

Written evidence submitted by Unite the Union

1. Introduction

- 1.1. This submission is made by Unite, the UK's largest trade union with over one million members across all sectors of the economy, including manufacturing, financial services, transport, food and agriculture, construction, energy and utilities, information technology, service industries, health, local government and the not for profit sector. Unite also organises in the community, enabling those who are not in employment to be part of our union.
- 1.2. Of particular relevance to this submission, Unite represents over 35,000 energy and utility workers; around a quarter of a million members in the transport industries and hundreds of thousands more in the various manufacturing industries. Unite also represents 68,000 construction workers who will hopefully be offered the opportunity to provide their services on terms and conditions that are commensurate with their skill set. Finally Unite also represents members in the oil and gas industry, in mining, in the chemicals sector and many others who face a future where we are moving away from fossil fuels into a more sustainable world where there current skills and experiences may be transferable into methods that help reduce the level of greenhouse gasses in our atmosphere.
- 1.3. In summary, the delays and prevarication and belief in a dash for gas have come home to roost. No more should we as a developed nation see family's struggling to stay warm and fed. Unite does not believe it is doing enough to help those now in fuel poverty. The line that we should or should not invest in fossil fuels and only in alternative energy sources is a false choice. Yes we need a predictable baseload from nuclear and tidal energy and renewables but we can still have our cake and eat it if there is investment in the right places. It is possible to extract hydrogen from natural gas without creating more emissions than would be produced if the gas was simply burnt. Methane pyrolysis of natural gas can be produce hydrogen and solid carbon that can be used in rechargeable batteries for example. CCS is developed enough and should be expanded as can create carbon sinks through the deployment of Direct Air Capture (DAC's) to undo the damage we have caused already and pull us back from the brink. But to break the bonds of fossil fuels the nation needs every amp of power it can muster calling for the need for wide scale emission and energy reduction schemes.
- 1.4. As a nation Britain was the home of the industrial revolution and as such has contributed far more greenhouse gasses (GHG) into the atmosphere as other less developed nations. Britain, therefore needs to act in solidarity especially as a nation with the financial stability to be a world leader in the battle against climate change. As a Union we will not allow working people across the world to be divided – in the workplace and as a country, must take the lead in contributing to tackling the climate crisis.
- 1.5. Where there are job losses there needs to be investment into Just Transition to ensure we have the skilled people to build and fit the air pumps, charging pints, install insulation etc so that working people do not pay the price for a crisis they have not created. These jobs have to be attractive to the workers displaced too with similar salaries, recognition, terms and conditions or these workers will simply migrate to some other employment or resist change. In short the world needs to revise its economy to stay below 1.5°C but there are ways to do this and ways to easily cause devastation. This is part of our fight to win stronger employment and trade union rights, sectoral collective bargaining and to end insecurity in work. Unite believe that there needs to be understanding of the future of their industry and role in supporting local communities. Unite supports efforts to realise a just transition for all, including those who may otherwise have difficult due to their self-employed status. Consequently Unite supports the idea of things like the a training fund for the offshore passport to be established as part of the North Sea Transition Deal to directly support workers, which can be accessed by all not just those directly employed.

2. **Consultation Questions**

Securing sustainable energy supplies and protecting households from high prices

- How effective will the Government's Energy Security Strategy be: at reducing reliance on oil and gas at the pace required to limit global heating to 1.5 degrees; securing alternative energy supplies; and protecting households from high fossil fuel prices?

- 2.1. Unite would argue that if the above was the stated aim of the government, they have failed miserably. Britain was the nation that started the industrial revolution that has caused the release of so much more of the total GHG's upon which the nation has flourished. As a nation we can again be a world leader and act in solidarity with less developed nations to ensure that no worker is adversely impacted by decisions taken to combat climate change. As things stand, however, if anything, the government has pushed through policies that will lock in the UK's dependence on a supply of natural gas. In pushing for the creation of more Grey and eventually Blue hydrogen generating facilities at Freeports rather, than electrolysis facilities or the development of methane pyrolysis¹. These Blue and Grey Hydrogen processes use natural gas as a feed stock and consequently link energy prices to the spot price of natural gas. While pyrolysis also uses natural gas it does not cause the release of GHG's, and potentially could mean we can use the reserves of oil and gas if regulated to end the emissions produced.
- 2.2. Grey Hydrogen is created when the raw gas undergoes Steam Methyl Reformation driving off the carbon from the methane, to create carbon dioxide (CO₂) and leaving behind hydrogen. The majority of the waste gasses which will include both CO₂ and any unreacted methane, propane, butane etc which are then vented to the atmosphere. In this process more emissions are released than would be the case if the gas was burnt naturally as energy is required to create the steam.
- 2.3. Blue Hydrogen is the same process as Grey Hydrogen except the flue waste gasses are bubbled through a CO₂ capturing medium before release. The CO₂ can then be placed into a tanker or pipeline for injection into a disused oil or gas well for long term carbon capture and storage (CCS). The process of extracting the CO₂ does not capture the other greenhouse gasses and requires considerable energy to create the heat to boil off the captured CO₂, so that the medium can be reused.
- 2.4. In both practices the process can create more GHG emissions, than are released if the gas was burnt naturally and may, according to one study, be worse than burning coal². It is possible to reduce the volume of emissions, however, by using waste heat from another industrial process to help boil off the CO₂ from the medium or create the steam. This could be from any industrial process requiring or generating heat, including nuclear power generation, ceramics, metal manufacture or glass to name but a few. And of course some of the hydrogen created could also be used to generate the heat.
- 2.5. Natural gas can be also be cracked in a similar way to oil leaving a solid carbon deposit and hydrogen through methane pyrolysis¹ but this process has yet to reach even a demonstration phase. If it was to become commercial the carbon could be utilised in silver carbon battery technology³ and leave a waste that is simple to store even above ground. If this process can be adapted to also process crude oil then we would have a way of having our cake and eat it, preserving thousands of jobs in the oil and gas industry and at the same time reducing emissions to zero. The key is to properly target investment from both the public and private sectors.

¹ See the article in Science Direct in a paper by Sebastian Timmerberg, Martin Kaltschmitt and Mattias Finkbeiner

[https://www.sciencedirect.com/science/article/pii/S2590174520300155#:~:text=Methane%20decomposition%20\(also%20called%20methane,from%20different%20sources%20of%20energy](https://www.sciencedirect.com/science/article/pii/S2590174520300155#:~:text=Methane%20decomposition%20(also%20called%20methane,from%20different%20sources%20of%20energy)

² <https://arstechnica.com/science/2021/08/blue-hydrogen-pushed-by-gas-companies-harms-climate-more-than-coal-study-says/>

³ <https://insideevs.com/news/405131/silver-answer-solid-state-cells-samsung/>

- 2.6. The alternative ways to create hydrogen include electrolysis of water or ammonia or extracting from animal waste and sewage leaving a clean supply of water and nitrate fertiliser⁴. These require a supply of electricity to perform this task which could be generated from the extra generation created from renewable energy above than needed by the grid at that time. The problem with hydrogen is that if burnt in a confined space in air it will create nitrogen oxides simply due to the heat involved in the process. Passing hydrogen through a fuel cell however reduces its emissions to just water and deoxygenated air.
- 2.7. At point of use hydrogen may not release any GHG's, it is therefore seen as a way to fuel everything from the manufacture of steel to road, sea and air vehicles to a replacement for gas in domestic heating. The problem is creating enough hydrogen and electricity to meet these demands if we do not use oil and gas. Currently without a reliance on fossil fuels we will fall a long way short of meeting these projected future demands.

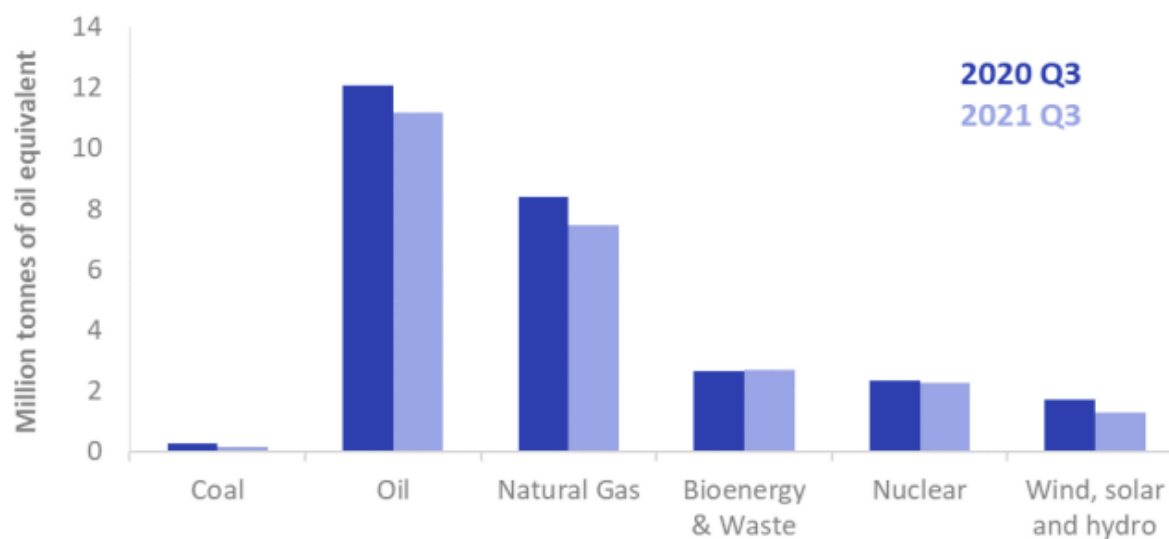


Figure 1 Source BEIS Energy Trends Statistics release 23 December 2021

- 2.8. As can be seen from the above graph⁵ the volume of energy created from Nuclear, Biomass, Waste and renewables is far lower than the amount of coal, oil and gas produced by the UK. Therefore if we are to replace all fossil fuels there needs to be a huge increase in these alternative energy sources.
- 2.9. Under emissions in line with current pledges under the Paris Agreement (known as Nationally Determined Contributions, or NDCs), global warming is expected to surpass 1.5°C above pre-industrial levels, even if these pledges are supplemented with very challenging increases in the scale and ambition of mitigation after 2030⁶. In order to stay below a 1.5°C increase in global warming the planet has no choice but to invest in measures to extract GHG's from the atmosphere. According to one study we have only enough capacity left for 15 more years of current GHG emissions before we reach the 1.5°C barrier⁷. The Glasgow pact signed at COP26 will only reduce emissions to at best 1.8°C of warming which will have some catastrophic

⁴ <https://www.farmonline.com.au/story/6668499/new-tech-turns-manure-into-hydrogen/>

⁵ For the full report on UK power consumption and generation from which the graph was taken go to:- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1043234/Energy_Trends_December_2021.pdf

⁶ A quote taken from Chapter two of a IPCC report <https://www.ipcc.ch/sr15/chapter/chapter-2/#:~:text=Under%20emissions%20in,mitigation%20after%202030>

⁷ <https://www.carbonbrief.org/analysis-how-much-carbon-budget-is-left-to-limit-global-warming-to-1-5c#:~:text=Millar's%20estimate%20of%20the%20carbon,emissions%20at%20our%20current%20rate>

impacts on the world's climate and may be enough to trigger a runaway climate changing event from which we will not recover.

- 2.10. Additionally a policy of achieving a Net Zero outcome by 2050 requires not only reductions of GHG production but the creation of carbon sinks to a scale that they balance the release of emissions that cannot be avoided. At present the UK is not investing anything like the amount needed into these natural and industrial methods of reducing GHG in the atmosphere. By industrial methods Unite refers to the process of using the same CO₂ capturing technology as described earlier only passing the air through the capturing medium, this is called Direct Air Capture (DAC). The problem as described is as highlighted previously, the need for energy either as waste heat or electricity to power the process.
- 2.11. The combined additional demand on the national grid for electrical power could be as great as 14 times the current levels of electrical power generation⁸. At the moment the government has only announced plans which might hold the potential of doubling our generation capacity. As has happened recently with the supply of electricity from renewables, building additional renewable capacity is no guarantee of electrical supply⁹. Connecting the UK to its neighbours will make it possible to import and export excess power but that is on the proviso that the neighbour you rely on has that power to spare. At present our neighbours are in a similar boat with some still reliant on brown coal power plants which they will need to replace, so are facing an energy crisis of their own. We learned from the current emergency that such is the dependence of Germany and Italy on Russian Natural Gas that they would not be able to keep the lights on without it yet we are building a UK to Germany interconnector which can transfer energy directly between our two nations.
- Should Government policies on onshore energy generation or exploration be revised in light of the energy security situation? Given the current and potential speed of deployment, what low-carbon energy sources are most likely to secure supplies of affordable and sustainable energy rapidly?
- 2.12. In light of the energy security situation, Unite believes that any and all sustainable options should not be removed from the table and that efforts should be employed to speed up the approval of new power generation, be they onshore wind, wave, hydro, tidal, solar, nuclear etc. It currently takes ten years to obtain approval for a new nuclear facility in this country before the construction phase can begin. By the time the facility is finished and can switch on the technology has moved on, as has the energy crisis. Whilst it is faster to construct a wind turbine than a nuclear power station you need both and in an ideal world you need both to be operational yesterday.
- Is the Government doing enough to protect the high number of households likely to fall into fuel poverty as a result of high fossil fuel prices over the coming year? To what extent, and how rapidly, could energy saving or efficiency measures help to reduce reliance on oil and gas and relieve fuel poverty?
- 2.13. Unite does not believe it is doing enough to help those now in fuel poverty. These energy companies forward purchased supplies of gas and oil six months to a year prior to the recent spike in fuel prices. As a result they are obtaining a massive unexpected windfall of profits which the government could apply a windfall tax upon which will not impact their forward investment plans which should have been budgeted for some time prior to the current crisis. In France the energy regulator did not allow energy prices to climb by more than 4% and at the same time placed upon the energy companies the obligation to build new nuclear power stations. In the UK we have seen energy bills more than double for consumers and if Ofgem allows the cap to increase again in October will see the bills growing even further. At this rate all but the top earners will avoid fuel poverty status.

⁸ If based on the assumption that we do not expand our populations needs, invest in DAC and do not use any energy from oil and gas, reducing our emissions to zero.

⁹ In Q3 2021/22 the weather conditions meant there was not enough wind to provide enough power from renewable energy sources despite an increase in capacity, so the grid had to rely on imports and the use of coal once more.

- 2.14. Energy Saving measures can have a dramatic impact on the amount of energy consumed but it often requires investment into insulation and education into techniques to reduce bills. i.e. boiling an extra 1 litre of water more than is needed in a kettle uses enough energy to keep an led light bulb lit for around 10 hours. Computers have transformers in them that can draw over 1000 Watts of power so leaving them on or leaving TV's, stereos, set top boxes and phone charges and any other device with a transformer in it plugged in when not in use could continue to draw power.
- 2.15. Unite and other trade unions have advocated for the introduction of recognised environmental reps in workplaces to help companies reduce their energy consumption. If these reps had some automatic right to facility time in a similar way to health and safety reps they could work with employers to help educate workforces into energy saving measures. Once these simple skills are learnt from such courses in workplaces, it is hoped these employees can apply these techniques at home or whilst out driving.
- 2.16. Education and insulation can go a long way but neither can address the substantial increase in the price of food and clothing in the shops nor will it reduce rents and mortgage payments that add to the burden of households. Unite therefore supports the Labour Party's position on applying a tax on these windfalls to help families in need meet their bills.
- Which elements of the International Energy Agency's 10-point plans to Reduce Reliance on Russian Natural Gas and Cut Oil Use are relevant to the UK and which could the Government seek to implement as a priority?
- 2.17. In the below, Unite stresses our response to each of these key points. Firstly we only have a few gas supply contracts with Russia in the UK with the majority of our imported gas coming from Norway so for the UK reducing our dependence on Russian gas and oil is far more simpler than some nations. Secondly sourcing supplies from nations other than Russia will be what every nation will be trying to do which will mean an increased price for gas. As a result the UK may need to be concerned about supplies from Norway being diverted in future.
- 2.18. There is still not enough natural gas storage in the UK and as a result the UK is forced to sell its gas to Europe in the summer when prices are normally low and then buy those supplies back in the winter when they are needed and prices are high. This situation is one which Unite and its predecessor unions have stated repeatedly for decades with not enough action being taken.
- 2.19. In this response Unite has covered the use of alternative energy sources earlier but highlighted that these take time to clear regulations, scrutiny and be constructed, in some cases up to 20 years before the power can be switched on. Such legal and regulatory hurdles need to be streamlined so we can produce the power we need sooner.
- 2.20. The UK is already stretching out the generational capacity of nuclear power stations beyond their designed lifespan to provide the cushion we need to build the fleets replacements. As things stand, however, by 2035 the UK may only have the one working power station at Hinkley Point. The government has given its consent for large new reactors to be built and for 11 small modular reactors but they have ten years of legal paperwork, consultations and planning to overcome before they can break ground. As stated earlier this needs to be streamlined so we can start construction sooner. The commitment to 8 sites, to include 8 SMR reactors on Anglesey and 24 GWe is not enough to meet the growing needs of the nation.
- 2.21. Biomass can be expanded at Drax by employing more of their old coal fired boilers. The issue is that Biomass is not zero carbon, creates powerful GHG's during pellet production, transportation and during combustion. It is only when combined with CCS that a Biomass plant comes into its own as a potential carbon sink. Had the government pressed ahead with the White Rose project and not withdrawn its investment the pipeline may have been in place by today benefiting not just biomass but other industries like ceramics, glass and paper production.
- 2.22. As stated Unite would welcome measure to shelter the more vulnerable electricity consumers from higher prices and a raid on their unexpected windfall profits could help.

- 2.23. Heat Pumps do offer a very energy efficient alternative to gas boilers but their production costs are currently high, there are not enough engineers skilled to fit them and the additional power requirements will also require domestic property supplies to be upgraded to cope with not just the demand for power for electrical heating but also the power needed to recharge electric vehicles (EV's). Consequently if there is a wholesale move from gas boilers to heat pumps and EV's the grid itself both nationally and locally, to homes and businesses needs upgrading.
- 2.24. As highlighted earlier Unite agrees that a programme to insulate and improve the energy efficiency of homes is needed but again there is a lack of skilled workers in this area. The trade union movement has been calling for workers displaced as a result of the closure of high carbon industries to be retrained to fit insulation, heat pumps, smart meters, and other energy saving activities. As a nation we should be investing in UK based jobs, conditions on paying full UK tax and the enforcement of international law, environmental concerns, equalities, skills and apprenticeships, prevention of modern slavery and the promotion of mental health and wellbeing.
- 2.25. The ILO's vision of a just transition is broadly in line with the above stated aims and is primarily positive. It states that we need a bridge from where we are today to a future where all jobs are green and decent, poverty is eradicated, and communities are thriving and resilient. More precisely, it is a systemic and whole of economy approach to sustainability. Vic Van Vuuren, Director of the ILO's Enterprises department has stated that ***"For the ILO, a just energy transition is urgent, indispensable and possible. [...] There is clear evidence that there will be more gains for the economy and people than losses." "A just transition is about maximizing economic and social gains, while effectively managing the risks in the economic, technological and social transformation"***¹⁰. In other words we need a method of capturing the skills of all those losing their employment and if required retrain them so that we have the workforce we need in future to perform all the earlier stated goals. It is estimated that we may require as many as 1.5 times the current level of employment in a green economy and we cannot therefore standby and allow workers to be thrown onto the scrap heap as has been the case with the coal industry. Equally Unite believes we cannot afford for pay, terms and conditions to be undermined by semi-skilled or untrained agency workers or those on zero hours contracts performing the tasks of highly trained professionals. The highly skilled workers receiving salaries commensurate with their position would not be happy moving to a job on reduced terms, conditions & collective bargaining rights, particularly if there is a loss of earning potential. If there is such a diminution of their living standards there will be resistance to change which the nation and planet cannot afford.
- 2.26. This is part of our fight to win stronger employment and trade union rights, sectoral collective bargaining and to end insecurity in work. Unite believe that there needs to be understanding of the future of their industry and role in supporting local communities. A recent report commissioned by the STUC - 'Green Jobs in Scotland - estimates that with the right policies and funding in place, Scotland alone could see job creation in the region of 156,000 - 367,000 jobs. And as part of Unite's plan to save and create UK green manufacturing jobs, we estimate at least 10,000 new jobs would be created by the end of the decade, with another 10,000 anticipated by the creation of a centralised transport and storage industry in the North Sea. With proper government support, a total of 68,000 jobs could be created in the UK by 2050, providing a boost to our country's output of almost £3 billion, including a significant chunk paid out as workers' wages.
- 2.27. Turning down the thermostats of all buildings, will by definition, save energy but there comes a point where heating will be needed. Consequently, this is just one element in the battle to reduce emissions.
- 2.28. Currently the UK like the EU have reserve capacity in play to meet the supply needs of the grid should renewable energy sources fail to deliver. In a number of cases this takes the form of a gas powered power station with the turbines powered but the circuit breakers left open until the power is needed. In order to replace such supplies stored electricity could be deployed instead where they are recharged from the grid when the power demands are being more than fulfilled by

¹⁰ https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_826717/lang--en/index.htm

over generation. Nuclear and 'Pink Hydrogen' generation could also provide such a buffer using nuclear energy to generate hydrogen through electrolysis. This hydrogen could be stored until needed and then passed through a series of hydrogen fuel cells creating both the energy required, replenishing the electrolysis water supplies and creating a supply of deoxygenated air, a mixture of gasses which can be used in a similar way to CO₂ fire extinguishers. Of course if excess hydrogen is created during the process it can be sold for use in transport of the creation of synthetic drop in fuels for things like long distance aviation¹¹.

Tax and the fossil fuel industry

- What impact will high prices for oil and gas have on production and the net zero transition? What are the pros and cons of a windfall tax levied on fossil energy producers? How should the revenue from any levy be allocated?

2.29. Unite believes that high energy prices will focus minds on ways to reduce their bill and hence accelerate the transition to reduced emissions. Unite does not believe that high prices will accelerate the transition to a net zero economy, however, as this would require investment into carbon sinks such as DAC deployment which can consume a lot of energy. The pros of a windfall tax have been discussed earlier in this response in that this was unexpected, resulting from prices increasing dramatically between when they were hedged (pre-purchase supplies at the price on the day for later delivery, up to a year in advance) and the date of delivery. Therefore these profits were not predicted or included in any energy company's forecasts and budgets as they arose as a result of the war between Russia and Ukraine and hence should not impact any stated investment plans. The cons are that soon the six monthly or annual hedged supplies are exhausted, the industry will then have to pay the new market rate for gas and oil, and the windfall profits can help to reduce their impact on the finances of these companies. Unite is not advocating that all of the windfall profits are simply handed over to the government but that a one off windfall tax is applied which will help share the impact between the energy companies and their customers. Unite believe the revenue should be deployed at least in the short term towards helping those who are on the lowest household incomes first and then toward investment into carbon reduction technology.

- Should the Government continue to provide tax reliefs or financial support to the fossil fuel industry, such as the ring-fence corporate tax relief for new oil and gas fields?

2.30. Unite does not believe for environmental reasons that the government should 100% support the fossil fuel industry. As highlighted we as a planet are already reaching the end of our emissions limits if we are to keep global warming below 1.5°C. With nations such as India still dependant on coal opening up more sources of fossil fuels would be the potential death nail for life as we know it on this planet. Unite represents oil and gas workers but recognises that there are no jobs on a dead planet. Instead Unite campaigns for a just transition of these workers into roles that can help achieve a carbon free economy and provide them with a similar standard of living. Vulnerable workers especially in smart meter installation are currently being urged into transition on the cheap, and install heat pumps and EV charging points, being manipulated to demarcate industry standards which will affect others sectors. Unite believes that we need to avoid any confusion and that national industry standards remain integral.

- How can Government phase out support for fossil fuels whilst most effectively supporting households through the transition?

2.31. Unite would argue that the first step is to provide the training needed for workers to transition into careers that will help tackle climate change and support households such as the increased production of heat pumps, solar water heating, solar pv panels, insulation etc. Unite would then suggest offering loans to householders to enable the purchase of heat pumps and insulation with the repayment cost added to the energy bill. If spread over enough years the saving from the

¹¹ Sustainable Aviation Fuel (SAF) is currently seen as the only solution which can be offered to overcome the carbon reduction hurdles of flights over 4,000 km.

reduced demand for gas will more than compensate for the enhanced price of electricity. If the government borrows the money it can be obtained at a far lower rate of interest. Similarly those in rented accommodation could temporarily have their rent or local authority rates increased slightly to repay the cost of the heat pumps. If the Government or local authorities made a bulk order purchase of enough air source heat pumps or insulation to go round it could obtain a substantial discount to an individual making such a purchase and help develop the business into the scale needed for the bulk supply of this equipment. Unite would caution against leaving this to the market to decide upon given the shambles that happened following the roll out of smart meters. Of course if these loans were administered at a local authority level, the authority would need to be supported in this endeavour centrally from HM treasury and not expected to meet this additional burden from existing resources.

The transitional role of oil and gas in the energy mix

- Can the UK's oil and gas reserves be exploited while limiting global temperature rises to 1.5c in line with the Paris Agreement?

2.32. As highlighted we have around 15 years' worth of emissions at their current level and then the planet will exceed the 1.5°C level. Yes natural gas can be converted to Blue Hydrogen and the CO₂ can be injected back but into the hole from where the oil and gas was extracted, the challenge would be to find a way to better convert the natural gas so as to leave nothing but solid carbon. As highlighted earlier Methane decomposition¹² (also called methane pyrolysis or methane cracking) is a chemical process splitting methane, or in general hydrocarbons, into its elemental components hydrogen and solid carbon which can be stored far more easily than in old gas and oil wells. The problem is upscaling the process to commercial levels is possibly years away. If this process does prove viable at a commercial level then the gas reserves could prove to become a game changer. Equally it is possible to turn coal into coal gas and in a similar way to convert crude oil, if these processes are combined it may technically be possible to utilise both fossil fuels but also reduce emissions to zero. The key is to invest into the science and develop the technology.

- Is carbon capture and storage technology sufficiently mature to be deployed at scale in the necessary timescale? What economic opportunities are there in carbon capture in the North Sea? What risks are there to relying on carbon capture technologies?

2.33. Unite believe CCS is and there a many economic opportunities it provides, especially in selling storage capacity to nations without such an array of geological storage options. The main risk associated with carbon capture is ensuring that none of the stored carbon escapes. In Iceland this problem is solved by combining the gasses to be stored with a chemical mix which converts the CO₂ into limestone¹³. If converted to solid carbon and this is not used for industrial purposes, it is easily stored. The process to capture carbon has been around since the Second World War, the trick is providing the energy without releasing any further emissions.

- While the UK continues to use fossil fuels during the transition to net zero, how significant is the environmental or carbon benefit of exploiting domestic oil and gas reserves compared to importing fuels from other major suppliers?

2.34. In general as explained earlier the UK does not have enough gas storage facilities for oil and gas and hence buys natural gas frequently from the market in the winter at a higher price than it is forced to sell its excess production in the summer. Unite believes that the best place for oil and gas reserves is in the ground until such time as they can be used safely without damaging the environment, Currently, however, the UK economy is sadly dependant on the flow of these

¹² See the article in Science Direct in a paper by Sebastian Timmerberg, Martin Kaltschmitt and Mattias Finkbeiner

[https://www.sciencedirect.com/science/article/pii/S2590174520300155#:~:text=Methane%20decomposition%20\(also%20called%20methane,from%20different%20sources%20of%20energy](https://www.sciencedirect.com/science/article/pii/S2590174520300155#:~:text=Methane%20decomposition%20(also%20called%20methane,from%20different%20sources%20of%20energy)

¹³ See the BBC coverage <https://www.bbc.co.uk/news/world-43789527>

hydrocarbons, which, at the end of the day, do support thousands of highly skilled jobs. As a result any transition to an economy free from fossil fuels will require retraining for these workers so they can move into secure employment reducing emissions through a Just Transition process into similar paying jobs.

- Is the North Sea Transition Deal structured appropriately to meet net zero goals and support a 'just transition' for those working within the oil and gas sector in the UK? Is there sufficient independent oversight of the Deal?

2.35. Unite believe that more oversight is needed especially from the trade unions representing not only the oil and gas workers but also the industries into which these members will transition to ensure that these workers do not undermine and erode existing rates of pay, terms and condition agreements. Commercially, there is always a temptation to race to the bottom to get things done on the cheap but doing so in this instance could undermine the whole transition process and undermine any efforts to encourage workers to buy into the roles that are so desperately needed.

2.36. Unite supports calls for: An Offshore Training Passport which will allow workers to move freely between offshore and onshore energy sectors (i.e. renewables, oil and gas, and decommissioning) with a standardisation of certification across roles and sectors, and clarity that a certificate in date does not need to be repeated. This should be accessible to all workers, including ad hoc contractors. Unite supports the call for a training fund for the offshore passport to be established as part of the North Sea Transition Deal to directly support workers, which can be accessed by individual, self-employed and contract workers rather than only through employers.

- Is the North Sea Transition Deal genuinely compatible with the UK's current domestic carbon targets and international obligations? How rigorous is the proposed Climate Compatibility Checkpoint for new oil and gas fields?

2.37. Unite believe that the transition deal is not compatible as it envisions the exploration for more oil and gas at a time when the technology is not developed enough to more sustainably exploit such potential resources. In any event any new find may take years to develop by which time we may be approaching the limit of emissions globally if we are to remain below 1.5°C. Currently following the Glasgow COP, the nations have agreed to limit emissions to 1.8°C which would cause wide spread changes in our climate and sea levels that could destroy our way of life. The UK has the opportunity to develop the technology for export and lead the way in developing alternatives to carbon and fossil fuels but these are not even considered in these proposals.

2.38. Unite believes in the need to develop a sustainable economy that includes an energy policy focussing on these areas to both protect existing jobs and ensure skills utilisation, while embracing new opportunities in emerging markets such as carbon capture and storage (CCS) projects. This requires:

- **A government led industrial strategy where jobs and communities are protected and supported by public investment and ownership, including a transition commission where workers' voice is represented**
- **A dedicated, fully funded department of government whose sole focus is on a green economy and a Just Transition in, and for, the UK**
- **Trade Union engagement and involvement at national, regional and sectoral level to support industrial strategies to deliver a just transition for workers**
- **Public policy and investment to secure a positive future for workers in affected industries and communities with targeted economic investment in industry cluster areas**
- **Identification and strategic planning to support green jobs that workers in affected industries will transition into**

- **A skills transition policy with job and income and job protection for workers while developing any new and necessary skills**
- **Supportive industrial relations landscape with access to workplaces for trade unions supporting fair work and good quality jobs**

3. Conclusion

- 3.1. Unite believes a good start to this process would be the granting of facility time to recognised workplace environmental reps, and a greater use of education to show how savings can be made. Equally a windfall tax would help those in need. The challenge is to develop the technology so we can use our fossil fuel reserves without exceeding 1.5°C and undo the damage already caused through a truly just transition of workers and their working practices.

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