

Y Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith /
Climate Change, Environment and Infrastructure Committee
Blaenoriaethau ar gyfer y Chweched Senedd / Priorities for the Sixth Senedd
PR01

Ymateb gan Dr Paul Sinnadurai
Evidence from Dr Paul Sinnadurai

Dear Committee

Thank you for inviting me to submit evidence to you based on the Minister's and Deputy Minister's priorities for the next 18 months. I offer the following comments and recommendations. I provide these comments and recommendations on an individual basis.

1. First, congratulations on appointing the Minister, Deputy Minister and Chair of the Committee; a positive statement of intent.
2. Congratulations too on accelerating efforts to address these vital challenges for this generation and for generations to come.
3. Any positive feelings must, however, be tempered by the slow pace that the Welsh Government, together with other governments, has exhibited during the past decade and more, in really getting to grips with these challenges. You will recall that in 2010, all the devolved administrations failed to meet their respective biodiversity conservation targets and it was cold comfort that the rest of the world failed too. Progress in Wales has been too slow since then, with so much emphasis placed on world-leading legislation but far too little practical action and fiscal measures in place since then. Even now, the total WG budget allocation for environment, energy and rural affairs published for 2021-2022 is just 3.6% of total Resource and Capital; this is far too little. Even if you argue that the other sectors will contribute towards reversing nature's collapse and mitigating and adapting to the impacts of climate change, the base allocation of 3.6% is simply too small.
4. The economy is a wholly owned subsidiary of the environment, and not the other way round. If you want the Welsh economy to grow and Welsh people to thrive, the environment must be allowed to recover, grow and thrive first of all; so invest more!

Energy

5. It is encouraging to see the ambition for renewable energy; I hope that this is reflected in revised planning policy to require, not just encourage, combined heat and power units from new housing estates and large municipal and private buildings; every retail park has been a wasted opportunity, for example.
6. Wales does not yet have sufficient distribution grid capacity at a regional and local level, which disadvantages smaller projects and householders. How do you propose to overcome this?

Net Zero

7. Net zero is a laudable ambition for the public sector but you will need to express progress in terms of the shortfall against the overall carbon budget reductions required by all sectors; most emissions are generated by the private and domestic sectors.

8. Recent announcements by the Royal Meteorological Society and the former UK Government Chief Scientist Professor Sir David King, illustrate what has been apparent for a long time, that 2030, 2037 and 2050 targets are wholly inadequate and behind the curve for addressing climate change. Is the Welsh Government prepared to set better targets that are based on reality?

Trees

9. Yes, the UK and Wales lack sufficient tree cover but you risk seeing a lot of new trees die where they are planted poorly, are the wrong species for the local conditions or are vulnerable to the vagaries in weather that climate change is causing, from drought and heat stress to waterlogged soils and frosts. As well as financial incentives, private initiative and national strategy, you need a coherent and robust plan in terms of ecological function of tree-rich landscapes within catchments, so that we can track the benefits and anticipate the unforeseen consequences. You need to invest properly in the right expertise, spread widely and available locally, to enable concerned people to do this right.

10. To meet your ambition, you need a lot more ecologists at large in Wales. Are you investing to develop this expertise at universities? Is ecology a strong subject in the Welsh curriculum? Should ecology be a mandatory subject for GCSE?

11. You need to issue advice to avoid a proliferation in plastic waste from the millions of tree guards.

Nature and Biodiversity

12. Changes to agriculture will see more land released from agriculture. This creates an opportunity for nature recovery achieved through various means ranging from deliberate intervention to recover nature to deliberate and accidental non-intervention. To understand how land release affects biodiversity and nature recovery, you will need to track it through e.g., the Countryside Survey, with the latter carried out at a higher level of resolution.

13. In 2018, DEFRA's former Chief Scientist Professor Sir Ian Boyd advised that the world has until 2030 to reverse the catastrophic collapse in nature and this will require "disruptive change." Your priorities need to illustrate how the WG will accelerate nature recovery. Wales has lost a lot of ground since 2010 due to the heavy focus on establishing Natural Resources Wales and breathing life into the WFG Act and Environment (Wales) Act; a lot of bureaucratic effort during the past decade but too little practical action. Where's the urgency?

14. Your priorities also need to exemplify the ecosystem approach through multi-year spending plans, budgets and programmes.

Circular Economy

15. Please expand your understanding of a circular economy, which involves more than reuse of resources. It is also about circular, local lives and livelihoods and local supply chains. You could do worse than measure this through a combination of doughnut economics and monitoring ecological footprints. The Optimised Retrofit for social housing, and the "RoRo" model outlined in 18 below, would fit here too.

Transport.

16. I urge you to look beyond the short term solution of electric cars, buses and lorries. I have three mantras on this.

a. First: what is a row of electric cars or even driverless cars? A bus! What is a row of electric buses or lorries, or even driverless buses and lorries? A train! So, the answer is to move swiftly beyond the notion of personalised transport towards a massive re-shaping of Wales' transport infrastructure: a "National Metro System", accelerated by opting for light rail and trams connecting towns and villages via hubs (see c below), alongside the current larger scale trains; blending transport systems with Active Travel, where the latter is re-cast to be fit for rural Wales too.

b. My second mantra is that you must pay attention to the future of the bitumen and asphalt supplies, which the world relies on to build and maintain its roads. These are byproducts of the oil industry, which is on its way out; so, bitumen and asphalt are on their way out too. What then? Electric vehicles still need roads but roads aren't sustainable, and they are major sources of carbon emissions too throughout the lifecycle of their raw materials, construction and use. We won't be re-surfacing roads with recycled plastic in future because plastic deteriorates, emits carbon and micro-plastic fragments. So: electric buses and a National Metro System are the answer for Wales, coupled with major lifestyle and life choice changes that this demands.

c. My third mantra ties together the first two. By moving from road to rail we will significantly reduce emissions and traffic and the other damage that road traffic causes to human health and biodiversity. Road haulage is out of control, with Britain's just-in-time supply chains over-reliant on too many road freight vehicles. It will be impossible to replace this with electric supply vehicles. So, we must move this onto an enhanced rail network – a National Metro System – interlinking with regional and local roll-on-roll-off hubs – "RoRo Britain" and "RoRo Wales" – with successively smaller trains, trams and e-carts moving goods to local retailers via hubs, which would form part of the new circular economies, local supply chains, green employment and localised industrial renewal.

17. Providing an e-charging network for a like-for-like volume of private vehicles is not sustainable, either in terms of the electricity demands or in terms of the environmental damage required to install the infrastructure.

18. Personalised electric vehicles come with the same very high environmental cost in terms of raw materials as their hydro-carbon predecessors; the only difference being their power supply. The mining for raw materials such as lithium from mines and quarries, and for other semi-precious and rare, finite minerals from deep ocean nodule trawling and the Arctic Circle will be a retrograde and immoral step because now we know the environmental impact that we are inflicting during this Anthropocene era; e-vehicles simply continue that practice and kick the bigger decisions, to move away from personalised vehicles, down the road.

19. So, you have a major job on your hands to start persuading individuals to think differently about our life choices, which have been heavily subsidised by hydrocarbons and

private vehicle use, which have extracted too high a price on the environment and human health.

Additional Comments

20. ***Litter and Fly-tipping***. You need to run sustained, long-term campaigns that will help people to understand how their behaviour and decisions affect the environment, public expenditure and how in turn these come back to affect their lives. For example, people's attitude to waste and littering must be addressed head-on. We have seen the worst of this during the release from CV-19 lockdowns. The arguments against littering and fly-tipping are well-rehearsed and understood but most people who drop litter or fly-tip are unaware of the consequences of their actions for the environment, public expenditure and quality of lives. So, make them aware.

21. ***A National Community Service***. Alongside the National Nature Service, establish a mandatory "national community service" for all people aged between 16 and 60. Everyone would need to complete a minimum of 6 months during this period, either continuously or through several service units. Everyone would be entitled to complete more than 6 months, in return for which they would receive an Income Tax break for every additional month completed; this could incentivise a lifetime habit and would be a direct way to measure the effectiveness of the WFG Act. Think of the benefits and added value!

Yours faithfully

Paul Sinnadurai