## **Environment and Sustainability Committee**

Inquiry into Energy Policy and Planning in Wales EPP 143 – Stella Towsend

Date 22.9.11

Dear Sir,

I live in the Sarnau Valley between Meifod and Ardleen in Montgomeryshire. It is a place with little existing infrastructure or development. Nevertheless it has been identified(by National Grid) as a possible route for a new powerline between proposed wind power stations in upland Powys and the existing electricity grid in Shropshire. Since these proposals were launched earlier this year I have applied myself to trying to understand why such a powerline might be considered necessary, and what the implications of assuring 'a low carbon future' might be.

Several ostensibly 'low carbon/renewable energy' developments are in place, approved or proposed in Wales and I have concerns about whether these are in fact sustainable developments. 'Sustainable' and 'renewable' are often used interchangeably or rolled into one idea, whereas they are in fact different issues. 'Renewable' implies that there is always a supply of the raw material or that the raw material replenishes itself; wind and sunshine are examples here. On the other hand, whether something is 'sustainable' considers the total impact of using that renewable resource.

With energy generation, it appears to me that the use of renewable resources may not be sustainable and it is this particular issue that I would ask your committee to take into account in its deliberations.

I give two examples below of where I think there has been insufficient scrutiny of SUSTAINABILITY, which includes the immediate and long term impact on the socio economic and natural environment.

1

The recently approved biomass power station in Anglesey.

The Daily Post has reported that this will require 40,000 tons of imported woodchip (arriving weekly at Holyhead) but that it is hoped that, over time, the supply of indigenous wood will increase. It's the word 'hoped' that bothers me. **Has no one done the calculation?** Worked out how many acres of UK woodland need to be permanently producing wood for this biomass plant? What the transport and road wear would cost? What habitats or other land use this wood production would displace? What impact there would be on water resources? What subsidy would be needed for landowners to start producing the raw fuel? How this would affect electricity bills?

There is one good outcome however, and that is the creation of 700 jobs in Anglesey.

In principal, production of heat and power from wood is a great idea. If I had a sawmill and plenty of waste wood to burn I'd build my own biomass plant on site; no transport costs, useful energy, no need to dispose of waste some other way, no diversion of land use to fuel production and possibly an additional job in that local community. I think this is a critical issue with many proposed 'renewable' energy initiatives. In their original small scale, opportunistic, on site form they are both renewable and sustainable. They do not have major impacts at a distance (in miles or time) from the power generating site. When they are scaled up, however, there can be many adverse impacts and it is these that need detailed scrutiny rather than just 'hope'.

2

Proposed windpower stations in Mid Wales

The extent and potential impact of the proposals for wind power stations in Mid Wales only became apparent to the majority of the people likely to be affected by this when National Grid undertook a

public consultation about the route of a high voltage powerline this year. The existing 297 wind turbines in Mid Wales have not required a very high voltage line to export power to England, but it appears that the construction of only some of the (currently proposed) additional 500 turbines will require not only a lengthy 400kV line but also the construction of a large substation and many additional lower voltage lines. Their will be enormous knock on effects of this on the road network (there really needs to be a completely new road network), on the local tourist economy, on the ecosystem and possibly on flood management.

Again it appears that **no one has done the calculation.** Looking at the short and long term impact, across all possible domains and within the total geographical area affected does not seem to have been done or costed. So in the Mid Wales context, wind power may be renewable, but it may not be sustainable. Again it is the scale of development that is of concern; even the 297 turbines currently producing wind power have had a modest impact on the larger part of Mid Wales, but the scaling up of wind power in Mid Wales will have colossal and far reaching consequences, both in Mid Wales and in Shropshire.

Might there be useful outcomes like job creation? Probably not; it appears that jobs will be lost (in tourism) and not replaced by work in the power industry. Again, an issue that is crucial in considering sustainability. If many jobs will be lost, it can only be expected that local people will oppose developments resulting in delay, even civil disobedience, and the willingness of power companies to make proposals.

I would ask you to let me know how you propose to incorporate the consideration of **sustainability** as opposed to **renewability** in your discussions about energy policy and planning in Wales.

Thanks.	
I look forward to your response.	
Yours sincerely,	
Stella Townsend	