Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith / Climate Change, Environment and Infrastructure Committee Cynhyrchu ynni adnewyddadwy yng Nghymru / Renewable energy generation in Wales RE06

Ymateb gan / Evidence from EDF Renewables



- 1. At EDF Renewables UK our goal is to combat climate change we're passionate about creating a net zero future where clean energy powers our lives. Tackling climate change is what motivates us it spurs us on to seek out and bring forward the right projects and to develop the most creative solutions for communities.
- 2. We have a longstanding commitment to supporting the development of renewable energy in Wales. We plan to develop, build, operate and maintain 1GW of innovative onshore wind, solar and battery storage projects by 2030. Additionally, we have announced a joint venture in the Celtic Sea, Gwynt Glas, which will produce a further 1GW of offshore floating wind with DP Energy.
- 3. From generating and storing low carbon electricity to heating and lighting our homes or travelling to work by electric bus or car. We want to make renewable energy accessible and affordable for everyone in Wales, transform the economy and create new sustainable employment.
- 4. And in doing so, we want to work with the Welsh Government, with members of the Senedd and with the communities they represent to deliver a future where net zero powers our lives.
- 5. Independent analysis of our onshore wind, solar and battery plans details how EDF Renewables will:
 - Grow the Welsh economy by £1bn1
 - Directly invest over £1.1bn over the lifetime of the projects²
 - Provide over £100m in community benefit
 - Create and safeguard over 2000 full time, high-skilled, high salaried jobs in operation, maintenance, construction, and across the Welsh supply chain³
 - Power nearly 400,000 homes just under a third of all the homes in Wales⁴
 - Reduce carbon generation by nearly 740,000 tonnes⁵
- 6. It is clear our work provides a great opportunity for Wales and we welcome the opportunity to take part in the Committee's excellent work, to further your objectives and give feedback on the development of policy and Government direction.

¹ Impacts on Welsh Gross Value Added will be a boost of £962m, through direct and indirect effects, £577m from wind and £384m from solar.

² The direct investment will total £1.17bn over the lifetime of these schemes, from initial development to closure, with £706m in wind and £470m in solar.

³ A total of 1,315 jobs will directly be created or safeguarded in Wales by the proposed schemes rising to a total of 2,152 jobs from the supply chain through the multiplier effect.

⁴ 1GW of energy produced across onshore wind and solar will power 397,173 homes in Wales using modelling from EDF-R. According to the latest estimates produced by the Government of Wales, the total number of houses in Wales in mid 2020 stood at 1.38 million (https://gov.wales/household-estimates-mid-2020-html#section-80331)

⁵ 1GW of energy produced across onshore wind and solar will reduce carbon by 739,982 tonnes using modelling from EDF-R. 500MW of onshore wind capacity will reduce carbon generation by 523,567 tonnes. 500MW of Solar will reduce carbon generation by 216,415 tonnes.



Response to the Deep Dive

- 7. The Welsh Government's Deep Dive exercise, led by the Deputy Minister for Climate Change, aimed to identify barriers to significantly scaling up renewable energy in Wales and to determine the steps to overcome them.
- 8. We are grateful for this initiative by the Deputy Minister, and the Welsh Government's keenness to understand the challenges renewable energy developers face. EDF Renewables participated with industry in providing feedback to the Deputy Minister and we share in the aspiration he has to ensure the people of Wales directly benefit, economically and socially, from renewable energy development.
- 9. We also welcome the additional documentation published in recent months, including the Net Zero Wales Plan and the intention to consult for a new target of 100% of renewable energy by 2035, as outlined in the updated Programme for Government.
- 10. Indeed, the vision for renewable energy generation in Wales is positive, and there is a lot of work being done by the Government to set out the direction in which it intends the industry to move.
- 11. However, there are still some fundamental areas and aspects which we would like to draw attention which we feel the Deep Dive does not. We understand that without clarity in addressing these urgently, the current targets and aspirations could be undermined and Wales's potential be overlooked.

Grid infrastructure and investment

- 12. Our concern is that the Deep Dive recommendations on grid infrastructure do not go far enough in addressing the significant barrier that grid poses for development.
- 13. Limited access and capacity of grid infrastructure is a fundamental and key barrier to achieving net zero in Wales. There can be no illusion: without necessary investment in new grid infrastructure, or plans to upgrade existing infrastructure in Wales in the short term, there will not be the development in renewable energy needed to meet the 2030 and 2050 targets, let alone a new 2035 target. Nor will development happen at the pace and scale required.
- 14. From our position as a developer, the lack of concentrated focus on resolving grid infrastructure in Wales undermines a lot of the positive initiatives and discussion had throughout the Deep Dive. For example, the potential for development in the Celtic Sea could greatly contribute to Wales's ambitions. But without the installation or reinforcement of grid, terminals in Wales could be overlooked in favour of England, therefore not retaining some of the prized social and economic benefits as expected.

Planning and consenting of development

15. Linking to the section before, new or upgraded grid infrastructure will need to go through various planning authorities which will take time. And to coincide with this, planning authorities will also need to consider applications for renewable energy development.



16. 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. We welcome the end-to-end review of NRW and we are pleased on the timescales promised for the publication.

National Energy Plan

- 17. EDF Renewables has concern about the ambition and method to produce a new, national energy plan by 2024 which is informed by local plans. A scale up of local energy plans, with only local scale projects, is unlikely to produce a national energy plan that incorporates the large-scale generations that will be needed to achieve net zero.
- 18. What is not conveyed at all in the Deep Dive or the recommendations is the unprecedented scale of increased electricity demand in every net zero scenario. The Government and stakeholders need to appraise the transition in line with increasing demand in EV charging, heat pumps and industrial processes, and the fact that net zero is going to require maximum use of available renewable resources, wherever those renewable resources happen to be.

Strategy and ambition

- 19. We have concern that the Deep Dive limits the ambition for Wales to produce renewable energy in line with what its needs are.
- 20. With future demand set to increase through EV charging, heat pumps and industrial requirements, this will likely outstrip the pace of renewables deployment.
- 21. While we fully appreciate renewable development needs to be considered, responsible and in line with the host communities, such a limited approach would constrain the growth of a key future industry that will provide Wales with massive social and economic returns.
- 22. And this approach does not compliment the huge potential Wales has to export renewable energy generation to the rest of the UK, further capitalising on the benefit of renewable energy generation and playing a role in the decarbonisation of the UK.

Net zero skills action plan

- 23. As outlined earlier, our plans in Wales will deliver huge economic benefits and opportunities for the Welsh people. But there is also a huge potential social benefit for whole communities and individuals.
- 24. At EDF Renewables, we put our communities at the centre of our plans. We recognise the importance of ensuring the value from our investment in projects, directly benefits those who live and work nearby to them.
- 25. Our projects in Wales are directly supporting communities through local meet the supplier breakfasts, recruitment and apprenticeship drives, localised engagement in our community benefit fund forums, and partnering on projects with local further education institutions.
- 26. We welcome the Government's initiative to develop a net zero skills action plan and will be providing details on how our examples can support the development of this policy.



Conclusion

- 27. The Deep Dive is a welcome and important contribution from the Government in setting plans to achieve net zero by working with renewable energy developers. There are positives which include the focus on retaining as much social and economic benefits in Wales and for Welsh businesses and people, the NRW end-to-end review and the net zero skills action plan.
- 28. But we draw concern over the focus and ambition the Government has outlined in the recommendations. We would like to see more focus on the 'here and now'.
- 29. Grid is the major, fundamental barrier that undermines much of the recommendations. And given the future increase in demand and consumption, grid needs to be urgently resolved to allow for capacity, and for the renewables deployment to meet this need.
- 30. Furthermore, there is no real mention of the potential that onshore wind, solar and battery storage can have in developing a successful and reliable future energy mix. A mix of technologies is essential and will ensure the benefits are captured in Wales, both in the immediate and longer-term.
- 31. And lastly, we have concern that the Deep Dive sets limits the ambition for Wales to produce renewable energy only in line with what its needs are. This is a potential game of continuous catch-up with demand very likely to outpace renewables deployment. It is also benign to the huge potential Wales has to become a net exporter and the massive social and economic benefits it can achieve under this scenario.