



12.30-14.00 11 December 2014

Committee Room 4, Scottish Parliament

Future energy scenarios: Meeting Scotland's target to decarbonise the power sector by 2030.

Convenor: Jim Eadie MSP

1. Attendees

A provisional list of attendees is attached to the end of this note. If you attended and are not shown on the list, please email Elizabeth Leighton (Elizabeth.leighton@est.org.uk).

2. Introduction and approval of minutes from the last meeting

Jim Eadie MSP welcomed everyone to the meeting and asked if there were any corrections to the minutes from the meeting on 30 October 2014 which had been circulated to members. There was one addition that had been received to the list of attendees.

Steven Young moved and Nigel Holmes seconded that the minutes represented an accurate description of the last meeting.

3. Presentations:

The convenor then introduced the presenters, who were asked to speak on the topic: **Future energy scenarios: Meeting Scotland's target to decarbonise the power sector by 2030.**

Paul Gardner, Senior Principal Engineer, DNV GL – Energy

Paul Gardner's presentation was based on a soon to be published report from WWF Scotland. This report argues that current Scottish Government policy to meet the target is fraught with risk as it relies heavily on Carbon Capture and Storage. Given its slow development and without any guarantee that CCS will be commercialised in time, WWF's report examines whether current thermal policy is fit for purpose, and whether a future based almost exclusively on proven renewable technologies is possible.

Marcus Stewart, Energy Supply Manager, National Grid

Marcus Stewart's presentation was based on National Grid's Future Energy Scenarios work. This annual publication describes National Grid's new analysis of credible future energy scenarios out to 2035 and 2050. This year the range of scenarios is based on the energy tri-lemma of security of supply, affordability and sustainability.

Dr Mark Winskel, Chancellor's Research Fellow on Energy Innovation at the Science, Technology and Innovation Studies group in the School of Social and Political Science at the University of Edinburgh

Mark Winskel provided a reflection on the first two presentations, based on his involvement with UK Energy Research Council's recent analysis of energy strategy uncertainties and his role as a reviewer for WWF's report.

6. Questions

A range of questions were directed at the panel; please note that the intention of this meeting note is not to record a verbatim account of the meeting. Questions posed to the panel included:

Steven Young asked about the setbacks to energy sources: CCS, tidal and shale and how these can be overcome.

Theodore Hostom asked why the WWF scenario did not include more pumped hydro.

Christopher Monckton asked what provision had been made in the energy scenarios if the impacts of climate change have been overstated.

Paul Gardner responded that it is best to keep as many technologies as possible in play, and it is too early to 'pick winners.' With this strategy, we should expect setbacks along the way. In time some technologies will be able to absorb the costs of such hiccups and address them, as has been the case with onshore wind. In terms of pumped hydro, the study took a conservative approach and worked with plans already identified, which meant that more pumped hydro was not necessary to meet the targets. In terms of the final point, the scenario was designed to address the problem of climate change which is backed up by overwhelming scientific consensus, and the government's decarbonisation target.

Marcus Stewart noted that the National Grid 'no progression' scenario covers a future where climate change impacts are less than predicted. In his view, this decade is about testing technologies and the next decade we really need the solutions in place. It is logical to plan for generations ahead, but everything has to compete in the market today.

Mark Winskel noted that CCS is an important solution but it is lacking political commitment. He stated that the international evidence on climate change shows that we are heading on a trajectory to 6 degrees warming and things have to change. In his view, the problem is that we are not taking it seriously enough and pretending we can live in a 'business as usual' scenario.

Bill Rodger asked whether enough was being done to keep all options open. He also questioned how Scotland can meet its peak demand from elsewhere as they might have same conditions causing a peak demand.

John McLean wondered why we don't use turbines on bridges for wind generation. He also noted it is very difficult to read the power point slides.

Marcus Stewart responded that National Grid's job is focusing on securing a GB energy market. Scotland is not an island and it is cost-effective to work with one energy market.

Mark Winskel noted it is important to consider options for the longer term and called for more effort to be made to synthesize the various scenarios work to build a better evidence base for future planning. This would help to identify the areas where there is agreement, and those where there is greater uncertainty.

Nigel Goddard noted it is important for the scenarios to define system boundaries.

Roderick Galbraith asked why shale is not given more consideration.

Mike Haesler asked if anyone had considered the costs to the consumer of pursuing these new technologies.

Paul Gardner said that there were boundaries to the WWF study, and it did analyse peak flows. In terms of costs, DECC's analysis shows that we are already paying less for energy due to these policies.

Marcus Stewart said that National Grid does not publish costs as it is not their place. He believes a ten year plan is needed to provide the best balance of energy generation.

Mark Winskel referenced some studies that concluded shale is not 'game-changing' for the UK. In terms of costs, UKERC has published costs for future energy scenarios. He noted that there is international consensus that the cost of not mitigating emissions now is far more than the costs that are envisaged for decarbonised energy supply. He also stated that more emphasis needs to be given to the low hanging fruit of energy efficiency. Reducing demand can buy the time needed for these technologies to develop.

Jim Eadie concluded the meeting and asked the secretariat to circulate the papers Mark Winskel referenced to the SPREEE group.

7. Date and Topic of Next Meeting

The next meeting will take place on 29 January 2015 between 12.30pm and 2.00pm. The meeting will focus on transport.

For suggestions and corrections of this note and to request copies of presentations, please contact the secretariat, Elizabeth Leighton (Elizabeth.leighton@est.org.uk).

9. Attendees

SPREEE Meeting 11 December 2014		Actual Attendance
Neil	Barnes	
Claudia	Beamish MSP	Scottish Parliament
Gavin	Donoghue	Scottish Renewables
Jim	Eadie MSP	Scottish Parliament
Shona	Fisher	Ofgem
Roderick	Galbraith	University of Glasgow

Sam	Gardner	WWF Scotland
Paul	Gardner	DNV GL
Gina	Hanrahan	WWF Scotland
Gareth	Harrison	University of Edinburgh
Patrick	Harvie MSP	Scottish Parliament
Nigel	Holmes	Scottish Hydrogen and Fuel Cell Association
Theodore	Holtom	Green Hydrogen Consulting
David	Infield	University of Strathclyde
Bill	Ireland	Logan Energy Limited
Elizabeth	Leighton	Energy Saving Trust
John	MacLean	Spitfire Resources
Helen	Melone	Energy Action Scotland
Christopher	Monckton	
Bill	Rodger	
Lorna	Ross	
David	Somervell	University of Edinburgh
Marcus	Stewart	National Grid
Jean	Welstead	SLR Consulting
Mark	Winkel	UK ERC
Stephen	Young	ECA and OWN Energy