

# Consultation Response

Tuesday 30<sup>th</sup> June 2020



## A Green Economic Recovery

*Labour Party consultation*

The Energy and Utilities Alliance (EUA) provides a leading industry voice helping shape the future policy direction within the sector. Using its wealth of expertise and over 100 years of experience, it acts to further the best interests of its members and the wider community in working towards a sustainable, energy secure and efficient future. EUA has seven organisational divisions - Utility Networks, the Heating and Hotwater Industry Council (HHIC), the Industrial & Commercial Energy Association (ICOM), the Manufacturers of Equipment for Heat Networks Association, the Hot Water Association (HWA), the Manufacturers' Association of Radiators and Convectors (MARC) and the Gas Vehicles Network (GVN).

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1. **What sectors do you believe are the priorities for investment from government, for a green recovery programme to build a stronger, more resilient future economy? How can this investment reduce regional inequalities as well as address the climate crisis and environmental degradation? And what science and technologies do we need to invest in?**

EUA believes that a key area for government investment will be the decarbonisation of heat in buildings. To date, many governments schemes in this area have been limited in scope and have not been able to reach those in fuel poverty on the scale required. Transforming the way in which we use energy in homes and buildings will be vital component of any Green New Deal and significant government policy attention and investment will be needed to achieve this.

The UK has an opportunity to become a world leader in hydrogen as a low carbon fuel for the future. Hydrogen could replace methane as the fuel transported by our extensive gas grid, the largest in the world. In doing so, we could decarbonise the fuel used by over 85% of households and many businesses for space heating and hot water. By leveraging the significant asset of Britain's gas grid, we can achieve decarbonisation in a way which is familiar to, and minimally disruptive for, consumers. Gas appliances are familiar to many consumers, both for heating and hot water production and for cooking. They are also popular with consumers reporting high levels of satisfaction with their gas heating systems and its ability to give them the level of comfort they desire.

Disruption would also be kept to a minimum as the vast majority of piping in homes is suitable for hydrogen and natural gas appliances could be swapped out for hydrogen ones. This process could be made smoother by the advent of hydrogen-ready appliances which would could be easily converted once an area was ready to move to a 100% hydrogen supply. Boiler manufacturers are already developed hydrogen-ready boilers which, if mandated from an appropriate date, would make switchovers even less costly or disruptive.

Using the gas grid to transport low carbon fuels therefore serves the dual purpose of providing consumers with a familiar and minimally disruptive fuel whilst also using, not losing, the significant asset of our gas grid. Switching to electric-only alternatives to gas appliances would not only necessitate a huge increase in electricity grid capacity with all the associated costs, it would also necessitate the costly mothballing of the gas grid. The grid provides the opportunity to gradually decarbonise by blending alternative gases, including biomethane and hydrogen, in with natural gas. The Hy4Heat study is exploring the potential of hydrogen to be blended up to 20% and used in existing gas appliances. A 20% blend could provide significant carbon savings; it is estimated that it would save six million tonnes of carbon dioxide a year, the equivalent of taking 2.5 million cars off the road.

Regional inequalities could be addressed partially through the creation of highly skilled, quality jobs, primarily in deindustrialised areas of the country and areas where there are existing skilled workers in the gas industry. This is backed up by a number of Labour MPs and Labour-affiliated trade unions who are already recognising and promoting the opportunities which hydrogen could afford. For example, Anna Turley, the former MP for Redcar, has been a keen supporter of a hydrogen economy which she sees as a key opportunity to replace lost skilled jobs in her area. Similarly, the GMB, UNISON, Unite and Prospect, collectively representing 200,000 workers in the energy industry, have all recently called on the Chancellor to begin formulating a UK-wide hydrogen strategy to generate jobs and support economic growth; they added that they believe hydrogen is key to the UK becoming decarbonised.

In order to become a world leader in hydrogen, the UK must continue to invest in research and development, feasibility studies and industrial trials. Positive progress is being made, with and without government funding, on proving the feasibility of hydrogen. However, the Government should be clear that it sees a future role for hydrogen as this would provide much-needed policy certainty, something which has been lacking for the future of heat, and could unlock further private investment.

The Government must also firmly commit to carbon capture, storage and usage, a technology which will be essential for the development of low carbon hydrogen and the decarbonisation of many other sectors. CCUS was a prime example of how government inaction can squander an opportunity for the UK to lead the way in a technology of the future. The cancellation of the CCUS competition in 2016, and the subsequent recommitment to CCUS last year, sent mixed signals to the industry and has undoubtedly set back its development by years. We cannot afford for the same mistakes to be made when it comes to hydrogen. With the EU and several European countries pressing ahead with the development of their own hydrogen strategies, the UK must seize the opportunity to lead the way in the development of a hydrogen economy and the opportunities for job creation and future exports which could come with it.

## 2. How do we support people who have lost employment during this crisis to move into environmental growth sectors? How can we ensure that such jobs are decently paid, with quality training, and offer representation by trade unions? What lessons can be learned from past programmes current support and international examples?

The concept of a 'green recovery' has gained significant traction since the pandemic's effects on the economy began to emerge. It is clear that constriction of public spending at this stage will

hamstringing the UK's recovery so investments in infrastructure and innovation will need to come forward. Assisting the transition to a net zero economy is an obvious focus for this investment, particularly if we are to meet our net zero target by 2050, or even earlier.

As previously mentioned, EUA believes that investments in developing hydrogen as a low carbon fuel for the future could provide significant opportunities for job creation. These jobs would be skilled, as those already in the gas industry are, and should provide the high levels of trade union representation currently seen in the energy industry. The fact that four major unions are backing a hydrogen strategy for the UK suggests that they believe investing in hydrogen could generate high quality jobs across the country which would be unionised.

**3. How should sector-specific support for business during this crisis be used to both protect and promote employment and to pursue our climate and nature objectives?**

Post-pandemic support for businesses could be made conditional on the expectation that they commit to reducing their carbon emissions, where possible, and produce a plan setting out their long term plans to decarbonise, where appropriate. Businesses operating in sectors which will be key to the transition to net zero, such as energy, should be incentivised to positively contribute.

**4. What is the scope for redeploying people from industries which are facing crisis? What are the models of retraining and support which should be examined? Do you know of examples of programmes which have been effective in enabling redeployment; and what can we learn from programmes that have not been effective?**

We have no comment to make.

**5. Given the regional and area-based impacts of this crisis, what role can a green recovery play in mitigating these impacts? What are the lessons of past environmental interventions in terms of local and regional impacts?**

A green recovery could play an important role in mitigating disproportionate effects in certain areas of the country. This can only happen, however, if the Government is willing and able to pinpoint areas suffering the worse effects and put in place appropriate support to minimise job losses and economic hardship. Areas which are particularly dependent on industries most affected by the lockdown will clearly need particularly close attention from government. In the energy industry, localised difficulties can arise from the closure of strategic sites such as the Rough gas storage facility which was closed in 2017.

**6. How can we help existing businesses, including SMEs, to adapt as a result of the crisis, including through measures for a green recovery? How can these measures be allied to the improvement of productivity and viability for these companies?**

We have no comment to make.

7. How can measures you are proposing in this recovery and renewal period improve quality of life—for example around walking, cycling and public transport, and improving access to nature? What habitats are you especially concerned about and want to see more support for and focus on?

We have no comment to make.

8. In providing responses to 1-7, please can you indicate to us what considerations of cost-benefit analysis are relevant (and, if such analysis has not been undertaken, what sources of information would be necessary to understand costs and benefits); and which institutions would be required to enable effective delivery? In particular, what is the role of public and private investment and different ownership models?

There are a number of projects currently examining the feasibility of hydrogen. Whilst cost-benefit analyses may form part of some of these projects, the key focus is on establishing how and when hydrogen could be deployed at scale across Britain's gas grid. The industry would need to establish the realistic likely cost of production hydrogen from both steam methane reformation and from electrolysis using renewable electricity. This information could then be used to estimate both likely costs for consumers and cost-benefit ratios, taking into account the overall value for the economy that hydrogen could provide.

The gas distribution networks will be central to answering these questions as progress on developing hydrogen technologies and products continues.

9. What are the key institutions including business, local government, trade unions who should play a role in delivering a green recovery? Are there particular lessons that should be learnt about effective delivery? Local people know their communities better than Westminster. What steps do we need to introduce to empower local communities to be able to tailor the provision to suit their needs?

Trade unions have a key role to play in shaping and promoting a Green New Deal. On behalf of their members and all workers in the energy industry, they can bring an important perspective on how we can reach our net zero target whilst safeguarding good quality, skilled jobs.

Local government also has a key role which we have seen already. Whilst central government has only begun speaking positively about hydrogen in the past 12 months or so, ambitious local councils have been blazing a trail on the future of energy for many years. For example, Leeds City Council has launched the H21 project to promote Leeds as the UK's first potential city to switch its gas network to 100% hydrogen. Significant time and resource has already gone into exploring this which has generated significant interest in the energy industry and the political sphere. Several of the Leeds MPs are working to help promote Leeds' work on hydrogen alongside Northern Gas Networks, an EUA member company. As stated in the question, local communities know their area best and therefore local government will be able to protect against a 'one-size-fits-all' approach emanating from central government in London. This approach has been mooted in the past, for example taking the form of all-out electrification of heating in the early days of the coalition government. Local government should be empowered and supported to make sure that the best pathways towards net zero for each part of the UK are delivered.

10. What other issues/points do you think are important? What are the COVID-19 challenges of delivering such a programme and how might they be overcome?

We also feel that transport will be a key area to consider alongside other sectors as we reduced our emissions in the coming decades. There will clearly be direct benefits to the health of millions of people if air quality is improved, for example by ending the sale of petrol and diesel vehicles in the 2030s. Of particular interest for members in our Gas Vehicle Network division is the conversion of HGVs away from diesel to sustainable and practical alternatives.

A large amount of governmental resource and policymaking is focused on promoting and incentivising alternatives to petrol and diesel cars and vans, in both Scotland the rest of the UK. This is understandable given the high proportion of vehicles in these categories, however, HGVs make a disproportionate contribution to stubbornly high transport emissions. UK-wide, HGVs emit 21% of total transport-derived nitrous oxides (NO<sub>x</sub>) and 16% of transport greenhouse gas emissions despite constituting only 5% of vehicle miles travelled and just 2% of vehicles on the road. These vehicles are causing significant air pollution issues, particularly in Scotland's cities, but alternatives to all-out electrification are needed as there are currently no commercially viable battery or direct electric HGVs.

Many of the Gas Vehicle Network's members are supplying biomethane-based gas fuels which significantly lower NO<sub>x</sub> emissions whilst also delivering CO<sub>2</sub> savings in excess of 80% or, in the case of newly developed manure-based gas fuels, savings of 100%. Notably, biomethane is already playing a significant role within the gas vehicles sector; figures recently collated by the Gas Vehicle Network show that during 2019, 78.2% of the gas fuels dispensed in the UK were renewable biomethane-based. This demonstrates that biomethane for transport is both viable and sought after in the commercially competitive HGV market.

Transitioning heavy commercial vehicles to renewable biomethane and, potentially in the longer term, hydrogen would decarbonise a particularly difficult to treat sector. These fuels would avoid the need for vehicles to carry bulky and heavy batteries in addition to their payload, or for costly and disruptive overhead cables to be installed along our road network. Again, the experience for the end user would be very similar to existing fossil fuel vehicles so consumer acceptance would be high and additional training needs would be minimised. Refuelling would also be safe, clean and simple to carry out.