



---

# Minutes

## **Reducing the cost of electricity: A Presentation by John Feddersen, Co-Founder and Chief Executive, Aurora Energy Research**

**Wednesday 28 September 2016 at 12.00pm  
Conference Room 24, Ty Hywel, Cardiff Bay**

## Attendees

### Assembly Members

Liam Bowen (on behalf of Simon  
Thomas AM)  
David Rowlands AM

Llyr Gruffydd, AM  
Lee Waters AM

### Industry Members

Neil Anderson, PACE  
Gordon Baird, Natural Resources  
Wales  
David Bezzing, National Assembly for  
Wales  
Simon Brammer, Ashden Awards  
Dr Jill Caine, Electricity Storage  
Network  
David Clubb, Renewable UK Cymru  
Ann Cousins, ARUP  
Dr Richard Cowell, Cardiff University  
Megan David, Cynnal Cardiff  
Keith Davies, Natural Resources  
Wales  
Dr Paul Davies, University of South  
Wales Business School  
John Feddersen, Aurora Energy  
Group  
Dave Finley, Hydrock  
Rachael Friel, Quatro Public Relations  
Jon Fox, Wardell Armstrong LLP  
Erin Gill, ARUP

Craig Harrison, Liberty Renewables  
Peter Hulson, ARUP  
Melanie Johnson, Sustainable Wales  
Sara Jones, Freshwater  
Shea Jones, Institute of Welsh Affairs  
Steve Keating, Pembrokeshire County  
Council  
Bethan Lawson, ARUP  
Judith Marquand, Cardiff University /  
Member of Wolfson College, Oxford  
Dan McCallum, Awel Aman Tawe /  
Renew Wales  
Anna McMorrin, Invicta Public Affairs  
Jessica McQuade, WWF Cymru  
Llinos Merriman, Ofgem  
Margaret Minhinnick, Sustainable  
Wales  
Alexander Phillips, Grayling  
Sara Powell-Davies, Renewable UK  
Cymru  
Jennifer Pride, Welsh Government



Robert Proctor, Renew Wales /  
Adfywio Cymru  
Anne Sharp, Constructing Excellence  
Wales  
Jeremy Smith, RWE Innogy UK Ltd  
Nick Speed, Centrica

Mary Thorogood, Vattenfall UK  
Jon Towned, Oren Associates  
Gareth Tucker, Seren Energy  
Neil Woollard, Tidal Lagoon Power  
Fanoula Ziouzia, Energy Saving Trust

## Welcome

- Llyr Gruffydd gave a welcome to the first meeting of the Cross Party Group on Sustainable Energy. He emphasised that it was important to have a specific forum for Assembly Members to discuss sustainable energy issues, providing a space where stakeholders could interact and enrich those discussions. The high level of attendance at the meeting reflected the importance of having a group of this kind.

## AGM

- Llyr Gruffydd was voted in as chair of the group.
- Freshwater was voted in to provide the secretariat function for the group.

## Presentation – John Feddersen, Aurora Energy Group: Reducing the Cost of Electricity

- The presentation covered two areas.
  - It looked at the recent UK policy context (over past six years), examining where we came from, where we are now and what the landscape looks like going forward.
  - Secondly, it looked at Wales in particular and what it would be sensible for Welsh policy maker to advocate in the energy space.

## UK Policy Context

- UK Policy Context (2010 election - 2015)
  - During the time of Huhne / Davey, UK policy characterised by two assumptions:
    - That the high fossil fuel prices at the time would keep on rising – implication that decarbonisation is cheap.
    - The integration of renewables into the grid was still at an early stage. The big pick up in off shore wind / on-shore wind and solar hadn't happened.
  - This led to two consequences:
    - Lib Democrats who had inherited the energy and climate change portfolio pursued an aggressive programme of deploying renewables throughout the UK.
    - UK introduced a carbon price. Europe didn't follow us. Now the carbon price in the UK is about four times the price of that in



France. France is now exporting electricity to the UK about 95% of time.

- UK Policy Context (from Sept / Oct 2015)
  - Reset by Rudd.
  - Commodity prices had halved and cost of renewables was more expensive, especially if tied to guaranteed prices with CfDs.
  - No budget to spend on renewables the allocated Levy Control Framework budget on low carbon technology up to the early 2020s.
  - Hinkley cost had become very large because of fixed price and falling commodity prices.
  - Context of fiscal austerity – chancellor was not prepared to lend more cash to low carbon energy.
  - The policy response was:
    - Went for the quick win of closing the coal fleet – cheap way to decarbonise.
    - Killed CCS (carbon capture and storage) which doesn't pay short term dividends as its costs are high.
    - Tidal lagoons were spared and could still play a major role
    - The above makes sense from a low cost / low carbon perspective. However, slightly more confusing is that most support was withdrawn from the cheaper technologies of on-shore wind and solar technology
    - Placed emphasis on off-shore wind and nuclear for low carbon technology.
    - Decisions were political in terms of winning votes and not necessarily economically driven
    - Addressed the capacity market (lights going out). In a year or two, once the capacity market begins to deliver, politics won't have the emphasis on security of supply, it will be about affordability and decarbonisation.
  
- UK Policy Context (2016 onwards)
  - Greg Clark and the new industrial strategy
  - Can expect more of the same and a continuation in terms of key policy drivers.
  - Opposition to on-shore wind and solar is a core conservative policy. .
  - In terms of decarbonisation and renewables challenge, it looks like being an off-shore wind and nuclear story at present.

## Low carbon generation in Wales

Where should AMs be focusing their efforts for a low carbon future in Wales?

- **Nuclear** would be a sensible way to decarbonise. Take steps to enable the significant project, Wylfa Newydd, to go ahead.



- **On shore wind and solar** It's a credible economic and political argument to relax the absence of funding and increase the amount of regulatory approval to enable some of these projects to go ahead. Subtle changes to solar and on shore wind policy can lead to lower bills and should be advocated.
- **Tidal power** is like CCS, as it is long-term and untested. However, it's relatively low entry cost to try something that could make a major impact. The potential is there to develop it large-scale if it comes off.
- Make sure **pumped storage** doesn't miss out as it is flexible, shifting power at different times of day as interconnectors do. When redesigning grid codes, pump storage is remunerated in line with the flexibility it offers.

## Questions and Answers

- **Question:** *Robert Proctor* from *Renew Wales* asked how we can we maximise the benefits of energy generation in Wales in terms of jobs / local benefit? For example, how many jobs per Mega Watt (MW) will Wylfa be providing to the economy of Wales?
- **Response:** The premise of what JF has been talking about is that energy policy is driven on a UK level. Can't comment on community energy regulation within Wales specifically as he's not an expert in this area. If the challenge is that it's remiss to focus on the UK level rather than the Welsh level, then JF would have to disagree. This isn't to discount the community energy sector, but it's necessary to look at the relevance of it.
- **Question:** *Neil Anderson* from *PACE* expressed concerns that we're not taking a strategic view of the way in which energy interacts with the economy and what that may mean in the longer term. Questioned why the speaker didn't mention about energy conservation in his presentation as that is the cheapest source of saving on energy.
- **Response:** There aren't a lot of people doing it so it can't be especially cheap. The social cost of carbon is well above the current carbon price that is charged in this country – so a higher cost of carbon is desirable. JF's view on affordability – for a given level of carbon, cheap is better than expensive. In terms of jobs and the local economy, JF agrees it is important. There is room for strategy in terms of energy policy and where you will have the most return on investment for what you do. However, JF's main concern is that it's a murky world as it's hard to quantify the number of jobs created. The ability to make good decisions on those sorts of investments are challenging. Industrial strategy is central to energy policy, so inroads are being made. However, it's hard to implement good policy based on local benefits.



- **Question:** *Jon Townsend* from *Oren Associates* noted that storage is important and that he has heard rumours that the government is backing out on what has been billed as the panacea in terms of sorting out energy distribution and management / balancing demand with capacity (ie smart grid and metering)
- **Response:** The roll out of the smart grid programme is difficult and expensive, and there's both a delay and a technology issue. These are sensible moves, it is happening, but the extent to which it is happening is an open question. It's a hugely complex programme that the government has to deliver.
- **Question:** *Simon Brammer* from *Ashden Awards* noted that we shouldn't underestimate the impact of community projects / broader energy efficiency programmes to help solve issues such as clean air or fuel poverty.
- **Question:** *Dan McCallum* from *Awel Aman Tawe* commented that there may be a 'ban' on on-shore and solar in England, but that there is more planning policy support in Wales. If you can get planning support for solar, can they still be built with the current economic support that is available? Do you see wind turbine costs coming down?

- **Response:** The wind turbine industry is global – there are other places who are building wind farms who will buy them eg Europe. There's not going to be a glut in the market on account of conservative policy over the summer last year. How do you build larger projects in Wales without government support and subsidy – and there's no money left. We spent it 2-4 years ago.

In terms of efficiency– JF has been damning of government programmes regarding installing efficiency. The world is naturally becoming a lot more efficient. Products / appliances / lights are becoming more efficient and GDP growth is not now being matched by an increased demand in power.

- **Question:** *Nick Speed* from *Centrica* noted that people in Wales are paying more for electricity than in most other parts of Britain, which makes community energy schemes of interest. He asked what would be JF's advice in terms of community energy projects and how do we bring down electricity prices in Wales?
- **Response:** One of the big moving pieces is how to reward people who are on the distribution grid. It's an on-going process that is transformational.

## Close

LG thanked JF for his presentation and invited suggestions for future topics from attendees. The next event will be in January / February, potentially on the subject of Tidal Lagoon.