Tees Valley Unlimited Response to Consultation on Project Discovery – Options for Delivering Secure and Sustainable Energy Supplies

Tees Valley Unlimited (TVU) is a partnership of public, private and voluntary bodies that coordinate activities, appropriate to a city region level, designed to improve the economic performance of the entire Tees Valley. TVU has a remit to ensure that the decisions and actions of European institutions and national government maximise the attraction of external resources to the sub-region and to ensure that the policies adopted by these organisations cater to the needs of the sub-region.

We are pleased to have the opportunity to respond to this consultation and fully support actions that will enable us to meet the challenge of low carbon economic growth.

1. **Do you agree with our assessment of the current arrangements?**

   Yes

2. **Are there other aspects of the current arrangements which could have a negative impact on secure and sustainable energy supplies or costs to customers?**

   It is unclear to what extent biomass energy has been considered, including security of supply for imported biomass.

   The issue of risk relating to changing government policy is not covered. The lack of certainty over government intervention and support has significantly affected the ability of technologies, such as CCS, to find investors.

   A further issue not covered is the cost to transmit to the grid, the cost is based on proximity to areas of demand, however these locations are often not suitable for major energy and heat generating plants. For example, areas, such as Tees Valley, have to pay £9.85 per kW, while plants located in Kent on pay 25p per kW, this would mean that 1000MW electricity plant would have to pay £10 million per year to transmit to the grid in Tees Valley, while nearly nothing in Kent. No account is taken of the most suitable location to situate these plants based on available land, infrastructure or skills, and this type of charging mechanism may deter investment in these most suitable locations. For example a new Hartlepool Nuclear Power station has been deferred until 2023, rather than 2019.

3. **Do you agree that the five issues we highlighted are the most important?**

   Yes, however lack of consistent policy, or the potential for policy change is significantly affecting the level of risk of low carbon energy generation.

4. **Do you have any comments on our description of what might happen if no changes are made to the current arrangements?**

It is not clear to what extent biomass energy, and distributed heating (around and between industrial consumers) has been included in the analysis. It is also not clear whether cumulative impacts of failing energy security has been considered e.g. firms relocating outside UK will compound delaying investment in energy infrastructure.

If the charging mechanism for transmission to the electrical grid is not reviewed, future low carbon investments may be deterred, as those locations most suitable to the type of energy generating plants, such as the Tees Valley, are penalised in costs to transmit to the grid, and those large international companies may chose a different location in the EU to build their energy generating plants.

5. **Do you believe that our policy packages cover a sufficient range of possible policy measures?**

   The government has already stated that there will be a minimum price for carbon allowances purchased to meet CRC obligations, so there is potential to have minimum UK price if it is legal to do so. It would be useful to clearly differentiate between different types of renewables as the document seems to concentrate on mainly wind (so intermittency is more of an issue than wave/tidal for example). CCS is included in the scenarios, so it would seem legitimate that wave/tidal was also considered as an emerging renewable technology.

6. **Do you have suggestions for variants to these policy packages?**

   It's not clear whether the document has considered that increased uptake of electric vehicles could balance electricity storage for domestic properties. There is potential to develop vehicle batteries so that they can be used to store electricity when it is cheap and abundant, and then feed back into houses during peak demand times (for further details see Dr David MacKay, 2008, in Sustainable Energy – without the Hot Air, UIT Cambridge) .

7. **What other policy measures do you believe should be considered, and why?**

   More attention could be paid to all types of biomass (e.g. including industrial AD plants), and storage for renewable energy – e.g. hydro and hydrogen storage

8. **Do you agree with the assessment criteria we have used to evaluate the policy packages?**

   Yes, but perhaps looking at 2020 targets is too short term for large long term investments.

9. **Do you have any comments on our initial assessment of each of the packages?**

   Has the technical feasibility and costs associated with storage of renewable energy been considered?

10. **Do you agree with our summary of the key benefits and key risks of each policy package?**

One of the key risks associated with changing renewable obligations to renewable tenders is the extra instability in policy mechanisms, constantly changing the approach adds extra risk to investments which would rely, at least in the medium term, on the policy mechanism to operate. Even if there are benefits with the new system, the fact that the system is constantly being changed can put off investors.

11. **Do you have a view on which package is preferable, or alternative policy measures or packages that you would advocate?**

    Enhanced obligations.

12. **Do you agree with our assessment of the timing for important investment decisions?**

    Yes

13. **Do you believe that early actions should be considered?**

    Yes

14. **Do you think that the issues are such that policy measures should be considered as a package, or on a case by case basis?**

    No comment