Emissions Reduction Plan 2021-2025 - Power Chapter

Questionnaire

Details of respondent (please read the accompanying Privacy Notice)	
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Name of Organisation:	Energy UK

Responses

Are these the right strategic priorities to decarbonise the energy system over the 2020s?	
Response (delete as appropriate)	~~Strongly agree /~~ Agree / ~~Neither agree not disagree / Disagree / Strongly disagree~~
Additional comments	Considering the policy areas in which Wales has the power to make change, Energy UK agrees that the strategic priorities are appropriate to focus on in order to decarbonise the energy system over the 2020s: • Reduce the electricity generated from fossil fuels and waste, and reduce greenhouse gas emissions from combustion of all fuels for electricity • Plan for a more integrated net zero energy system • Capture benefit for Wales from the changes We support the plan to reduce carbon emissions in Wales through a combination of measures, including significantly increased renewable deployment, reduction of fossil fuel generation, and decentralised and new local-owned energy projects. The magnitude of the challenge is huge and will require huge private and public investment in Wales however it comes with a great opportunity to preserve and create high quality jobs. A strategic priority which the current plan does not communicate clearly is the role of firm, flexible energy to underpin decentralised generation and ensure that business and individuals can invest with confidence in Wales. We expect the role of low-carbon power, long duration storage and hydrogen to be pivotal in Wales, and the UK as a whole, in regard to providing firm and flexible local energy to cover prolonged periods (i.e., beyond timespans that batteries can cover economically) when there is inadequate renewable energy production or storage. Strengthening the grid is key to the deployment of renewables and meeting the need for local firm flexible power in periods of low renewable generation. Making much-needed grid reinforcement will enable shovel ready projects to connect and provide low carbon renewable generation. Critical to this in Wales is raising the threshold for Welsh Government to make planning consent decisions for transmission network to 400kV onshore.

	All technologies are likely to benefit from this and include establish shovel ready projects such as solar and onshore, as well as the likes of power with Carbon Capture and Storage and hydrogen-fired peaking plant and long duration storage such as pumped hydro. The CO2 and hydrogen infrastructure created to support power with CCS and hydrogen will be available to local industry in Wales, thus providing jobs and costs synergies well beyond the low-carbon hydrogen or power production itself. Not taking such an opportunity risks the loss of associated high quality green jobs and industry to other areas and especially the North East coast of England. Regarding the priority to '*Reduce the electricity generated from fossil fuels and waste, and reduce greenhouse gas emissions from combustion of all fuels for electricity',* we would suggest that this be complemented by associated policy priorities. These should be to increase the electricity generated from all types of new renewable energy projects located in Wales, o support both existing fossil-fuel generators in Wales to decarbonise using lower carbon alternatives and also existing low carbon technologies such as pumped hydro storage with a view to achieving net zero whilst assisting with the provision of firm capacity. Appropriate supporting policies must be in place to ensure a transparent, smooth but robust framework to deliver these three policy priorities. A Natural Resource Wales (NRW) Estate tender, similar to the process held in Scotland, could lead to a steady pipeline of onshore wind projects, and therefore Energy UK recommends that this approach is taken in order to guarantee continued onshore wind development in Wales. Regarding the policy proposal, '*Capture benefit for Wales from the changes'*, we support the emphasis on working with developers to establish strong Welsh supply chains and local jobs but this has to be in the context of availability of such skills and resources. A focus on policy decisions that enhance socio-economic and supply chain opportunities is also key - including local port development (solidifying the attractiveness of the region for offshore renewables, hydrogen and other energy types); working to attract manufacturers and energy-related services to Wales; and supporting opportunities for repurposing to further build on Wales' existing capabilities. The commitment by Government to expand renewable energy generation by public bodies and community groups in Wales by over 100 MW by 2026 puts further impetus on the need for a Mid Wales grid solution in able to meet these targets. This could also be mentioned in this *'Capture benefit for Wales from the changes'* section to highlight the additional infrastructure which would be needed to meet this target, and therefore the economic benefits that this investment would deliver. More broadly in terms of strategic priorities, Energy UK would like to see a focus in terms of the 'here and now' technologies of importance to Wales such as offshore and onshore wind and pumped hydro storage, whilst continuing to incentivise the more nascent technologies that are required as part of a successful future energy mix. This will ensure the benefits are captured for Wales in both the immediate and longer-term.

Are these the right policies and proposals to decarbonise the energy system over the 2020s?	
Response (delete as appropriate)	~~Strongly agree /~~ Agree / ~~Neither agree not disagree / Disagree / Strongly disagree~~
Additional comments	Energy UK agrees that the Future Wales and Planning Policy Wales provide strong support for renewable energy development. However, it does not necessarily follow that Wales is 'well-placed to support the renewable sector, attract new investment'. There is a clear need for additional transmission grid-infrastructure in Mid Wales, as

	well as upgrades to grid infrastructure in other parts of Wales. The current set up makes timely and cost-effective grid connections challenging at best, and in the case of Mid-Wales has resulted in a significant shortfall in capacity compared to the potential opportunity for new renewables. The scarcity of cost-effective electricity network capacity is the largest single constraint preventing the deployment of additional renewable generation in Wales. The absence of adequate grid infrastructure, grid connection delays, increased costs and uncertainty about connection locations across Wales are unnecessarily limiting or are delaying some projects, both onshore and offshore. Mid-Wales is an example of an enormous area of excellent wind resource that would be highly suitable for development but for the complete absence of transmission grid infrastructure. The commitment to '*work with the network operators in Wales to determine the transformation needed in the electricity and gas grid…*' is significantly lacking in detail. Wales urgently requires a coherent and costed plan to be put in place for the upgrading of its grid infrastructure to enable full decarbonisation to happen. Therefore, we would like to see Ofgem and Government commit to creating a clear workplan in order to overcome this barrier. Any consideration of this issue should also consider the demand-side which is likely to increase due to EV roll-out, heat pumps and electrolytic hydrogen. There is an assumption that the 2030 targets will largely be achieved through further decarbonisation of the electricity supply, however it is difficult to see how Wales can achieve the roll-out of renewable electricity generation required to meet 2030 targets without a significant change in pace on grid infrastructure. In relation to grid considerations for offshore wind / renewables more specifically – Energy UK is pleased to note Wales' involvement in Offshore Transmission Network Review discussions. We recommend that evolving policies and priorities link to the need for a more coordinated offshore grid approach, to avoid the connection issues faced by other parts of the UK. This is particularly important in light of the Irish Sea Region being a key zone for the development of extension projects, Round 4 sites and floating wind projects going forwards. With regard to the decarbonisation readiness consultation one of our initial views is that any proposal to transition oversight from the planning regime to environmental permitting regimes should be accompanied by strong proposals to ensure applications or amendments are dealt with in a timely manner and in a way consistent with how they would have been treated under the replaced planning regime. Alongside this is the need to properly resource the statutory consultee function within NRW to ensure timely and substantive input to planning applications and associated permits. For floating wind particularly, a more ambitious proposal for deployment in Welsh waters is recommended. The current UK ambition for floating wind to 2030 is 1GW. Energy UK considers 2-3GW to be more appropriate and Welsh Government should consider what proportion of this greater ambition could be developed in Wales. The ambition to reduce use of fossil fuels for energy is appropriate and expected with increasing renewables deployment. Security of supply needs to be addressed concurrently, as per the CCC's 2035 ambition to phase out unabated gas power plant by 2035 with the major caveat of 'subject to security of supply'. Two issues need to be part of the strategy: provision of generation for periods of low wind or other renewable generation, and; resilience of the power grid to changing demand/supply. Regarding hydrogen, the pathway for hydrogen is in draft and mainly encourages transport-related demand, and will not be consistent with the UK Government's Hydrogen Strategy (when published) or Transport Decarbonisation Plan. We would be supportive of this pathway being updated and, strengthened if necessary. This should be followed up with a Ministerial Statement in support of hydrogen in Wales, a review of Welsh planning requirements to ensure these are adequate and enable suitable

	developments, consideration of demand-side measures that can be taken in Wales by the Welsh Government and also a Welsh target for hydrogen production similar to the UK's target of 5GW of hydrogen by 2030. The Hydrogen Pathways report included a proposal to scope out large-scale opportunities, this could be included in the LCDP document.

What additional evidence do we need to gather to inform our priorities, policies and proposals and maximise the chances of success?	
Additional comments	It would be useful to gather: • Information on the need for firm, flexible low-carbon power in the 2030s to provide power during low wind conditions that will occur routinely throughout the year. Wales should therefore fully assess needs for security of supply to ensure the greater necessary penetrations of renewables can be supported. • Further evidence to confirm the current constraints in electricity and gas network infrastructure in Wales and the options to resolve these. Investment in grid infrastructure will be key for Wales' success in decarbonising it's electricity system, and therefore evidence which demonstrates the current barrier this poses will help to support the need for urgent policy action • Evidence is needed on the total costs for different options presented in the strategy to reflect what it could mean for the bill payers. It is likely that a combination of options will give lowest costs to achieve Net Zero. • A 'deep dive' to gain an understanding of the obstacles to renewable energy development and deployment in Wales, especially Mid-Wales. • An overview of the number of offshore projects being developed in the Irish Sea region as a whole which adds to the necessary focus across a number of policy themes including consenting, grid and supply chain/ports/manufacturing opportunities.

Do you understand the role we are asking you to play? What support do you need to maximise your contribution? Are there barriers Welsh Government are able to remove to accelerate progress?	
Response	The expected role of the private sector is mostly clear and the ask of private sector to provide investment funds for low carbon infrastructure in Wales is clear, however this will only be possible if some of the enablers that have been mentioned earlier are realised (for example by funding 'no regrets' grid consenting activity in Mid-Wales which would open up renewable development opportunities increasing jobs and supply chain). Energy UK understands the need for WG strategy to create local jobs and wealth from the green energy transition. With expected growing demand for clean energy and capacity from electrification, there will be room for huge amounts of new and local entrants into energy in Wales. The strategy is however unclear on what part incumbent energy production businesses that have the technology play and what expertise and resources are needed to address inevitable challenges that will arise from a new

	energy system mix. We would like to see clear Welsh policy support for large scale renewables, hydrogen and CCS. Energy companies would like to be fully engaged by Welsh Government and Regulators in policy and strategy development affecting the sector in Wales. Such work needs to be undertaken in consultation with industry and in a transparent, open and timely way. It is also advised that the plan expands on what is meant by 'flexibility' in this context. Whilst our members strive to maintain flexibility in our approach to the development of low carbon infrastructure, it is worth highlighting that flexibility can only be achieved within the limits of the planning system in operation.

What should we be requiring of others e.g. UK Government, regulators etc.	
Response	The Welsh Government must work closely with UK Government, Ofgem and National Grid to ensure sufficient priority is given to addressing current grid constraints in Mid Wales. Electricity grid infrastructure is key to unlock further renewable projects in Wales and therefore the importance of this must be recognised by all key stakeholders. Indeed, we consider that the threshold at which Welsh Government can make decisions on transmission system planning consents should be raised to cover 400kV. Significant grid reinforcement is paramount to connecting renewables and therefore to meeting the strategic priorities set out by the Emissions Reduction Plan. We believe the Welsh Government should be asking for more planning consent powers with regards to transmission network in order to realise this Emissions Reductions Plan. It is important that the UK Government and Welsh Government work together on all these issues. It is also important that Welsh Government continues to work with key developers and operating businesses to take onboard what the challenges currently are in order to arrive at policies that address these. There is also an urgent need to properly resource the statutory consultee function within NRW to ensure timely and substantive input to planning applications and associated permits. In relation to onshore wind, offshore wind and other offshore/marine renewables, a robust and well-resourced Welsh consenting regime with clear decision-making timescales is required to ensure that any risk of programme delay is minimised for projects successfully progressing through to CfD application. More generally, industry is recommending that environmental regulators have a new statutory duty to take climate change mitigation and delivery of net zero by 2050 into their decision-making processes. This will ensure that climate change is taken into account by all consultees for renewable energy projects. We recommend that the Welsh Government implements such a statutory duty, subject to full consultation with all stakeholders.

Do you have any other comments to make?	
Response	No

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Questionnaire

Are you happy for us to contact you should we wish to discuss your response further?	
Response (delete as appropriate)	Yes

Thank you for taking the time to respond. Please e-mail your completed questionnaire to energypolicymailbox@gov.wales. We require responses by 31 July 2021 to inform our draft plan.