



# PGES

All-Party Parliamentary Group  
for Energy Studies  
Founded in 1980

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## PGES Speaker Meeting 17<sup>th</sup> November 2020

**Dr. Mark Selby, FEng, Chief Technology Officer, Ceres Power Limited**

### **CLEAN ENERGY FOR A CLEAN WORLD**

*Ceres Power is a leader in the electrochemical technology sector enabling the world's most progressive companies to deliver clean energy at scale and at speed. We pioneer advanced hydrogen production and use technologies - electrolyzers and fuel cells - and embed them - through licensing manufacturing and system design - in to our partners organisations to meet their strategic imperative to transform to clean energy. Today those partners include some of the largest and most active global companies in decarbonisation: Bosch, Doosan, Weichai, Honda and others.*

*Hydrogen, today, accounts for about 4% of final energy demand globally, and over 95% of that is generated from fossil fuels. So the first thing is hydrogen today is not very green yet but it can be and there are technology solutions to that and decarbonizing hydrogen and producing green hydrogen is a huge commercial opportunity for the UK. Credible estimates from organisations like Goldman Sachs, McKinsey, or the Hydrogen Council for the value of a 2050 Hydrogen Industry range from 2- 12 trillion dollars, Oil & Gas is around 3 trillion dollars today. Other countries government believe these estimates and have announced huge Hydrogen specific, post-COVID, stimulus packages: \$14Bn from South Korea, €9Bn from Germany, €550Bn for Hydrogen from the EU amongst too many others to list.*

*The discussion in the UK with relation to hydrogen is relatively limited to Heat and Transport but this is not typical of the global conversation. More expansive visions for how Hydrogen decarbonises the parts of the energy system that electricity can't reach are live and being invested in. These include global shipping, steel production and fertiliser production amongst others. Thinking about UK solutions to UK problems in a particular way that means we can tack on a few jobs in the supply chain in SME's is really not going to cut it. When you think about the scale of opportunity decarbonisation presents, that is a staggeringly unambitious goal and probably means we will be overtaken by solutions from around the world much like the first phase of wind deployment.*

*Ceres Power's business model means we are reaching out to those advanced hydrogen economies to harvest value created in SME's and the UK Science Infrastructure over the past decade. We have partners in all of those leading markets: Korea, Germany, Japan, China and have attracted £150 million in Foreign Direct Investment in the last 2 years alone. Ceres harvests that value back to the UK, to create really high value science and engineering jobs working at the cutting edge of industrialising materials science. Ceres has commercial proof that the UK can succeed in providing tangible solutions to a global problem solved in the UK.*

## **ceres**

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#### *Officers*

Alan Brown MP; Julie Elliott MP; Jim Shannon MP; Taiwo Owatemi MP  
The Rt Hon Lord Hunt of Kings Heath OBE; Lord O'Neill of Clackmannan;  
Lord Oxburgh KBE; Lord Ravensdale; Lord Redesdale