The Paris Agreement on Climate Change: What does it mean for the UK?

Notes and observations by Andy Hannah arising from his attendance on behalf of ADAPT at the above conference at The Royal Society on 23 February 2016.

The Paris Agreement

The substance of the agreement can perhaps be summarised thus:

- Commitments from nations to reduce greenhouse gases which added together and if implemented should limit global warming to 2.7 degrees Celsius compared to pre-industrial levels. If no reductions were to take place the prediction is an increase of 4-6 degrees Celcius. An increase of 0.8 to 1 degree Celcius has already taken place.
- Agreement on a target warming of significantly below 2 degrees, and to pursue efforts to a target limit of 1.5 degrees.
- 5-yearly review process to try to close the gap between the country commitments and the target.
- Net zero emissions this century, which will make fossil fuel use (without carbon capture) largely outdated.
- Commitment to help poorer countries achieve greenhouse gas reduction.
- Monitoring and verification agreements, at least in outline.

At the conference, there was broad agreement that the Paris Agreement represents a remarkable achievement in gaining consensus from 195 countries for measures which will, in the medium to long term, mean dramatic changes to the way society operates.

In particular the commitments and targets agreed mean that fossil fuel industries will not be able to continue to operate in there current mode, and constraints on greenhouse gas emissions will become the dominant factor rather than the availability of fossil fuels. This represents a commitment to 'leave it in the ground'.

It is clear that the processes agreed are slow, and the link to action at national level is indirect, which introduces the risk of delay. There must be doubt as to whether the implementation of measures by nations across the globe can be mobilised quickly enough for the 1.5 degree aspiration to be met. However, the achievement should not be dismissed, for it is highly significant, substantive in its scope and, in the long term, potentially very powerful.

The UK and the Paris Agreement

The process of aggregating commitments is further complicated by the fact that our promise is subsumed into the EU commitment.

I have tried to summarise some of the pertinent points below:

- The EU is responsible for about 9% of global emissions
- Both the UK and the EU have commitments in place to reduce emissions by 80% from 1990 levels by 2050
- The UK Committee for Climate Change (CCC) who advise UK government believe that that commitment is consistent with the 2 degree Celsius global objective

- The EU has a 2030 target of at least 40% reduction from 1990 levels, which CCC believe to be inadequate to meet the 2050 objective and the global 2 degrees objective.
- The UK is advocating the strengthening of this 2030 target.
- The UK manages it's trajectory to the 2050 objective by a series of Carbon Budgets, the latest (5th) of which was published just before the Paris Summit. Legislation based on this will be processed in June 2016.
- These budgets are published and legislated on at 5 year intervals.
- The 5th Carbon Budget recommends a 57% reduction from 1990 levels by 2032. This builds upon the 4th Budget which set a 52% reduction from 1990 by 2027.
- The level of reduction recorded now is 36%.
- This has been based on about 2% year on year reduction from 1990.
- The 5th Budget supposes a 3% reduction annually to 2030, and a 4% annual reduction from 2030-2050.
- Meeting the 5th Carbon budget is assumed to require action beyond the decarbonisation of the power generation sector (from 450gCO2/kWh in 2014 to 200-250g CO2/kWh in 2020 and less than100g CO2/kWh by 2030), including:
 - Electric vehicles (over half by 2030)
 - Low Carbon heating
 - Solid Wall Insulation of buildings
 - Reduction of Agricultural emissions
 - Energy Efficiency improvements
- No change to the recommended 5th Carbon Budget has been made as a result of the Paris Agreement.

Her Majesty's Government and Energy Policy

- The role of the Government is to:
 - Set targets on emissions reduction
 - o Enact policies to achieve the targets set
- Assuming that the recommended 5th Carbon Budget is passed into legislation in June, it represents a credible path towards the early stages of the Paris Agreement commitments
- The remaining question therefore is whether the policies of the current government will result in the targets being met.
- There was broad agreement amongst the Conference panellists that a coherent energy policy is a necessity.
- One panellist commented that the "We won't come anywhere close with the current policy". Others were silent on the matter.

Personal comment on the current energy policy in this context.

With renewable power generation support being curtailed, a policy focus on fracking for fossil fuel gas, and coal fired power stations only being decommissioned if replaced by gas, it is hard to have confidence that the decarbonisation of power generation will in reality progress as quickly as cited in the papers supporting the 5th Carbon budget. As for the other technology developments cited above, the policy and regulatory regime in some areas appears to have been weakened rather than strengthened.

The need for a comprehensive and coherent energy policy for the UK is clearer than ever as a result of the commitments made in Paris.