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When I first presented this idea to the NWBLT, it was described rather unromantically as the Prestatyn to Stranraer barrages and connecting roads project and in essence that is what it still is.

I wasn't sure that it would fly, but the NWBLT kept smiling benignly and telling me to carry on. More importantly I met George Aggidis, the head of Lancaster University's Renewal Energy Group, and David Howard, based at Lancaster University but employed by the National Environmental Research Council and they provided me with increased enthusiasm and a mass of background information on the separate parts of the whole subject which just needed integrating. Latterly we also received help from Judith Wolf and others at the Institute of Oceanography.

From those initial thoughts and discussions, it seemed sensible to produce a computer controlled physical model of the whole of the North West, which would allow the various implications to be examined against a realistic background. Soon it became apparent that the implications of the whole project were much wider than we originally thought.

It became apparent that the North West was in a favourable position with its existing power supplies. It is the birth place of civil nuclear power that could be extended further, it is a good place for wind turbines and where the first stirrings of talk about a new source of natural gas by fracking might be available.

What was being ignored was tidal energy, although masses of academic research had taken place in the North West with its estuaries with high tidal ranges again very well placed.

We were also becoming very well aware that the coastal areas of the North West from Merseyside in the south, the Fylde coast, and in particular the West Cumbrian coast were less than prosperous, with high levels of unemployment.

The production of "green power" using tidal gateways, and the improved communication from connecting them up would it seemed to me would help to improve all of this.

North West Energy Squared has therefore evolved to become a project which, by putting together the actual and potential energy of the North West with the energy of the people and businesses of the North West we could increase the wealth of the people and communities of the North West, so that adequate resources were available to maintain and improve the environment for people, birds and wildlife and most importantly to inspire and improve education especially technical education and to provide a backdrop against which under privileged members of our society can be helped to improve themselves.

This evolution will continue through the life of the festival and beyond. Just last week, through Arup, who have been responsible for and involved in the model were given permission by DEFRA to use their latest version of an interactive computer model to illustrate the impact of rising sea levels as a result of climate change. It indicates quite clearly that the biggest impact on an estuary environment results from climate change, and the most effective way of dealing with the problem is by using a tidal gateway

SO WHERE ARE WE GOING WITH IT ALL?

Well I hope we will learn a lot more from using the model over the next 5 or 6 weeks and increasing knowledge to a wider group can never be a bad thing.

But what I really hope is that we will learn enough to have the confidence to say we can deal with this, we can generate 20 TWh of power a year (enough to power 4.5 million homes) we can provide flood control where needed, we can hugely improve the economy by creating both construction and permanent jobs, we can increase tourism in the appropriate areas, we can enhance the view of the North West as a vibrant, efficient and co-operative place to do business. We can do all of that without damaging the environment and whilst improving the lot of all our citizens especially those who are under privileged.

WHAT NEEDS TO HAPPEN TO ACHIEVE THIS?

Well a list of things:

1. The first and perhaps the most important is the will to want to make it happen. That is up to us.
2. The second is finance. The current slightly gormless assessment of the viability of such projects using; a "levelisation" formula and a "strike price" for electricity needs to be replaced by a mixture of government contribution and equity finance. 20 TWh a year of electricity @ 10p a KW, would produce £2 billion a year. This is a good base for an equity investment.
3. The third is related to the environment.
Due regard needs to be given to this but on the basis of achieving a balance between appropriate protection and growth. The DEFRA computer model is interesting in this respect, in that it demonstrates that if global warming is not slowed down the impact on the environment will be very severe. Using green energy sources such as tidal will help with this, doing nothing will do more harm to the environment, for example to estuarial mudflats, than taking careful and ameliorative action.

If we can get all of these things together it will assist in enabling the North West to move forward for the benefit of all of its citizens and those of the UK in total.

The model, it is hoped, will encourage you to consider all these matters constructively.