HRLN 09 - Evidence from: Institution of Civil Engineers (ICE) Cymru Wales

Senedd Cymru | Welsh Parliament

Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith | Climate Change, Environment, and Infrastructure Committee

Atal a gwrthdroi colli natur erbyn 2030 | Halting and reversing the loss of nature by 2030

1. Your views on the effectiveness of current policies / funds / statutory duties in halting and reversing the loss of nature by 2030.

(We would be grateful if you could keep your answer to around 500 words).

I am Andrew Basford, Chair of the North Wales Branch of the Institution of Civil Engineers Cymru Wales. Our members are at the forefront of appraising, designing, and constructing civil engineering infrastructure (transport, energy, water) for benefiting the prosperity, health and wellbeing of populations and the environment in Wales. The sustainable management of natural resources especially cultural heritage and leaving a lasting positive legacy on the Welsh landscape plays a key part in what we do.

We are aware that recent changes civil engineering projects must deliver a net benefit for biodiversity. Whilst the Section 6 duty to maintain and enhance biodiversity and promote ecosystem resilience has been a requirement since the introduction of the Environment (Wales) Act 2016, recent changes to Planning Policy Wales means that we must demonstrate a net benefit for biodiversity, within Green Infrastructure Statements when we submit planning applications for example. Further, we are aware of requirements of the recent PPW changes and some of the tools and techniques still in development including by NRW to ensure we can deliver a net benefit for biodiversity and wider benefits through our projects.

The achievability (time, cost, programme) of schemes we interact with, which can positively contribute to reversing the loss of nature, are dependent on the effectiveness of current policies, funding and complying with statutory duties. On current policies and duties, given the complex nature of our schemes, we can experience conflicting environmental legislation resulting in delay and additional cost. Examples include lack of determination from approval bodies requesting

additional information which may not be proportionate, to pre-condition requirements stipulating extensive surveys or studies which then could result in delayed or abortive works, or the withdrawing of entire schemes altogether.

On the funding front, lack of foresight and certainty of pipeline 'green' schemes or projects (which may contribute to the '30 30' recommendations) has also presented a challenge for the civil engineering sector. Linked to this, a lack of necessary investment in skills, innovation and technology has constrained the opportunities for sustainable solutions and minimising carbon, and we continue to work with all clients and partners to strengthen the supply chains in Wales.

2. Your views on the progress towards implementing the Biodiversity Deep Dive recommendations.

(We would be grateful if you could keep your answer to around 500 words).

The Well-being of Future Generations (Wales) Act 2015 amongst other legislation is ensuring we are at the forefront of driving the sustainable development agenda. The civil engineering industry has and continues to play a key part in enhancing the environment and thus contributing to the biodiversity deep dive recommendations.

One area that needs greater recognition and attention on biodiversity loss, is the changes already underfoot as a result of climate change and sea level rise. These pressures will continue which will mean the baseline condition and thus solution, is not static and thus the requirements for maintaining and reversing biodiversity loss, will be in a transient state. This can make it challenging for designers and developers, for example when preparing Habitat Regulation Assessments, especially on coastal schemes where sea level rise and coastal squeeze impacts require offset. The interaction between river and tidal systems at the mouths of estuaries is not static and much greater consideration of coastal adaptation now to reduce the pressures in the future need greater focus.

3. Your views on current arrangements for monitoring biodiversity.

(We would be grateful if you could keep your answer to around 500 words).

We recognise that arrangements for monitoring biodiversity require continued investment and as stated in point 2., several of these area may be facing pressures from sea level rise and climate change requiring new or adaptable approaches to manage the risks to the environment and changes underfoot.

Where certain schemes are developed for example through the Nature Recovery Exemplar Areas and catchment scale initiatives, greater consideration is needed on ensuring long term viability, particularly operation and maintenance of infrastructure. This it to ensure solutions remains fit for purpose, perform as designed and avoid the risk of only a short term gains and long term liabilities or issues being left for future generations. Partnerships are key but so too are long-term binding agreements ensuring funding and resource is committed and can cope with the anticipated pressures we will face on people and biodiversity.

4. Your views on new approaches needed to halt and reverse the loss of nature by 2030.

(We would be grateful if you could keep your answer to around 500 words).

The Institution of Civil Engineers Cymru Wales has a key part to play in halting or reversing the loss of nature and our members have the requisite skills and experience to contribute to all 30 30 recommendations. Approaches need to consider supply chains and investment in skills and technology as well as ways infrastructure can be enabled where there may be conflicting environmental legislation. Grey (more traditional) infrastructure still has its part to play and continued investment in operating, maintaining and upgrading the roads, buildings and infrastructure is needed. Sustainable development will require continued collaboration to ensure our solutions maximise opportunities for multiple benefits and can stand the test of time.

5. Do you have any other points you wish to raise within the scope of this inquiry?

(We would be grateful if you could keep your answer to around 500 words).

We each have a social responsibility to maintain or enhance biodiversity. The ICE's touring exhibition running in 2023 has empowered young people to engineer a net zero world with a link available here: Time is running out | Institution of Civil Engineers (ICE). The exhibition highlighted the central role civil engineers play in tackling climate change and the challenges we face require innovative solutions and a call for action for the next generation. As engineers, we must offer an experience that not only sparks curiosity but also inspires young minds to envision and build a sustainable future. Solutions will not be easy, change will be happening and we need to be ready across key sectors with sufficient enabling legislation and investment and acceleration of net zero initiatives with skills fit for

the future in core areas such as transport, energy, and water to manage these challenges into the future.