

## NON-VERBATIM MINUTE

**DATE:** Tuesday, December 14 2021

**TIME:** 11:00 - 12:00

**METHOD:** Zoom Meeting

**CHAIR:** Richard Thomson MP, Officer of the All-Party Parliamentary Group on Hydrogen

Richard Thomson MP welcomed attendees and opened the session. He introduced **Dr Kiara Zennaro**, Head of Heat and Green Gas Lead at the Association for Renewable Energy and Clean Technology.

Dr Zennaro explained the REA's responsibilities and her role within it, saying that they were the largest trade association in the UK for renewable energy. She stated that several of the REA's members are involved in the hydrogen industry and moving the agenda of hydrogen forward within Government, looking at building the areas necessary for the hydrogen economy.

She added that hydrogen has a key role to play in decarbonising the economy and transitioning to net zero, adding that hydrogen has a key role across many sectors, such as industry, transport, heat and buildings.

She questioned whether the Government's ambitions for hydrogen production were ambitious enough, noting the Climate Change Committee's higher targets. She also noted the different methods of hydrogen production and the different methods of transporting it, for example via the gas grid and via traditional transport.

She added that the REA do not support the use of grey hydrogen, and only support the use of blue hydrogen as a transition technology to green hydrogen, which they support most strongly. She expressed support for moving away from colours to describe hydrogen, stating that they should be renamed according to their carbon output.

She noted the REA's call for a credible low-carbon hydrogen standard, and for underpinning investment in low-carbon hydrogen production, noting Germany's doubling of their 2030 green hydrogen production target recently.

She noted the REA's calls for a wide range of scales and projects and for pragmatic rules on electricity inputs and additionality, and for reduced costs of grid electricity, for example by exempting electrolyzers from additional levies, as well as increased support for large-scale hydrogen support and for hydrogen injection into the gas grid.

She concluded by noting the key points of the Heat and Buildings Strategy, particularly welcoming the 2035 pledge of installing low-carbon heating systems, and the movement around consulting on hydrogen heating. The REA believe there is no silver bullet to decarbonising heat. and that the right solutions must be used at the right time.

Richard Thomson MP thanked Kiara Zennaro, and handed over to **Ian Lewis**, Executive Director, Thames Estuary Growth Board

Ian Lewis introduced himself and stated that the TEGB aims to operate to a number of principles – not duplicating what is already happening, focusing on things that will have an estuary-wide impact, working with other regions and using their respective strengths, and being investor-led.

He noted the Thames Freeport cluster is now operational, and stated that the biggest challenge to decarbonisation flows from transport, noting the transport-demand density of the Thames Area. He then handed over to Helena Anderson, Co-Founder of Ikigai Capital.

Helena Anderson congratulated Kiara Zennaro on her presentation and noted the difficulty in different demand streams and calculating how much hydrogen is needed in a particular area. She noted the outcomes of the TEGB work, stating that it was based on factors such as the size of the potential market, technology readiness, competitiveness and capacity of the supply chain, competition from alternative fuels/technology, policy support and flexibility. She stated that the most important use of hydrogen in transport is in heavy goods and maritime.

She noted TEGB's two main workstreams. The first is the development of an ecosystem and delivery map for hydrogen, encouraging investment into it based on more mature technology.

The second workstream is in living labs, supporting technology in Technology Readiness Levels 3-7, where there is a concept but not yet a prototype. This is not just about Thames Estuary, but about rolling it out to hydrogen valleys nationwide. We need to be delivering hydrogen in valleys all across the UK.

The conclusion of the TEGB research was the need to break the Estuary down into separate smaller clusters. They are now working with stakeholders on potential adjustments and how to move across to hydrogen across various sectors.

Richard Thomson MP thanked Ian and Helena and welcomed **Juergen Maier**.

Juergen Maier introduced himself and set out that the Northern Powerhouse Partnership's ambition is to work with the national and local governments to create prosperity and 'level-up'. He stated that they see hydrogen as a key opportunity for growth, both as a key technology to drive net zero and through development to create a new hydrogen economy. He stated that he agreed that it was a multi-technology issue at heart, noting for example its use in furnaces and glass production.

He stated that the opportunity to create these industries is definitely open now, adding that we could do better in rolling out hydrogen locally. He stated that investment and scaling up is critical to avoid losing out versus the US and Germany for example, expressing concern at limited hydrogen facilities in UK. He agreed with Helena Anderson that the best way to scale up is to create new demonstrator projects, aka 'sandpits'.

He stated that the Government should be investing further to grow the market by stimulating market mechanisms, as the Government did for offshore wind with the Contracts for Difference scheme. He called for a cross-UK strategy for scaling up the hydrogen economy and for more long-termism. He stated that the Heat and Buildings Strategy doesn't really give a long-term view; while the incentives around heat pumps are great, he doesn't really see a long-term strategy in terms of creating the skills environment and helping installers, noting the superior system in place in Austria. He called for a 'huge dose' of long-termism, and additional help for local authorities to help create the skills ecosystem, whether around heat pumps, hydrogen boilers or other tech. In summary, there are huge opportunities, but we need to scale up and have a proper long-term view.

RT thanked Juergen Maier and invited Dame Rosie Winterton MP to ask a question.

Dame Rosie Winterton MP asked, on behalf of a company in her constituency that manufactures green hydrogen, if it would be possible to develop a green hydrogen strategy and asking Juergen Maier if the NPP could support them.

Juergen Maier said there is a role for all forms of hydrogen but said that the more focus on green hydrogen the better. He noted Germany's ambition in this area, and called for greater ambition from the UK. He said the NPP would be visiting the company Clean Power Hydrogen in her constituency soon, and agreed that more needs to be done from Government to support these companies and other companies in their supply chains.

Helena Anderson added that it is important to note what stage in development a company is that you are looking at. For example, is it still in technology development or at the scaling-up stage? There can be no one-size-fits-all approach.

David Cowdrey asked if the focus on heavy industry in Helena Anderson's presentation is down to cost.

HA said it is down to cost, as there is a tipping point at around 7 tons for a vehicle where batteries are no longer effective due to weight and hydrogen becomes the most efficient fuel. The same issue is present in any long-haul transport.

Richard Thomson invited Seena Shah to ask a question, asking if the Government is doing enough to eradicate policy gaps that prevent hydrogen infrastructure development from moving forward.

Kiara Zennaro said they are not doing enough, they need to be more ambitious on targets and accelerate development.

Ian Lewis said that the Hydrogen Strategy didn't do enough on generating demand, we need to go further.

Helena Anderson and Juergen Maier both agreed with Ian Lewis, with Juergen Maier adding that there is nowhere near enough emphasis on local infrastructure development.

Richard Thomson MP thanked attendees and ended the discussion.