



Heat

12.45pm, Thursday 11 January 2018

Committee Room 6

The Scottish Parliament

Chair: Alexander Burnett MSP

1. Attendees and Presentations

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 Elaine Waterson (Elaine.waterson@est.org.uk).

For a copy of the presentations please email Elaine Waterson (Elaine.waterson@est.org.uk).

2. Introduction by Chair and approval of minutes from the last meeting

Alexander Burnett MSP welcomed everyone to the meeting and wished everyone a Happy New Year.

Minutes of the previous meeting, held on 14 September 2017, had been sent round group members in advance and the secretariat received no requests for additions or corrections. No requests for additions or corrections were made at the meeting.

3. Presentation – The ‘big picture’ – the transition to low carbon heat – Professor Janette Web, University of Edinburgh. Jan Webb began her presentation with a look at ‘where we are now’ focussing specifically on Scotland’s final energy consumption, the primary heating fuel used by households, annual energy consumption patterns and the energy efficiency of the housing stock. She went on to discuss the Scottish Government’s exiting targets and the progress that has been made towards meeting these to date. She then noted that what happens to gas is a key bit of the puzzle that needs to be solved and explored some of the issues around the future of gas in more detail. Finally, she noted that the ‘transition to low carbon heat will require urgent action now’ and outlined her thoughts on what this action should look like.

4. Presentation – Social/fuel poverty impacts and the role that new technologies might play – Andrew Bissell, Sunamp. Andrew Bissell began his presentation by noting that a lot of the work Sunamp has done to date has been driven by the fuel poverty agenda. He went on to highlight that, because hot water tanks are being taken out in many homes when boilers are replaced, we are now living in an era where households are storage poor. He went on to outline the advantages of Sunamp batteries over lithium batteries, noting in particular that a heat battery can deliver more energy at a given time, has a >35,0000 cycle life with no degradation of capacity (over those cycles) and on a per cycle basis costs are one tenth of that of a conventional battery. He then provided more detail about the East Heat project which is being delivered by Sunamp, Local Energy Scotland and a number of

Housing Associations. A core part of the project involves the retrofit of heat batteries in conjunction with PV. To date bill savings of between 10-60% have been reported. Finally, he outlined some other projects that Sunamp is involved with and highlighted his view that advanced heat storage should be part of the solution to Scotland's 'heat trilemma'.

5. Presentation – The possible role of hydrogen in the transition to low carbon heat in Scotland, Angus McIntosh, Scotia Gas Networks. In the session's final presentation Angus McIntosh started by providing an outline of SGN's role and noted the reliability of the existing gas network. He went on to outline 4 possible scenarios for the gas network and highlighted the importance of taking a customer centric view. He then discussed a number of current hydrogen projects happening in other parts of the UK (including H21 in Leeds) and talked about 3 of the test sites SGN has in Scotland. He also noted that hydrogen has very different natural qualities to natural gas (including different types of explosion!) and mentioned that hydrogen household appliances have already been developed. He closed his presentation by highlighting the need to make sure that *all* options are explored to ensure that safe and affordable solutions can be found.

4. Question and Answer Session

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 and answers received included:

- **Lorna Ross** noted that she was interested in solutions for her own property and asked whether, given that she was looking at changing her heating system, a Sunamp battery might be the best solution for her. She also noted that she would be happy to offer her home as a potential case study for hydrogen.
- **Andrew Bissell** responded by highlighting that Sunamp batteries were currently on the market and have been installed in both social and private housing. He went on to suggest that combined with a heat pump they might offer an appropriate solution for her home.
- **Angus McIntosh** responded by emphasising the importance of having early adopters and stressed that for hydrogen the important thing to do is to demonstrate network capability.
- **Andrew Bissell** then noted that he had, to a large extent, voluntarily disconnected from the gas grid (only using gas for cooking) and asked if anyone else had done so too.
- **Mark Whittet**, Scottish Energy News, highlighted the importance of new build commitments.
- **Alexander Burnett MSP** noted his disappointment that 'the foot had been taken off the pedal' in relation to low carbon homes.
- **Mark Ruskell MSP** then asked for the panels' views about the infrastructure investment that is needed by 2025.
- **Angus McIntosh** noted that their demonstration/proof of concept project are all loss making.
- **Andrew Bissell** highlighted the success of Feed-in Tariffs (FiTs) and noted that no country has ever introduced subsidy for storage that operates in the same way as FiTs. He went on to recommend that the Scottish Government gives this issue some consideration.
- **Jan Webb** suggested that there needs to be infrastructure for the retrofit of low carbon buildings and that consideration needs to be given to creating the infrastructure necessary to bring down costs. She referenced the Energiesprong model and its use of cladding type solutions that are cost effective when produced at scale.
- **Chris Cook**, Nordic Enterprise Trust, talked about moving towards a service model for heat.
- **Marcus Wilson**, Citizens Advice Scotland, asked for the panels' views about the best ways to win over consumers.

- **Andrew Bissell** highlighted that while economics matter personal goals do as well. He went on to suggest that millennials are likely to be particularly interested in things as a service and are likely to buy into that business model. He also noted that the bill will remain an important consideration – particularly for those in fuel poverty.
- **Angus McIntosh** outlined his view that the vast majority of energy users are not interested in where their energy comes from and that price will remain important to them.
- **Jan Webb** highlighted the importance of inclusive economic opportunities.

5. Conclusion and dates of future meetings

Alexander Burnett MSP thanked everyone for their attendance at, and participation during, the meeting and noted that future meetings are planned as follows:

- February 22nd 12.45pm – Electric vehicles and charging infrastructure
- March 15th 12.45pm – The export of renewable energy
- April 19th 12.45pm – Joint session with the Architecture and Built Environment group on the Warm Homes Bill

7. AOB

No other business was discussed.

8. Attendees

Members

Keith	Baker
Alan	Beal
Sarah	Beattie-Smith
Chris	Bell
Rebecca	Bell
John	Birchmore
Patricia	Boyle
Lynne	Bryceland
Alexander	Burnett, MSP
Jamie	Carruthers
Chris	Cook
Kate	Cunningham
Brian	Davison
Jamie	Farquhar
Bronagh	Finnegan
Karen	Freel
Roderick	Galbraith
Roddy	Hamilton
Gina	Hanrahan
David	Hawkey
Nigel	Holmes

Sue	Kearns
Simon	Kemp
Stewart	Little
Cate	Lyon
John	MacLean
Eoghan	Maguire
Liam	McArthur, MSP
Iain	McCaskey
John	McKinney
Sam	McMillan
Paul	Moseley
Tariq	Muneer
Pete	Roche
Bill	Rodger
Lorna	Ross
Mark	Ruskell, MSP
Peter	Speirs
Anne	Stevenson
John	Taylor
Enrique	Troncoso
Julia	Wallis
Elaine	Waterson
Janette	Webb
Shemaiah	Weekes
Mark	Whittet
Andy	Wightman, MSP

Non-member guests

John	Barclay
Andrew	Bissell
Jack	Flower
Chris	Jackson
Urszula	Kasperek
Christopher	Lees
Angus	McIntosh
Colin	Pritchard
Colin	Thomson
Marcus	Wilson
Geoffrey	Wood

For suggestions of corrections for this note please contact the secretariat, Elaine Waterson (Elaine.waterson@est.org.uk).