

Y Pwyllgor Amgylchedd a Chynaliadwyedd

Lleoliad:
Ystafell Bwyllgora 3 - Y Senedd

Dyddiad:
Dydd Iau, 29 Medi 2011

Amser:
09:00

Cynulliad
Cenedlaethol
Cymru

National
Assembly for
Wales



I gael rhagor o wybodaeth, cysylltwch a:

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Agenda

- 1. Cyflwyniad, ymddiheuriadau a dirprwyon**
- 2. Ymchwiliad i bolisi ynni a chynllunio yng Nghymru - Tystiolaeth gan Brifysgol Caerdydd (09:00 - 09:50)** (Tudalennau 1 - 9)
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Dr Richard Cowell, Uwch-ddarlithydd Cynllunio a Pholisi Amgylcheddol
- 3. Ymchwiliad i bolisi ynni a chynllunio yng Nghymru - Tystiolaeth gan Ysgol Fusnes Caerdydd (09:50 - 10:40)** (Tudalennau 10 - 26)
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Dr Calvin Jones, yr Uned Ymchwil i Economi Cymru
- 4. Ymchwiliad i bolisi ynni a chynllunio yng Nghymru - Tystiolaeth gan y Sefydliad Cynllunio Trefol Brenhinol yng Nghymru (10:40 - 11:30)** (Tudalennau 27 - 31)
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Dr Roisin Willmott, Cyfarwyddwr Cenedlaethol
- 5. Grwp Gorchwyl a Gorffen ar y Polisi Pysgodfeydd Cyffredin - Cytuno'r cylch gorchwyl (11:30 - 11:35)** (Tudalennau 32 - 33)
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- 6. Grwp Gorchwyl a Gorffen ar y Polisi Amaethyddol Cyffredin - Cytuno'r cylch gorchwyl (11:35 - 11:40)** (Tudalennau 34 - 36)

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Environment and Sustainability Committee

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Inquiry into Energy Policy and Planning in Wales- Submission by Dr Richard Cowell, Cardiff University.

1.0 Introduction

Richard Cowell is a Reader in Environmental Planning at the School of City and Regional Planning, Cardiff University (cowellrj@cardiff.ac.uk). His research interests lie in the relationship between land use planning and sustainable development, with a particular focus on the interface between planning and renewable energy. This submission reviews the key targets and planning arrangements for energy infrastructure in Wales and the UK, before proceeding to assess the performance of these arrangements.

2.0 Targets for renewable energy and climate change

In the early years of the last decade, the Welsh Government's set generation targets for renewable energy of 4TWh per annum for 2010 and 7TWh for 2020.¹ These targets informed Welsh planning policy guidance for renewable energy, notably Technical Advice Note 8 (TAN8) released in 2005.² To support the 2010 target, a technology-specific target was set for 800MW of new on-shore wind power to be installed, with another 200MW from offshore wind and other renewable technologies.

Since this time, government action to address climate change has intensified. Under the Climate Change Act, the UK Government has committed itself both to an overall emissions reduction target for greenhouse gases of 80% by 2050, and a system of Carbon Budgets. In line with this, the Welsh Government has made commitments to annual reductions in the emissions of the six greenhouse gases of 3% per year, in areas of devolved competence.³ This target includes all 'direct' greenhouse gas emissions in Wales; i.e. it includes the emissions associated with electricity consumption in Wales, as allocated to end-users, but excludes those from heavy industry and power generation.⁴ An interim target of a 40% reduction by 2020 has also been set.

For renewable energy, the Welsh Government aims 'to renewably generate up to twice as much electricity annually by 2025 as we use today and by 2050, at the latest, be in a position where almost all of our local energy needs, whether for heat, electrical power or vehicle transport, can be met by low carbon electricity production'.⁵ The Welsh Government has also estimated the potential for major renewable energy technologies, of which salient features are:

- total renewable electricity output by 2025 is expected to be 48TWh and about half of this is expected to come from offshore wind and tidal range power, which assumed progress with a Severn tidal project

- the 5TWh assumed to come from on-shore wind is deemed to require 2GW of installed capacity, which is anticipated to be in place by 2015-2017

Two issues arise in linking consent procedures for energy infrastructure and the Welsh Government's greenhouse gas emissions reduction targets:

- Although renewable energy is essential to achieving a decarbonised energy system, the extent to which meeting renewable energy targets contributes to Welsh greenhouse gas emission reduction targets in the shorter term depends on how much fossil fuel generation is actually displaced. This highlights that what matters is not simply the allocation of planning powers but how they are used, not just for renewable energy schemes but also for fossil fuel projects, and in relation to the overall level of consumption. Moreover, any displacement of fossil fuel by renewable energy would occur within the wider UK energy system, not just within Wales.
- Although consent decisions for electricity generation facilities are relevant to the renewable energy targets, they are not directly relevant to the Welsh Government's targets for greenhouse gas emissions reduction, because these exclude emissions from power generation. The link is indirect, insofar as Welsh power generation influences the carbon intensity of the overall UK electricity supply mix.

3.0 Consenting Arrangements for Energy Infrastructure

The planning arrangements for energy infrastructure can be categorised according to the scale of the infrastructure concerned, and whether it falls onshore or offshore.

Small-scale, micro-generation equipment

As with other categories of development, very small renewable energy generation equipment ('micro-generation') may be installed without the need for planning consent. This is referred to as 'permitted development', and the Welsh Government has paralleled England in extending permitted development rights for micro-renewables. Smaller electricity distribution lines are also permitted development.

Electricity generating facilities below 50MW

For facilities below 50MW, applications are determined by the local planning authority within the town and country planning system. If the local authority refuses consent and the developer appeals, or the Welsh Government decide that an application raises wider issues, then a public inquiry will be held run by the Planning Inspectorate. They issue a recommendation to Welsh Ministers who make the final decision.

Major energy generating facilities and grid lines

Larger power stations (50MW or above) have long been subject to special planning procedures, which have applied equally to England and Wales. Since electricity privatisation, proposals have needed to secure 'Section 36' consent under the Electricity Act 1989; consent is issued by the relevant Minister under a process managed by a special unit in Whitehall. Local planning authorities are important

consultees – if they object to an application it automatically triggers a public inquiry. Comparable procedures apply to major grid lines, under Section 37 of the 1989 Act.

The desire of successive governments to ‘streamline’ the decision-making process for major infrastructure has seen the inception of new consenting arrangements. Under the 2008 Planning Act, responsibility for determining consents for onshore generating facilities of 50MW or above and large grid lines now fall to an independent body, the Infrastructure Planning Commission (IPC). The IPC will hold an examination for each application, but work to a strict timetable. Its decisions must be made in accordance with National Policy Statements, issued by central government, which aim to clarify the need for certain categories of infrastructure. The Welsh Government is a statutory consultee to this process.⁶

Although the May 2010 Coalition government plans to abolish the IPC, the broad structure of the new process remains intact. Although examinations will be held by a Major Infrastructure Unit (MIU) within the Planning Inspectorate, the process will still be ‘streamlined’, and National Policy Statements will guide deliberations. However, final decisions will revert to being made by Ministers and National Policy Statements will be ratified by Parliament.

The Scottish Government has executive control over the consents process for major energy infrastructure. Applications to build and operate power stations and to install overhead power lines are made to the Scottish Ministers for consent: in operational terms, the consents process is handled by the Energy Consents Unit.

Offshore renewable energy

The arrangements for off-shore energy developments in England and Wales are more complicated. For schemes below 100MW, the lead organisation for consents is to be the Marine Management Organisation created by the Marine Coastal Access Act 2009. For schemes above 100MW, applications fall to the IPC with the Marine Management Organisation as an important consultee. Broadly speaking, these arrangements apply in Wales too, subject to the caveats that (i) the onshore works pertaining to major offshore renewable energy facilities (like transformers) will be consented by local planning authorities in Wales, rather than the IPC (as in England), and (ii) applicants seeking to develop off-shore wind farms in the in-shore waters around the Welsh coast can either apply to the Welsh Government, under the 1992 Transport and Works Act, or to the IPC.

In Scotland, from April 2011, a new agency Marine Scotland has been given responsibility for issuing all of the licenses and consents for offshore renewables.

Steps to devolve the responsibility for consenting major energy infrastructure to Wales thus need to consider not only the relationship with the IPC (and then MIU), but also the Marine Management Organisation. That said, most offshore wind projects are likely to exceed 100MW and therefore fall outside its purview.

4.0 Planning Policy for Energy Infrastructure

To assess whether a particular allocation of powers is more likely to deliver a given goal (such as for renewable energy), one must also look also at the policies against which decisions are to be made.

An important feature of the National Policy Statement for energy is that it seeks to clarify the need for each type of energy generation and grid infrastructure, with the expectation that issues of need will not normally be reopened in individual project inquiries. Moreover, the NPS does not permit the IPC (or successor bodies) to assess whether individual energy generation projects will assist in meeting the Carbon Budgets: 'it is for industry to propose the specific types of developments that they assess to be viable'⁷, within the strategic framework set by government (such as the European Union Emissions Trading Scheme). The UK government has resisted setting targets or limits for individual types of energy generation.

The implication is that if the consenting powers for major electricity generating infrastructure was devolved to the Welsh Government, and it adopted the same line as the current NPS, it would be difficult to use the consents mechanism to steer investment towards greenhouse gas emissions reduction targets.

For applications in Wales below 50MW, the main policy context is given by local development plans and national planning policy guidance. This includes Planning Policy Wales and the system of technical advice notes (such as TAN8). From the 2005 revision of TAN8, the main thrust of Welsh planning policy has been:

- to stress the importance of expanding renewable energy, to meet Welsh targets;
- to set out the factors to be taken into account when determining proposals for renewable energy projects;
- for on-shore wind, to institute a presumption in favour of the development of large-scale wind projects (of 25MW or above) within seven demarcated 'Strategic Search Areas', while allowing a more restrictive approach to be taken to onshore wind schemes above 5MW outside them.

The Strategic Search Areas have – unsurprisingly – attracted wind farm applications of more than 50MW in capacity. For such applications, responsibility for implementing Welsh planning policy falls to the IPC (then MIU), although it should be noted that a number of large wind farm applications were lodged before the 2008 Planning Act procedures, and these are being addressed under Section 36. Consequently, the relationship between National Policy Statements and Welsh planning policy becomes important. Although the NPS explains that '(t)he IPC should have regard to' Welsh policy, and expects 'applicants to have taken them into account when working up their proposals', it also says '(w)hether an application conforms to the guidance or the targets will not, in itself, be a reason for approving or rejecting the application'⁸.

This could be interpreted in a number of ways. It might be read as no more than a reflection of the discretionary character of British planning policy, in which each application is to be treated on its merits. Equally, one might observe that the firm spatial policies in TAN8 have not been reflected with equal firmness in the National Policy Statement. Although the National Policy Statement has received the ratification of Parliament, it is unclear whether there is any statutory reason why it could not have been worded to support more firmly the policies of TAN8.

5.0 Evaluation – how has the planning regime for major energy projects performed?

Clearly, the multi-tier arrangements for making decisions on major energy infrastructure attenuate the decision-making authority of the Welsh Government, but the substantive implications for development outcomes – and thereby renewable energy aspirations – are unclear. No consents have yet been issued by the IPC, and the arrangements for offshore developments are not yet fully in place. Consequently, there is little hard evidence by which to deduce the weight being given to Welsh planning policy, or whether the IPC's decisions differ from what the Welsh Government might have done. Section 36 consents have been issued for a series of gas-fired power stations (as at Baglan and Pembroke) and biomass power stations (as at Port Talbot), but DECC's decision letters do not record whether this is what the Welsh Government would have wished.

In the absence of evidence, this submission offers broader considerations against which the interface between planning, consenting processes and energy policy might be judged. The main point is that assessing 'the performance' of planning is by no means simple, since the planning system seeks to achieve different objectives simultaneously – the delivery and reconciliation of a range of economic, social and environmental objectives, while providing for public engagement and democratic legitimacy. Concomitantly, those concerned that the Welsh Government does not possess the full array of consenting powers may have different concerns in mind, which may prove hard to reconcile.

5.1 Delivery

New on-shore wind energy development from 2005 to 2010 fell short of the Welsh Government's 800MW target. Before judging TAN8 a failure, it must be noted that there is now about 1950MW of onshore capacity under active consideration within the Strategic Search Areas:⁹ a level sufficient to help the Welsh Government meet its 2GW aspiration. It could be concluded that TAN8 has helped to construct a stable and attractive context for large-scale wind energy investment in Wales.

Nevertheless, it is often argued that TAN8 – and planning processes generally – have delayed the delivery of renewable energy investment. Such claims require qualification. Firstly, although TAN8 did disrupt the flow of on-shore wind applications coming forward, new applicants have also had to negotiate Forestry Commission Wales's preferred bidder strategy for applications within Strategic Search Areas that also fall within the national forest estate; larger power station applications have also needed to address the shifting consents regime for major infrastructure projects, including the IPC's new requirements for pre-application consultation. Electricity Market Reform may also create hesitancy among developers.

Secondly, and more fundamentally, whether decision-making speed should be the pre-eminent basis for judging the effectiveness of planning is questionable, especially where larger projects with significant systemic impacts are concerned. Arguably, planning processes ought not be concerned solely with consenting the maximum level of development as quickly as possible, but with helping society both identify and deliver the *best* low carbon energy system possible.¹⁰ This entails some consideration of the other goals that ought to be met, alongside those of low carbon energy, which is not always swift. TAN8 should thus not be

judged solely against the delivery of renewable energy, but also the delivery of valued landscapes, free of major industrial intrusions. For some, the concern might be that the IPC will fail to give adequate weight to the spatial policies of TAN8.

There is one dimension of delivery where simply relocating consenting powers from one arena of government to another will not straightforwardly resolve the problem – coordinating grid connection with new energy generation capacity investment. This is not a new problem.¹¹ The procedures operated by the IPC replicate British planning conventions in dealing with separate applications separately (because power stations and grid connections are applied for by separate, private companies), with grid connections being subservient to power station applications (since grid operators have an obligation to connect).

In theory, TAN8 could have given the Welsh Government an advantage over other parts of the UK, by providing a firm spatial expression of likely concentrations of on-shore wind investment before individual applications come forward, allowing early discussions about grid capacity reinforcement. Conflicts that have emerged around transmission line projects in mid-Wales suggest that it has proved difficult to translate the ‘advance warning’ of TAN8 into a planning process which overcomes the fragmented nature of the consenting regime.

5.2 Engagement and democratic legitimacy

It is often contended that the problem with planning lies in local implementation, especially the susceptibility of local planning committees to cave in to organised and vocal local opposition, leading to refusals of projects which, on policy grounds, should have been consented. Indeed, the recent planning reforms in England and Wales – the system of National Policy Statements and the IPC – might be read as attempts to delimit the impact of ‘local objections’, and thereby expedite consent. It is unclear that they have achieved this, and the reasons why might hold lessons for any decision-making system for major energy projects introduced by the Welsh Assembly government. Simply reallocating decision-making powers from one level to another may be insufficient as a mechanism for expediting renewable energy development, insofar as it may do little in itself to tackle the reasons why major energy projects are controversial.

One reason is quite simply the scale of transformation - in our energy systems, in our modes of travel and lifestyle, and in our wider environments - required by the decarbonisation of electricity generation, and the unavoidably uneven distribution of costs and benefits. One should not be surprised that this is generating significant societal conflict. It is equally unsurprising that much of the societal response to these transformations gets concentrated on the planning system, given that it is one principle democratic arenas for deliberating the direction of development. For many people – despite the best efforts to encourage wide consultation around planning policies – it is only when specific projects come forward that their interest is ignited.

Another reason concerns the perception that decision-making processes are unfair – an important dimension of public opposition to major energy development. Devolving consent decisions for major energy projects from London to Cardiff may help in this regard but not perhaps if the Welsh Government just replicates a centralised, fast-track decision-making procedure. The 2008 Planning Act

consenting process has attracted opposition for the way in which it restricts public engagement, and it is not yet clear whether the recent emphasis on ‘front loading’ public involvement (i.e. consulting widely before proposals are submitted) leads to greater public contentment. Indeed, it may simply expose earlier in the planning process the reality – which many of the members of the public find difficult – that key policy decisions justifying particular forms of energy investment have already been taken. It is not easy, in practice, to confine the new, ‘streamlined’ consenting processes to minor issues of siting and design.

All of this suggests that the Welsh government would do well to consider carefully how the public might be engaged in policy formulation, rather than simply development applications. This is a fundamentally difficult issue, but a few lessons are worth noting. The fact that consultation drafts of the 2005 version of TAN8 received 1700 separate responses – a remarkable number for a planning policy document – could be taken as positive endorsement of how translating future energy supply into some kind of visual form stimulates engagement. There is also evidence that collaboration between tiers of government in the identification of wind energy development zones can lead to policies which enjoy greater local commitment, as in Germany between Länder and municipality level, although it entails risks for achieving targets. Simply passing responsibility for identifying wind power development areas to local municipalities, without adequate incentive to give weight to renewable energy targets, risks too few areas being identified, as happened in Sweden.¹²

While there will be criticism of the veracity of some of the concerns raised by sectors of the public, it is equally true that even carefully prepared strategic spatial guidance cannot be omniscient, and that there will inevitably be issues and impacts that only become apparent at the application stage. It is perfectly consistent with the implementation of TAN8 that certain specific applications may come forward within the Strategic Search Areas yet not be found environmentally acceptable. Arguably, because central government planning policy cannot easily be omniscient in its identification of environmental and social consequences, and because the ‘need’ for certain categories of energy technology tend to shift, there is a case for seeing planning not simply as a means of facilitating the unquestioning delivery of investment, but an important arena for testing policy. Indeed, a further criticism of the kind of centralised consenting regime set up by the 2008 Act is the assumption that the overarching need for categories of infrastructure can be wholly resolved, *a priori*, of individual planning projects, and that nothing useful is learned from the contestation of ideas that takes place within planning processes.

5.3 Costs and benefits

One further factor shaping public opposition is the sense that local communities receive relatively little benefit from major renewable energy projects and grid infrastructure. While the Welsh Government is supporting community-owned renewable energy development through initiatives like Ynni'r Fro, the bulk of capacity development is likely to come from major, international corporations, for which other mechanisms would be required to channel benefits to the affected areas. The proposal of the Coalition government to direct a greater share of business rates to local communities may help incentivise acceptance (as happened to some extent with similar strategies in France).¹³ Although the mode of

renewable energy development, including the balance between different forms of ownership, is a reflection of the financial support system rather than the planning system, attention could be given to whether planning policy does as much as it could to accommodate renewable energy projects with substantial community input.

6.0 Conclusions

There may be reasons of principle, based on self-determination, why Wales should be given responsibility for consenting major onshore and offshore energy infrastructure projects. How far this will assist in meeting the Welsh Government's aspirations for renewable energy and targets for greenhouse gas emissions reductions is complicated by a number of factors:

- the dislocation between renewable energy targets and greenhouse gas emission reduction targets;
- the policy criteria against which new energy projects will be judged;
- the problems of coordinating grid capacity investment with energy generation

Simply reallocating decision-making powers will not automatically resolve these problems, or the root causes of opposition to major renewable energy facilities. But it provides an opportunity to think about how planning can be used, creatively, to foster a low carbon energy future, and this may entail seeing it as more than a regulatory hoop. This should also be an opportunity for considering carefully the merits of creating a Welsh version of the kind of fast-track decision-making process currently operated by DECC (under Section 36) and the IPC.

¹ Welsh Assembly Government (2003) *Welsh Assembly Government Energy Statement*, February.

² Welsh Assembly Government (2005) Technical Advice Note 8: Planning for Renewable Energy. July, WAG: Cardiff.

³ Welsh Assembly Government (2010) *Climate Change Strategy for Wales*, October.

⁴ Welsh Assembly Government (2010) *Climate Change Strategy for Wales*, October, p.34

⁵ Welsh Assembly Government (2010) *A Low Carbon Revolution*, p.6.

⁶ Infrastructure Planning Commission (IPC) and the Welsh Assembly Government (The Assembly Government), *Memorandum of Understanding*.

⁷ Department of Energy and Climate Change (2011) *Overarching National Policy Statement for Energy* (EN-1), July, para 3.3.6.

⁸ Department of Energy and Climate Change (2011) *National Policy Statement for Renewable Energy Infrastructure* (EN-3), Para 2.2.1.

⁹ Review for the Welsh Assembly Government by Arup (2010)

¹⁰ Breukers S and Wolsink M (2007b) 'Wind power implementation in changing institutional landscapes: an international comparison', *Energy Policy* 35, 2737-2750.

¹¹ Sheate, W R (1995) 'Electricity generation and transmission: a case study of problematic EIA implementation in the UK', *Environmental Policy and Practice* 5(1), 17-25.

¹² Bergek A (2010) 'Levelling the playing field? The influence of national wind power planning instruments on conflicts of interest in a Swedish county', *Energy Policy* 38, 2357-2369.

¹³ Nadaï A (2007) "Planning", "siting" and the local acceptance of wind power: some lessons from the French case', *Energy Policy* 35, 2715-2726.

Eitem 3

Pwyllgor yr Amgylchedd a Chynaliadwyedd

E&S(4)-05-11 papur 2

Ymchwiliad i bolisi ynni a chynllunio yng Nghymru – Papur gan Dr Calvin Jones, Ysgol Fusnes Caerdydd

Mae papur Dr Calvin Jones o fis Rhagfyr 2009, 'Wales in the Energy Crunch', a phapur yn amlinellu'r wybodaeth ddiweddaraf wedi'u cynnwys fel atodiadau.

Gwasanaeth y Pwyllgorau

Wales in the Energy Crunch





Wales in the Energy Crunch

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December 2009

Published by the Welsh Economy Research Unit
and
the ESRC Centre for Business Relationships, Accountability, Sustainability and
Society

www.weru.org.uk

ISBN: 978-1-906644-22-2

A copy of the full report is available to download from:
<http://www.lulu.com/product/download/wales-in-the-energy-crunch/6008970>

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Wales in the Energy Crunch: Summary

Overview

There is increasing agreement that the peak of global conventional oil production will occur within the next 10-15 years, if not sooner. Crude oil comprises around a third of primary energy requirements, and almost 100% of energy use in transport.

The decreasing output of 'easy' oil will provoke a number of strong economic reactions. For example, there will be a rush to alternative fuel sources where technically feasible, including nuclear, gas, wind and biomass for electricity generation, and biofuels, gas and electrification for vehicles. Meanwhile, it is likely that development of oil from more difficult locations will intensify, as will that of 'unconventional oil' such as that strip mined from tar sands in Canada.

None of these alternative fuels and technologies will replace easy oil, or make any appreciable difference to the timing of the global peak in production. Each fuel faces significant geo-technical, environmental, political or economic barriers to increased production - sometimes all at once. Novel energy sources and new nuclear (or Severn tidal power) will not come on stream in large quantities before 2020 at the very earliest. Carbon capture and storage technologies, which may make the burning of coal possible without engendering catastrophic climate change, are likely even further away and requiring enormous investment.

The world then faces a very significant energy gap in liquid fuel availability in the upcoming decade, and probably beyond. The increasing concentration of remaining fossil fuels in a small number of regions with often problematic relationships with the West may see energy supply increasingly used as a political tool. At the same time the increasing demand and purchasing power of China (in particular) suggests that even where fossil fuels are brought to global markets, they will be extremely expensive.

In 2009-10 the UK will for the first time import more than half its gas; a proportion that will move inexorably upwards as North Sea reserves dwindle. Unfortunately, the former abundance of North Sea gas has meant the UK is ill placed to secure and store gas compared to its European partners: for example, whilst many European nations have developed bilateral long term contracts with supplier nations to buy gas, the UK typically purchases its gas on 'spot' markets. We are at the very end of the gas pipeline.

The response of the UK government to tighter and more volatile energy markets has been to call for their better operation. It also believes that should national (state-run) energy companies be replaced by multinationals, increased efficiencies would also drive increased supply. In the longer term, and linked to its climate commitments, the UK Government suggests that nuclear could produce a third or more of UK electricity, with the remainder renewably or 'clean' coal sourced

The prospect of an early peak in conventional oil and intermittence or expensiveness of gas disrupting this smooth medium term transition does not appear to form part of Government scenario planning.

Implications for Wales

Energy Generation

The substantial renewable energy potential of Wales remains largely unfulfilled. Wales produces 4% of its electricity from renewables (largely onshore wind) which is higher than England but significantly lower than Scotland (and indeed many other European countries). The installation of renewable capacity in Wales is progressing far more slowly than Assembly Government targets.

The commissioning of a large new LNG gas-fueled power station at Milford Haven and the continuation of generation at Aberthaw coal fired power station means that Wales will continue to be overwhelmingly fossil fuel dependent for its primary energy for at least the next decade - or for as long as such fuel is available and affordable. It is notable that the commissioning of the Milford Haven gas turbines, and the decommissioning of Wylfa, will increase CO₂ emissions from power generation in Wales by at least 4.5 million tonnes per annum (around a 30% increase).

Energy Use and Competitiveness

Whilst the energy supply issues faced by Wales are mirrored elsewhere in the UK, there are substantially more vulnerabilities in Welsh industry. Wales is more manufacturing dependent than the UK as a whole, which means wealth generation is more energy intensive. Further, manufacturing in Wales is particularly energy intense, requiring over 50% more energy per unit of value added than the UK average. This means our manufacturing activities are more vulnerable to energy cost increases than other UK (and likely European) regions.

Some of Wales' key industrial players are in sectors which are likely to face significant restructuring in the face of energy scarcity and climate regulation. The implementation of EU regulations on carbon emissions may affect the competitiveness of each sector, whilst increased fuel costs and lower disposable income would particularly affect the prospects for Airbus.

In almost no case is a 'final' product made in Wales, let alone having a strong association with Wales. This means that there is little incentive for companies to continue to manufacture in Wales should cost competitiveness decline at a time when industries face significant reinvestment in production infrastructure.

Meanwhile, Wales' comparative lack of higher order innovative and R&D activities means it is unlikely that the region will gather much of the product and process innovation that will accompany volatile and increasing energy costs. Where Wales is innovative and has an international presence in the field of energy, organisations tend to be focussed more on social or environmental goals (such as those clustered around the Centre for Alternative Technology or Sundance Renewables). However, this activity at the edges of the economic mainstream, and in areas that possess little economic advantage in a traditional sense do show that people and organisations in Wales can make a difference, by thinking and acting 'outside the box'. Understanding and benefiting from these processes may be a key element in sustaining prosperity in future, even more challenging environments.

Travel and Transport

Employment opportunities that persist in the face of energy scarcity and climate regulation are a necessary but not sufficient condition for a long-term successful region. The people of that region also have to be able to get to and do those jobs; products must be brought to market and various services accessed by the people of Wales. This is a concern should fuel costs rise, with an often very limited set of substitutes for private car use.

In this context, Wales' dependence on the private car is a concern. A substantially higher proportion of commuting trips in Wales are by private car than in GB as a whole and with even more rural areas than Wales less car-dependent for commuting. This car dependence is not restricted to work trips: In 2005-6 Wales had the highest proportion of all household trips in GB that were by car. Wales also had the lowest proportion of children walking to school and the highest proportion driven to school of any UK region at this time

Some of these travel patterns are the result of geography and the dispersal of populations and services: for example, Wales has the poorest access of any region to hourly bus services close to home, and its children travel amongst the furthest to get to school. Whether these patterns are the result of socio-economic, cultural or purely geographic factors will be very important for policy development.

Proportionately less people in Wales work than in the UK, although that gap has narrowed over recent years. What has not narrowed is the gap in Wales-UK wage and income differentials, with Wales remaining at 12-13% below the UK. The combination of the highest car dependence, with amongst the lowest income (household and GVA) of the UK regions is concerning. This is not only with respect to access to work, but also services – especially for the one in six workless households in Wales. Transport and travel constitutes the largest single element of household expenditure, and the largest element within this is fuel costs. Relatively cheap motoring costs overall (despite increasing fuel costs) have encouraged the use of cars over relatively more expensive modes since 1990.

The implication of the data is that Wales is perhaps worse placed than any other region to absorb higher travel costs and/or climate taxation, especially those that impact more on private car use. With four-fifths of commuters travelling by car, increases in fuel costs have the effect of lowering the real wage. It is more expensive to travel to work, hence the differential between earned income and benefit payments decreases, encouraging more people, especially at the lower end of the income scale, to stay at home rather than work. The increasing real cost of bus and train travel over many years does not hold out much greater hope for non-car commuters.

In 2008 270,000 of Welsh households, were estimated to be in fuel poverty, a 12% increase on 2004 and showing that the Assembly aspiration to eliminate fuel poverty by 2018 is probably unobtainable in a regime of increasing energy prices. The ‘double whammy’ of increasing fuel prices for both home use and for travel means that many Welsh households face substantial falls in real welfare as fuel purchases comprise an increasing proportion of household spending - and with the number of these households proportionately higher in Wales than elsewhere in the UK.

Policy & Politics

The need to fundamentally change production processes and lifestyles, in an very short timeframe, yet with long and uncertain payback times on associated investments suggests that governments at all levels will play an increasingly important role in the economy. The lack of a critical mass in private sector innovation and lack of company autonomy in Wales suggests the government here will be even more important in the transition.

It is notable then that the National Assembly does not control energy policy for Wales, with centralised generation of over 50MW installed capacity remaining under the remit of Whitehall (and with this unlikely to change in the short term). However, Assembly Government policy (as opposed to aspiration) is currently very similar to that of the UK government, suggesting that even if the Assembly was to be awarded powers in this area, there is no guarantee an appropriately radical energy policy and implementation would follow.

With Wales subservient to London in many energy matters, the relationship between DECC in Whitehall and DESH and DET in Cardiff will be critical. For example there may be a tendency, despite DECC's UK-wide remit, to direct innovative low carbon technology and development to the South West of England rather than Wales, with the former identified as England's pathfinder low carbon region.

Public policy approaches to energy and climate are typified by an unwillingness to accept the existence of (and hence impose) substantial costs in the transition to an energy resilience. Here, the focus on short term 'regional competitiveness' precludes the possibility of imposing costs on existing stakeholders (such as high energy industry or users of private vehicles). This means Wales will travel no faster than other parts of the UK towards true energy resilience despite the need for greater urgency implied by our relative vulnerability.

Policy In Wales

The Assembly Government's broad policies on energy and carbon emissions are radical, brave and pointless. Planning Guidance support for renewables is far less strong an economic signal than support for a new 2000MWe gas fired station at Milford, or the planning permission for Ffos-y-Fran that enables Aberthaw to burn coal until 2018. What incentive is there to invest in smart grids; innovative dispersed generation; and politically difficult energy from waste plants or wind; when power is available at the flick of a switch from *currently* inexpensive gas and coal?

The problem here is that the continued dominance of fossil fuels in upcoming years may lock us even further into a path of dependency, meaning that should supplies be interrupted or become extremely expensive, the window for investment in truly large scale alternatives may have passed – in both financial and climate terms. In this scenario, those who suffer most are the poorest households in Wales and potentially, Wales itself as one of the poorest regions.

Energy policy in Wales needs to be far more complex and holistic if it is to be fit for purpose. Currently, there is very little discussion in energy ‘route maps’ and strategies regarding how different generation methods fit together in terms of complementarity, substitutability or cost. Without this, no assessment can be made of how likely take-up of renewables will be beyond purely regulated levels.

Wales has an aspiration, along with many other regions, to develop low carbon industries. A healthy dose of realism is necessary when considering this aspiration. There are very few policies extant in Wales which will encourage industry to ‘green’ more quickly than anywhere else in the UK – although our exposure to high energy costs may do the job for us sooner than we’d like. Assembly support is extended to companies irrespective of their energy profile or climate commitments. £28m spent supporting re-investment at Airbus cannot then be invested in low carbon, sustainable or energy resilient activities or products.

The identification of Aerospace and Automotives as favoured ‘key’ sectors in Assembly policy, and the continuing focus on these sectors (along with others that are currently high energy such as tourism and agri-food) sits uneasily within a green jobs strategy when Wales has access to none of the levers that might ‘green’ these businesses. Welsh aspirations for a low carbon future are wholly dependent on the adoption of appropriate technologies (where they even exist) by businesses in these sectors – and then their roll-out to Welsh operations. History suggests a measure of caution here.

Similar limitations exist in policies on travel and transport. Like other governments, the Assembly relies on carrots rather than sticks. The insistence of the Assembly that it will not toll any existing strategic trunk roads effectively signals that it is unwilling to impose costs on motorists beyond those imposed by the UK government. The prospect of modal shift occurring in Wales beyond any UK changes is therefore low.

Policies to improve walking, cycling and public transport infrastructures in Wales are welcome. However, policies which rely upon the incremental improvement of facilities, together with making citizens aware of low energy and CO2 options will have a limited impact, and this only in the medium term.

Unless the relative-cost and convenience issue is tackled extremely rapidly in favour of public transport, the majority of Welsh workers and residents will stop using their cars for day-to-day essentials only when car use becomes economically unfeasible. When this happens, public transport services will be unable to cope. Ramping up public transport provision by orders of magnitude whilst encouraging (or in some cases, such as in city centres, forcing) residents to use these modes is necessary if Wales is to function economically beyond peak oil. The appropriate policies are well known and proven in much of Europe - mandating priority bus and cycle lanes on arterial routes; high occupancy lanes; and car-free city centres; and with urban congestion charging and road pricing providing the income to enable investment in lower-carbon transport. Unfortunately all of this appears currently politically unacceptable.

Summary of the Problem

Fossil fuel energy traded on global markets is to become far scarcer in the medium term. In particular, availability of easily recoverable and easily refinable liquid fuels will decrease at a precipitate rate for geological reasons by the mid-2020s at the absolute latest, and with the significant possibility that the 'peak' of conventional oil may come far sooner (or in fact, already be passed). The behaviour of global energy markets in 2007 and 2008 suggest that once the absolute decline in 'easy' oil is priced in to markets, prices will respond quickly upwards, but with increasing volatility.

These price increases will affect not just oil, but its substitutes, such as liquid and piped natural gas. Meanwhile, the increasing concentration of the bulk of resources in a few countries brings into question how much fuel will actually reach global markets at all, with nationalistic concerns and behaviour already evident amongst resource rich nations. Moves by Chinese national companies to secure access to energy through joint ventures and trade-for-aid deals may also diminish globally traded supply.

All alternatives to liquid fossil fuels face significant problems in terms of access, be these technical, geographical, political, environmental or in many cases all four. There may be two trillion barrels of oil 'left', but much of it may as well be on the moon in terms of its usefulness for plugging short-to-medium term energy gaps.

North Sea oil and gas may have been more a curse than a blessing for the UK, leaving us short of energy storage and lacking long established commercial relationships with energy rich countries. Meanwhile, the prospect of peak oil disrupting the easy transition to a low carbon future is not even considered by the UK government. Despite our renewable potential, Wales appears more vulnerable than the UK as a whole to energy-cost induced disruption and poverty.

What Can and Should be Done?

The response of the UK government to upcoming energy issues is summarised by a belief in the power of open markets. Replacing inefficient state enterprises with efficient global companies in resource rich countries; encouraging further exploration; and freeing gas markets will be sufficient, in conjunction with squeezing our own North Sea gas, to ride the energy storm into a bright, low carbon future. If this analysis is correct, then Wales may have little to worry about. However, this optimistic reading has attracted sharp criticism; and not just from environmentalists. The 2008 credit crunch and recession reveal the consequences of ignoring the potential for systematic risks to go unnoticed within strategic industries.

The devolution settlement leaves limited room for manoeuvre in some respects, although even within the limited set of powers held by Cardiff, much could be done to prepare Wales more effectively for a higher energy cost world. We face a problem however. The framing of climate and energy security issues as 'win-win' in governments' dialogue with voters, together with continuing climate-change scepticism amongst some, means there is little incentive for politicians to suggest to the electorate that radical changes to their fundamental behaviours are needed. The spectre of appearing 'anti-business' appears to further restrict debate. This means that whilst actions taken in Wales appear worthwhile or even radical by UK standards they are doing nothing to prepare us for the changes we are likely to face, within the timescales we are likely to face them.

A number of policies, if implemented quickly, might serve to move Wales towards greater energy security and resilience. Each of the suggested policies has something in common: they would be generally unpopular. Whilst a debate with the Welsh people on the urgency of the peak-resource problem is obviously needed, it is perhaps less important than the creation of 'political space' within which AMs as a whole can show leadership. It is difficult to see how anything other than wide support within the Assembly (in the best case, fully cross-party) will allow this to happen.

The transition to energy resilience will involve significant investment. Whilst some of the actions undertaken will provide revenues for government (and perhaps even profits), this will be in the longer term, with investment spending required up front. The credit crunch and subsequent recession has left UK and hence Welsh public sector funding facing cuts in the near future. Again, in common with the rest of the UK, money will be hard to find, and investment will require the abandonment of other programmes. There are however a number of potential avenues which could provide funding for energy resilience interventions on a significant scale. These might include the redirection of monies from existing policies (such as flexible support for business); the utilisation of EU Convergence and transition funds; the issuing of ‘green bonds’ by the Assembly or LA partners; and, of course new taxes.

Conclusion

Economic and energy policy is increasingly shaped by the need to decarbonise production to respond to anthropogenic climate change. So far, however policies have failed to influence the structure of our economies sufficiently quickly to respond to the science. This is perhaps because climate change is a complex process, with long term and uncertain effects. The impossibility of ‘seeing’ these effects directly means that despite overwhelming scientific and government consensus regarding the causes and eventual severity of climate change, a public debate still continues as to its fundamental existence.

Further complexity arises because the worst of climate change effects are predicted to affect the global South and less developed nations. Radical climate change abatement is for Wales and the UK in part a moral action. As such it is open to debate and different attitudes based upon the subjective values of individuals. These facets have perhaps provided an incentive for governments and political parties of all types to avoid proposing the radical economic and public policies that the climate change science demands for fear of electoral punishment.

Peak oil, and the coming energy crisis, is *not* the same. Wales is amongst the most fossil fuel dependent regions of the UK, and with the UK having increasingly limited access to fossil fuel sources that are reliable and abundant. The impact of the global peak of oil production will be felt directly in Wales, by the latest within 10 years, perhaps more here than anywhere else in the UK, and with an economy and population less well prepared to deal than in other regions with substantially increasing and volatile energy costs.

There are two basic approaches that the current (and the next) Government in Wales can take to the energy crisis. Firstly, it could rely upon the UK government to fulfil its responsibility and plan for sharply decreased imported energy with a credible, costed and holistic energy strategy. In this case Wales would of course have to hope that UK-wide actions are sufficiently sophisticated to protect prosperity in Wales in terms of direct interventions (given our different industrial mix and population dispersal); that UK and European energy markets respond effectively to rapidly changing economic stimuli; and that public finances recover quickly enough from the dire position in 2009 to appropriately fund actions.

The other option is to assume the worst: that one or more links of this chain will break, and Wales will suffer substantial economic dislocation and increased poverty following an energy crunch. In this case, it is the responsibility of the National Assembly and Government to embark immediately upon a risk assessment exercise that identifies the key likely impacts of an energy crunch, and can suggest policies to minimize these impacts without the assumption that any current programme, sector, infrastructure or mindset will remain viable and appropriate.

Clearly embarking upon this route involves a difficult, complex and expensive journey, and probably the need to fundamentally reassess both the nature of party politics in Wales, and the quality of debate between Welsh politicians, civil society and people. It involves upsetting and inconveniencing many people. The alternative for Wales is to avoid serious debate and radical action and to follow the UK government in trusting markets to provide solutions. However, the fundamental geographic and character of Wales means that this failure in the duty of care will have the most severe consequences for our prosperity and wellbeing.

Policies for Preparedness?
<i>A Sustainable Resource Map of Wales</i>
<p>There is currently no systematic understanding of the potential for the landscape in Wales to provide an increased output of energy which is fit to drive land use policy. A typology of land within Wales could be developed with ecological and topographical characteristics; elevation; wind profile; distance from grid points and current ownership and usage. The development of this 'blank sheet' classification system would indicate to what uses land in Wales could be put. Important here is the ground-up assessment of land potential, unconstrained by existing restrictions or conventions. The land use map developed above would provide intelligence to guide a plan of action to rapidly increase non-fossil fuel energy supply. Sites with prime technical potential could be quickly identified and the information on ownership and current usage used to identify those sites where development is immediately feasible.</p>
<i>Direct Intervention in Renewables</i>
<p>Identifying suitable sites is not adequate for action. Market, planning and perception barriers to the development of local non-fossil energy could be breached with the Government of Wales and its partners taking direct action to ensure security of energy supply. Starting with the prime spots in its own estate, and that of partner organisations (Unitary Authorities; Education; Forestry Commission) the Assembly could rapidly develop energy sources which are effectively in house – owned by, and with the output used by, public sector organisations. (and potentially with a measure of trading via the grid or directly).</p>
<i>Changing Travel Behaviours</i>
<p>In Wales as elsewhere, motorists have benefited from a relative cheapening of travel compared to other modes. Reversing this trend would require the Assembly to make motoring more expensive. Road pricing has the benefit of both reducing energy use and climate emissions, and potentially providing revenue with which other transport options can be improved. The 'inelastic' nature of demand for car travel means that those who can pay will continue to use their private vehicles even if prices increase significantly. Clearly, there is potential here for a nuanced policy to drive revenue increases which improve public transport for the very worst off.</p>
<i>A Single Focus Economic Policy</i>
<p>Assembly policy for economic development is the same as many other regions with alike situations: this approach has, unsurprisingly, done nothing to improve Wales' prosperity compared to other regions over many years. The opportunity exists, however, for the Assembly to concentrate its economic policy on one goal and one goal only – increasing regional energy resilience. Through this filter a very different set of industrial and labour market interventions will arise. Clearly this approach would involve the slaughter of many sacred cows, generic grants to business and general business support amongst them. Some companies in search of grant aid that is not linked to low-carbon production might not reinvest or even leave Wales. Companies might not choose to come to Wales in the absence of an unquestioningly positive attitude to business investment. These are not trivial concerns. However, the impact on actual regional economic performance is likely to be substantially less than that which would occur should Wales enter an energy recession at its current level of unpreparedness.</p>

Annex B

Wales in the Energy Crunch: Update & Implications

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September 2011

1. When Wales in the Energy Crunch was written in late 2009 the medium term price of a barrel of oil (2005-2009) was at \$65-\$70. Since that time the price has largely remained at a level above \$100, despite an extremely weak economic recovery.
2. Many of the political-economy concerns raised in the report around oil supply have been exemplified by the 'Arab Spring', with unrest and revolution in Tunisia, Egypt and then war in Libya having a positive effect on oil prices, despite the fact that these countries are not the major Middle Eastern suppliers. Notably, the prospect of political volatility within Saudi Arabia has arguably increased not receded.
3. Recovery (in the West) has been stymied by worries around public, corporate and household debt. Were these resolved, it is uncertain how far oil supply could be increased to enable a higher level of economic supply. Without this increase, even a second debt recession could be extended or followed by a recession triggered by spikes in energy and resource prices - effectively the recession we avoided in 2008.
4. Nonetheless OPEC oil production increased slightly in August showing there is at least a moderate amount of slack in supply - especially should the Eurozone, and hence demand, collapse.
5. Additionally, developments in gas 'fracking' promise increases in the supply of liquid gas, albeit with uncertain environmental concerns. This is, however, a technology with medium- rather than short- term application in Europe due to licensing & environmental impact issues. For example the New York Times reports high levels of radioactivity in fracked wastewater from some of the the 70,000 Pennsylvania franking wells, with this water retuning to the table largely untreated (http://www.nytimes.com/2011/02/27/us/27gas.html?_r=1).
6. Substitution between gas and oil, especially in transportation, is short term limited. This is evidenced by the recent licensing in the US of a controversial pipeline to take Canadian oil-sands crude to Texas for refining despite extensive fracking developments in the US itself.
7. Turning to the UK there have been strong signals since the 2010 election that Nuclear is (by and large) the chosen solution for electricity supply problems. Whilst the UK Coalition make nods to the need for increased renewables, a lack of consideration of the

substitutability/complementarity between wind and nuclear means that beyond direct subsidy through Renewable Obligation Certificates, development of renewables at large scale is uncertain. -The 'always on' nature of nuclear electric supply, together with plant locations at centralised locations near large transformers gives it a massive technical advantage over diffuse wind without substantial investment in a new 'smart' supply grid. This advantage is cemented by what appears to be a government willingness to insure private sector companies' risk regarding decontamination costs. Nuclear will become more attractive than gas should the coalition follow through on its promise of a high carbon price floor.

8. It is notable that whilst offshore wind is more reliable and efficient than onshore, its relatively high cost means it is unlikely to progress substantially at the expense of nuclear without the continuation of ROCs - and with of course all subsidy uncertain in these budget constrained times.

9. Wales' energy mix and prospect for the same is de facto similar to that of the UK; fast increasing reliance on imported gas (Pembroke), with a medium term switch to nuclear - dependent of course on the development at Wylfa B and the size and number of its reactors.

10. Despite strong demand from supply companies, onshore renewables installations have missed Government targets for a number of years now, and with some anecdotal evidence that, even with TAN8, this is largely due to Planning delays and refusals (this may apply more widely to renewables, e.g. biomass, but I have no evidence of this). If the planning system is indeed the major constraint, then all government attempts to substantially move Wales toward a more renewable energy mix are pointless without fundamental planning reform - that for example minimises the influence of aesthetic considerations on approvals.

Summary

In common with other places, Wales needs new supplies of both primary energy and electricity generating capacity. A number of factors, including location of hydrocarbon deposits and transformer locations will bias development toward already-industrialised areas. Additionally, the need for employment in these areas (despite most energy developments extreme capital intensity), together with the geographically tighter visual impact of hydrocarbon and nuclear facilities, might make planning and development of such facilities 'easier' compared to rural wind. The local welcome (broadly) for Ffos-y-Fran and Wylfa B as compared with the furore over wind developments in Powys is a case in point. If one had to bet on whether fracking test licences were more likely to be awarded in the Vale or Maesteg, it would be a relatively easy win. Effectively, then, the 'status quo' and cumulative causality will lead to the industrialised (and poor)

parts of Wales continuing to supply our energy and bear the majority of any regionally arising environmental and social costs.


RTPI

 mediation of space · making of place
 cyd drefnu gofod · creu cynefin

National Assembly for Wales:
Environment and Sustainability Committee Inquiry into Energy Policy and Planning
Evidence submitted by RTPI Cymru
Background

The Royal Town Planning Institute (RTPI) is a membership organisation representing over 22,000 spatial planners; RTPI Cymru represents the interests of almost 1,100 members in Wales. It exists to advance the science and art of town planning for the benefit of the public.

RTPI Cymru welcomes the Inquiry by the Committee. This evidence has been developed by RTPI Cymru's Policy and Research Forum, which has representatives from across the planning community in Wales.

General

The RTPI is committed to ensuring that planning addresses climate change as a matter of priority. The RTPI published its 7 Commitments to Climate change in 2010. The first Commitment is that the RTPI will promote understanding of how effective spatial planning helps meet carbon budgets and targets through managing demand for finite natural resources and energy usage. This means supporting individuals, organisations and communities to change their behaviour to:

- reduce the overall demand for energy and particularly for carbon consuming travel;
- shift increasingly to the use of renewable energy; and
- reduce the consumption of natural resources

The remainder of this paper addresses the specific planning related issues raised by the Committee.

The roles of the different consenting agencies, how they inter-relate and how the current system could be improved, both with and without further devolution

The Planning Act (2008) introduced a new process for consenting nationally significant infrastructure projects (NSIPs), including major energy projects, using a system of National Policy Statements (NPS) and a decision making process and single consenting regime by the Infrastructure Planning Commission (IPC). The Localism Bill proposes to amend this, with the final decision on projects being made by the relevant UK Government Minister, rather than the IPC.

This system applies in Wales for renewable energy projects on land over 50MW and over 100MW offshore. However those elements contained within the Devolution settlement are excluded from the IPC process. These associated developments, for example sub-stations, are dealt with by the Local Planning Authority (LPA) as a planning

application. This is a fragmented system for determining all the elements of a large energy project, with two separate policy regimes in use.

RTPI Cymru supports the argument that decisions on nationally significant renewable energy projects i.e. over 50MW on-shore and 100MW off-shore, should be devolved to Wales, as they are in Scotland and Northern Ireland. This will facilitate the ability to deliver a comprehensive renewable energy strategy in Wales.

LPAs are able to play a role in the IPC process through the ability to comment upon the quality of the applicant's consultation process and producing a Local Impact Report (LIR), as well as commenting as an Authority on the application. LPAs receive no fee for applications submitted to the IPC for consideration.

The planning applications for larger renewable energy projects, including wind farms, often have very complex issues to be resolved. The Welsh Government has provided grant support to LPAs to access expert advice and support on dealing with these issues; there is also funding available from the Welsh Government to LPAs needing to respond to IPC schemes within the SSAs. We would recommend that this support is continued. We would also recommend that the IPC be encouraged to provide similar support to LPAs for those schemes submitted that do not fit with the Welsh Government criteria.

The relationship between the UK Government's Energy National Policy Statements and Welsh national and local planning policies and whether or not these policies can achieve the Welsh Government's aspirations, including whether or not a formal review of TAN 8 is now required.

Planning Policy Wales (PPW) and TAN 8: Planning for Renewable Energy provide the national policy for Wales on renewable and low carbon energy. Much of the attention to this policy context is around on-shore wind farms, as they are currently the most commercially mature and Wales's topography is suited to them. However the policy and TAN 8 refer to a range of other renewable and low carbon energy sources. The RTPI believes that a mix of energy sources is required to continue to meet energy needs. However, an emphasis of Government policy should be, in the first instance, on reducing energy demand.

Through Planning Policy Wales and TAN 8 there is an established approach to guiding on-shore wind developments over 25MW to seven Strategic Search Areas (SSAs) across Wales. The RTPI believes that this approach provides a strategic method of directing these projects to more appropriate locations. However, the approach does not give an automatic presumption in favour of development within the SSAs; each proposal is also subject to other material considerations, as with any planning application and to an Environmental Impact Assessment (EIA).

The RTPI recognises that this is a working spatial policy for renewable energy and that this should not be undermined by the NPS process. Whilst Welsh Government policies are material considerations through the IPC process, it remains to be seen if they will be undermined by the NPS.

The draft national policy statements (NPSs) only consolidate existing (UK) Government policy and outline a framework for assessing development proposals. As a result they lack the spatial element of policy necessary for meaningful and informed decisions to be made about the location and/or routing of the envisaged infrastructures.

The NPSs' failure to provide spatial guidance means that there is no strategic means of assessing whether there is a need to provide a particular type of infrastructure in a particular place. This means that currently decision making at the investment stage is left entirely to the criteria of the infrastructure providers, thereby failing to take account of the needs and aspirations of other sectors of the wider community. Part of the purpose of the NPSs is to provide a context that enables investment decisions (by all parties - not just infrastructure developers) to be made on a strategic basis; the NPSs do not currently meet this purpose.

Being site-specific, or narrowing the field of search, enables investors to make more informed decisions, and makes consultation easier and more meaningful. Both communities and the infrastructure development industry need a more strategic policy context within which to make investment decisions, which the NPSs do not generally offer (except in the case of proposed nuclear sites). NPSs outline the need for infrastructure, but then leave it to the market to come forward with proposals for the location and type of energy infrastructure, effectively putting at risk the impetus to ensure energy security of supply.

There is a current call from a number of parties to review TAN 8; this call for a review is directed towards on-shore wind energy and the SSAs in particular. In considering whether a review is appropriate, it is important to recall the basis on which the SSAs were developed. Research was commissioned by the Welsh Assembly Government to assist with the drafting and implementation of TAN 8, originally published in 1995. Arup and its sub-consultants were appointed to undertake the research, published in 2005 (Facilitating Planning For Renewable Energy in Wales: Meeting the Target, 2005). The brief was to provide a map for Wales identifying SSAs capable of delivering the Welsh Government's renewable energy target of 4 TWh by 2010. The fundamental objective was to ascertain the most appropriate areas of Wales in which to locate the 800MW of onshore wind turbines minimising direct land take.

The Arup report states: "The research employed a land-use sieve approach applicable at an all-Wales level to identify *relatively unconstrained* areas according to nominated criteria. This data was then combined with information on the capacity of the existing and proposed grid network to produce a plan indicating broad strategic search areas for major wind energy developments, together with a strategic assessment of their potential wind energy capacity to 2010. The result of the analysis was the derivation of seven strategic areas for large-scale onshore wind energy development in Wales."

The SSAs have therefore been drawn up on the basis of evidence excluding agreed National and International designations, combined with other technical and practical factors. There was also consideration given to the cumulative visual impact of developments. Since the publication of TAN8 in 2005, LPAs have had the opportunity

to refine the boundaries of the SSAs. Given the methodology used for devising the SSAs, the RTPPI does not consider a wholesale review is appropriate. Instead, there remains the opportunity to consider material considerations and the Environmental Impact Assessment (EIA) for each proposal to be considered on its own merits.

Local planning policies in Wales are required to be in line with Welsh Government national planning policy. PPW states that LPAs “should plan positively for all forms of renewable and low energy development using up to date and appropriate evidence.” The Welsh Government has commissioned a Toolkit to support LPAs in this work.

The potential contribution and likelihood that different types of renewable and low carbon energy will be capable of delivering the Welsh Government’s aspirations for energy generation

The RTPPI is unable to comment on the generating capacity of potential energy sources. However it does support the promotion of a mix of energy sources to meet demand, preferably from renewable or low-carbon sources, but that the primary policy of all Government policy should be to reduce energy demand.

Indicative targets were set out in TAN8 for each of the SSAs; these have not been met to date. Welsh Government figures are that 175MW of the 2010 target of 800MW had been achieved.

There are currently a number of projects, with significant power generation capacity, awaiting determination by either LPAs or the UK Government. A fundamental issue which needs to be resolved before the applications can be determined, is that of transport access. Whilst there may be some other requirements specific to individual projects, such as landscape assessments, the predominant issue affecting the majority of projects awaiting determination is that of transporting the turbines to site.

The potential role of other forms of energy production in Wales

The RTPPI appreciates that to meet current energy demand, taking into account the state of energy infrastructure serving the UK at present, it is inevitable that some generation of energy using carbon sources is required. However, given the urgency of climate change, this should be kept to a minimum and that there should be a policy priority for reducing energy demand.

The transport issues relating to wind turbines and other forms of renewable energy including their impact on roads, traffic and tourism

The transport implications during the construction phase of these large structures, are significant through areas and along highways which are not suited to these Abnormal Indivisible Loads (AILs). This is likely to cause significant disruption to local communities, businesses and the tourist sector. The transport implications are a material consideration as part of the planning application, and also as part of the EIA. It is appropriate for the proposers of the developments to bring forward proposals to mitigate this impact, working with statutory agencies as appropriate.

Power Transmission Lines

The need for new power lines to serve both on and off shore wind farms is causing at least as much concern in local communities as the wind turbines themselves.

The RTPI has also argued in its response to the NPSs, that there should be a requirement to apply for consent for power transmission lines at the same time as the generating plant. It is obvious that generating capacity in new areas will require power transmission lines and in most cases these will tend to be above ground because of the prohibitive cost of putting them underground. However, it suits the power companies to obtain planning permission for the generation plant (e.g. wind farms below 50MW) first before making an application for the transmission lines and pylons. In this event the determining authority is under pressure to grant consent.

In TAN 8, “developers are encouraged to provide details of likely routes” at the time of application for the wind farm. There are currently no proposals for such a requirement in the NPSs.

September 2011

Y Pwyllgor Amgylchedd a Chynaliadwyedd

E&S(4)-05-11 papur 4

Y Pwyllgor Amgylchedd a Chynaliadwyedd: Grŵp Gorchwyl a Gorffen ar y Polisi Pysgodfeydd Cyffredin

Cefndir

Y Polisi Pysgodfeydd Cyffredin (PPC) yw'r offeryn a ddefnyddir gan yr Undeb Ewropeaidd i reoli pysgodfeydd a dyframaeth. Fe'i hadolygir bob hyn a hyn, ac fe'i diwygiwyd ddiwethaf yn 2002. Fodd bynnag, cytunir yn gyffredinol nad yw diwygiadau 2002 wedi creu sector pysgota cynaliadwy. Ar 13 Gorffennaf 2011, cyhoeddodd y Comisiwn Ewropeaidd ei gynigion ar gyfer diwygio'r polisi, gan ddatgan bod angen newidiadau sylfaenol iddo.

Disgwylir y bydd ail gynnig ategol ar gyfer sefydlu Cronfa Forol a Physgodfeydd Ewrop, sef yr offeryn ariannol a fydd yn cefnogi ymdrechion i weithredu'r Polisi Pysgodfeydd Cyffredin diwygiedig ar ôl 2013, yn cael ei gyhoeddi ym mis Tachwedd 2011.

Bydd y cynigion a wneir gan y Comisiwn a fydd yn berthnasol i bysgodfeydd bach neu a fydd yn effeithio arnynt, yn ogystal â chynigion a fydd yn ymwneud â datblygiad economaidd cymunedau arfordirol, o bwysigrwydd penodol i Gymru.

Mae'r Pwyllgor Amgylchedd a Chynaliadwyedd wedi penderfynu sefydlu Grŵp Gorchwyl a Gorffen er mwyn clywed barn rhanddeiliaid ar gynigion y Comisiwn ac i ddilyn y trafodaethau a gynhelir arnynt wrth iddynt ddatblygu dros y flwyddyn nesaf.

Cylch gorchwyl

- Asesu effaith posibl cynigion y Comisiwn ar Gymru ac ar Barth Pysgodfeydd Cymru, ac ystyried y goblygiadau ehangach i foroedd tiriogaethol Cymru a fydd yn deillio o'r cynigion ar gyfer sector pysgodfeydd Ewrop.
- Gwneud argymhellion i Lywodraeth Cymru ynghylch y materion y dylai'r Llywodraeth eu blaenoriaethu yn ystod y trafodaethau ar y broses ddiwygio.
- Bod yn fforwm lle gall rhanddeiliaid yng Nghymru ymgysylltu â'r ddadl dros ddyfodol y polisi.
- Er mwyn dylanwadu ar y ddadl ehangach ar y PPC, bydd y Grŵp Gorchwyl a Gorffen yn ceisio rhannu ei gasgliadau â chyrrff Seneddol y DU, y Comisiwn Ewropeaidd, Senedd Ewrop a chyrrff perthnasol eraill yn Ewrop, fel Pwyllgor y Rhanbarthau.

Bydd y Grŵp yn ystyried:

- Beth allai cynigion y Comisiwn Ewropeaidd eu golygu i Gymru ac i reolaeth Parth Pysgodfeydd Cymru? Yn benodol, a fyddai cynigion y Comisiwn i ddatganoli'r rheolaeth o bysgodfeydd o fudd i Gymru?

- Beth allai cynigion y Comisiwn Ewropeaidd eu golygu o ran hyfywedd cymdeithasol ac economaidd cymunedau arfordirol yng Nghymru?
- Pa effaith y gallai newidiadau yn y sector pysgodfeydd ehangach yn Ewrop ei chael ar Gymru?
- Beth ddylai Llywodraeth Cymru ei flaenoriaethu yn ystod y trafodaethau ar ddiwygio'r PPC er mwyn sicrhau canlyniadau buddiol i Gymru?
- Sut all Cymru sicrhau bod ei barn yn cael ei hystyried yn y trafodaethau?

Y Pwyllgor Amgylchedd a Chynaliadwyedd

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Y Pwyllgor Amgylchedd a Chynaliadwyedd: Y Grŵp Gorchwyl a Gorffen ar y Polisi Amaeth Cyffredin

Ymchwiliad i ddiwygio'r Polisi Amaeth Cyffredin

Cefndir

Ym mis Gorffennaf 2010, cyhoeddodd Is-bwyllgor Datblygu Gwledig y Trydydd Cynulliad ei adroddiad ar ddiwygio'r Polisi Amaeth Cyffredin (PAC), ar ôl ymchwiliad a geisiodd barn rhanddeiliaid yng Nghymru ar sut y dylid diwygio'r PAC yn y dyfodol a'r canlyniadau a fyddai'n rhoi'r budd mwyaf i Gymru. Yn hytrach na bod yn ddiweddglo, y bwriad oedd i'r adroddiad fod yn gam cyntaf mewn trafodaeth barhaus ymysg y Cynulliad a'i rhanddeiliaid ar yr effaith tebygol y byddai'r broses o ddiwygio'r PAC yn ei chael ar Gymru.

Mae'r PAC o bwys mawr i Gymru. O dan Golofn 1 y PAC mae Cymru yn cael oddeutu €330 miliwn bob blwyddyn, ac, o dan Golofn 2, cafodd €367.7 miliwn ar gyfer Cynllun Datblygu Gwledig Cymru ar gyfer y cyfnod rhwng 2007 a 2013. Penderfynodd y Pwyllgor Amgylchedd a Chynaliadwyedd felly barhau â'r deialog â rhanddeiliaid yng Nghymru ar y broses ddiwygio, gan sefydlu'r Grŵp Gorchwyl a Gorffen ar y Polisi Amaeth Cyffredin. Nod y Grŵp Gorchwyl a Gorffen yw: cael barn rhanddeiliaid yng Nghymru ar gynigion manwl y Comisiwn ynghylch diwygio'r PAC; cyflwyno argymhellion i Lywodraeth Cymru ar ei blaenoriaethau mewn perthynas â thrafod telerau; a chyfrannu at sicrhau bod y safbwyntiau a leisir yng Nghymru yn rhan o'r broses o gynnal trafodaethau yn Ewrop.

Cydnabyddir yn eang y bydd y ddadl ar ddiwygio'r PAC yn cael ei dylanwadu gan y drafodaeth ar bolisiau Ewropeaidd allweddol eraill, gan gynnwys y rheini sy'n ymwneud â dyfodol cyllideb yr Undeb Ewropeaidd a chronfeydd strwythurol. O ganlyniad, bydd y Grŵp Gorchwyl a Gorffen ar y PAC yn ystyried y trafodaethau hyn wrth iddo lunio'i gasgliadau, a bydd yn ceisio sicrhau bod ei waith yn cyd-fynd â'r gwaith craffu y mae pwyllgorau eraill y Cynulliad yn ei wneud mewn perthynas â'r meysydd polisi hyn.

Y Cylch Gorchwyl

- Asesu'r effaith y gallai cynigion y Comisiwn Ewropeaidd ynghylch diwygio'r Polisi Amaeth Cyffredin ei chael ar Gymru, gan gynnwys oblygiadau i bolisiau perthnasol Llywodraeth Cymru.
- I ystyried pa ganlyniadau a fyddai'n rhoi'r budd mwyaf i Gymru.
- Cyflwyno argymhellion i Lywodraeth Cymru ar y materion y dylid rhoi blaenoriaeth iddynt wrth drafod y broses ddiwygio.
- Bod yn fforwm lle y gall rhanddeiliaid yng Nghymru fod yn rhan o'r ddadl ar ddyfodol y polisi.
- Er mwyn dylanwadu ar y drafodaeth ehangach ar ddiwygio'r PAC, mae'r Grŵp Gorchwyl a Gorffen yn bwriadu rhannu ei gasgliadau â chyryff seneddol y DU, ynghyd

â'r Comisiwn Ewropeaidd, Senedd Ewrop a chyrrff Ewropeaidd perthnasol eraill, gan gynnwys Pwyllgor y Rhanbarthau.

Bydd yr ymchwiliad yn ystyried y cwestiynau canlynol:

- Beth fydd arwyddocâd cynigion y Comisiwn Ewropeaidd i Gymru?
- Beth ddylai fod yn flaenoriaethau i Lywodraeth Cymru wrth drafod diwygio'r PAC er mwyn sicrhau y ceir canlyniad sy'n rhoi budd i Gymru?
- Sut y gall Cymru sicrhau bod ei barn yn rhan o'r broses drafod?

Rhestr o gyrff y gellid ymgynghori â hwy

- NFU Cymru
- Undeb Amaethwyr Cymru
- Clybiau Ffermwyr Ifanc Cymru
- Ffermwyr Dyfodol Cymru
- Cymdeithas Tir a Busnes Cefn Gwlad
- Cymdeithas Genedlaethol Defaid Cymru
- Cig Oen ac Eidion Cymru
- Hybu Cig Cymru
- Cyngor Cefn Gwlad Cymru
- Asiantaeth yr Amgylchedd Cymru
- Cymdeithas Llywodraeth Leol Cymru
- Yr Ymddiriedolaeth Genedlaethol
- Y Gymdeithas Frenhinol er Gwarchod Adar
- Cymdeithas Awdurdodau Parciau Cenedlaethol Cymru
- Cymdeithas Genedlaethol yr Ardaloedd o Harddwch Naturiol Eithriadol
- Cyswllt Amgylchedd Cymru
- Yr Eglwys yng Nghymru
- Y Grŵp Cyngori ar Ffermio a Bywyd Gwyllt
- Ystâd y Goron
- Cymdeithas Frenhinol Ffermwyr Godro Prydain
- Cymdeithas y Ffermwyr Tenant
- Cymdeithas y Ffermydd Bychain
- Cymdeithas Foch Prydain

- Cymdeithas y Pridd
- Canolfan Organig Prydain