

Agenda – Y Pwyllgor Amgylchedd a Chynaliadwyedd

Lleoliad:	I gael rhagor o wybodaeth cysylltwch a:
Ystafell Bwyllgora 3 – y Senedd	Alun Davidson
Dyddiad: Dydd Mercher, 18 Tachwedd	Clerc y Pwyllgor
2015	0300 200 6565
Amser: 09.15	SeneddAmgylch@Cynulliad.Cymru

Cyfarfod preifat cyn y prif gyfarfod (09.15 – 09.30)

- 1 Cyflwyniad, ymddiheuriadau a dirprwyon
- 2 Cynnig o dan Reol Sefydlog 17.42 i benderfynu gwahardd y cyhoedd o'r cyfarfod ar gyfer eitem 3
- 3 Etifeddiaeth Pedwerydd Cynulliad y Pwyllgor: Trafodaeth ar Ymgynghoriad y Pwyllgor Busnes
(09:30 – 10:00)
E&S(4)-32-15 Papur 1
- 4 Ymchwiliad i 'Ddyfodol Ynni Craffach i Gymru?' – Fideo Grwpiau Ynni Cymunedol
(10:00 – 10:30) (Tudalennau 1 – 9)

Egwyl (10:30 – 10:40)

- 5 Ymchwiliad i 'Ddyfodol Ynni Craffach i Gymru?'
(10:40 – 11:40) (Tudalennau 10 – 20)

Robert Proctor, Rheolwr Datblygu Busnes, Ynni Cymunedol Cymru

Merlin Hyman, Prif Weithredwr, Regen South West



E&S(4)-32-15 Papur 2

E&S(4)-32-15 Papur 3

6 Ymchwiliad i ‘Ddyfodol Ynni Craffach i Gymru?’

(11:40 – 12:40)

(Tudalennau 21 – 31)

Hywel Thomas, Cadeirydd a Chyfarwyddwr, Cwmni Adfywio Abergwyngregyn

Keith Jones, Cyfarwyddwr, Ynni Padarn Peris / Ymgynghorydd Amgylcheddol, Yr

Ymddiriedolaeth Genedlaethol

Drwy gyswllt fideo:

Paula Roberts, Cyfarwyddwr, Ynni Padarn Peris

Alun Hughes, Cadeirydd, Ynni Padarn Peris

Meleri Davies, Cydlynnydd Datblygiad Cymunedol ac Economaidd, Partneriaeth

Ogwen

E&S(4)-32-15 Papur 4

E&S(4)-32-15 Papur 5

E&S(4)-32-15 Papur 6

7 Papurau i'w nodi

Craffu ar waith y Gweinidog Cyfoeth Naturiol: Ymateb gan y Gweinidog Cyfoeth Naturiol.

(Tudalennau 32 – 41)

E&S(4)-32-15 Papur 7

‘Dyfodol Ynni Craffach i Gymru’? Rhagor o wybodaeth gan Scottish Power

(Tudalennau 42 – 53)

E&S(4)-32-15 Papur 8

**Craffu ar waith y Dirprwy Weinidog Ffermio a Bwyd: ymateb gan y Dirprwy
Weinidog Ffermio a Bwyd**

(Tudalennau 54 – 57)

E&S(4)-32-15 Papur 9

Mae cyfyngiadau ar y ddogfen hon

Mae cyfyngiadau ar y ddogfen hon

Eitem 5

Cynulliad Cenedlaethol Cymru Pwyllgor Amgylchedd a Chynaliadwyedd	National Assembly for Wales Environment and Sustainability Committee
Dyfodol Ynni Craffach i Gymru?	A Smarter Energy Future for Wales?
Ymateb gan Ynni Cymunedol Cymru (Saesneg yn unig)	Response from Community Energy Wales
SEFW 12	SEFW 12



Cynulliad
Cenedlaethol
Cymru

National
Assembly for
Wales

Environment and Sustainability Committee
National Assembly for Wales
Pierhead Street
Cardiff
CF99 1NA

Re: Consultation - A Smart Energy Future for Wales?

1. The energy mix

- How can we decarbonise our energy system at a sufficient pace to achieve the necessary reductions in emissions?
- What mixture of distributed generation resources best meets Wales' renewable energy needs in respect to the supply of a) electricity, b) gas, and c) heat?

1.1 As an ideal we would support the work carried out by Zero Carbon Britain¹ who detail how using current technologies we can become a zero carbon society by 2030.

1.2 The report details a technically robust scenario in which the UK has risen to the challenge of climate change by rapidly reducing greenhouse gas emissions to net zero. It demonstrates that we can do this using only currently available technology, whilst maintaining a modern standard of living, eating well, and meeting our energy demand at all times with 100% renewable UK energy sources.

1.3 In their scenario electricity supply from renewables exceeds demand 82% of the time. However, it also requires us to reduce the total energy demand by 60%. They propose managing variability to meet demand 100% of the time by:

- Shifting energy demand by using 'smart' appliances, demand management, and short-term energy storage (pumped storage, batteries, heat storage and hydrogen) for storage over hours or days. This means supply meets demand a further 3% of the time.
- Using **long-term energy storage** (for weeks or months) in the form of **carbon neutral synthetic gas** to cover demand the remaining 15% of the time. This represents only 3% of total electricity supply, but is crucial to managing variability as it can be dispatched quickly as and when necessary.

1.4 The **ZCB energy model** used to develop this scenario is one of the most detailed studies of energy variability to date. The model uses hourly weather data (sunlight, wind speeds,

¹ <http://www.zerocarbonbritain.org/ZCBrtf%20-%20Executive%20summary.pdf>

temperatures etc.) over ten years – a total of almost 88,000 hours – to test the scenario under real life conditions.

2. The grid

- How does the grid distribution network in Wales enable or restrict the development of a new smarter energy system?
- What changes might be needed in terms of ownership, regulation, operation and investment?

2.1 It is clear that one of the most significant factors holding back the deployment of renewable energy in the UK is grid capacity. In Wales a number of Community Energy Projects have been abandoned or constrained by grid capacity. By way of example: Upper Conwy Valley hydro with 920kW potential constrained to 100kW by grid connection and now unlikely to be built; Ogwen hydro 900kW re-sized to 499kW; Anafon hydro with 500kW capacity re-sized to 270kW due to the connection costs. In addition to these mid-scale schemes, countless small community and farm scale schemes will not be built because of grid constraint or connection costs. As an example one 18kW scheme on a farm in Mid Wales near Builth Wells was quoted a connection cost of £5.7 million for line re-inforcement due to grid constraints. This scheme would have cost £100,000 so the connection cost was totally out of proportion.

2.2 Some active network management (ANM) can be beneficial in maximising the capacity in the network. However, ANM should not be used as a reason for delaying strategic grid investments. It is particularly costly for small schemes (£20,000) and it constrains the outputs of generators reducing the return for the generator.

2.3 Active network management and storage may provide future opportunities to resolve some of these issues. However, they are currently immature technologies that are not able to deliver carbon reductions in the short term. We support continued research and any pilots in the effectiveness of these options where they could ease pressure on the grid. This should not be used as an excuse to stop strategic grid investment now. If we are to see continued investment in Renewable Energy in Wales then some investment into the grid needs to be made for the general benefit and should be paid for by means other than existing and new connection customers. It is worth noting that other strategic networks all receive state funding for part of the infrastructure development, for example trunk roads and rural broadband. It seems perverse that one of the vital national infrastructure networks that is hampering our ability to meet our climate change commitments is actively prevented from supporting strategic reinforcement by its regulator.

3. Storage

- How can energy storage mechanisms be used to overcome barriers to increasing the use of renewable energy?

3.1 Again referring back to the Zero Carbon Britain report² they have carried out extensive research into options available to us with current technologies. In particular the section on balancing supply and demand provides detailed analysis of the options available to us. We should invest in technological advances in this area but for now we need to implement what technologies already exist.

3.2 In their scenario electricity supply from renewables exceeds demand 82% of the time. They manage variability to meet demand 100% of the time by:

- Shifting energy demand by using 'smart' appliances, demand management, and short-term energy storage (pumped storage, batteries, heat storage and hydrogen) for storage over hours or days. This means supply meets demand a further 3% of the time.
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4. Ownership

- To investigate the desirability and feasibility of greater public and community ownership of generation, transmission and distribution infrastructure and the implications of such a change.

Having **ownership** of an energy asset in your community can help you:

4.1 Deliver Social & Economic Purpose, because it:

- Allows generation of income that can be re-invested locally
- Provides jobs, training and business opportunities
- Can reverse economic decline of areas and attract investment
- Enables more intensive use of assets and services when control is closer to community
- Allows better stewardship of local assets because the community owns and uses them
- Enables local people to make ethical investments that support the local economy
- Local ownership ensures that interest on shares is re-distributed within the local economy

4.2. Change Attitudes and Relationships, because it:

- Gives the group credibility with funders / other stakeholders
- Heightens the group's profile and improves perceptions of it
- Instils a renewed sense of pride and confidence in the community

² <http://www.zerocarbonbritain.org/ZCBrtf%20-%20Executive%20summary.pdf>

- Provides local people with a meaningful stake in the future development of the place in which they live and/or work
- Can increase participation - membership, volunteering, attendance at meetings
- Encourages, through its success, further ideas and activity – ripple effect!

4.3. Move towards financial self-sufficiency, because:

- The organisation can generate income from the asset
- Can benefit directly from free or low cost energy if the Energy source is linked to Community Building.
- There is incentive to invest to reduce running costs of buildings - e.g. energy efficiency
- It gives your Balance sheet strength - which you can use as security

4.4 Build organisational sustainability through:

- Independence/ control over future of asset allowing you to make long-term plans
- Leverage, enabling you to negotiate further investment
- The development of skills and capacity locally that taking on and managing a building encourages
- Attracting new people with additional skills
- Building long-term support from community

4.5 To illustrate some of these points we can look to Scotland where Community Land Scotland who represents Community Land Owners in Scotland has produced a report on the impacts of the transfer of land to community ownership. Of 12 Community organisations surveyed they demonstrated the significant impact of Community Ownership in general as they were able to increase the value of the land by 244%, increase their total turnover by 254% and invest in a range of improvements such as affordable housing, business units, tourist facilities and Communications infrastructure. By far and away the biggest investments they had made were in Renewable Energy, at least 48% of all investment was in Renewable Energy and at least 40% of future investments was planned to be renewable energy. These schemes have provided a steady income and although modest in scale are around 20 times more valuable economically to them than if they were privately owned and they were provided with a Community Benefit fund³. This also highlights the benefits of social ownership in general and how it can revive once declining areas into prosperous places with job opportunities.

³ <http://www.communitylandscotland.org.uk/wp-content/uploads/2014/06/FINAL-Community-Land-Scotland-Economic-Data-Report-140414-For-Release.pdf>

4.6 In a report commissioned by the National Trust⁴ they also highlighted some of the key benefits of Community Ownership as providing: Autonomy; Resilience; Community Empowerment; Education; Sense of Place and support to the Local Economy.

4.7 A recent report highlights the economic benefit of Community Hydro Projects. As well as the economic benefit of the Development itself, they also look at the economic benefit of how these schemes use the surplus they create to re-invest in the local community. They estimated that for every mW installed it would provide £300,000 of Gross Value Added and provide 10 Full time Equivalent (FTE) jobs. It was identified that the annual surplus was used for a mix of educational, community retail and recreational activities, along with a good proportion of physical refurbishment and 'pump priming' for further, low carbon investment⁵.

4.8 These figures are subject to change particularly given the recent proposals announced by DECC in July and August 2015 on FIT pre-accreditation and FIT levels. If these changes go ahead it is likely to threaten the viability of the majority of Community Energy schemes in Wales, unless we can look at alternative ways of financing them.

4.9 However, in the UK we could be benefitting more by enabling Community Energy groups to distribute their energy directly to the Communities they are based in or to their members. Community buildings can benefit from free or low cost energy if the installations are connected to them such as Egni PV Co-operative.⁶ However, at the moment it is incredibly difficult and impossible without an intermediary for local households to purchase electricity directly from the community owned generators. If we are to support more local people (particularly those that have less or no capital to invest in schemes) to benefit from Renewable installations we need to make this process a more feasible opportunity for Communities. It may be possible to develop models similar to those that already exist and are being used by Local Authorities to buy electricity from local generators to benefit local householders as well. CEW are looking to explore these opportunities further:

- Through the Piclo scheme being trialled by Open Utility (www.openutility.com) it should be possible for electricity exported from schools to be sold on to other public estate users (such as council offices) at a discount.
- Rooftop solar can be funded by power purchase agreements (PPA). Here the company or organisation installing the system meets all of the capital cost. The building occupant pays for as much or as little as wanted of the electricity generated (at a discounted rate compared with grid electricity) and any surplus electricity is exported to the grid.

⁴ <http://www.nationaltrust.org.uk/document-1355801605221/>

⁵

<http://regenwales.org/upload/pdf/071015091201Impact%20of%20Small%20and%20Community%20Hydro%20in%20Wales.pdf>

⁶ <http://egni.coop/>

4.10 If Community Energy generators were able to do this more easily then it could provide a way forward for Community Energy that is not so reliant on Government controlled schemes such as the Feed in Tariff (FITs). A great example of a future vision for communities in Wales is Feldheim⁷ a small agricultural village with around 130 inhabitants located 80 km southwest of Berlin. It owns and manages its own heat and electricity networks through an independent local utility company established in partnership with a local private developer, (Energiequelle Ltd.), local agricultural cooperatives, the local government and the citizens of Feldheim. Feldheim hosts a number of wind turbines (74.1 MW) which were developed by Energiequelle, some of which feed into Feldheim's community-owned electricity network. The community owns a biogas plant (500 kW) which runs on the by-products of pig and cattle farming and feed into Feldheim's community-owned district heating network. The output of the plant is in turn used as agricultural fertilizer. The town has a woodchip boiler and an electric battery in planning stage for back-up of heating and electricity respectively.

4.11 Among the many benefits of Feldheim's approach is the considerable lower cost of energy compared to normal private utility rates (17€ct/kWh vs. 28€ct/kWh - a 40% saving) increasing local value to the region in the form of local tax revenue, job creation, and long-term security of energy supply. This demonstrates the potential benefits of local ownership and how it can provide a model to support areas with high levels of fuel poverty.

4.12 Germany provides a vision of how things could be in Wales. In Germany in recent years their 'Energiewende' (energy transition) strategy has led to cross party political support for targets including one for a 50% reduction in primary energy use by 2050 and one for achieving an 80% renewable electricity share of total consumption by 2050. In early 2012, around 25% of Germany's power was generated from renewable sources; in 2011, over 380,000 people were employed in the renewable energy sources industry; Only 13% of Germany's 60 GW of renewable energy is owned by utilities, with the rest being owned by households, communities, and farmers among others.

5. Energy efficiency and demand reduction

- How can the planning system and building regulations be used to improve the energy efficiency of houses (both new build and existing stock)?
- What would the environmental, social and economic impacts be if Wales set higher energy efficiency standards for new build housing? (e.g. Passivhaus or Energy Plus)

5.1 Building regulations could ensure all new build properties and renovations met minimum energy efficiency standards. We would be supportive of significantly increasing this requirement on energy efficiency as we need to reduce our energy usage by 60% if we are to achieve Zero Carbon Britain's vision for the future. We have the technology to create zero carbon homes as demonstrated by Passivhaus standards and the Solcer House

⁷ <http://www.gov.scot/Publications/2014/08/1223/8>

developed by Cardiff University⁸ at a cost acceptable to Social Housing benchmarks. This will also enable the diversification of the housing sector with new innovative companies taking the opportunity to break into the market.

6. Communities - making the case for change

- How can communities, businesses and industry contribute to transforming the way that Wales thinks about energy?" Does the answer to this challenge lie in enabling communities to take greater responsibility for meeting their future energy needs?

6.1 Yes, there are currently over 80 Community Groups in Wales that are looking to take control of their energy future in Wales through developing Community Energy projects. Community Energy Wales has created a database of these organisations.

6.2 There are many communities that are looking to take action on climate change, over 320 community groups and organisations across Wales have contacted Renew Wales for support in taking action on climate change.

6.3 One of the main motivating factors for Community Energy is that Communities want greater responsibility for their energy. We want to work with Local Authorities to identify what potential opportunities exist for developing opportunities to create renewable energy that is locally owned. We need a grid and an electricity distribution system that supports local people to be able to purchase energy locally when available. This will particularly benefit those in areas of Fuel Poverty.

6.4 We want to support Local Authorities and other public bodies to make best use of public assets such as roof space, unused land etc. We would support a Welsh version of Community Rights which exists in England. However, we feel that these rights could go further and we can build on what exists currently in England and extend it. A useful reference is the latest Community Rights report which suggests ways it could be used more effectively.⁹

6.5 We also need a better replacement for Green Deal. There is an excellent example in Wales of the public sector, business and communities working together to improve energy efficiency. Robert Owen Community Banking Fund's zero interest loan finance scheme to improve energy efficiency or generate renewable energy is a great example of how we could do things differently in Wales.¹⁰ Often schemes like the Green Deal would exclude those

⁸ <http://www.solcer.org/>

⁹ <http://www.publications.parliament.uk/pa/cm201415/cmselect/cmcomloc/262/262.pdf>

¹⁰ https://www.rocbf.co.uk/zilf_faq

that were less well off as they were unable or uneasy about taking on the rates of interest that were available through this scheme.

Response from Regen SW

- How is it best to engage communities in the smart energy agenda?

Ensure smart energy strategies and projects have social and environmental as well as economic objectives.

Engage local communities early on in smart energy projects to enable them to help shape initiatives to overcome concerns over issues such as privacy and provide local benefits.

See the Wadbridge case study in our work for Cornwall Council on the benefits of their Smart Cornwall project at page 186 of

www.cornwall.gov.uk/media/3620621/Smart-Cornwall-Evidence-base-report-FINAL.pdf

- What is the most appropriate geographical scale (local neighbourhoods, cities, city regions)?

I think cities and regions are already engaging in the smart city and energy agenda. The challenge is to engage communities at a more local level

- What are the motivating factors for local community groups?

They vary, but local economic resilience is often a strong driver.

- What are the main obstacles to community energy co-operatives and how can they be removed?

Developing energy projects is extremely complicated. Community groups need support, guidance and partners if they are to succeed.

The current government subsidy changes have made most community energy projects unviable.

- What sources of funding (e.g.: community banking loan schemes) could be made available?

Local share issues have proved a successful way of financing projects. We do not see finance as a fundamental barrier – although this could change if the scale of sector changes. Where funding is needed is grant funding at earlier stages to help groups get going. E.g Regen and Devon County council have run a grant scheme of a few thousand pounds.

- What role should businesses, local authorities and the Welsh Government play in this transformation?

- What skills development and training is needed?

We have found an ongoing community support network providing support and peer to peer mentoring on key issues such as business planning, cooperative structures, grid access and share offers is more successful than ‘one off’ training - see <http://www.regensw.co.uk/communities/> for more info on our network of 250 community energy groups in the south west - including a video on their views.

This support be made more effective with ability and resource to produce guides on key issues such as we have done with Western Power Distribution on community grid access www.westernpower.co.uk/docs/connections/Generation/Community-Energy-Schemes/WPD_Guide_FINAL.aspx and Local Energy Scotland on a wide range of issues.

- What are the successes and limitations of the Ynni'r Fro programme?
- What can Wales learn from elsewhere on how best to engage local communities with this agenda?

A Smarter Energy Future for Wales?

18 November 2015

Abergwyngregyn Hydro

- How is it best to engage communities in the smart energy agenda?

A majority of the public by now have an appreciation of what is meant by “green energy”, however it is doubtful if the concept of smart energy is understood by the general public.

The best way to engage with communities is at a community level and to achieve meaningful engagement requires adequate funding in terms of providing the necessary human resources and training to deliver this.

- What is the most appropriate geographical scale (local neighbourhoods, cities, city regions)?

The appropriate geographical scale will depend on the nature of the locality, however to be effective it needs to be “local” and by that it means what those who live there perceive as being local to them. This could be a village, wards or towns.

- What are the motivating factors for local community groups?

Each community group will have their own motivating factors dependent on a number of factors, however main factors would be fuel poverty, helping the green agenda by reducing the carbon footprint of the community, providing sources of income to address local social and environmental issues.

- What are the main obstacles to community energy co-operatives and how can they be removed?

The main obstacles to community energy projects are:-

the lack of human resources, there is a dependence of projects being delivered purely on a voluntary basis;

lack of “hands on” advice in terms of administrative and technical matters;



the complexity of the consenting procedures i.e. consents required from a number of bodies including LPA's, NRW, DECC as a minimum.

Access to funding to start up projects and easier access to capital funding to deliver the end product.

Grid constraints can also be a problem, especially in terms of the high costs of upgrades. WG could assist for example funding an Esco type organisation to be first mover on grid improvements as the DNO because of their regulation can't unilaterally reinforce grid to enable multiple community energy companies to develop their projects (model bring developed in London) this ultimately means that the first mover as they are called community does not have to take on all the grid cost which would enable others to connect in later but bankrupt their own project

What sources of funding (e.g.: community banking loan schemes) could be made available?

Many funders are risk averse and do not understand community projects. They tend to treat community energy schemes as they would any commercial operator. There needs to be therefore loan schemes tailored to community projects which are operated by people who understand community needs and capabilities.

What role should businesses, local authorities and the Welsh Government play in this transformation?

The Welsh Government has made a start in this respect through their Ynni'r Fro program and it is understood that this is to be continued. However, the timescale in the delivery of community projects from inception to completion can be a number of years and therefore any programme needs to be long term and adequately funded. In addition, it would be of considerable benefit for communities to have a "programme officer" or the like who would be able to parachute in to assist in the more complex and time consuming issues which arise.

It is appreciated that local authorities' resources are stretched and are having to face cutbacks at present, however local authorities could assist through making loans available from their capital assets at a local level as has been done in a number of authorities already.

Businesses can also assist and benefit from community energy projects through things such as power purchase agreements.

What skills development and training is needed?

Whilst skills development and training would assist local groups, the delivery of projects is still heavily reliant on unpaid volunteers and not all communities have the luxury of having people who are willing to give up the 1000's of unpaid hours that are required. The main issue is therefore one of human resources.

What are the successes and limitations of the Ynni'r Fro programme?



In terms of our experience the feasibility and development funding was crucial to the delivery of the project as was the assistance of the local development officer.

The main limitations of the scheme were the length of the programme itself and the number of officers available to cover Wales so as to be more hands on in projects.

□ What can Wales learn from elsewhere on how best to engage local communities with this agenda?

In our development stage we took considerable advice and steer from projects in Scotland where they appear to be years ahead of both Wales and England in terms of the development of green energy and community energy.

Hywel Thomas

October 2015



A Smarter Energy Future for Wales?

Evidence paper from Keith Jones

- **How is it best to engage communities in the smart energy agenda?**

Through the use of community champions. Groups and or individuals who are already engaged in this area of work. Enable networking to then happen between these groups in order to spread the word. For example 5 communities in NW Wales have formed a coalition to share, learn and spread the lessons. WG could support this approach by enabling pump priming capacity building eg officer level to support, seed funding to facilitate the development of business plans and so on

- **What is the most appropriate geographical scale (local neighbourhoods, cities, city regions)?**

All of them. We should not stick to geographical scale but they should be resource dependant. The resource being both energy opportunity but also community group availability and experience to develop. City level does make sense as they are quite often structured to work on other projects at this scale. From experience to date the more successful project are not driven by location but by people (e.g. not by local authorities who are often hampered in being innovative by their own policies and processes) Rural communities could be on a country level and break down to community level but we have also found that you can have communities of interest rather than geographical communities. There are many NGO's Charities who cross boundaries but who can help and should be helped to drive community energy.

- **What are the motivating factors for local community groups?**

Taking control of their own futures. Seeing external companies come in to harvest benefit from communities area and leave only loose change. Wanting to make a real and tangible difference to their community. Future generation's sustainability and leaving a positive legacy for those who follow

- **What are the main obstacles to community energy co-operatives and how can they be removed?**

Statutory processes slowing aspects down in gaining approval, access to land or sometimes providing conflicting advice from officer to specialist levels. This is getting better but the capacity within these organisations is getting more and more constrained e.g. Planning departments becoming pinch points because of a lack of staff

Access to capital. A development fund which could be facilitated by Welsh gov. Not public funding because of the state aid implications but underwrite an investment fund especially for project financing. Facilitating low risk debt finance once sites are up and running. Eg Allied capital in Scotland

Welsh Gov procurement establishing the ability of public bodies to buy community energy through 'non traditional business models' (OFGEM trial) there are several of these trials underway in NW Wales

- **What sources of funding (e.g.: community banking loan schemes) could be made available?**

The at risk element of feasibility should be funded but consider a revolving fund which means getting more bangs per buck. Staged payments based on agreed quality and milestones to make the money go further and to revolve within the system

Development of capital fund from private finance but underwritten by some public funding to lower the cost of capital but without impacting state aid. Community bank loan is a simple and quicker process. Governments usually complicate things when they try to simplify things

Added value grants e.g. consider grants for ecological improvements to community projects. Fish passes, ecological corridors as such like. Adding value but should be good value for the country because the contractors are on site

- **What role should businesses, local authorities and the Welsh Government play in this transformation?**

Enabling to development of a power supply and purchasing structure in Wales.

Work with business or develop a business to operate power purchasing and power selling arrangement. (but not through buy for or sell to wales... not flexible and innovative enough)

Create a public sector market for this energy e.g. enabling public bodies to have a strike price based on available wholesale costs of community energy. This would pump prime the customer base

Enable the development of non-traditional energy business models. In NW Wales currently trailing peer to peer selling of energy. Also a pilot site for 'energy local' virtual grid. Fuel poverty and added value element to this.

Overall the aim is to add and keep value to locally generated energy which would insulate community projects from large FIT cuts and also drive cultural shift in energy use though improved understanding of generation and also pride in local use

Local authorities. Access to their resources if they can't make an energy project work. Too onerous at the moment. They can learn a lot for the charity sector in terms of proving best value without the risk of judicial review from letting an asset out too cheaply

Providing the guidance and structures to enable local authorities to enable them to access Prudential loans to enable a portfolio of community projects to happen or creating a framework to enable public pension funding into this sector. (low risk low cost finance... this could even be for the much lower risk refinancing aspect once the project share up and running)

There is also a role for the social housing sector in this field as a buyer of energy, tackler of fuel poverty, capital financier of project in JV's and such like

Develop a suite of documentation and contracts which the community groups can take on and that have been developed in conjunction with the banking and business world which would

- a) Lower legal costs for development
- b) Make due diligence quicker for financing of projects
- c) Lower the costs overall for projects
- d) Establish projects to be packed because of the use of similar contractual suits

Broker and fund Wales academic institutions to develop more applied and cross sectoral research into community energy.

- a) Engineer R&D into unitisation, lower costs, quicker implementation
- b) Research into social and business models to allow the sector to retain more value, work together, share benefit

- **What skills development and training is needed?**

The skills are in the communities. Enabling this to be shared would be a good start

Training is needed for statutory and public bodies on the sector. Eg training session is being organised for LAG Leader group and community development officers in Gwynedd by the community sector (the skills are in the community sector and just need sharing)

- **What are the successes and limitations of the Ynni'r Fro programme?**

Ynni'r fro has been very weak in fact non-existent in social media. This is where community energy lives, raises money, shares its lessons and communicates day to day.

YF needs to be lighter on its feet in terms of approval processes. Many examples of changes in the program having a slowing down effect of decision processes. The clients often not knowing what was going on. Better comm's will be essential

At officer level in NW Wales the support has been exemplary. Everything from helping with application forms, sign posting funding opportunities, due diligence checks and so on. We know the skills of the officers are varied and differing quality. The main weakness has been their small number and large geographical spread which can often be seen as poor service by some groups but in fact I know personally the officers are working long hours and try to be SMART

- **What can Wales learn from elsewhere on how best to engage local communities with this agenda?**

Nothing new but CARES program in Scotland. But we now have a lot to share e.g. Wales Ireland Interreg bid. This would also be a good opportunity for Wales to sit back and look deep into the sector. Interestingly the consortium in in NW is gaining a lot of interest from Scotland as another possible model

A Smarter Energy Future for Wales? Evidence paper from Alun Hughes

- **How is it best to engage communities in the smart energy agenda?**

A majority of the public by now have an appreciation of what is meant by “green energy”, however it is doubtful if the concept of smart energy is understood by the general public.

The best way to engage with communities is at a community level and to achieve meaningful engagement requires adequate funding in terms of providing the necessary human resources and training to deliver this.

- **What is the most appropriate geographical scale (local neighbourhoods, cities, city regions)?**

The appropriate geographical scale will depend on the nature of the locality, however to be effective it needs to be “local” and by that it means what those who live there perceive as being local to them. This could be a village, wards or towns.

- **What are the motivating factors for local community groups?**

Each community group will have their own motivating factors dependent on a number of factors, however main factors would be fuel poverty, helping the green agenda by reducing the carbon footprint of the community, providing sources of income to address local social and environmental issues.

- **What are the main obstacles to community energy co-operatives and how can they be removed?**

The main obstacles to community energy projects are:-

- the lack of human resources, there is a dependence of projects being delivered purely on a voluntary basis;
- lack of “hands on” advice in terms of administrative and technical

matters;

- the complexity of the consenting procedures i.e. consents required from a number of bodies including LPA's, NRW, DECC as a minimum.
- Access to funding to start up projects and easier access to capital funding to deliver the end product.

Grid constraints can also be a problem, especially in terms of the high costs of upgrades. WG could assist for example funding an Esco type organisation to be first mover on grid improvements as the DNO because of their regulation can't unilaterally reinforce grid to enable multiple community energy companies to develop their projects (model being developed in London) this ultimately means that the first mover as they are called community does not have to take on all the grid cost which would enable others to connect in later but bankrupt their own project.

- **What sources of funding (e.g.: community banking loan schemes) could be made available?**

Many funders are risk averse and do not understand community projects. They tend to treat community energy schemes as they would any commercial operator. There needs to be therefore loan schemes tailored to community projects which are operated by people who understand community needs and capabilities.

- **What role should businesses, local authorities and the Welsh Government play in this transformation?**

The Welsh Government has made a start in this respect through their Ynni'r Fro program and it is understood that this is to be continued. However, the timescale in the delivery of community projects from inception to completion can be a number of years and therefore any programme needs to be long term and adequately funded. In addition, it would be of considerable benefit for communities to have a "programme officer" or the like who would be able to parachute in to assist in the more complex and time consuming issues which arise.

It is appreciated that local authorities' resources are stretched and are

having to face cutbacks at present, however local authorities could assist through making loans available from their capital assets at a local level as has been done in a number of authorities already.

Businesses can also assist and benefit from community energy projects through things such as power purchase agreements.

- **What skills development and training is needed?**

Whilst skills development and training would assist local groups, the delivery of projects is still heavily reliant on unpaid volunteers and not all communities have the luxury of having people who are willing to give up the 1000's of unpaid hours that are required. The main issue is therefore one of human resources.

- **What are the successes and limitations of the Ynni'r Fro programme?**

In terms of our experience the feasibility and development funding was crucial to the delivery of the project as was the assistance of the local development officer.

The main limitations of the scheme were the length of the programme itself and the number of officers available to cover Wales so as to be more hands on in projects.

- **What can Wales learn from elsewhere on how best to engage local communities with this agenda?**

In our development stage we took considerable advice and steer from projects in Scotland where they appear to be years ahead of both Wales and England in terms of the development of green energy and community energy.

Eitem 7.1

Carl Sargeant AC / AM
Y Gweinidog Cyfoeth Naturiol
Minister for Natural Resources



Llywodraeth Cymru
Welsh Government

Ein cyf/Our ref: M-P-CS-0043-15

Alun Ffred Jones AM
Chair
Environment and Sustainability Committee

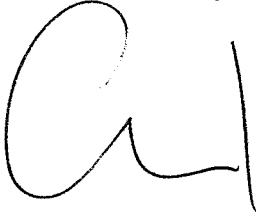
 November 2015

Dear Alun Ffred,

Further to the email from the Committee Clerk on 28 October, I am pleased to provide a response – at Annex 1 - to the action points raised during my appearance before the Committee on 14 October.

I trust that I have addressed the Committee's queries in full.

Yours sincerely



Carl Sargeant AC / AM
Y Gweinidog Cyfoeth Naturiol
Minister for Natural Resources

Bae Caerdydd • Cardiff Bay
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We welcome receiving correspondence in Welsh and any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

Tudalen y pecyn 38

Annex 1

The rationale behind the 350MW ceiling for the further devolution of energy consenting powers.

The Committee inquired about the rationale for the 350 mega watt (MW) ceiling contained within the Draft Wales Bill, (clause 17). This threshold is derived from the Commission on Devolution in Wales (Silk 2 Report), published in March 2014.

<http://webarchive.nationalarchives.gov.uk/20140605075122/http://commissionondevolutioninwales.independent.gov.uk/files/2014/03/Empowerment-Responsibility-Legislative-Powers-to-strengthen-Wales.pdf>

Chapter 8 deals with Natural Resources, setting out the evidence received by the Commission, their assessment and recommendations. Paragraphs 8.2.19 and 8.2.20 outline the Commission's conclusions on the threshold.

As for the necessary primary legislation, clause 17 of the Draft Wales Bill issued last month, seeks to devolve to Wales the responsibility for energy generating development consents for projects up to 350MW onshore and offshore in Welsh territorial waters. The combined effect of the provisions in the Bill is to dis-apply the Secretary of State for Energy and Climate Change's power under the 2008 Planning Act to grant a development consent order (DCO) in relation to electricity generating stations up to 350MW. This would leave consenting for electricity generating stations to be determined in accordance with S36 of the Electricity Act 1989; however, subsections (6)-(8) of the Draft Wales Bill would remove the requirements of the Electricity Act in relation to electricity generating stations up to 350MW, which in effect transfers such projects into the Town and Country Planning system in Wales if they are onshore, (ie above low water mark).

Silk 2 also recommended that responsibility for granting consent for associated development for energy generating projects should be aligned with the responsibility for granting the consent for the main project; paragraph 8.2.25 refers. Planning consents for energy projects over 50MW are currently determined via a DCO from the Secretary of State under the Nationally Significant Infrastructure Projects (NSIP) regime established by the 2008 Planning Act. However, large energy projects are also likely to require consent for development which is related to the principal project and is necessary for the project to proceed. In England the Secretary of State can currently incorporate a wide range of such related consents within the DCO. In Wales, however, the Secretary of State currently has limited powers to grant these consents, restricted to surface works, boreholes or pipes ancillary to underground gas storage. Clause 17 of the Draft Wales Bill would devolve consents for energy projects up to 350MW to Wales, while under clause 18 the Secretary of State would be able to consent not only the principal project over 350 MW but also any associated development consents required in Wales.

The Committee may also wish to note that the Silk 2 recommendations and Draft Wales Bill clauses are silent on energy projects other than generating stations, such as grid transmission lines. As drafted the combined result would be to add to the complexity of the current regime in Wales. For example, an NSIP power station over 350 MW would be consented via a DCO which included consent for associated development. However, an NSIP grid transmission line would not be able to include associated developments, such as planning permission for a sub-station, within the DCO. In this case planning permission for

the sub-station would need to be determined by either the Welsh Ministers as part of a Development of National Significance, or on call-in, or by the relevant local planning authority.

An additional change to the energy consenting regime was announced by the UK Government on 18 June, to remove the 50 MW threshold and transfer decisions on all applications for onshore wind generation to the town and country planning regime, to be taken by local planning authorities in England and within the planning regime set by Welsh Ministers in Wales. This announcement is reflected in clause 59 of the Energy Bill, amending s36 of the Electricity Act 1989; two related statutory instruments are expected to give effect to this.

The Silk Commission aimed to balance accountability, clarity, coherence, subsidiarity and effectiveness. However it is questionable if clauses 17 and 18 within the Draft Wales Bill deliver the balance sought. There is a risk of making the existing fragmented consenting system even more fragmented.

The legislative framework for marine planning

Welsh Government made a clear commitment to sustainable development in the Government of Wales Act. This is strengthened by the Well-being of the Future Generations (Wales) Act. There is clear commitment to sustainability also in the legislation relating to marine planning - the Marine and Coastal Access Act 2009 in the UK and the EU Maritime Spatial Planning Directive 89/2014.

The need to manage activity in our seas, to secure meaningful engagement, integration and long term environmental and economic sustainability is central throughout the legislative framework. Welsh Government is working to achieve co-ordination across Departments and through key forthcoming legislation relating to the Environment, to terrestrial Planning and to the management of Natural Resources.

The Marine and Coastal Access Act 2009 (MCAA)

This has been the framework for marine planning in the UK from 2009. It provides for a Marine Policy Statement to be introduced and sets Welsh Ministers as the marine planning authority for Wales responsible for preparing a marine plan for both the inshore and offshore regions.

The MCAA requires the Welsh Ministers to seek to ensure that a marine plan is in place for a marine planning authority area (for Wales this means the inshore and offshore areas) when a Marine Policy Statement is in effect.

The **Marine Policy Statement (MPS)** was jointly adopted by all UK administrations and published in 2011.

<https://www.gov.uk/government/publications/uk-marine-policy-statement>. As the policy framework for marine plans, it established consistency in marine planning across the UK marine area. It set the direction for marine licensing and other relevant authorisation systems.

It provides the high level policy context and outlines the aims of marine planning as being to:

- achieve integration between different objectives;
- recognise that the demand for use of our seas and that the resulting pressures on them will continue to increase;
- manage competing demands on the marine area, taking an ecosystem-based approach;
- enable the co-existence of compatible activities wherever possible; and
- integrate with terrestrial planning.

The objectives and the policies identified in the draft Initial Welsh National Marine Plan have been developed in compliance with the MPS and address the key activities that happen in the marine environment.

The EU Framework Directive for Maritime Spatial Planning 89/2014 http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.257.01.0135.01.ENG provides a framework for maritime spatial-planning (or marine planning) EU wide which aims to promote the sustainable development of marine areas and the sustainable use of marine resources. The Directive requires that Member States:

- take into account land-sea interactions
- take into account environmental, economic and social aspects, as well as safety aspects
- aim to promote coherence between maritime spatial planning and the resulting plan(s) and other processes, such as integrated coastal management or equivalent formal or informal practices
- ensure the involvement of stakeholders
- organise the use of the best available data
- ensure trans-boundary cooperation
- promote cooperation with third countries

The Directive requires Member States to develop a national marine plan no later than 31 March 2021 and to review it at least every ten years.

We anticipate that we will be ready to introduce a plan in Wales before 2021. The draft Initial Welsh National Marine Plan has been prepared in accordance with, and gives consideration to, the Directive (2014/89/EU) using the powers contained within MCAA.

The Directive refers to the need to comply with other relevant Directives, among them the marine strategy framework.

The European Marine Strategy Framework Directive 2008/56/EC. The overarching aim is for Member States to put in place measures to achieve and maintain Good Environmental Status (GES) in European waters by 2020. The Welsh Government and other UK administrations are committed to developing an UK Marine Strategy to implement the Directive. Similar strategies are being developed across the European Union to collectively look after our seas for future generations.

Development of the first Welsh National Marine Plan.

The first Welsh National Marine Plan for Wales is being developed from first principles. It will be the first time we are adopting a planned approach to activity happening in Welsh waters and it is important to ensure that it is robust.

The marine plan for Wales is progressing towards introduction with a draft being shared for comment this autumn.

The plan will take a 20 year outlook initially and will cover the Welsh inshore and offshore waters. It will clarify marine objectives and priorities, providing direction towards consistent, evidence based decisions for those making choices and taking decisions about activities taking place in our marine area. The Welsh National Marine Plan will support the delivery of Welsh Government policy on the economy, the environment, climate change and other key policies.

Engagement

There is continuing and considerable engagement of development of the marine plan. There has been formal consultation at key stages, on the vision, structure and evidence, as well as ongoing less formal liaison. A network of stakeholders has been developed and advisory groups have been established. There are many contacts with representatives of organisations including the Marine Management Organisation, the Crown Estates, Wales Environment Link, the Pembrokeshire Coastal Forum, the Welsh Fishing Association, the Welsh Yachting Association, the Aggregates industry, the Severn Estuary Partnership and more. There is an engagement exercise on an initial draft of the plan taking place over the Autumn with public sessions being held during November and meetings with interested parties through to February next year.

Integration

Officials are working with colleagues across local and central government in Wales and the UK, to ensure that lessons are learned from plan development elsewhere and that best practice is shared. Officials are studying the plans of other administrations and there is liaison building where such plans will cover areas which border our waters, such as in the estuarine regions of the Dee and the Severn.

Close working with policy officials in Welsh Government and across the UK has informed the draft to this point, with input from a range of key people with the necessary expertise. This has included establishing groups of senior officials to ensure coherence across departments, on policy areas such as natural resources, economic growth, and tourism. This work will continue.

The evidence supporting the Plan

A Strategic Scoping Exercise to collate the best available evidence on marine planning was carried out in 2014. It was shared openly for comment during its development and revised in the light of comments received. It was published as the Wales Marine Evidence Report recently.

The Marine Evidence Portal for Wales, presenting various data sets linked to an interactive map of Wales has been published and shared electronically 2014-15. Other evidence is published on the marine planning pages of the Welsh Government website as it emerges. <http://gov.wales/topics/environmentcountryside/marineandfisheries/marine-planning/?lang=en>

The current, initial draft of the first Welsh National Marine Plan.

The draft Plan presents a **detailed introduction** which sets the context of the plan. There are then **general, overarching policies** that have relevance to many activities, such as the need to act in such a way that ensures sustainability, both economic and environmental. This is supported by **policies that are relevant for specific sectors**. These include; Aquaculture; Aggregates, Defence; Dredging and disposal, Energy, Fisheries; Ports and Shipping, Subsea cabling, Surface water runoff and wastewater management, Tourism and Recreation. Direction is provided on natural resource management.

Welsh Government is committed to working with all those with an interest to develop the marine plan. We will continue to refine and develop our communication networks and approaches as the plan develops towards introduction, and when it becomes operational.

Indicative timetable for developing the Plan

This indicative timetable was published recently on the marine planning pages of the internet (see link below) as part of the revised Statement of Public Participation.

<p>1. Informal and widespread discussions on the draft WNMP and revision of the Plan in light of points raised</p> <p>2. Formal Consultation on the revised draft of the WNMP and the Sustainability Appraisal</p>	<p>Late Autumn 2015 , early 2016</p> <p>2016</p>
<p>3. Formal adoption and introduction of the WNMP and associated documents</p>	<p>2016 /2017</p>
<p>4. Implement and evaluate the WNMP</p>	<p>2017 onwards</p>

Documents and information will be published on the Welsh Government website as appropriate.

<http://gov.wales/topics/environmentcountryside/marineandfisheries/marine-planning/?lang=en>

The Criteria for Assessing Good Ecological Status' (GES)

Good ecological status, together with good chemical status, are the requirements to be met by all designated water bodies under the EU Water Framework Directive (the Directive).

Ecological status describes the degree to which human uses of the water environment have altered the structure and functioning of aquatic plant and animal communities. The Ecological classification system has five classes, from high to bad, and uses biological, physico-chemical, hydromorphological and chemical assessments of status.

Biological assessment uses numeric measures of communities of plants and animals (e.g. fish and rooted plants). Physico-chemical assessment looks at elements such as temperature and the level of nutrients, which support the biology. The hydromorphological assessment looks at water flow and physical habitat. The Directive only gives definitions for three classes for these quality elements (high, good and moderate status) but for the purposes of planning improvements and assessing deterioration, we need numeric values equivalent to all five biological classes 'High' ecological status represents an ecology relatively undisturbed by man. 'Good' ecological status means that human activities have had only slight impacts on the ecological characteristics of aquatic plants and animal communities.

Chemical status describes whether the water contains safe levels of certain toxic chemicals that have been identified as of particular concern across Europe because of their toxicity, persistence and ability to accumulate in the bodies of plants or animals. These include the chemicals known as 'priority substances' and include a sub-set called 'priority hazardous substances' as well as other toxic substances identified under the Dangerous Substances Directive. The chemical classification is simple: water which contains too high a concentration of the listed pollutants cannot be classified as 'good'.

These pollutant standards are set by the UK according to the procedure outlined in Annex V of the WFD.

The overall ecological status of a water body is determined by whichever of these assessments is the poorer. So, a water body might pass 'good status' for chemical and physico-chemical assessments, but be classed as 'moderate status' for the biological assessment. In this case it would be classed overall as 'moderate ecological status'.

Good ecological status, together with good chemical status, are the requirements to be met by all designated water bodies under the EU Water Framework Directive (the Directive).

Ecological status describes the degree to which human uses of the water environment have altered the structure and functioning of aquatic plant and animal communities. The Ecological classification system has five classes, from high to bad, and uses biological, physico-chemical, hydromorphological and chemical assessments of status.

Comparison of the 42% GES figure for Water Bodies in Wales with UK and Europe

It is very difficult to give an accurate answer to this question as every country measures and reports on GES slightly differently. Within the UK, a number of water bodies are cross border so it is not possible to disaggregate the figures to give individual countries' data. This data however should be available when the final river basin management plans are published at the end of this year. The same applies to other EU countries.

Progress in implementing the seven recommendations from the Natural Resources Wales Coastal Review that will not be completed during this financial year, including a timeline for completing these recommendations.

I am pleased with the ongoing work of NRW to progress the recommendations set out within the NRW Coastal Delivery Plan. Work on all 47 recommendations has commenced and I am pleased to say that 21 were recorded as complete by the end of October 2015; this includes a number of recommendations where Welsh Government are leading. The proposed completion of 42 Recommendations within this financial year presents a very positive picture.

Within the delivery plan we have already acknowledged that a number of the recommendations were to be ongoing and not for completion this financial year. My officials will continue to work alongside NRW to progress work on these. There are also two recommendations relating to forecasting, on which we will always seek improvement as is appropriate. It is important to note that flood forecasting has already improved since 2014.

I now consider that only 5 recommendations will still be ongoing at the end of the financial year. These were highlighted within the delivery plan as being ongoing work. Those which will be ongoing in March 2016 will be:

Recommendation 3 – *work to assess the joint probability of the 2013/14 winter storms.* This recommendation is defined as ongoing in the Delivery Plan. Officials met with risk management authorities on 3 November where consultants presented on how this probability work was progressing in relation to the initial flooding in Rhyl.

Recommendation 5 - *review the guidance used for assessment and design of coastal standard or service against flooding.* This is ongoing work and is connected to the consideration of joint probability analysis (recommendation 3) being pursued via the current Research and Development project.

Recommendation 6 – *identify and implement opportunities to deliver further improvements to longer range forecasts.* NRW has taken a significant step forward since the 2013/14 storms in that they are now able to forecast coastal flooding up to 5 days ahead, giving more lead time to prepare. This recommendation is defined as continuous improvement in nature as we will always want to improve our forecasting.

Recommendation 8 – *progress opportunities to deliver improvements to the accuracy of the forecasting service.* As with recommendation 6, this recommendation is defined as continuous improvement in nature.

Recommendation 41 – *supporting coastal adaptation at a local level through development of a toolkit.* We recognise the continued progress being made by the Fairbourne Moving Forward project and the recent appointment of a researcher to help inform future toolkit development. This recommendation is defined as long term/ongoing within the Delivery Plan.



SP ENERGY NETWORKS

Mr Alun Ffred Jones
Chair, Environment and
Sustainability Committee
The National Assembly for Wales
Cardiff Bay
Cardiff
CF99 1NA

Your ref.

Our Ref
SAS/HTT

Date
6 November 2015

Dear Mr Jones,

Inquiry into 'A Smarter Energy Future for Wales?'

Further to our discussions at the Committee I am pleased to write to you with further information on our work on Smart Cities.

Key to the development of Smart Cities is new technology and innovation. Within SP Energy Networks, we are investing in innovation and have structured the business with a dedicated team focussed on Research and Development of new technologies to enable smart networks. Ofgem support this work through the Innovation Funding Mechanisms; Network Innovation Competition (NIC) for major development projects, Network Innovation Allowance (NIA) for smaller innovation development and the Innovation Roll out Mechanism (IRM) for large scale deployment.

We have a number of flagship projects which contribute within the area of maximising the use of existing assets, so avoiding additional infrastructure and reducing carbon footprint. These include the use of a 132kV Phase Shift Transformer, the first use of this technology in the UK on the 132kV distribution network, use of STATCOMS to regulate voltage and use of dynamic thermal ratings on overhead lines.

Other areas of innovation focus on active management of the distribution network. Distribution networks have traditionally been designed as passive networks, with a power flow in one direction towards the consumer. The scale of embedded "clean" generation within the distribution networks and advances in technology are enabling a fundamental move away from a passive network to active network management.

We have two smart energy cities in our license areas: Liverpool and Glasgow. We are looking to take the principles established with these two cities to other large conurbations within our area. As part of this we have been working with a number of Local Authorities and Enterprise Zones on Integrated Energy Investment Planning (IEIP).

Through our work on IEIP with the Core Cities & Liverpool City Council, SP Energy Networks were the only DNO to submit 6 case studies to the Ofgem/DECC working group as part of the consultation on "Quicker and more efficient connections". The case studies included Anglesey and Deeside Enterprise Zones (selected by WG).

The Liverpool case study "Baltic Triangle & Ropewalks" has now been put forward as a pilot area as part of the same consultation for the Non-traditional Business Models. I enclose for your information a copy of the slides shared with Ofgem and DECC on this case study.

I would be delighted to take you or other representatives of the Committee through the work we have been doing in these areas, if you are interested in exploring this in more detail.

Yours Sincerely,

A handwritten signature in cursive script that reads "Stephen A Stewart". The signature is written in dark ink and is positioned above the printed name and title.

Stephen Stewart
SP Manweb Licence Director



**SP ENERGY
NETWORKS**



Tudalen y pecyn 50

Strategic Investment in Electricity Distribution Infrastructure Baltic Triangle & Ropewalks Case Study

October 2014

Strategic Investment in Electrical Infrastructure



Planned developments at the Baltic Triangle & Ropewalks area of the City of Liverpool have been identified as:

86 Planned Developments delivering the following outputs:

- Residential 24,000m²
- Hotel 32,000m²
- Retail 14,500m²
- Office Space 4,500m²

- Total cost estimate £85m

Source: LCC

Tudalen y pecyn 51

The characteristics of these developments make this area an ideal candidate for a new approach to strategic reinforcement.

Baltic Triangle & Ropewalks

The Vibrant Scene



Identified as a new Cultural Quarter in City's 2009 Development Plan

Historic warehouses cut across 1960's industrial units

Live music venues, unique bars & restaurants

Home to city's creative industries

Adjacent to City Centre, close to Liverpool Waterfront and the Albert Dock



Baltic Triangle & Ropewalks

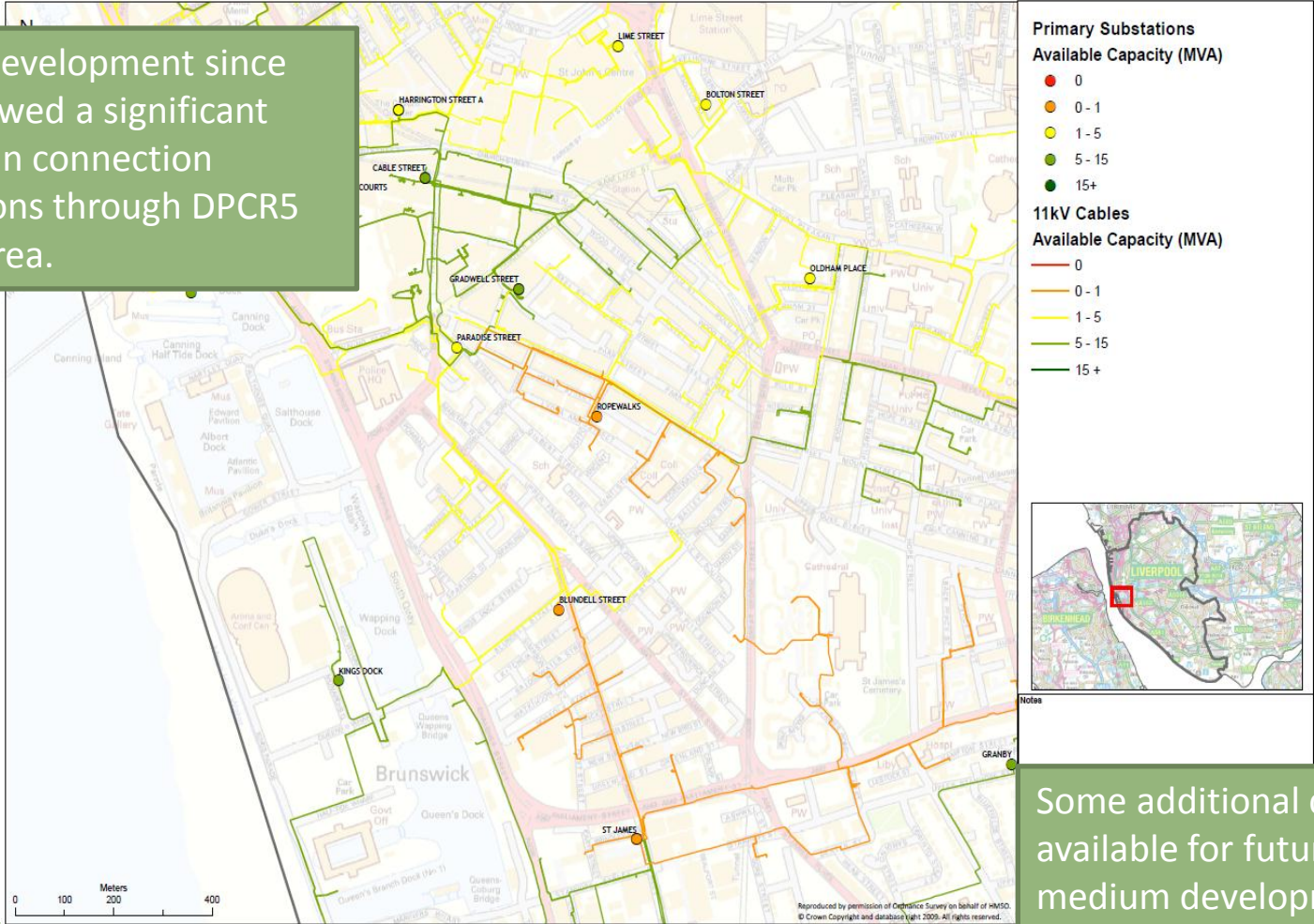
2015 - 11kV Network Predicted Available Capacity



Liverpool - Baltic Triangle & Ropewalks - SPEN HV Load Index, 2015

Further development since 2010 showed a significant increase in connection applications through DPCR5 for this area.

Tudalen y pecyn 53



Some additional capacity available for future small to medium developments.

Baltic Triangle & Ropewalks

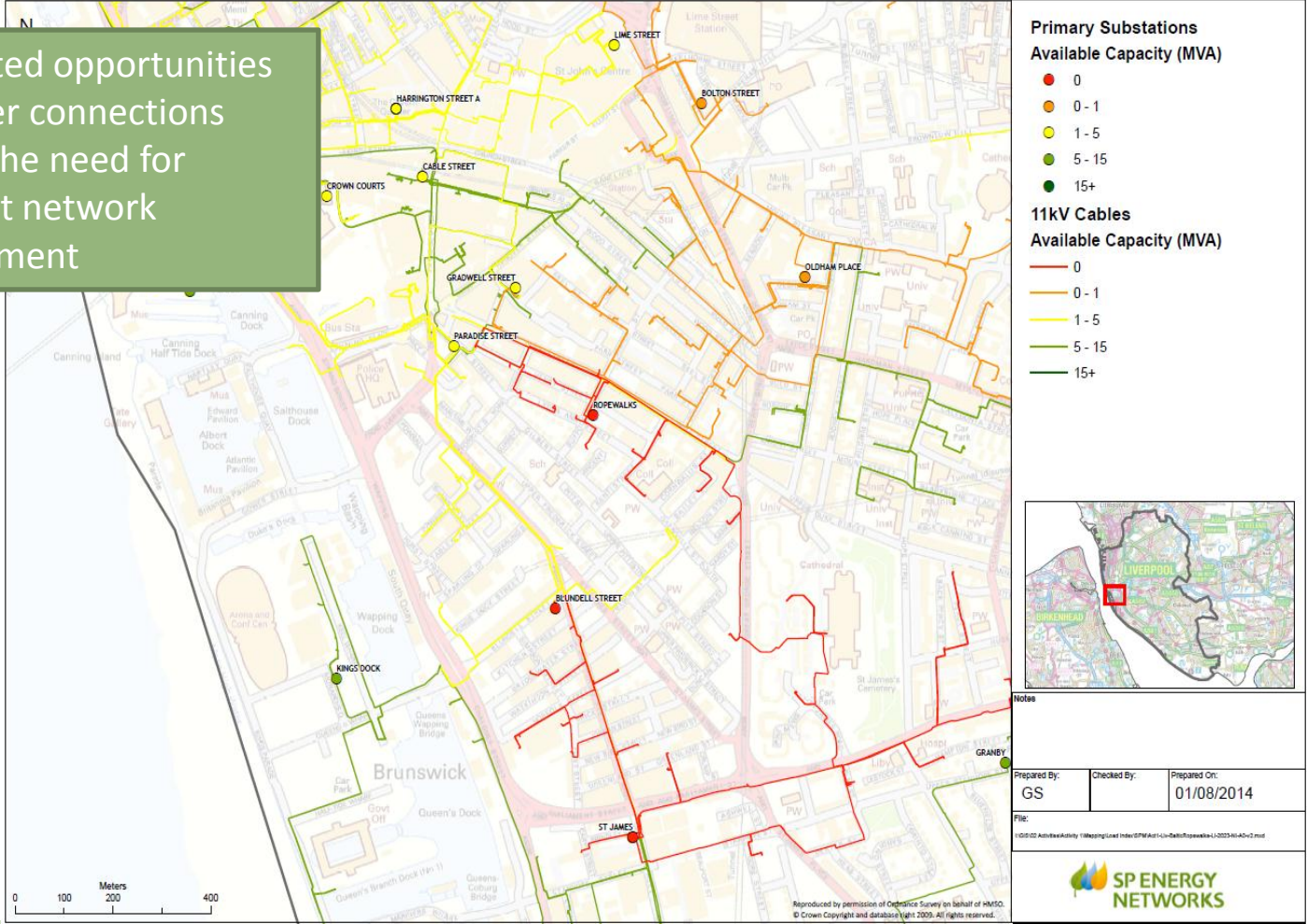
2023 - 11kV Network Predicted Available Capacity



Liverpool - Baltic Triangle & Ropewalks - SPEN HV Load Index, 2023

Very limited opportunities for further connections without the need for significant network reinforcement

Tudaleny pecyn 54



Baltic Triangle & Ropewalks

Estimated New Load Required



Category Description	No. of Consented Planning Applications	Estimated New Load from Planning Applications (using ESDD-04-003 Issue 2 and 4) (kVA)	Estimated Net New Load (taking into account any existing load for each development site) (kVA)
Housing/Apartments/Residential Units/Student Accommodation	25	14,063	11,903
Hotels	14	5,840	4,666
Retail/Leisure	13	5,034	4,464
Employment Space/Office/Non-Residential/Other	10	3,710	3,686
Mixed Developments	24	13,304	9,139
Totals	86	41,951	33,858

Tudalen y pecyn 55

Not all Planning Applications actually result in completed development. Historical analysis of Liverpool CC Planning Permission completions since 2002 has produced a completion rate of 70%. Therefore we have applied the 70% completion rate factor to the net new load.

Total Estimated Net New Load

23.7 MW

Baltic Triangle & Ropewalks

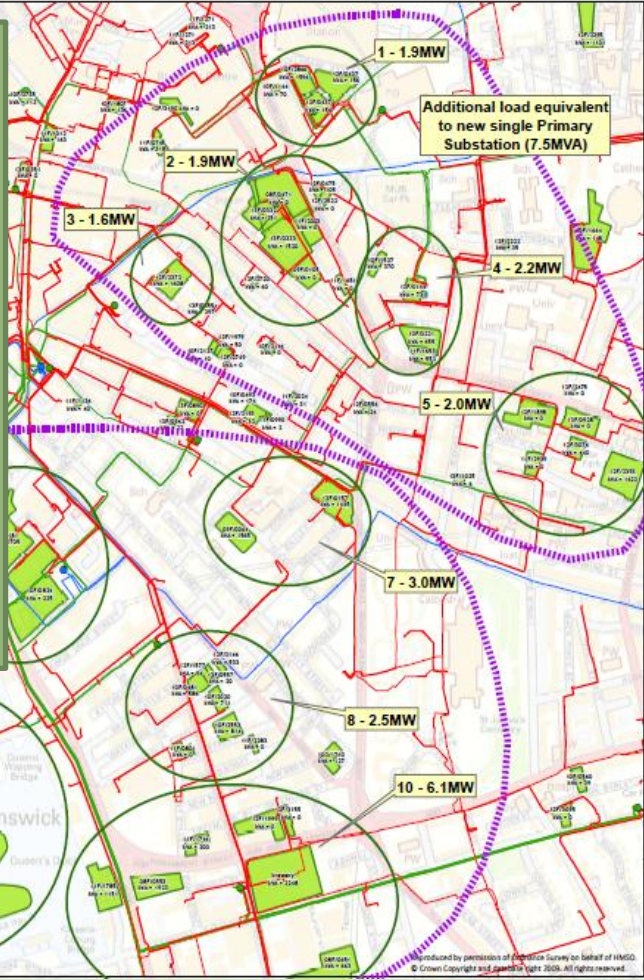
2023 - Network Reinforcement Analysis including Planning Application Load



Liverpool - Baltic Triangle & Ropewalks - SPEN Network and Planning Applications

Initial analysis indicates:

- 2 additional primary substations required to accommodate the 23.7MW increased demand
- 33kV and 11kV circuit regrouping required to incorporate the additional primary substations
- Further detailed network analysis necessary to determine exact design requirements
- Additional land will be required for substation sites



Legend

- 33/11 kV Substation
- 132/33 kV Substation
- HV Cable
- 33kV Cable
- 132kV Cable
- Planning Applications

Main Points of Additional Load:

1. Skeithorne Street - 1.9MW
2. Central Village - 1.9MW
3. Seel Street Development - 1.6MW
4. Oldham Street - 2.2 MW
5. Hope Place - 2 MW
6. Baltic Triangle - 2MW
7. Cornwallis St - 3 MW
8. Jamaica St - 2.5 MW
9. Arena Exhibition & Ex Tax Office - 1.5MW
10. Stanhope St - 6.1 MW



Notes

Approximate Cost of this proposed reinforcement - £9.6million to £12.1million

Baltic Triangle & Ropewalks

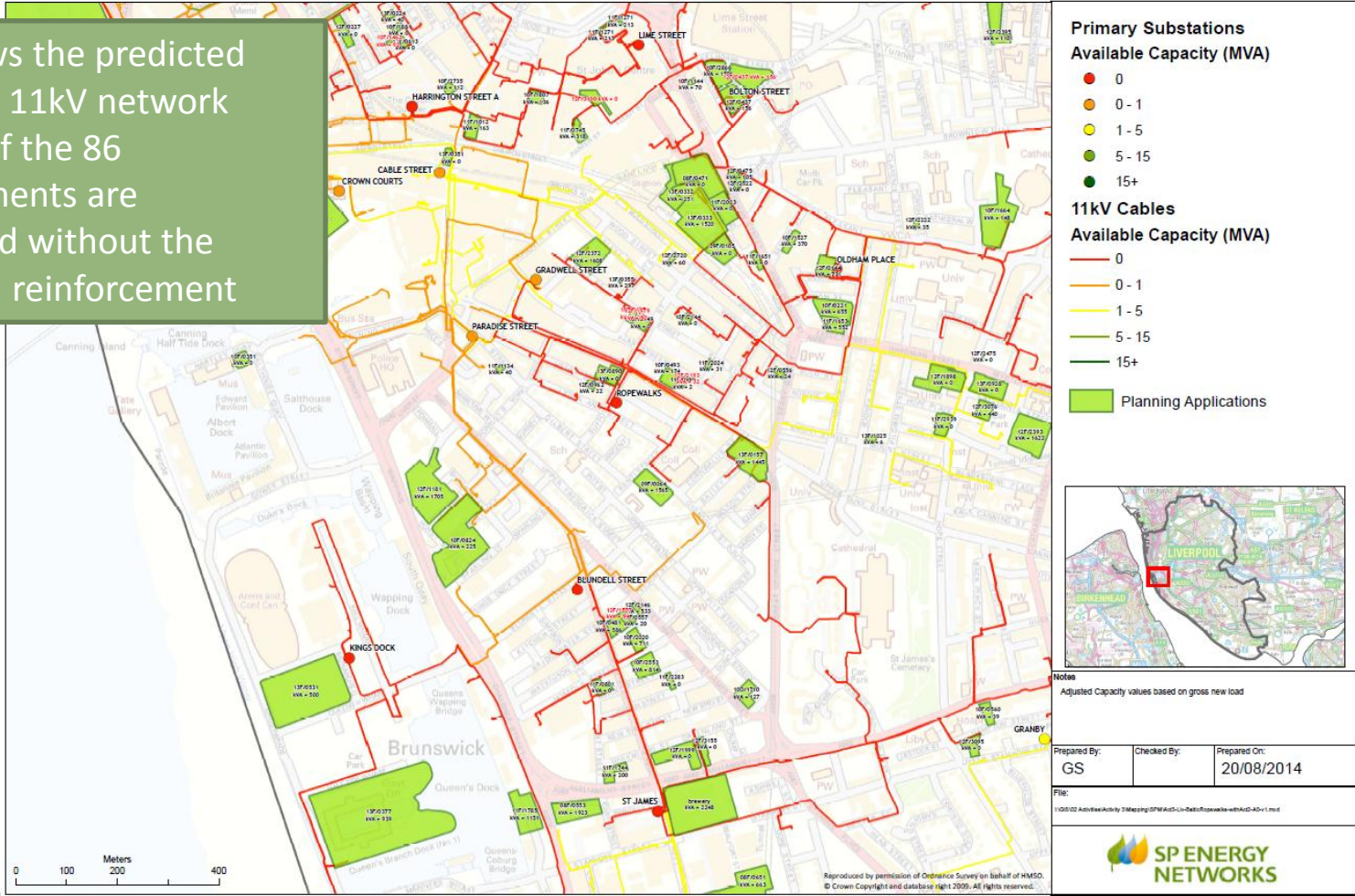
2023 - 11kV Network Predicted Available Capacity with additional Planning Application load



Liverpool - Baltic Triangle & Ropewalks - SPEN HV Load Index, 2023, with Planning Applications Load

This shows the predicted available 11kV network capacity if the 86 developments are connected without the proposed reinforcement

Tudalen y pecyn 57



Baltic Triangle & Ropewalks

Current Options



**Cost
Apportionment
(CAF)**

Tudalen y pecyn 58

**Speculative
Developments**

However, these current mechanisms are unsuitable:

- The majority of the developments planned are relatively small without one large lead developer.
- It is unlikely that any one of the developers will be able to afford to be the first comer under current methodology.
- Difficult for so many disparate organisations to come together behind one co-ordinated approach.

Further considerations:

- Incremental investment could lead to uneconomic development of the network.
- May act as a barrier to regeneration development.
- Current approach does not always accommodate rapid regeneration.

Liverpool City Council & Core Cities Summary

Find a
solution
that will:

Tudalen y pecyn 59

- Improve long term planning and the role of infrastructure in economic regeneration
- Deal with the immediate situation in areas such as the Baltic Triangle & Ropewalks that come through outside the RIIO time frames

Implement
a solution
that will:

- Be in the best interest of consumers not reinforce development pressures in the south east.
- Be a joint submission from the appropriate local authority and the DNO
- Be transparent in reassuring leaders that any direct or indirect benefits to the DNO are accounted for and passed back to consumers

Eitem 7.3

Rebecca Evans AC / AM
Y Dirprwy Weinidog Ffermio a Bwyd
Deputy Minister for Farming and Food



Llywodraeth Cymru
Welsh Government

Ein cyf/Our ref MA(P)RE/0058/15

Alun Ffred Jones AM
Chair
Environment and Sustainability Committee
National Assembly for Wales

10 November 2015

Dear Alun Ffred,

Further to the email from the Committee Clerk on 28 October, I am pleased to provide a response to the action points raised during my appearance before the Committee on 14 October.

During the scrutiny session I agreed to provide details of the terms of reference for the Agricultural Advisory Panel for Wales.

The Agricultural Advisory Panel for Wales will include the following membership:

- Independent Chair
- 3 Unite
- 1 FUW
- 1 CLA
- 1 NFU
- 2 Independent experts
- 2 Independent experts (with a background in education)

The Agricultural Advisory Panel for Wales (Establishment) Order 2016 is being drafted in such a way as to allow the Panel, once established, to decide on its own code of conduct and decide on the best methods by which it will pursue its remit as defined under the Agricultural Sector (Wales) Act 2014.

The Order stipulates that the Panel will decide as to the method by which it will pursue each aspect of its remit by a majority vote.

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Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

The Order also includes provisions to establish a permanent sub committee, whose remit will be to assist the core Panel with the functions of promoting careers in agriculture and encouraging up-skilling in the industry.

The timetable for the establishment of the Panel is a combined timetable including the public appointments timetable and legislative timetable. The Coming into Force date for the Order establishing the Panel is 3 February 2016 and the expected commencement date for public appointments is 12 February 2016.

I also agreed to provide confirmation of the number of badger carcasses reported to the Welsh Government in response to its dead badger survey and the number of these infected with tuberculosis. Up until the end of September 2015, 885 badgers were reported. 401 of these were collected, of which 327 were suitable for Post Mortem. 22 have Positive Culture, 253 Negative Culture and 52 are pending results.

The reasons not all reported badgers are collected vary, from,

- Unsuitable subjects - if the carcass is too decomposed, a Post Mortem can not be performed.
- Dangerous location – if the badgers are not safely retrievable, they are not collected.
- Duplication - there are occasions when we are notified by more than one caller for the same carcass.

The scheme has been running a year and it is our intention to produce a report in the New Year. There is, as you can appreciate, a time lag in getting culture results and a report will have to wait for all culture results to be in before being released.

We also discussed the independent evaluation of Glastir advanced and I agreed to share a note on the progress made to date against each of the 10 recommendations:

No	Recommendation	Update
1	Some of the target area maps need to be further refined.	The Welsh Government has worked with NRW to assess the Water Quantity map to ensure better targeting of interventions.
2	Additional procedures are needed to ensure that the objectives addressed are appropriate and the management for those objectives is appropriate and sufficient.	Contract Managers have been encouraged to be more pragmatic in their approach to addressing objectives and to concentrate on delivering beneficial outcomes. Contract Managers have the facility to reject unsuitable objectives and are aware of the need to ensure there is a sufficient package of activity to deliver the objectives. Work is on going in regard to improving procedures and guidance.
3	Contract Managers need more high quality guidance, support and training.	A programme of training has been implemented with specialist training events already undertaken.
4	Some specific actions are needed to avoid the risk that the scheme will promote excessive uniformity of management in woodland and upland habitats.	The Welsh Government has initiated discussions with NRW on uplands and designated sites. The Welsh Government is developing new guidance for grazed woodland for the next round of applications

No	Recommendation	Update
5	Actions for flood risk reduction need to be planned on a catchment scale.	Managers have been given specialist training and the associated maps used to target resources have been reviewed.
6	More needs to be done to encourage and help fund facilitation and partnership working in order to establish landscape scale working where it is needed.	A GIS assessment of the key objective is due to start shortly, this will feed into work undertaken next year.
7	Glastir Advanced is not the ideal mechanism to use for the control of mobile pest species.	Implemented for contracts negotiated after the release of the report.
8	Coordination with other schemes needs to be maintained and improved.	Link between Glastir Advanced and SPG is in place.
9	The wider value of some management needs to be recognised.	Monitoring and evaluation is already in place and is ongoing.
10	Contracts need more follow up visits and advice.	The new Farming Connect services are due to start in the Autumn. A package of support will be made available to all farmers.

In addition, I agreed to provide a note on the impact the Control of Horses Act has had on equine welfare.

As you will recall, the Control of Horses (Wales) Act 2014 was introduced in response to calls for urgent action by local authorities, equine charities and the Police. The Act gives local authorities more effective legal powers to address the issues of fly grazing, straying and abandonment of horses and ponies across Wales. Although recognised that many of the equines found fly grazing have welfare concerns the Act should not be regarded as a panacea for all equine issues. In the event of action being necessary to resolve welfare cases local authorities have the Animal Welfare Act 2006 at their disposal.

Not all local authorities have had problems with Fly Grazing and abandonment so have therefore had no occasion to use the legislation. However, what is known is that over the first 12 months of the life of the Act at least 11 local authorities used the powers contained within the Act to seize some 460 horses. In addition the Welsh Government has supported a number of local authorities through the provision of match funding to enable the removal and disposal of horses and ponies found fly grazing or abandoned on land without lawful authority.

This support has been given on a case by case basis and following the receipt of a detailed business case supporting the course of action to be taken. There have been no recent reports of large numbers of fly grazed or abandoned horses and ponies and as such no requests have been made for funding to deal with such issues. What has been concluded is that in the case of small numbers of fly grazed horses the powers provided within the Control of Horses Act are proving sufficient for local authorities to resolve local issues.

The Animal Welfare Act 2006 includes a legal duty on owners or people responsible for equines to take reasonable steps to ensure the animal's welfare needs are met. Partnership working is key to the success in raising standards and compliance in animal health and welfare. The Wales Animal Health and Welfare Framework sets out the Welsh Government plan for continuing and lasting improvements in standards of animal health and welfare.

Engagement between local authorities and, in particular, equine charities continues to develop to good effect. Meetings take place between various interested parties, welfare charities, commoners association and local authorities. The Welsh Government continues to promote partnership working and the sharing of resources as the best way forward.

A commitment has been given to undertake a review of the Control of Horses (Wales) Act 2014 within 3 years of it coming into force.

I trust that I have addressed the Committee's queries in full.

Yours,

A handwritten signature in black ink that reads "Rebecca". The script is cursive and fluid.

Rebecca Evans AC / AM

Y Dirprwy Weinidog Ffermio a Bwyd
Deputy Minister for Farming and Food