

Draft National Development Framework

1. NDF Outcomes (chapter 3)

Q1. The NDF has proposed 11 Outcomes as an ambition of where we want to be in 20 years' time. Overall, to what extent do you agree or disagree the 11 Outcomes are a realistic vision for the NDF?

No Response

Q2. To what extent do you agree with the 11 Outcomes as ambitions for the NDF?

No Response

2. Spatial Strategy (policies 1 - 4)

Q3. The NDF spatial strategy is a guiding framework for where large-scale change and nationally important developments will be focused over the next 20 years. To what extent do you agree or disagree with the spatial strategy and key principles for development in...

No Response

Q4. If you have any comments on the spatial strategy or key principles for development in urban and rural areas, please tell us:

No Response

3. Affordable Housing (policy 5)

Q5. The NDF sets out the approach for providing affordable housing, encouraging local authorities, social landlords, and small and medium-sized construction and building enterprises to build more homes. To what extent do you agree or disagree with the approach to increasing affordable housing?

No Response

Q6. If you disagree, in what other ways can the NDF approach the delivery of affordable housing?

No Response

4. Mobile Action Zones (policy 6)

Q7. To what extent do you agree or disagree the identification of mobile action zones will be effective in encouraging better mobile coverage?

No Response

Q8. If you disagree, in what other ways can the NDF improve mobile phone coverage in the areas which currently have limited access?

No Response

5. Low Emission Vehicles (policy 7)

Q9. To what extent do you agree or disagree that policy 7 will enable and encourage the roll-out of charging infrastructure for ultra-low emission vehicles?

No Response

Q10. If you disagree, in what other ways can the NDF enable and encourage the roll-out of charging infrastructure for ultra-low emission vehicles?

No Response

6. Green Infrastructure (policies 8 & 9)

Q11. To what extent do you agree or disagree with the approach to maintaining and enhancing biodiversity and ecological networks?

No Response

7. Renewable Energy and District Heat Networks (policies 10-15)

Q12. To what extent do you agree or disagree with the NDF's policies to lower carbon emissions in Wales using...

No Response

Q13. If you disagree with the NDF's approaches to green infrastructure, renewable energy or district heat networks, what alternative approaches should we consider to help Wales to enhance its biodiversity and transition to a low carbon economy?

No Response

8. The Regions (policy 16)

Q14. To what extent do you agree or disagree with the principle of developing Strategic Development Plans prepared at a regional scale? The NDF identifies three overall regions of Wales, each with their own distinct opportunities and challenges. These are North Wales, Mid and South West Wales, and South East Wales.

No Response

9. North Wales (policies 17-22)

Q15. We have identified Wrexham and Deeside as the main focus of development in North Wales. A new green belt will be created to manage the form of growth. A number of coastal towns are identified as having key regional roles, while we support growth and development at Holyhead Port. We will support improved transport infrastructure in the region, including a North Wales Metro, and support better connectivity with England. North West Wales is recognised as having potential to supply low-carbon energy on a strategic scale. To what extent do you agree or disagree with the proposed policies and approach for the North Region?

No Response

10. Mid and South West Wales (policies 23-26)

Q16. Swansea Bay and Llanelli is the main urban area within the region and is our preferred location for growth. We also identify a number of rural and market towns, and the four Haven Towns in Pembrokeshire, as being regionally important. The haven Waterway is nationally important and its development is supported. We support proposals for a Swansea Bay Metro. To what extent do you agree or disagree with the proposed policies and approach for the Mid and South West Region?

No Response

11. South East Wales (policies 27-33)

Q17. In South East Wales we are proposing to enhance Cardiff's role as the capital and secure more sustainable growth in Newport and the Valleys. A green belt around Newport and eastern parts of the region will support the spatial strategy and focus development on existing cities and towns. Transport Orientated Development, using locations benefitting from mainline railway and Metro stations, will shape the approach to development across the region. There is support for the growth and development of Cardiff Airport. To what extent do you agree or disagree with the proposed policies and approach for the South East Region?

No Response

Q18. If you have any comments about the NDF's approach or policies to the three regions, please tell us. If you have any alternatives, please explain them and tell us why you think they would be better.

No Response

12. Integrated Sustainability Appraisal

Q19. As part of the consultation process, an Integrated Sustainability Appraisal (ISA) was conducted to assess the social, economic and environmental impacts of a plan. The report identified a number of monitoring indicators, including health, equalities, Welsh language, the impact on rural communities, children's rights, climate change and economic development. Do you have any comments on the findings of the Integrated Sustainability Appraisal Report? Please outline any further alternative monitoring indicators you consider would strengthen the ISA.

No Response

13. Habitats Regulations Assessment

Q20. As part of the development of the NDF, a Habitats Regulations Assessment (HRA) was undertaken. The purpose of the HRA process is to identify, assess and address any 'significant effects' of the plan on sites such as Special Areas of Conservation and Special Protection Areas for birds. Do you have any comments on the Habitats Regulations Assessment report?

No Response

14. Welsh Language

Q21. We would like to know your views on the effects that the NDF would have on the Welsh language, specifically on opportunities for people to use Welsh and on treating the Welsh language no less favourably than English. What effects do you think there would be? How could positive effects be increased, or negative effects be mitigated?

No Response

Q22. Please also explain how you believe the proposed NDF could be formulated or changed so as to have: positive effects or increased positive effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language, and no adverse effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language.

No Response

15. Further comments

Q23. Are there any further comments that you would like to make on the NDF, or any alternative proposals you feel we should consider?

Hydrogen Cymru

Response to Welsh Government's

National Development Framework Consultation 2019

Hydrogen Cymru is being established to advance the hydrogen economy in Wales. Currently in the formation phase, a formal launch is being planned for early 2020. This response to the Welsh

Government's NDF consultation represents the views of those Hydrogen Cymru supporting organisations listed below.

Increasing evidence supports the view that hydrogen is essential to delivering net zero targets^{1,2,3}. Most recently we have seen a stalling of emissions reduction (according to ONS stats) with Wales already having more work to do in reducing its emissions than the rest of the UK.

Hydrogen can help decarbonise all sectors of the economy; in power, heat, industry, transport and agriculture applications. Hydrogen can be used for power to gas applications, for energy storage, for fuel production and for use across the industrial and energy sectors. Hydrogen has huge market potential across energy systems⁴.

Power to gas technology, in the form of electrolysis, is emerging across the world as a means of releasing the full potential of renewable energy. This works by using renewables and low carbon power to split water to produce hydrogen and oxygen.

There is a need to create a pathway for the application of power-to-gas technologies in order for renewables and other low carbon power sources - of all types and at all scales - to overcome electricity grid constraints and costs and to reach new markets.

This "sector coupling" of the electricity, heat, transport and heavy industry networks through so-called green hydrogen can release the full potential of renewables utilising both existing and new infrastructure.

The need to build new, costly electricity grid infrastructure which connects areas of renewable energy resource to areas of energy demand can be reduced by utilising renewables to produce hydrogen as the alternative. Hydrogen can be stored for use in local communities and can also be shipped (e.g. at-scale via gas pipelines) to external markets.

The business case for such scenarios is evolving and is expected to progress through the 2020s to a stage where "no-regrets" low carbon hydrogen may reach cost-parity with conventional (natural gas-based with no CCS) hydrogen production⁵.

Hydrogen technologies can, therefore, add significant value to renewables and also complement other clean energy technologies including batteries, smart controls and nuclear power.

The use of hydrogen as a fuel not only supports deep decarbonisation goals but also improves air quality (there are very low greenhouse gas and particulate emissions); supports resilient future-proofed distributed generation systems; and de-couples communities from volatile, external energy markets.

We are in a position where rapid decarbonisation needs to begin today and across the whole energy system. By connecting with the waste and heavy industries, hydrogen provides a variety of opportunities that can begin to be implemented immediately.

While we recognise that the NDF has been several years in the making and some of its preparatory work predates the current surge of interest in hydrogen, it has been noted that even with the acknowledgement that we are in a climate crisis the NDF does not make mention of hydrogen technologies and infrastructure. We would still urge that provision should be made to the future, potentially large-scale application of hydrogen technologies within the current NDF.

Hydrogen Cymru can help establish a framework for more detailed assessments which can inform the evolution of the NDF through the 2020s, with deep decarbonisation at scale in mind.

Hydrogen can help deliver the Welsh Government's renewable energy targets (e.g. For one gigawatt of renewable energy capacity to be locally owned by 2030). We, therefore, call on the NDF to recognise this and to reflect the scale-up potential of producing hydrogen from Wales' large onshore and offshore renewable resource.

The emerging hydrogen economy will also bring about significant job creation throughout the value chain and supply chains. There are opportunities for investment into hydrogen infrastructure assets and for indigenous startups.

In summary, we would ask for a statement in the NDF which recognises that hydrogen is likely to play a major role in a future decarbonised economy and that there is a presumption in favour of hydrogen-related infrastructure.

References:

1 Climate Change Commission, Net Zero Technical Report, May 2019
<https://www.theccc.org.uk/publication/net-zero-technical-report/>

2 International Energy Agency, The Future of Hydrogen, June 2019
<https://www.iea.org/publications/reports/thefutureofhydrogen/>

3 Energy Networks Association, Pathways to Net Zero, October 2019
<http://www.energynetworks.org/gas/futures/gas-decarbonisation-pathways/pathways-to-net-zero-report.html>

4 Wood Mackenzie, Green hydrogen production: Landscape, projects and costs, October 2019
<https://www.rechargenews.com/transition/1867257/green-hydrogen-can-beat-fossil-fuel-h2-on-price-by-2030>

5 Bloomberg NEF Analysis, August 2019
<https://www.bloomberg.com/news/articles/2019-08-21/cost-of-hydrogen-from-renewables-to-plummet-next-decade-bnef>

Hydrogen Cymru Supporting Organisations November 2019:

Afallen
Arup
Bia Energy Consulting
Capital Law
Chris Foxall
Costain
Dwr Cymru Welsh Water
Industry Wales
Innogy
Dr Jenifer Baxter - Institution of Mechanical Engineers
SP Energy Networks
Wales & West Utilities
Ynni Glân

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Tachwedd/November 2019

16. Are you...?

Q24. Are you:

Submitting a response on behalf of an organisation

Submit your response

Q25. You are about to submit your response. Please ensure you are satisfied with the answers you have provided before sending.

Name	Guto Owen
Organisation (if applicable)	Hydrogen Cymru (in preparation)
Preferred contact details (email/phone/post)	Email

Q26. If you want to receive a receipt of your response, please provide an email address.
Email address

[Redacted email address]

Q27. Responses to consultations may be made public. To keep your response anonymous (including email addresses) tick the box.

No Response