Local Heat & Energy Efficiency Strategies – Opportunities for Heat System Decarbonisation

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Heat in Scotland

In Scotland

- 79% of our domestic properties heated by gas
- 7% heated by oil
- Commercial & Industrial use 40% of gas consumed

- Draft Climate Change Plan presents massive decarbonisation challenge
  - 98% emissions reduction for non-domestic buildings; 75% emissions reduction for domestic buildings, by 2032
  - 94% of non-domestic buildings’ heat; 80% of domestic buildings’ heat, from low carbon sources, by 2032

- Split of responsibilities – UK Government - electricity, gas network, the Scottish Government (SG) - heat.
  - UKG – exploring the potential use of hydrogen gas for heating until 2020
  - SG heat decarbonisation activity – focus on low regrets options
Heat Policy Statement – the Heat Hierarchy

Reduce the need for Heat

Supply Heat efficiently & at least cost to consumers

Low carbon & renewable Heat

Heat demand
- Buildings
- Industry
- Fuel costs

Heat transmission & storage
- District heating
- Gas grid
- Thermal storage

Heat generation
- Renewable heat
- CHP
- Electrical heat
Heat decarbonisation so far...

• Heat supply is diversifying:
  • Share of renewable heat is rising (3.8% in 2014, 5.3-5.6% in 2015)
  • Electrical heat is growing in non-domestic sector (currently over 50%)
  • District and communal heating is rising (25,800 homes connected)

• But gas remains our primary fuel...
Why are we here today?

- Draft Scottish Energy Strategy
  - Whole system view
  - A Stable managed energy transition
  - A Smarter model of local energy provision

- Scotland's Energy Efficiency programme

- Consultation on Local Heat and Energy Efficiency Strategies (LHEES) & District Heating Regulation
LHEES - Pilot and Capacity Building Programme

• 12 Local Authorities funded to test LHEES concept
• 9 Local Authorities taking part in joint procurement activity for technical consultancy support
• Support provided from existing national programmes (RES/SFT/EST)
• Evaluation of pilot studies to understand:
  • Required skills and resources
  • Activities and processes
  • Technical requirements (e.g. data, tools etc.)
• Series of events throughout 2018 – knowledge sharing, feedback, learning from experts
The purpose of today

- Mix of opportunities for heat system decarbonisation
  - District Heating
  - Electrification of Heat
  - Decarbonising the gas network
<table>
<thead>
<tr>
<th>Timing</th>
<th>Item</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>Registration/lunch</td>
<td>12:00-12:45</td>
</tr>
<tr>
<td>10</td>
<td>Introduction - Craig Frew</td>
<td>12:45-12:55</td>
</tr>
<tr>
<td>20</td>
<td>Policy/Background - Scott Brady &amp; Ross Loveridge</td>
<td>12:55-13:15</td>
</tr>
<tr>
<td>35</td>
<td>Managing Heat Decarbonisation - Keith MacLean</td>
<td>13:15-13:50</td>
</tr>
<tr>
<td>35</td>
<td>District Heating - Dave Hawkey</td>
<td>13:50-14:25</td>
</tr>
<tr>
<td>15</td>
<td>Tea/Coffee Break</td>
<td>14:25-14:40</td>
</tr>
<tr>
<td>35</td>
<td>Electrification of Heat - Dina Darshini</td>
<td>14:40-15:15</td>
</tr>
<tr>
<td>30</td>
<td>Panel discussion - Chaired by Keith MacLean</td>
<td>15:50-16:20</td>
</tr>
<tr>
<td>10</td>
<td>Closing remarks - Craig Frew</td>
<td>16:20-16:30</td>
</tr>
</tbody>
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Housekeeping