Ireland thus far, but it is likely to have been even lower in rural areas with concerns about range and charging points being greater than for urban dwellers.

The WDC believes that it is essential that part of the NECP will have a specific focus on issues for rural areas, and actions to ensure that rural areas are both in a position to benefit from a move to a low carbon economy (and there was many opportunities for them to do so) and also that rural

[3] For more information on rural travel patterns see above and http://www.wdc.ie/wp-content/uploads/WDC-Submission-to-DTTAS-on-SFILT-Consultation-October-2014.pdf and also http://www.wdc.ie/wp-content/uploads/WDC_Policy-Briefing-no-6-Commuting-Final.pdf and http://www.wdc.ie/wp-content/uploads/Supplementary-Note-WDC-Policy-briefing-No6.pdf

[4] Towards a New National Climate Policy: Interim Report of the NESC Secretariat Report to the Department of Environment, Community and Local Government. June 2012

dwellers make a fair contribution other national goals in relation to renewable energy and to our actions to mitigate climate change.

Renewable Energy

Question 2: How do you believe Ireland's national contribution towards the EU's 2030 renewable energy target of 32% should be determined? Please include your reasoning.

Question 3: How do you believe the contribution to be made from the individual sectors (i.e. electricity, heat and transport) should be determined? Please include your reasoning.

Question 4: What policies and measures do you believe Ireland should adopt to achieve its renewable energy contribution and what are the grounds for your recommendations?

The WDC has been active in developing measures to promote the use of energy from biomass, assessing biomass availability and the development of supply chains for its local use. Our experience has shown that strategic policy interventions must recognise the wider market environment in order to design and deliver effective, value for money policy and identify actions which result in sustainable market growth. The WDC identified the following as priority market development issues to achieve sustainable supply chain growth in the bioenergy sector. These are likely to be very relevant to the development of the wider bioeconomy in Ireland:

- *Flexibility of Approach*: High level targets, be they national or EU, must be translated into a regional and local context if they are to drive delivery of market growth rates. This applies in any area but in relation to use of renewable energy it should be remembered that regions have varying levels of competitive advantage in their energy resources e.g. there are significant wood resource in the western counties, energy crop potential in the southern tillage areas, wind and ocean opportunities in the north west, solar opportunities in the south east and other areas. Regions must be supported to develop their energy resources in the most effective and appropriate manner given their conditions and characteristics. The development of local loops of demand and supply typically result in sustainable, efficient deployment of resources.

- *Supply Chain Approach*: A supply chain development approach is necessary to tackle the barriers to growth and achieve sustainable development in the heat sector. The development of bioenergy for heating is very dependent on the establishment of appropriate supply chains, along which the resource passes, from production, various uses and extractions to its final uses and contribution to future bioeconomy resources (in a circular approach). The piloting of supply chain demonstration projects serves to build market confidence and expertise. Such projects will highlight current gaps and limitations to the policy framework and thereby inform policy makers on the design of national policy.

- *Partnership Approach*: The successful delivery of a supply chain approach is dependent on effective cross-agency and cross departmental working arrangements, and partnerships between public and private stakeholders. Effective supply chain interventions must be dealt with through partnership i.e. linking of demand- and supply-side support programmes

delivered by various agencies and departments into present a coherent and comprehensive sectoral intervention. It also allows for the development of trust between communities and developers and, where implemented effectively, benefits all parties involved.

It should be recognised that in order to bring most effective regional economic and sustainability benefits from developing the local energy resources there should be a focus on regional and local loops within that economy and given that some of the energy markets will be small and they will vary. It is also useful to focus on local market development in preference to transporting resources from the regions for processing or use elsewhere, and to ensure that regions and smaller areas have the opportunity to benefit from their own energy resource, either thorough use or though its sale with profits providing local economic benefit.

The WDC is aware that the renewable heat market has the potential to create considerable levels of employment across the Western Region and to provide long-term stable markets for low value wood fuels which can compete with fossil fuels and reduce and fix energy prices for end users. Local wood biomass resources are finite, however, and as demand for biomass increases in a variety of markets, a greater understanding of the available resources at both a county and regional level is required. The WDC has prepared resource assessments[5] for the Region which provide an overview of the potential supply of wood based biomass and estimate demand for renewable heat market within each county. They also highlight the issues regarding the potential impacts of large scale projects such as Bio-Refineries and/or Combined Heat and Power (CHP) plants on county and regional supply chains. From this experience we are aware that assessing the availability of all kinds of bioeconomy resources and their potential use in new value added activities should be an important action for the development of the sector[6].

An OECD report "Linking Renewable Energy to Rural Development"[7] contains a useful examination of policy options and actions in fifteen OECD regions. It highlights effective renewable energy policy and shows how bioenergy can provide greater local and national economic benefits than other renewable energies. As noted in the OECD report, bioenergy policy interventions are typically most effective when delivered at a regional and/or local level where they can be tailored to local resources and conditions.

The WDC also commissioned a study of District Heating as an enabling technology for biomass in the Western Region[8] which examined options for public sector buildings and the wider community in the Western Region. It outlined the issues for the development of District Heating in Ireland and used three case studies of existing District Heating schemes to highlight the benefits and learnings. It also provided case studies of two potential schemes in the Western Region.

The WDC has been involved in other detailed studies of district heating opportunities in the region, recognising that this is a potential use of local biomass resources and will provide renewable heat in

[5] https://www.wdc.ie/publications/renewable-energy-reports/
[6] See also https://www.wdc.ie/regional-development/renewable-energy/
[7] OECD, 2012, *Linking Renewable Energy to Rural Development*, OECD Green Growth Studies, OECD publishing. http://dx.doi.org/10.1787/9789264180444-en

[8] http://www.raslres.eu/wp-content/uploads/2011/06/RASLRES-District-Heating-Public-Sector-WR.pdf

urban centres and can also help those who find it difficult to purchase fuel for heating in large amounts (please contact us for more detailed information on these studies).

Energy Efficiency

Question 5: Bearing in mind Ireland's current state of progress on energy efficiency, what contribution do you believe Ireland should make to the EU indicative energy efficiency target of 32.5% by 2030, and why?

Question 6: What indicative national milestones for energy efficiency do you believe that Ireland should set for 2030, 2040 and 2050, and why?

Question 7: What policies and measures do you believe Ireland should adopt to achieve its energy efficiency contribution and what are the grounds for your recommendations?

In order to meet its energy efficiency contribution it is important to work with public, private and domestic users. The public sector should be an exemplar for energy efficiency and for use of renewable energy heat and transport. In doing so, as well as providing examples and participating in pilot actions, the public sector will be an important customer for businesses in the developing renewable energy or climate action sectors. Given, as discussed above, the difficulties of matching supply and demand at local levels, public sector investment in energy efficiency and making use of renewable energy in day to day activities will help to stimulate the development of businesses and allow the supply chain to develop securely.

In the small scale commercial sector, and in the domestic sector, the capital investment required to improve energy efficiency may be difficult to finance. Very low cost loans (such as are available in Germany) are one means of helping this sector to invest, in particular for those without mortgages or who cannot afford to add to their mortgage. At the same time it would be useful to encourage lenders to develop packages for mortgage holders to lend them capital for energy efficiency investments with a top up to their current mortgage in a simple, cost effective way.

Finally, the WDC believes that it is very important to ensure that local communities are in a position to participate in energy efficiency and renewable energy development projects. Given that a complex mix of policy instruments will be required to incentivise and empower people to achieve 2030 targets, it should be remembered that the SEAI Better Energy Community Programme has delivered almost 10% of the overall Irish energy efficiency target. If there was a suite of additional community supports in addition to the grant aid even more could be delivered. Community groups often face a scarcity of resources relating to the lack of sufficient practical capacity both at the start, and during, the energy transition process. Scarce resources identified include time, technical expertise, access to finance and financial expertise, bargaining skills, equipment and capacity to complete lengthy grant application documents.

Policies and support measures for communities should include financial support for community-led projects across early phases of project development including feasibility and development studies (grants, legal and technical assistance). Financial support should also deliver key capacity building

supports such as trusted advisors and trusted intermediaries to support communities who may wish to develop renewable energy projects. Financial risk mitigation will also be crucial in assisting communities to realise local energy projects.

Energy Security

Question 8: In terms of the areas of energy security identified in the template, are you satisfied with the resilience of Ireland's national and regional (with other Member States) energy systems and if not, what suggestions would you make for improvement?

Question 9: What policies and measures do you believe Ireland should adopt to achieve its energy security objectives and what are the grounds for your recommendations?

Using our own energy resources for electricity generation and for heating and transport (electricity and renewable gas) will all make a significant contribution to our energy security as well as to our economy. Stimulating the development and use of renewable energy in heat and transport is an important way of achieving 2030 and later 2050 targets.

It is also important that we invest in energy systems that allow us to make the best use of our resources for electricity generation. This would include further investment in transmission in North Mayo and in the north west (Donegal) to allow future development of on shore electricity generation. This is discussed in more detail below (Q 12 and 13).

Electricity Interconnectivity

Question 10: Taking into account the EU electricity interconnection target, what do you believe should be Ireland's priorities in terms of further electricity interconnection, and why?

Question 11: What policies and measures do you believe Ireland should adopt to achieve its electricity interconnection objective and what are the grounds for your recommendations?

While the detail of electricity interconnection targets and policies are largely beyond the remit of the WDC, we acknowledge that there are clear benefits to be gained from interconnection, especially in terms of allowing the export of renewably generated electricity in times where there is a surplus, and in helping to balance the grid. However, in order to maximise the benefits of a very expensive investment (the Celtic Interconnector will cost around €1 billion) it is important that we make the most of our opportunities to generate electricity where the resource is available. For this it is essential that there is investment in transmission infrastructure in areas which have the greatest potential resources.

At the same time it must be recognised that people living in these areas of significant generation opportunity should be able to receive benefits from the use of the local resource, and more importantly should be able to be a key part of its development, through community projects or in balanced, fair partnership with developers.

Energy Transmission Infrastructure

Question 12: What electricity and gas transmission infrastructure projects would you consider to be of greatest importance in terms of Ireland's achievement of the objectives, targets and contributions under the 5 dimensions of the Energy Union strategy?

Electricity Transmission

The WDC has recently commissioned a study of the electricity transmission grid in the Western Region[9] to review the current and future needs for electricity transmission infrastructure in the Region, and consider how renewable electricity generation, potential new generation technologies, new ways of using and managing electricity, and new methods of improving the use of existing transmission infrastructure might impact on need for investment. The WDC region has a significant capacity of connected renewable generation. By 2020 there could be approximately 1,760MW of renewable generation connected in the WDC region, consisting of 1,595MW of wind generation and 165MW of hydro generation. The Region is currently producing enough renewable generation to meet 100% of its own demand. By 2020 it will be a net exporter of renewable energy, providing approximately 15% of the total national demand and making a significant contribution to the 2020 RES-E targets. The government recently announced support for further renewable generation with an outlook to 2030 (through the Renewable Electricity Support Scheme (RESS)). The support proposed by the Government is aiming to almost double the amount of renewable energy in 2030 compared with 2020 levels. This provides the opportunity for more development of renewables in the Western Region, potentially making it a major exporter of renewables to the rest of Ireland.

The transmission system has been an important enabler to allow the Western Region to achieve relatively high levels of renewable generation. EirGrid and ESB Networks have to-date made substantial investment in the transmission network in the region. The majority of the recent investment was in upgrading the existing transmission network to provide additional capacity.

There is capacity in the transmission system for further renewable generation in areas of the WDC region including large parts of Co. Roscommon, Co. Clare and Co. Galway. As well as onshore wind, there is also the potential in these areas for the development of new renewable technologies such as solar and marine generation.

We are, however, very concerned at the pace and scale of development of new transmission circuits elsewhere in the WDC region. The areas of particular concern in the medium term are Co. Donegal and North Mayo/West Sligo. In the longer term there could also be the need for new transmission

[9] This study was conducted for the WDC by MullanGrid and will be available shortly.

circuits to Co. Sligo/Leitrim. Considering the long timelines to deliver new transmission infrastructure it is important to take a long-term view on the generation needs in these areas.

The Western Region has some of the best resources for on shore wind in Europe, and in the future, as technology improves, for offshore energy generation. It is therefore important to the Region and to Ireland, as well as the rest of the EU, that there is development of significant electricity transmission infrastructure projects in Donegal and North Mayo (in addition to the North Connacht Project which is currently planned in North Mayo and which is unlikely to have any spare capacity by the time it is commissioned) in order to make the best use of this resource. While there are opportunities to use smart grid technologies to maximise the use of existing transmission infrastructure, investment in new infrastructure is also needed. Developing electricity transmission infrastructure is a slow process, so it is important that the NECP has clear objectives in this area which can then feed into a new Grid Development Strategy so that EirGrid can develop a transmission grid fit for a low carbon economy in the long term.

As noted above, it must be recognised that people living in these areas of significant generation opportunity should be able to receive benefits from the use of the local resource, and more importantly should be able to be a key part of its development, through community projects or in balanced, fair partnership with developers.

Gas transmission

A significant part of the north west of Ireland does not have access to the natural gas transmission grid. As has been discussed by the WDC elsewhere (see 'Why invest in gas? Benefits of natural gas infrastructure for the north west'[10] for an overview) the development of the natural gas can give rise to significant saving in the cost of energy for both commercial and domestic users. As a lower emission fossil fuel, natural gas can also contribute to a reduction in emission by users who connect and, in the future with the development of renewable gas, there will be further opportunities to lower emissions through its use in place of natural gas and in transport. The WDC therefore believes that an extension of the gas transmission grid into the north west would be an important project contributing to the achievement of Ireland's targets for lower emissions and more sustainable energy generation and use.

Question 13: What policies and measures do you believe Ireland should adopt to achieve its energy transmission objectives and what are the grounds for your recommendations?

Electricity Transmission

The energy White Paper 'Ireland's Transmission to a Low Carbon Energy Future 2015-2030' indicates that Ireland's electricity transmission objectives were set out in EirGrid's Grid 25 document. This was followed in 2017 by 'Ireland's Grid Development Strategy: Your Grid, Your Tomorrow'[11]. Grid 25 was a long term ambitious, strategy for the development of the electricity transmission to 2025 to

[10] https://www.wdc.ie/wp-content/uploads/WDC-PolicyBrief-005-Nat-Gas-Sep11-Final1.pdf
[11] https://issuu.com/designtactics/docs/eirgrid_-_ireland_s_grid_developmen?e=1919908/43298204

ensure that Ireland could meet EU targets for renewable energy, reduce CO_2 emissions and reliance on imported fossil fuels. Originally it was to involve the construction of 800 km of new power lines and upgrading more than 2,000 km of existing lines. Grid25 wa a €3 billion investment to guarantee Ireland's energy future. Since its launch, however, it has been scaled back considerably with cancellation of a number of major projects and its replacement 'Your Grid, Your Tomorrow' is less ambitious and less specific about what is planned and does not include detail of how the transmission grid will help move us to a low carbon future.

It is important that objectives for electricity transmission are clearly set out by government and that EirGrid should produce a more detailed strategy on how these objectives will be achieved to 2030 and beyond. In terms of development of the electricity transmission grid development, projects at the planning stage now are only likely to be at the commissioning stage by 2030.

Following the publication of the finalised National Energy and Climate Action Plan in 2019, which will set out the overall objectives and targets and a plan for climate action, the electricity transmission objectives should be operationalised in a new grid development strategy with clear targets and a plan to achieve them.

Natural Gas Transmission

The White Paper outlined the use of natural gas as a transmission lower emissions fuel which would be an important transition fuel option in the move to a low carbon energy future. The Gas Networks Ireland ten year Natural Gas Development Plan (a rolling development plan issued annually) provides a view of how the gas network may develop over a ten year period. It is based on current supply and demand for gas, as well as projections for growth in gas consumption and development of infrastructure. It notes the importance of renewable gas for the future and outlines some of the objectives for its development in line with the National Mitigation Plan. Further focus on the use of natural gas as a transition fuel and on the development of renewable gas options should form a key part of the NECP.

In addition, the high level study commissioned by government (conducted by KPMG) last year into the Irish National Gas Network[12] examined issues relating to the wider economic costs and benefits of potential extensions to the Irish natural gas network, including decarbonisation, air quality, climate and emissions and regional and rural development benefits. The findings of this study (which have not yet been published) and the on going work on the development of renewable gas for use in the gas transmission grid should feed into the NECP and into the development of objectives for natural gas transmission and how it can aid reduction in carbon emissions and further decarbonisation.

Question 14: Noting considerable progress on the regional integration of Ireland's wholesale electricity and gas markets with neighbours, for example via physical interconnection and changes to market arrangements and rules, what further objectives do you believe Ireland should set in the area of energy market integration as set out above and why?"

[12] https://www.dccae.gov.ie/en-ie/energy/publications/Pages/Study-being-undertaken-into-Irish-Natural-Gas-Network.aspx

Question 15: What policies and measures do you believe Ireland should adopt to achieve market integration objectives and what are the grounds for your recommendations?

The WDC does not have a view on these questions. We would like to reiterate, however, the importance of our energy potential in terms of on and off shore renewable generation potential. It is important that any integration into international markets occurs in such way as to drive the opportunity for development of energy from these resources for export, so that the Region and people living here can benefit from involvement in international markets through community ownership or private investment options.

Question 16: Ireland currently has an energy poverty strategy 2016-2019. 19 Do you believe that a new strategy is required to cover the period up to 2030 and what objectives should it contain?

Question 17: What policies and measures do you believe Ireland should adopt to achieve its energy poverty objectives and what are the grounds for your recommendations?

It is essential that there should be a new energy poverty strategy in place from 2020 onwards. While it is important that the objective should be a reduction in energy poverty it is also essential that the strategy is developed in line with the NECP. Policies to reduce energy poverty should, where possible, help to increase our use of renewable energy and reduce our greenhouse gas emissions. At the very least the policy should not operate counter to these or incentivise poor energy management models or use of higher emitting fuels (which may happen inadvertently when the possible behavioural changes or financial implications for individual households are not considered carefully).

In this context to reduce the risk of energy poverty, the payment models used by energy or fuel suppliers should not unfairly benefit those with the capacity to engage with complex tariff options or ensure that those who do not do so for various reasons, are severely penalized.

The future energy poverty strategy should also address the issues that will arise as energy use becomes ‘smart’ with more controllable devices (boilers, heaters, washing machines, cookers etc. through the internet of things) allowing those who can afford such investment to benefit from lower tariffs and incentives and those who cannot, to face higher charges.

Question 18: What objectives do you believe Ireland should set for the funding of research covering the five dimensions of the energy union, and why?

Question 19: What policies and measures do you believe Ireland should adopt to achieve energy research objectives and what are the grounds for your recommendations?

While it is important to fund research under the five energy dimensions of the energy union, within all of these there are particular issues for rural areas. Enhancing our knowledge of these issues and options for addressing them will provide benefits throughout Ireland. For example efficient energy markets for all types of energy, not just electricity, but also local biomass and bioenergy markets, and markets for investment and installations (e.g. in renewable transport vehicles or for biomass boilers) which are trusted by buyers and have region wide coverage are important. Research on renewable energy markets and their operation at a local level is important.

Similarly energy efficiency options and incentives of various types, such as those for older homes and where the homeowner does not have a mortgage but has low income should be the subject of research.

Understanding policy and change in other countries can also stimulate innovation here in Ireland. It is important that we learn from what has worked in rural areas elsewhere in a systematic way. This is an important area of applied research.

Finally, while essential the focus should not just be on technological solutions but also on influencing behavioural change and effective incentives.

Question 20: Are there any other comments or observations that you wish to make?

The WDC welcomes the opportunity to input to this initial consultation on the National Energy and Climate Plan (NCEP).

While the focus of this consultation is on the template for the NCEP, in order for a successful, ambitious plan to be developed it is important that this is accompanied by clear targets and actions to achieve them, with the goal of making our economy more sustainable, of taking advantage of the economic opportunities provided by the renewable energy and climate action and thereby improving employment opportunities and stimulating innovation. The WDC has emphasised the importance of energy and climate action issues for rural dwellers. Addressing these needs to be a key part of the NECP to ensure an effective Plan with long term benefits.

The WDC believes that the renewable energy and climate action have the potential to create considerable employment across the Western Region and to provide long term stable markets for many low value biological outputs, as well as ensuring that much of the money spent on energy remains in Ireland. Therefore we suggest that any high level targets in the NECP should also be translated into a regional and local context so they can drive the delivery of a thriving low carbon and spread the benefits throughout the country.

For further information or discussion of any points raised, or to find out more about WDC work on please contact helenmchenry@wdc.ie

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