Suffolk High Energy Users' Network Challenge Lab Report

Background – What is the Suffolk High Energy Users' Network?

The Suffolk High Energy Users' Network (HEN) brings together major Suffolk businesses who are at the forefront of reducing greenhouse gases and carbon emissions, with <u>Suffolk Chamber of Commerce</u>, the <u>University of Suffolk</u> and <u>Groundwork East</u> to do even more to reduce industrial and business greenhouse gases and carbon emissions and as a result reduce energy costs.

The Suffolk High Energy Users' Network is funded by the <u>Suffolk Public Sector Leader's</u> <u>Group</u> to enable the businesses to work with the University of Suffolk to identify innovative new solutions to reduce emissions and energy costs. The funding will also be used for Groundwork East to help smaller Suffolk businesses that supply larger businesses, reduce their emissions and energy costs.

Coming together as a network also helps the businesses to share best practice and learn from each other.¹



Challenge Lab Purpose and Agenda

The purpose of the Suffolk HEN Challenge Lab, which was held at Dance East on the Ipswich Waterfront (IP4 1DW) from 09:30 to 13:30 on Thursday 27th February 2025, was to work together with experts to identify ways of overcoming some of the challenges to reducing carbon emissions at a faster rate and to a greater extent than before.

From 09:30 to 09:45, the delegates arrived for the Challenge Lab. At 09:45, the chair welcomed the delegates.

From 09:55 to 10:55, there was a panel of expert speakers and facilitators to stimulate and facilitate ideas and actions that would address these challenges. These experts were:

- Glen Buckingham
- Amy Coulter
- David Crookes
- June Davenport
- Robert Edge
- Glynn Lee
- Cathryn Lambourne
- Professor Darryl Newport

¹ <u>https://www.suffolkchamber.co.uk/support/business-voice/net-zero-climate-adaptation/suffolk-high-energy-users-network/</u>

From 10:55 to 12:35, the delegates were put into challenge break-out groups consisting of around five participants each. The delegates were able to move around if they were interested in more than one of the four challenges. These breakout groups, facilitated by the experts, had six tasks:

- 1. Refining and agreeing what the big challenge is (what the challenge is and the cause of this challenge).
- 2. Discussing ideas to resolve the challenge (not just a solution, but could also include further research into the challenge, putting together a plan to bid for funding for a new project to solve the challenge, or linking up with existing projects that are exploring a solution).
- 3. Refining and shortlisting these ideas, while considering what ideas could be feasibly turned into actions in the short to medium run.
- 4. Presenting the preferred ideas to all of the Challenge Lab's participants from 11:55 to 12:25.
- 5. Providing feedback on the presentations from 11:55 to 12:25.
- 6. Discussing the next steps, such as a brief for preparing action plans to implement the preferred ideas from 12:25 to 12:35.

From 12:35 to 13:25, the participants became involved in networking while having lunch.

The Challenge Lab ended at 13:30.

Challenge Lab Delegates

The delegates at the Suffolk HEN Challenge Lab were:

- Kate Severn from Treatt
- Krysz Procajlo from the Bury St. Edmunds' branch of Mizkan Euro Ltd.
- Richard Hallett from PPG
- James Hubbard from Greene King
- Gav Keach from Camstar
- Logan Buckingham of Muntons
- Glynn Lee and Rachel Sirkett from Suffolk County Council
- Robert Edge from Freeport East
- David Crookes from West Suffolk Council
- Mark Griffin from Scottish Power Renewables
- Glenn Buckingham from Suffolk NFU
- Cahtyrn Lambourne of Innovate UK
- June Davenport, Amy Coulter and Richard Jenner from Groundwork East
- Professor Darryl Newport, Annabelle Richardson, Manal Al Bassiss and Faraz Gul from the University of Suffolk
- Toby Warren from the Suffolk Chamber of Commerce

Presentations and Photos

Four presentations were delivered at the Suffolk HEN Challenge Lab:

- Robert Edge and Darryl Newport delivered a presentation on why the generation and supply of hydrogen could contribute to net zero carbon emissions by 2050. This included the production of the different types of hydrogen (e.g. electrolysis of water to produce green hydrogen) and the various ways in which hydrogen could be used.
- Amy Coulter and June Davenport delivered a presentation on the need for reducing Scope 3 greenhouse gas emissions. This included their definition of Scope 3 emissions and the impact of reducing Scope 3 emissions on Suffolk.
- David Crookes and Glynn Lee delivered a presentation on creating a low-carbon heat network for lpswich. This included their definition of a heat network, the overview of their design for this network, and the benefits of creating the network.
- Glen Buckingham and Cathryn Lambourne delivered a presentation on regenerative agriculture and increasing the yields of regenerative agriculture. This included what regenerative agriculture involves and a case study on regenerative agriculture from The Green Farm Collective.



Professor Darryl Newport and Robert Edge answering questions on generating and supplying hydrogen to achieve net zero carbon emissions



Glynn Lee and David Crookes delivering their presentation on creating low-carbon heat energy networks for lpswich

Challenge Lab Feedback

David Crookes notes of the discussions he had with PPG, Greene King and Branston Pickle:

- For PPG, they are going through a metering process to gain a better understanding of their energy consumption and heat waste. David intends to follow up with PPG once they have additional data to analyse.
- For Greene King, they are in the early stages of the feasibility of creating a heat network in Bury St. Edmunds and cannot provide much detail on the viability and potential route of this network. David intends to follow up with them once more information is available so that they could look at the potential of collaborating for creating expansion routes of a future network.
- For Branston Pickle, they are interested in gaining additional roof space for solar panels, so David Crookes and Glynn Lee would put Branston Pickle in touch with the Solar for Business scheme in West Suffolk.

Robert Edge – "The one takeaway we took away from our table from yesterday is that 'one size won't fit all!' with regard to decarbonisation and hydrogen is only one component for getting there."

Robert Edge is also hoping to establish a "collaboration of the willing" to explore the feasibility of building a green hydrogen pipeline from the ScottishPower Renewables facility in Felixstowe at least as far as Bury St. Edmunds. It is not feasible to build a hydrogen pipeline for Camstar Herbs given their location in Eye, but Robert has said that they would look at the costs and logistics of a possible mobile option.

Glyn Lee – "It was great to see so much interest in Heat Networks, and to respond to so many questions during the presentation. While most attendees were not from the central Ipswich area, it is hoped that word of mouth will spread to more and more parties." Glyn Lee notes that David Crookes had more responses from potential heat producers across Suffolk, although there were no participants present from the central Ipswich area.

Cathryn Lambourne – "It was an interesting session, and great that you have a group developed to tackle this issue in that community."

Report by Faraz Gul – University of Suffolk under-graduate research intern, working with the Suffolk High Energy Users' Network