"I will not cease from mental fight,
nor shall my sword sleep in my hand,
till we have built JERUSALEM"

Environment QUARTERLY

Issue 6

JIM MOWATT,
Director, Unite the union
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unite
the UNION

Foreword

Jim Mowatt - Director of the Unite Environment Taskforce

The climate crisis demands, in my view, that we in the union need to be ambitious. Quoting George Bernard Shaw when addressing the Irish Parliament in Dublin in 1963, President John F. Kennedy summed up an approach to life."Other people" he said "see things as they are and ask why? But I dream of things never were, and I ask why not?"

There are no insurmountable obstacles to frustrate us achieving our ambition to meet the targets of the Paris Agreement, the legally binding international treaty on climate change. The goal is to limit global warning to well below 2, preferably to 1.5° Celsius.

Technologically, even today, that target can be achieved. As with today's industrial struggles, we can learn and gain confidence from our understanding and application of our knowledge from history.

In 1905, in the USA only 2% of transport was motor driven. Just 20 years later, 95% of all transport in the USA was motor driven: yet in 1905 there were no real roads, no petrol stations, no accessible refined fuels and no highway code!

In the UK, the conversion of 20 million homes in the late 1960s from "town gas" to natural gas from the North Sea was accomplished in 10 years! The obstacles to achieving Net Zero are POLITICAL, regulatory and commercial. Market forces and short-term self-interest -aka- Neo Liberalism are the barriers which can be removed.

UNITE's primary focus on Jobs, Pay and Conditions is the bedrock of "Just Transition". In the next issue of our Environment Quarterly, we shall be concentrating on what we are doing as a union - and intend to do - to achieve a Just Transition for our members across ALL sectors of the union. This climate crisis, as I explained to all the NISC meetings recently, impacts on each of our members on at least two levels. As a citizen with the cost of living repercussions, housing retrofitting, transport (fuel) and energy increases. And as a worker with employment restructuring creating job insecurity, redundancies and unemployment .

These are the reasons for my request of the National Officers, the NISC delegates and our shop stewards for updates on examples of employer-led initiatives to attack our members conditions, pay and even their jobs. Moreover I'm keen to harvest instances of our negotiators collective demands for job retention, skills acquisitions and retraining; hopefully we can benefit from the historic Lucas Combine Shop Stewards Plan for proposals for alternative work, products and services.

This issue, which is the result of the sterling work of Carl Jerromes and Adam Heppell, has as its cover an uplifting painting by Jack McLean, the renowned Scottish artist and writer. Jack presented me with the painting "Greening Grangemouth" to celebrate my 20 years as a National Officer. Foreseeing the monumental structural changes being imposed by the climate crisis on the then Labour Government, Jack argued for the unions seizing the initiative on the Environment.

In solidarity,

JIM MOWATT
Director,UNITE Environment Taskforce.

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An Introduction to the Sections included in EQ6

This is the sixth edition of the Unite Environment Quarterly. The aim of the publication is to provide an update on Unite the Union's actions in addressing climate change issues in the workplace and communities.

The readership of the publication includes Unite representatives, Unite members, Unite full time officials and other interested parties that would like to join Unite to address the impacts of climate change.

In this edition of the Unite Environment Quarterly there are six main sections.

These are:

- Section 1: Unite Industry Sector Environment Reports for Q3 & Q4 2022.
- Section 2: Retrofitting
- Section 3: Just Transition
- Section 4: Unite Environment Taskforce News Round-Up
- Section 5: The United Nations Conference of Parties 2022 – COP27
- Section 6: TUSDAC and TUSNE meeting notes

In Section 1, we have received Unite Industry Sector Environment Reports from the following industries:

- Automotive
- Civil Air Transport (CAT)
- Construction parts 1 and 2
- Chemicals, Pharmaceuticals, Process and Textiles (CPPT)
- CPPT – The Downstream Oil Distribution (DOD)
- CPPT – The National Oil Refineries and Terminals
- Docks, Rail, Ferries and Waterways (DRF&W)
- Energy and Utilities
- Food, Drink and Agriculture (FDA)
- Government, Defence, Prisons and Contractors (GDP&C)
- Local Authorities

Section 2 focuses on the Retrofitting of Homes and Buildings. The Unite Environment Taskforce has identified that the retrofitting of buildings is an area where Unite can have a major role in addressing the climate emergency and tackling the energy and cost of living crisis by making UK and Irish homes more energy efficient. This should reduce households and companies energy bills.

Section 2 includes the following information and reports from:

- The UK Government
- The Environmental Audit Committee
- The Unite North East, Yorkshire and Humber Retrofitting of Homes Taskforce
- Unite Environment Taskforce working with the City of Edinburgh Council (CEC) Unite Branch
- Scottish Trades Union Congress (STUC)
- The Greener Jobs Alliance
- Open University

- The University of Westminster

Section 3 continues our focus on Just Transition. Regular readers will know that a Just Transition is at the heart of Unite's approach to tackling the climate emergency. Section 3 includes the following information and reports from:

- The International Trade Union Confederation (ITUC)
- Unite's Just Transition motion at the 2022 Trade Union Congress (TUC) Conference
- Winning a Just Transition in the workplace – Evolving the Lucas Plan to address the climate emergency – Unite Environment Taskforce
- Leeds University Business School
- TUC

Section 4 provides a news round-up, with information coming from members of the Unite Environment Taskforce, alongside general information and reports relating to addressing climate change from:

- Unite Scotland
- Unite National Political Education department
- Common Weal's ScotWind report
- The Labour Party – A Fairer, Greener Future
- Labour's plan for the state to provide green jobs growth
- Global Carbon Capture Storage Institute
- International Energy Agency – Renewables 2022 report
- UK Government U-turn on Onshore Wind Farms
- UK Government giving the go-ahead for a new coalmine in Cumbria
- The rush for green jobs has led to 'left behind' regions in the UK
- Nuclear Fusion Energy Breakthrough

Section 5 presents reactions to the United Nations Conference of Parties (COP27) event that took place in Sharm-el-Sheikh, Egypt in November 2022. It includes three reports, a general report from the International Trade Union Confederation (ITUC), and two reports from union representatives that were part of the ITUC's UK delegation to COP27.

Section 6 provides summary notes from TUSDAC and TUSNE meetings that took place in Q4 2022. TUSDAC stands for Trade Union Sustainable Development Advisory Committee (UK). Members of the Unite Environment Taskforce attend the bi-monthly meetings of TUSDAC. TUSNE stands for Trade Unionists for Safe Nuclear Energy. Members of the Unite Environment Taskforce attend TUSNE meetings. Jim Mowatt, Director of the Unite Environment Taskforce, is the current Chair of TUSNE.

Since our last edition of the Unite Environment Quarterly, the Met Office has confirmed that 2022 was the UK's warmest year on record. The average annual temperature in 2022 was more than 10C for the first time, the national weather service said. The mean temperature across the 12 months was 10.03C, topping the previous all-time high of 9.88C in 2014. It means 15 of the UK's top 20 warmest years on record have all occurred this century, with the entire top 10 within the past two decades. Dr Mark McCarthy, head of the Met Office National Climate Information Centre, said: "It is clear from the observational record that human-induced global warming is already impacting the UK's climate".

The escalation of the Russia and Ukraine conflict now enters its second year. The most obvious effect that this conflict has had on environmental matters is on the issue of nations securing their energy supplies. Some EU nations import large amounts of Russian fossil fuels (oil, gas and coal) for their energy supplies, particularly Germany and

Italy. Outside of the EU, China is also a big importer of Russian fossil fuels. This has led to some nations contemplating expanding their fossil fuel supplies to secure their own future energy needs. This strategy goes against the recommendations of the Paris Climate Agreement and the International Energy Agency who have stated that fossil fuels should be replaced with alternative energy supplies in a timeframe that will allow nations to meet their net zero emission commitments by 2050. For example, renewable energy (solar, wind, hydro) and nuclear energy, replacing fossil fuel use in the recommended timeframe.

Russia's 2022 invasion of Ukraine has focussed attention on the importance of Russian exports of gas, oil and coal, both to the Russia economy and for the energy security of the countries that import these fuels. The UK and EU have introduced full or partial bans on Russian coal and oil. The UK will ban imports of Russian gas from the start of 2023. The EU has not agreed a ban on Russian gas but has introduced policies aimed at moving away from dependence on it.

In 2021 imports from Russia made up 4% of gas used in the UK, 9% of oil and 27% of coal. In 2021, imports of gas, oil and coal from Russian to the UK were worth a combined £4.5 billion. The UK Government has committed to ending imports of oil and coal from Russia by the end of 2022 and ending imports of gas from Russia "...as soon as possible thereafter." It recently legislated for a ban on Russian gas which will start on 1 January 2023. In October 2022, the seventh full month since the invasion, according to UK trade statistics, the UK imported £2 million of oil, but no coal or gas from Russia. This was the seventh month in a row with no Russian gas imports. In June 2022, the UK imported no fossil fuel from Russia for the first time since 2000 (when this data is available back to). Overall energy imports from Russia in the year to October 2022 were £3.36 billion.

The invasion of Ukraine in February 2022 has led to a significant shift in energy security strategies across Europe, as Western countries have moved to reduce reliance on Russian energy imports and Russia has restricted gas supplies to Europe. The UK Government is no exception, and the British Energy Security Strategy, published in April 2022, indicated a renewed focus on energy security issues. The strategy focuses on expanding domestic UK energy supply alongside commitments to completely remove Russian oil and coal imports by the end of 2022, and Russian gas "as soon as possible thereafter". The policies include plans to further utilise North Sea reserves. In December 2022, the UK Government announced the opening of a new coalmine in Cumbria, the first in three decades.

Despite the potential for nations to expand their fossil fuel reserves to increase their energy security following the escalation of the Russia – Ukraine conflict, the International Energy Agency (iea) has predicted that the increase in the use of renewables globally in the next five years (2022-2027) will be equivalent to the rise in their use over the last twenty years. This is highlighted in the iea's Renewables 2022 report.

As we mentioned in the last edition of the Unite Environment Quarterly, Unite's primary focus on the environment is to protect members as the economy begins to decarbonise. This will involve negotiating for a Just Transition in members' workplaces and communities to secure employment, pay, terms and conditions and appropriate training so that members can acquire the green skills necessary to secure employment in the green economy. The effectiveness of Unite's negotiations on behalf of members this year has seen some magnificent settlements. This bodes well for the present and future task for Unite to negotiate Just Transition agreements for members in workplaces and communities going forward, as our economy and society decarbonises.

Unite workplace wins

Rolls Royce car workers win record pay deal

Go North East bus strikes off after Unite secures pay deal worth up to 13.1%.

Section One: Unite Industry Sectors' Environment Reports (Q3 & Q4 2022): Automotive Sector

The following is an edited version of a report submitted to the Unite Environment Taskforce by Des Quinn and Steve Bush (Unite National Officers for the Automotive sector) and Ben Norman (Unite Researcher for the Automotive sector).

Ending the Internal Combustion Engine (ICE) Age - Winning the transition to Electric Vehicles:

The transition from internal combustion engines to electric and alternatively fuelled vehicles is the top priority of the automotive sector. Such a transition must defend and advance secure jobs, good pay, and hard-won conditions.

As the sector prepares for our November conference the automotive NISC has proposed that for any transition to be considered 'just' it must include the following:

- A commitment that every step of the transition will be negotiated through collective bargaining.
- Realistic estimates for the numbers of new green jobs, the quality of those jobs, their likely locations and timeline.
- Any UK public funding (i.e., in R&D) must come with obligations for UK manufacturing.
- Commitments to upskilling, education, and training and how this will be provided by employers and government.
- Comprehensive support for workers in the component supply chain – to defend employment, win new investment and secure an industry transition on workers' terms.
- Commitments to protecting and extending trade union collective agreements and the ability to organise our workplaces (i.e., extended recognition agreements.)

Over 800,000 jobs are directly linked to the UK automotive industry. The UK automotive industry is inherently multinational in terms of ownership, supply chains and reliance on exports. The industry has already completed the first stages of transitioning to become a low carbon sector, with the majority of manufacturers now producing at least one electric or hybrid vehicle. The largest employers such as Stellantis (the owners of Vauxhall), Ford and Jaguar Land Rover (JLR) have announced comprehensive strategies whereby every model will have an electric variant by 2030. This is the year that the UK Government's ban on the sale of new petrol and diesel engine – internal combustion engine (ICE) - powered vehicles comes into force.

From Vauxhall's Ellesmere Port plant to Ford's Halewood plant, from the Cummins' plants in Daventry and Doncaster and the JLR sites in Coventry, Birmingham, Halewood, and Solihull, Unite shop stewards and officers have won significant victories at the bargaining table. In each case investment in new models and products has secured jobs in critical workplaces which also sustain jobs throughout supply chains connected to the UK automotive industry. Significant challenges remain for the UK automotive industry. These include:

Competition for investment:

Mergers and acquisitions have been the major trend of recent years as large producers consolidate to grow market share and pool investment for the transition.

This leads to excess plant capacity, allowing employers to try and pit individual sites against each other for new investment.

Supply Chain:

Large car assembly plants and Tier 1 suppliers, who are often multinationals themselves, have developed green transition plans which the union is working to influence. However, there aren't developed green transition plans deeper into the automotive industry's supply chain, which is made up of around 2500 employers. These smaller companies in the supply chain network are often entirely reliant on single customers, and some currently make components which may not be required after 2030. An ongoing pilot project, led by Unite in the West Midlands, is mapping the supply chain of Jaguar Land Rover in order to identify such sites in their supply chain network. This is being done to prepare its business operations for the post 2030 period.

Jaguar - Land Rover (JLR) Head Office in Whitley, Coventry

Tier 1 suppliers are companies that supply parts or systems directly to original equipment manufacturers (OEM). Automotive parts, such as exhaust systems and brake cylinders, are manufactured by a variety of OEMs. Original Equipment Manufacturers are companies that manufacture and sell products or parts of a product that their buyer, another company, sell to its own customers while putting the products under their own branding.

Exports:

Eight out of 10 cars produced in the UK are exported overseas. Those car producers in the UK that choose to solely produce internal combustion engine (ICE) vehicles, are limiting the sale of their cars to markets that have no restriction on vehicle emissions after 2030. This currently includes the BMW Mini plant in Cowley, Oxfordshire and the BMW Engine plant in Coleshill, in North Warwicksire, that produces the latest generation three and four cylinder petrol engines. The EU imports the majority of cars made in the UK. The EU has increased its commitment to reduce vehicle emissions, with emissions from new cars and new vans needing to be reduced by 55% by 2030, instead of 50%. The EU also stood firm on its commitment to ban new ICE vehicles from 2035.

The second stage of the green transition for the UK automotive sector, goes beyond the introduction of electric vehicles (EVs). This is already happening at pace – albeit slower in the UK than elsewhere due to the lack of a supporting industrial strategy from the UK Government. Attention must now be turned to winning union-jobs in the emerging parts of the decarbonising UK automotive industry. The emerging parts of the green transition in the UK automotive sector includes UK EV battery manufacturing, EV battery recycling and hydrogen fuel cells production.

Unite is involved in ongoing negotiations with larger employers that operate in the emerging parts of the decarbonising UK automotive industry. These negotiations are centred around winning investment in new technologies to make the UK automotive sector greener, and to improve the pay, conditions and security of the workforce.

Gigafactories

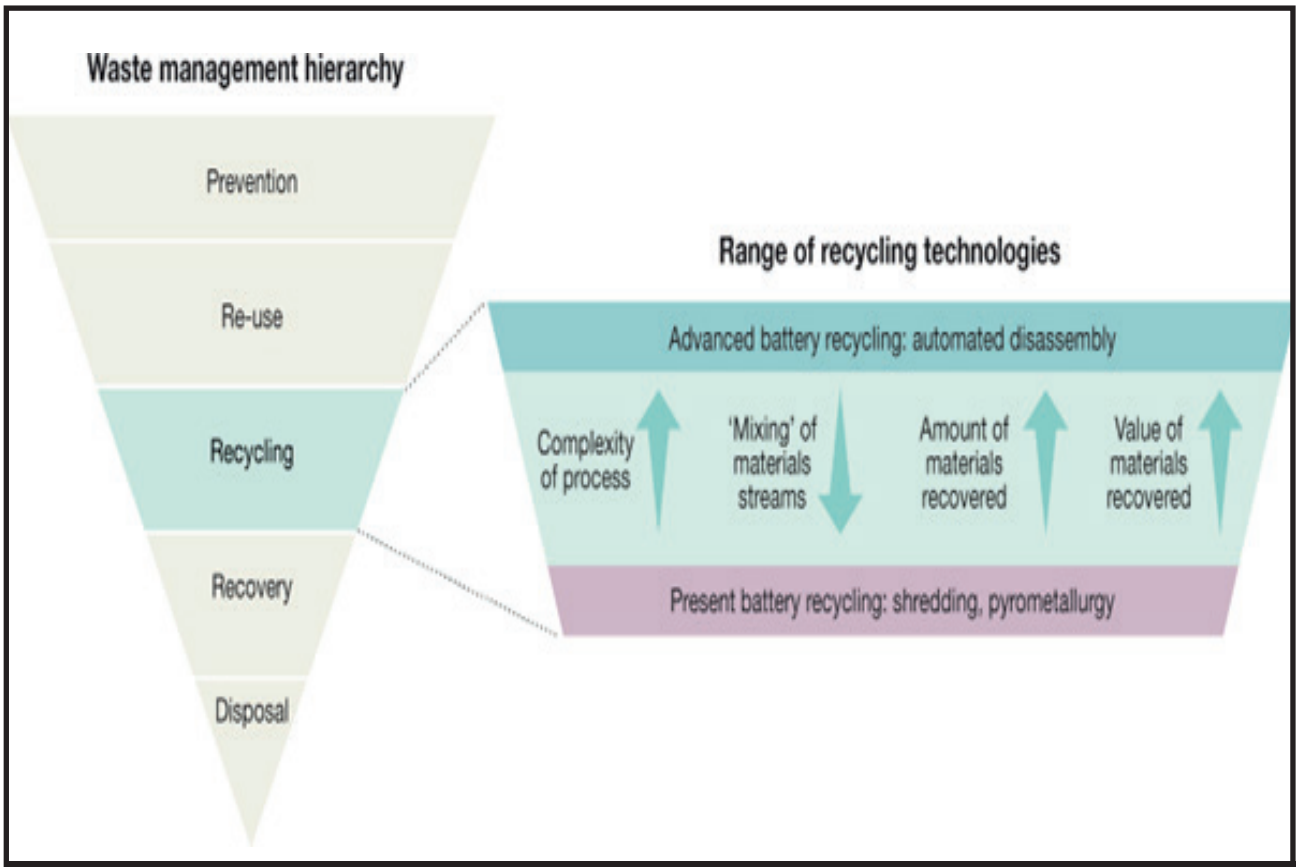
In the case of EV battery production, Unite has worked with the regional authorities developing plans for a West Midlands 'Gigafactory'. Unite has also initiated talks with BritishVolt about union recognition if their plans for a battery plant in Blyth ever materialise. The issue, especially for BritishVolt, is that new players in EV battery production are advancing plans based on support from venture capital without securing a sustainable customer base for EV batteries from UK vehicle producers.

Similarly, if any new companies are allowed to follow the Tesla model of operation, which is viciously anti-union, they would undercut pay and conditions across the sector. In the US, the United Autoworkers Union (UAW) faces an ongoing struggle with Tesla. Tesla is the only American owned automotive company that does not support workers being in a trade union. Cases of racism, sexism and workplace misconduct have resulted in Tesla workers trying to form a union in the company. However, Tesla's Chief Executive Officer (CEO), Elon Musk, has dismissed the idea of unions helping to protect workers' rights in the company.

The UAW reports that wages are lower in Tesla sites, and working conditions are significantly more dangerous. Tesla has already brought its business operating model to Europe. The new Tesla 'gigafactory' battery plant in Berlin (Gigafactory Berlin-Bradenburg) pays workers 20% less than the industry norm.

New jobs created in the emerging parts of the automotive sector (EV battery manufacturing, EV battery recycling and hydrogen fuel cells production), are not like-for-like replacements for those jobs lost in traditional manufacturing, and in the components supply chain. Specialist technicians will outnumber manufacturing roles. This will reverse the traditional occupation ratios in car plants and component sites. As a consequence of this, significant employer and government support will be needed for re-skilling and upskilling training to ensure that a maximum number of the existing workforce can successfully have employment opportunities in the industry's green transition. Unite's own research shows that 42% of its members in the automotive sector plan to still be working in the sector beyond 2030.

Elon Musk is the current Chief Executive Officer (CEO) of Tesla



'The waste management hierarchy and range of recycling options' - from 'Recycling lithium-ion batteries from electric vehicles, Nature (2019)

Battery Recycling

In 2017, over 105,000 EVs were on UK roads. It is anticipated that the first wave of lithium-ion batteries in EVs are now fast approaching the end of their 'first life' use. Currently, only 5% of EV batteries are recycled: P. Anderson, Birmingham Centre for Strategic Elements and Critical Materials.

The current lack of battery recycling has a negative impact on the environment. This is because it accelerates the scramble to extract nature's raw materials that are core components of EV batteries. EV batteries are based on lithium-ion construction, made up of lithium, nickel, cobalt, copper, and graphite.

It will become more economical to extract raw materials from first-use EV batteries when it can be done with economies of scale. It is estimated that this will happen from the mid 2020's onwards, when a lot of first use EV batteries become available. This should have the effect of reducing the extraction of nature's raw materials that are currently used in the composition of EV Batteries. This increase in EV battery recycling should be beneficial for the environment.

Automotive manufacturers like Volkswagen and Renault are already seeking a competitive advantage in the sourcing of raw materials for EV batteries, to help them increase their market share of the EV market. They are applying a 'closed loop' supply chain strategy in this area.

The Faraday Institute forecast that the process of recycling EV batteries could provide up to 12% of the demand for lithium for EVs. This is significant when UK demand alone will exceed 80,000 kilotons of lithium by 2035.

In Germany, Volkswagen has opened their first EV battery recycling plant, in Salzgitter. They have plans to recycle up to 3,600 battery systems, equivalent to around 1,500 tonnes each year during the pilot phase.

Volkswagen is looking towards the end of the 2020's, when first-use EV battery numbers returning from the market will be even higher. This will provide them with opportunities to recycle EV batteries more economically as scale economies will be even greater. By the end of the 2020s, the Volkswagen Group have set the target of increasing the amount of raw material reclaimed from first-use EV batteries from 53% to 97%. The Volkswagen plant in Salzgitter, along with sourcing agreements and joint ventures with Ganfeng, Umicore, Vulcan and 24M Technologies are aimed at securing most of Volkswagen's lithium supply chain requirements.

In France, Renault is working in a consortium with Veolia and Belgian chemical firm, Solvay. While Renault is only currently recycling hundreds of EV batteries each year, it has set the ambition of capturing 25% of the European EV battery recycling market. This number is far in excess of Renault's own current EV production.

This means Renault will be able to use recycling to source materials from the vehicles of their competitors. Were a UK company to adopt such an approach, it too could source materials from a growing domestic battery supply beyond its own production.

A precedent for UK sites is also set by Renault's 're-factory' at Flins (Paris), Europe's first circular economy plant. With a target of reaching negative carbon emissions by 2030, the site is being repurposed from manufacturing towards four new growth areas by 2024. The site will be organised into four areas: Retro-fit, Re-Energy, Re-Cycle and Re-Start. The Flins 're-factory' has increased employment opportunities, and is set to sustain 3,000 jobs by 2030.

Across the industry, the demand for the core materials for EV batteries has increased in line with the growth in demand for EV batteries overall (+100% Year on Year in 2021). The supply of lithium is identified as the main roadblock for further growing the EV industry, both in the short term and beyond towards 2030. Therefore, any contribution that EV battery recycling can make towards a sustainable lithium supply – estimated to be as much as 12% - is invaluable to the green transition in the UK automotive sector.

The Renault Group is working in a consortium with Veolia and Solvay, recycling hundreds of EV batteries each year

An academic study in 2014 considered the conversion rate to stand at 28 tons of used lithium-ion batteries, equivalent to 256 used Battery Electric Vehicles (BEVs), to produce one tonne of lithium.

In terms of the demand for lithium from one major producer alone, we can look at the example of Ford. In 2019, Ford sold 1,331,300 vehicles in Europe, including 355,000 in the UK.

If Ford wanted to maintain its current market position in Europe and the UK, but switched to producing only EVs, its demand for lithium to produce for example 300,000 EVs is shown in the following example:

Each new battery requires	8kg Lithium
256 end-of-life EV batteries	1 tonne of extracted Lithium
300,000 BEVs require	2,400 tonnes of Lithium

A hypothetical example of the amount of lithium that Ford would require to produce 300,000 electric vehicles (EVs)

In 2021, a tonne of lithium sold at auction for $2,350 (£1,755). It would cost an automotive manufacturer like Ford £4.2 million (£1,755 x 2,400 tonnes) for lithium to produce 300,000 EVs by 2020.

Methods of disassembling and then extracting materials for recycling differ, but each of the three main processes require scale to achieve profitability. The breakeven points for the three processes lies at 17,000 tonnes per year for pyrometallurgical, 7,000 tonnes per year for hydrometallurgical and 3,000 tonnes per year for direct recycling.

As already demonstrated, the growing UK BEV market from 2026 onwards, provides a growing source of end-of-life batteries, far in excess of the theoretical threshold of 7,000 tonnes. The processing cost of extracting lithium from EV batteries is estimated at £67.

For illustrative purposes, the cost of processing the required 2,400 tonnes of lithium for 300,000 BEVs in 2030 is 3.8% - or 96% cheaper than purchasing new lithium.

EV batteries are notoriously heavy which leads car makers to use lighter metals to compensate, and to ensure their supply of batteries is as close to final assembly as possible. This also means it's significantly cheaper to keep EV batteries that are currently in the UK, for recycling and reclamation. The alternative is to export them to recycling facilities in France, Belgium, or Germany and then re-import materials or new batteries. Employers will always cite transportation costs as being akin to labour costs when the pounds and pence of investment decisions are being calculated. The ability to remove transport costs by developing a circular supply chain in the UK is not only more environmentally sustainable, it is a negotiating tool for defending wages and conditions at the bargaining table.

Finally, Unite is also in discussions with companies about hydrogen fuel. Several barriers must be overcome to reach comparable growth for hydrogen fuel vehicles in the UK. This includes attempts to lower the current high retail price of hydrogen fuel vehicles. For example, a mid-size passenger car such as the Toyota Mirai, one of the two fuel cell electric vehicles (FCEVs) currently available in the UK, is priced around £60,000.

Other barriers that need to be addressed to promote the take up of hydrogen powered vehicles include, addressing the lack of refuelling infrastructure (hydrogen, being the most common fuel, lacks roadside provision), and the need to increase system efficiencies to compete with other powertrains.

For fuel cells, a crucial factor will be the price of hydrogen at the pump once the infrastructure is in place. Analysis by the Hydrogen Council shows the price of hydrogen for passenger vehicles becomes viable at $2/kg and $4-5/kg for commercial vehicles (including vans.)

In the North East, Unite shop stewards and officers worked with Cummins to win significant government backing for hydrogen production of commercial engines at the Darlington manufacturing plant. Unite has entered into talks with other engine makers and the Advanced Propulsion Centre (APC) to look at the feasibility of hydrogen fuel cells for commercial vans. For large UK factories, this would require engine production to be defended. Any gradual fall in engine production should be replaced by developing fuel cell manufacturing and EV battery recycling facilities. This would offer large factories, which may be currently at risk, a potential future by emulating the example of the Renault Flins factory outside Paris.

The automotive industry is witnessing the most significant technological revolution since the era of the horse. Technological shifts are never neutral, their impact is shaped by the interests they serve. It is for this reason that Unite ties the transition to electrification directly to advancing the collective bargaining agenda in the automotive industry. Unite's collective defence and advance of union-organised jobs, with associated pay and conditions, is designed to ensure that the automotive sector retains its crown as the UK's premier manufacturing sector for many years to come.

Unite has worked with Cummins to win significant government backing for hydrogen production of commercial engines at the Darlington manufacturing plant

Civil Air Transport (CAT) Sector

This is an edited version of a report submitted by Oliver Richardson (Unite National Officer for the Civil Air Transport sector) and Colin Potter (Unite Researcher for the Civil Air Transport sector).

The Civil Aviation Sector is still in recovery mode following the return to normal operations after the lifting of the COVID-19 travel bans. During the Pandemic, 98% of all passenger flights were stopped and government funding to the industry was limited to the furlough payments for staff. As a result, the supply chains in the industry shed tens of thousands of staff. This included many specialists who had previously been working on sustainable aviation fuels (SAFs), hybrid electric engines, and other ground breaking technologies that were designed to reduce the overall carbon footprint of the industry. These job losses have put the industry back several years regarding its decarbonisation programme.

However, some decarbonisation programmes in the industry have continued. There has been the introduction of a requirement that all aircraft departing an EU or UK airport, should use an increasing percentage of sustainable aviation fuels (SAFs). Sustainable aviation fuels have a higher calorific value. This reduces the amount of fuel needed to fly from A to B, and so reduces the total volume of carbon emissions released on these flights.

Sustainable aviation fuels also burn cleaner. They remove the aromatic hydrocarbons and sulphur impurities found in traditional hydrocarbon aviation fuel, like kerosene. The use of SAFs also reduces the negative impact that aviation travel can have on the global cooling and warming effect of clouds. When SAFs are used there is less soot and other microscopic particulates released into the atmosphere. This has the effect of reducing cloud condensation nuclei which can form when using traditional aviation fuels.

Cloud condensation nuclei are tiny suspended particles, either solid or liquid, upon which water vapour condensation begins in the atmosphere. They are also known as cloud seeds. Cloud condensation nuclei are a subset of aerosols in the atmosphere that can have an affect on the relative properties of clouds and the earth's overall atmosphere.

The use of traditional aviation fuels like kerosene produces soot and other microscopic particulates that can cause supersaturated clouds of water vapour found above 30,000 feet. This causes an additional cloud cover, which has the effect of blocking sunlight in the day, reducing the warming effect, and act as a blanket at night. This traps in the heat escaping to space and reflects it back, which warms the earth. The net impact of this global cooling and warming of our planet through the effects on our cloud system, is detrimental to the environment. By using SAFs, the aviation industry reduces this negative cloud formation, which is of significant impact towards addressing the climate emergency.

Currently, aircraft do not fly fast enough to complete all their journeys during daylight hours. The aviation industry has discovered ways to detect areas of the sky with higher than normal concentrations of supersaturated water vapour by using their weather radar. Such equipment is not yet standard on all aircraft, but it is coming.

All aircraft departing an EU or UK airport should use an increasing percentage of sustainable aviation fuels (SAFs)

On the ground, many airports across the UK are investing in a greater number of electric vehicles and a greater variety of them too. It is now possible to have an electric version of every ground vehicle in an airport, but sadly there are not enough connection points or electrical grid capacity to install these points and use them all at once.

The greatest fear for aviation workers currently, is the threat of another economic recession. This has been predicted by the UK Government, the Bank of England, and the Office of Budget Responsibility (OBR). The OBR predicts that the UK economy will shrink by 2% over the next two years, with unemployment rising by around 505,000 by the second half of 2024. The average household income is expected to drop by 7% over the next two years.

Now that the UK economy is officially in economic recession (a significant decline in economic activity that is spread across the economy and that lasts for a few months) this will cause families in the UK to tighten their spending. The disposable income for things like foreign holidays will fall. This could lead to more people taking holidays in the UK and therefore reducing the demand for foreign holidays and air travel. The economic recession linked to the global financial crash in 2007/09 wiped out several airlines.

This caused thousands of redundancies and prevented many airlines from investing in the green technologies required to decarbonise the industry.

EasyJet have announced that they are to ditch their controversial practice of planting trees to offset the carbon emissions released from their flights.

EasyJet are ditching their practice of planting trees to offset carbon emission from flights

They are replacing this carbon offsetting strategy with greater investment in green technologies directed at decarbonising their aviation travel.

This includes more fuel-efficient planes, and the development of hydrogen-powered jet engines to help them achieve their commitment of being a net zero carbon emissions business by 2050. EasyJet was one of the first airlines to start offsetting all their carbon emissions, when it signed a three-year contract to launch its programme in 2019. However, a joint investigation by the Guardian raised questions about the reliability of the carbon credits used by major airlines, including EasyJet, for carbon offsetting.

Hydrogen fuelled aircraft will require a full redesign of the aircraft's layout. This is because hydrogen fuelled aircraft will be carrying four times the amount of fuel than aircraft powered by traditional aviation fuel, like kerosene, to reach the same destination. It is estimated that hydrogen fuelled aircraft will have a maximum commercial flight range of around 3,700 kilometres (2000 newton-metres).

This fits well with the business model of most airline companies. The redesign of an aircraft's layout that will be required to store the extra fuel capacity for hydrogen fuelled aircraft, could include the rear section of the aircraft becoming a fuel tank, along with the wings and some of the cargo hold. Alternatively, the aircraft design could be based on a flying wing design, with passenger seats alongside the wings leading edge.

The Airbus ZEROe project has some insightful information on this subject.

The Airbus ZEROe project

Construction Sector - Part One

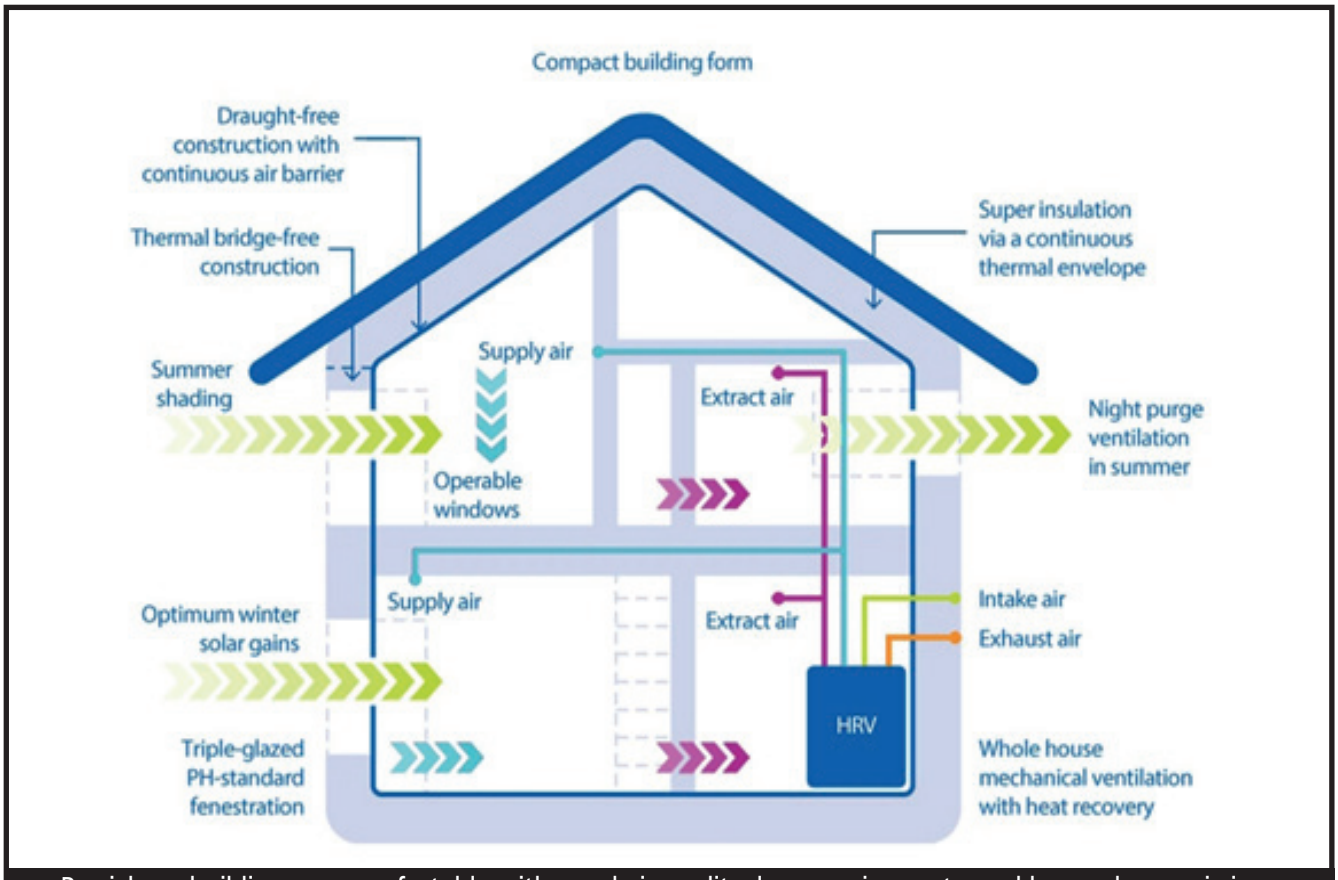
The following is an edited version of a report that has been constructed by Jerry Swain (Unite National Officer for the Construction sector) and Frank Gray (Unite Researcher for the Construction sector).

Time for change, but don't forget about the workers!

Unite has given its support to developing the Passivhaus model in the construction of low carbon housing. Buildings account for around 35% of total energy consumption, and are significant causes of carbon emissions. The Passivhaus model of construction has over 30 years of international evidence. These tried and tested solutions provide proven approaches to delivering net zero ready new houses and optimising the energy efficiency of existing buildings to a decarbonised energy grid.

This raises the health and wellbeing of occupants in these buildings. Passivhaus buildings provide a high level of comfort for occupants, using very little energy for heating and cooling. The Passivhaus model adopts a whole-building approach with clear, measured targets, focused on high quality construction, certified through an existing quality assurance process.

In response to a recent consultation on construction, Unite has set out the importance of addressing the climate crisis through a focus on making buildings more energy efficient, and delivering a sustainable environment. This should be achieved with the support of communities and the provision of skills, and decent well-paid work in the construction sector.



Passivhaus buildings are comfortable with good air quality, low running costs, and low carbon emissions

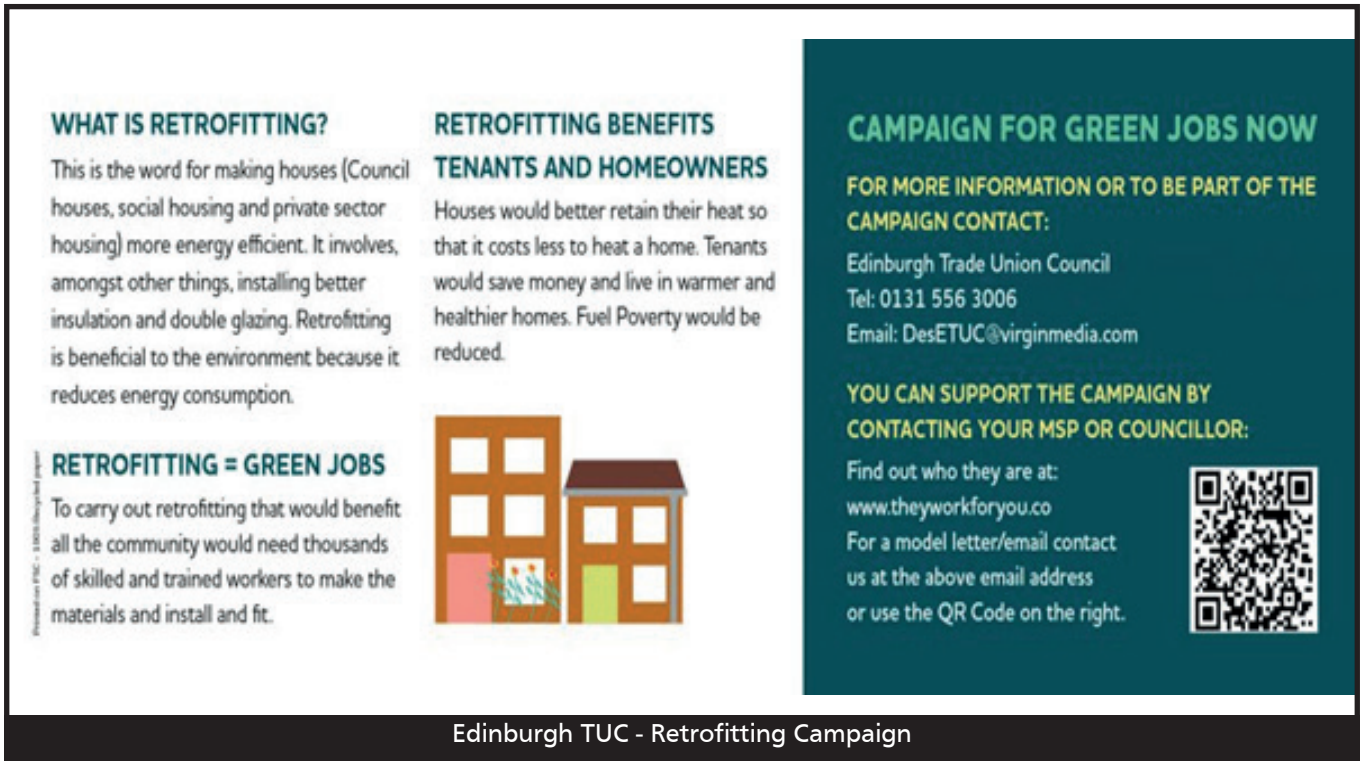
With fuel poverty at crisis point, it is now clear that action must be taken to ensure that newly built houses will help eliminate fuel poverty by maximising energy efficiency. This should be done alongside moving forward with a wide-ranging national retrofitting programme for existing homes and commercial buildings. Unite believes that radical and rapid change is necessary to make existing and new buildings more energy efficient. This will require successful construction, manufacturing and renewable energy industry sectors.

Trade unions representing workers must be central to developing systems and models for these industry sectors, so the UK is able to meet its net zero emissions commitments by 2050. This will require a just green transition, an economy where workers have a democratic voice in the decarbonisation of our economies and societies. This means the guarantee of decent jobs, fair pay and training programmes financed by government and employers.

The UK Government should commit to an integrated industrial strategy that supports local communities and underpins a social and industrial transformation towards a sustainable future.

A successful green transition will only be possible if workers organise in developing industries. Across the UK, workers must come together and negotiate on policies that lead to the implementation of up-skilling and re-skilling opportunities. This will help them to transition into the new jobs that are required in the green economy, allowing them to provide for themselves, their families, and their wider communities.

Ensuring that high housing construction standards and low carbon standards are met, will require high quality work to be undertaken in the construction industry. Unite recognises that this process needs a highly skilled construction work force and believes that greater opportunities for direct labour employment will help to achieve this. This would create a situation where the building of new homes and the retrofitting of existing buildings are undertaken by those with the appropriate skills, training, qualifications, and competence levels. Safe and good quality materials would be used, and completed works would be inspected to ensure that they are fully compliant with recognised standards for building safety and energy efficiency.



Edinburgh TUC - Retrofitting Campaign

The UK Government has a key role to play in the development of new low carbon housing, retrofitting programmes, and the creation of smarter buildings. It must ensure that there is the necessary investment in training and skills through bonafide apprenticeship programmes within collective bargaining arrangements. This will enable the nation to gain the skills sets it needs to complete the green transition in the construction industry. Providing training and guaranteed jobs for young people in 'sustainable industries' would be a way to deliver a future construction sector that would contribute to climate change targets and offer careers that would assist in a just transition.

All individual operatives and apprentices must be registered with the competency schemes appropriate to their occupation. Companies must all be registered with their relevant certification schemes to ensure building safety and quality standards are adhered to. This means an independent verification and monitoring scheme for the safety and protection of residents, clients, the tax payer, and the general public. This must include adherence to the standards set to meet Passivhaus and retrofitting housing models.

The Unite construction sector sees both net zero and competent construction standards as being inextricably linked. It is imperative that environmental measures and technologies are installed professionally to the required safety and quality standards by properly qualified craftspeople and contractors. Unite continues in its endeavours to ensure that construction work across the UK is only undertaken by registered, qualified, competent skilled workers. Only this will guarantee safe and quality installation and maintenance of the UK built environment moving forward. It is the ambition of Unite members for the recognised industry certification, the Construction Skills Certification Scheme (CSCS) partner card schemes, to evolve into Licence to Practice systems under joint industry control and governance. This includes new build, the existing built environment, retrofit, and the safe and competent installation of materials, equipment, and environmental technologies to meet net zero targets.

Unite representatives are participating in the development of sector specific competence frameworks for the craft trades and construction related occupations, under the Health and Safety Executive's (HSE) Building Safety Regulator. This was established following the devastating fire at Grenfell Tower in 2017.

Building Safety Regulator HSE

Unite are working with the HSE's Building Safety Regulator, set up after the Grenfell Tower fire, on developing sector specific competence frameworks for the craft trade and construction occupations

Strategically, industry recognised personnel certification card schemes, training, continuing professional development (CPD) and apprenticeships are being aligned to meet new competency requirements and standards.

This would include:

- Accredited third party certification of companies.
- Industry recognised and approved qualifications for individuals across the construction occupations.
- Registration with the relevant CSCS partner card scheme.
- CPD refresher training and the maintenance of individual skills.
- Individuals to have a core knowledge of fire safety in buildings, with training to be standardised and made mandatory.

However, Unite's construction representatives are advocating that these initiatives should not develop into a 'job tax' on workers, and they should be appropriately funded by government, industry, clients, and employers. It is the hope and expectation of the Unite Construction sector that this will create a firm basis for a system of registration / licencing for qualified, competent craft workers, with the necessary skills, knowledge, qualifications, training, experience, and professional behaviours and ethics, fully integrated into the system. If such standards are implemented then procurers need to be clear on enshrining policies that help deliver fair work in construction, specifically in four key areas:

1. Contracting authorities should set an expectation that trade unions have access to workplaces on all public construction contracts. Access should be facilitated throughout the supply chain. This should also extend to housing procured using public sector funding.
2. All contracting authorities should adhere to relevant collectively bargained pay rates as a condition of contract. Introducing this as a clause within industry standard contracts is an efficient, proportionate, and transparent way to implement this and to ensure that it is applied throughout the supply chain.
3. All contracting authorities should be signatories to a Fair Work Charter collectively agreed with employers and trade unions.
4. Public sector bodies and construction employers at all parts of the supply chain should increase their use of direct employment, and support upskilling and retraining for high quality careers in the industry to make it more attractive and increase retention rates. Support for direct employment should also reinforce a commitment never to use umbrella companies.

Unite believes that appropriate investment levels and development plans for green construction are needed to deliver a cleaner environment, alongside a modern construction sector that facilitates a positive employment setting. This includes the opportunity for continued skills development, high quality construction standards, fair employment contracts and an adherence to high levels of health and safety in the industry.

Unite believes that appropriate investment levels and development plans for green construction are needed to deliver a cleaner environment, alongside a modern construction sector that facilitates a positive employment setting

Construction Sector - Part Two

The following report has been compiled by Steve Craig, Unite National Development Officer, and Unite Environment Taskforce member.

Following a request to Building and Wood Workers International (BWI) from ICLEI (International Council for Local Environmental Initiatives) an international non-governmental organization that promotes sustainable development, Unite provided input on a joint BWI-Unite film promoting a circular economy approach across the construction sector. View a short film here.

The film complements a wider a piece of work specifically exploring what a circular economy approach in the building sector will look like for workers (e.g., re-skilling for material use; waste-segregation, repurposing materials) and the contribution that trade unions can make in a transition to circular economy initiatives across the construction sector.

Topic areas to be addressed in connection with the circular economy model within construction include:

- What will a circular economy approach in the building sector look like for workers?
- What opportunities does a circular economy approach in the building sector hold for workers?
- What steps can the building industry take to ensure workers needs are met in the transition to a circular economy approach across the sector?

The BWI-Unite film and contribution is part of a wider piece of work linked to the Marrakech Partnership Human Settlements action events which took place on the 17th November, 2022 This is part of the United Nations Framework Convention on Climate Change (UNFCCC) and United Nations high level champions' programme.

The event will be broadcast on the UNFCCC website under the following link.

The film also links to Unite's previous work with BWI linked to the C40 Cities 'Clean Construction' initiatives which was launched at C40 Cities at COP26 in Glasgow in October-November 2021.

C40 Cities 'Clean Construction' initiatives

Founded in 1990, ICLEI is the world's leading network of local and regional governments committed to sustainable development. ICLEI provides technical consulting to local governments to meet sustainability objectives.

Getting the Unite environment message across to a wider audience

ICLEI - 'Local Governments for Sustainability' is a global network of more than 2500 local and regional governments committed to sustainable urban development. Active in 125+ countries and covering 25% of the global urban population, they influence sustainability policy and drive local action for low emission, nature-based, equitable, resilient, and circular development.

Their members and teams of experts work together through peer exchange, partnerships and capacity building to create systemic change for urban sustainability.

ICLEI were keen to link-up with BWI and Unite to highlight the union and workers' perspective in any transition to a circular economy and in a sector which is one of the world's biggest consumers of energy and raw materials.

Ambet Yuson, General Secretary Building and Wood Workers International - Global Union Federation says:

"Workers will be the ones delivering the change we need, so a fair and Just Transition, where new green jobs are also decent and union jobs, is paramount. We have a once in a generation chance to deliver green skills development, retraining for workers, employment support programmes and access to comprehensive social protection through collaboration with cities, social dialogue and collective bargaining between companies and trade unions."

Unite Environment Taskforce features in BWI 100 Union Actions on Climate Justice Report

Unite initiatives on climate change and a worker centred Just Transition featured in a recent publication by the BWI. Showcasing a wide range of actions to respond to the challenges and impacts of climate change, BWI released its "100 Actions on Climate Justice Report" on its 5th World Congress in October 2022 in Madrid, Spain. A Unite delegation attended the conference and secured important positions on the BWI World Council.

The report highlights that BWI trade union affiliates from different regions across the world are engaged in various climate justice activities from workers' protection, organising and training and coalition-building, to social dialogues and campaigns. BWI said that the report will aid its new "Strategic Plan" to make climate change and the Just Transition to a green economy as its top priorities.

BWI hoped that the report will contribute to the development of a comprehensive approach to ensure that national governments enable and facilitate a Just Transition, and that employers and financiers will take their fair share of responsibility of a transition that is both socially and environmentally just.

Aside from the report, during its Congress, BWI passed resolutions that appealed to the sense of urgency of governments, employers and financial actors to actively engage workers and their unions as active partners in shaping a more sustainable and greener path forward. BWI said that workers and their unions must have strong voices in the development of "nationally-determined contributions" and other national and regional plans on climate change.

Download a copy of the report.

Linked to Richard Clarke's report on pages 46-51 above, Unite has been invited to deliver a presentation at a University of Westminster workshop 'Working together with local authorities for publicly accountable social housing retrofitting'. A report on this event is included in Section 2 'Retrofitting' of this edition of the Unite Environment Quarterly.

The Building and Wood Workers International (BWI) "100 Union Actions on Climate Justice" report (2022)

Chemicals, Pharmaceuticals, Process and Textiles (CPPT) Sectors

The following is an edited version of a report that has been constructed by Tony Devlin (Unite National Officer for the CPPT sector), Frank Gray (Unite Researcher for the CPPT sector), and Georgia Montague-Nelson (Global Labour Institute – GLI).

Chemicals & Pharmaceuticals Combine Conference 1st-2nd September 2022, London

On 1st and 2nd September 2022, the Unite Chemicals and Pharmaceuticals Combine held a conference in London to reflect on key trends and challenges facing the industry and used the opportunity to discuss strategy for the industry. The conference also included a tour of the Carbon Capture Storage (CCS) pilot plant at Imperial College London. The conference set out to consider key questions:

1. What are the global trends we are facing in our industry?

2. What challenges and opportunities does decarbonisation pose for the sector?

3. What are our priorities for future strategy?

Following introductions from delegates, Tony Devlin (CPPT National Officer), Bill Hodgson (Chair of the CPPT National Industrial Sector Committee [NISC]), and Cliff Bowen (Unite Executive Committee [EC] Member for CPPT) opened the meeting. They emphasised that the conference was an opportunity for delegates to increase their understanding of the changes taking place within their industries. In particular, the impact that these industry changes could have on their jobs, and the action that Unite can take to ensure a just green transition in the industry. It was also highlighted that the conference was an opportunity to share information amongst Unite representatives working in the CPPT sector.

The conference opened with a presentation from Steve Elliott (Chief Executive Officer [CEO]), and Simon Marsh (Employment and Communications Director) of the Chemical Industries Association (CIA). The CIA is a membership organisation of over 200 chemical and pharmaceutical companies. The CIA works with key stakeholders on political, economic, and legislative issues affecting the sector.

The presentation from Steve and Simon of the Chemical Industries Association focused on the following areas:

Issues Facing the Industry:

Cost and supply of energy, access to raw materials and shipping products, chemical regulation, net zero and just transition.

People & Skills:

There are major workforce challenges now and in the future in terms of retaining key workers and skills and recruiting new and future talent. The CIA has undertaken a study into future skills for the chemical industry, with recommendations focused on apprenticeships, upskilling/reskilling, and lifelong learning.

Trade Union Engagement:

The CIA has a good track record of strong relationships between employers and unions and has a longstanding consultative forum with joint lobbying commitments. The post-pandemic and cost-of-living pressures have resulted in a tough industrial relations period.

Brexit:

The immediate damage is limited, but the future is uncertain. Some progress has been made on trade agreements, but key chemical markets are still remote.

Future Skills for the Chemical Industries - The Chemical Industries Association (CIA)

COVID 19:

There has been industry growth throughout the pandemic with strong collaboration across the industry. China's 'zero tolerance' approach to the COVID-19 virus is a major supply chain challenge.

Cost of Living Impacts:

Demand is contracting, and inflation is racing, but recent investment remains above pre-pandemic levels. There is optimism about a 2023 sales recovery.

Energy Cost & Security:

Energy costs are increasingly unsustainable. More direct support from government is needed to compete with products from other locations. It was noted that the Ukraine invasion adds a new dimension to the challenge of transition, with particularly negative impacts for the working class. What impact will this have for those working from home?

Net Zero:

The commitment to net zero is impossible without the chemical industry. Investment in hydrogen, carbon capture and clean electricity is essential. More clarity is needed from the UK Government on how it plans to deliver its net zero commitments. For example, what role will industrial clusters play in the transition pathway to net zero emissions by 2050?

Future of Industry:

The Chemicals industry is resilient, but stagflation in the UK and global economy is a big possibility. Political uncertainty is not helping.

Key goals for the industry include:

- Short Term: surviving the downturn.
- Medium Term: securing a more compelling manufacturing environment based on more competitive energy and regulation, infrastructure, and skills.
- Long Term: seizing the net-zero sustainable prize.

Following a discussion amongst delegates, Tom Grinter, IndustriALL Chemicals and Pharmaceuticals Officer, gave a presentation on securing workers' power in the changing industry. Here is a summary of Tom's presentation:

Key challenges facing the industry:

- Trade policies, Ukraine invasion, COVID-19 pandemic, China, Digitalization (Industry 4.0), Climate Change and Sustainability.

- IndustriALL Priority Campaigns:

Ukraine, Belarus, Myanmar, health and safety as a core right, violence against women as an occupational safety and health (OSH) and union issue. Independent trade unionism is under threat globally.

- Sectoral Work:

International examples of successes in the sector include the Indian campaign for health and safety, Pharma workers in Peru building power, Iranian petrochemical workers' strike, Sanofi coordinated solidarity action, building worker power at BASF, and Dow Du Pont and Bayer trade union networks.

- Global Context:

Major challenges facing the sector include sustainability (regulation, energy transition, net zero ambitions, transparency along the value chain), technological innovation (increasing demand for organic, recyclable, and low-carbon products, more digital and AI), political changes (growing barriers between countries, growth in power of China and India).

- New Market Demands:

'Net zero' emissions goals, growth of social investors, development of new environmental protection laws.

- Chemical Industry Performance:

The industry has been performing strongly for the last 20 years. The industry is selling more biochemicals (chemical processes within and relating to living organisms), recyclable and low carbon products and there are major sustainable supply chain commitments. Global chemical production is expected to grow in 2022. The Asia-Pacific region is expected to maintain a lead in the future due to the development of the industry and increased investment in research and development.

- Pharmaceutical Performance:

Vaccines remain big profit makers in the industry following the COVID-19 pandemic. Growth in research and development has resulted in rising sales. The industry is experiencing major digitalization and is also responding to pressure to reduce carbon emissions.

- Future Strategy:

The IndustriALL Action Plan sets out priorities for future work. Key initiatives include a focus on good jobs and just transition in the energy sector, and a new vision for globalisation. IndustriALL are working on an initiative to ensure that the labour movement has information, tools and plants to get good jobs and just transition.

- International Examples:

Japan has developed the world's first national hydrogen strategy to position hydrogen as the new energy and make it affordable by 2050. Germany is focusing on building a hydrogen ready workforce by securing jobs, creating new jobs, and developing technological support programmes.

- Union Action:

Building sectoral unity and strength across borders is essential. It was noted that IndustriALL is a resource for members to provide support and assistance.

Discussions with the delegates was held during and following both presentations. Key ideas that emerged from the discussions included:

- Skills & Workforce Retention:

The industry needs to maintain its existing workforce, develop future talent, and stop the drain on talent and skills. The chemical and pharmaceutical workforce have essential skills and knowledge that are needed for the future of the industry, including for transitioning the industry. To get there we need more government support and investment in apprenticeships to encourage engagement in the industry, particularly for young people. This needs to be part of the industrial strategy. It was noted that the Chemical Industry Association (CIA) is undertaking work to encourage young peoples' engagement in the industry. The CIA have established the Chem Talent Network.

- Diversity in the Industry:

Transitioning the industry and securing talent and skills for the future also means that we need to improve diversity across the industry. There is a need to change the perception of the industry, challenge 'workplace banter' culture and address structural issues (e.g. shift patterns) that exclude women from the industry. Actions that could help to address this include changing language in job adverts, support for those lacking confidence, and education/awareness diversity training. It was noted that it would be useful to gather data about the diversity of the industry disaggregated by gender and age. It was emphasised that equality issues also affect other groups (BAME, LGBTQI+).

Tom Grinter, IndustriAll's Chemical and Pharmaceutical's Officer, provided a presentation to Unite representatives in the CPPT sector on the key challenges facing the Chemicals and Pharmaceuticals industries

- Industrial Relations:

Several delegates highlighted difficult industrial relations environments in their workplaces. It was noted that HR staff in companies often lack the knowledge and experience necessary for the job. Staff change jobs frequently. This makes it difficult to build a strong relationship between the union and the company. It was also noted that there is also a gap in training and experience within the union itself.

- Challenges versus Opportunities:

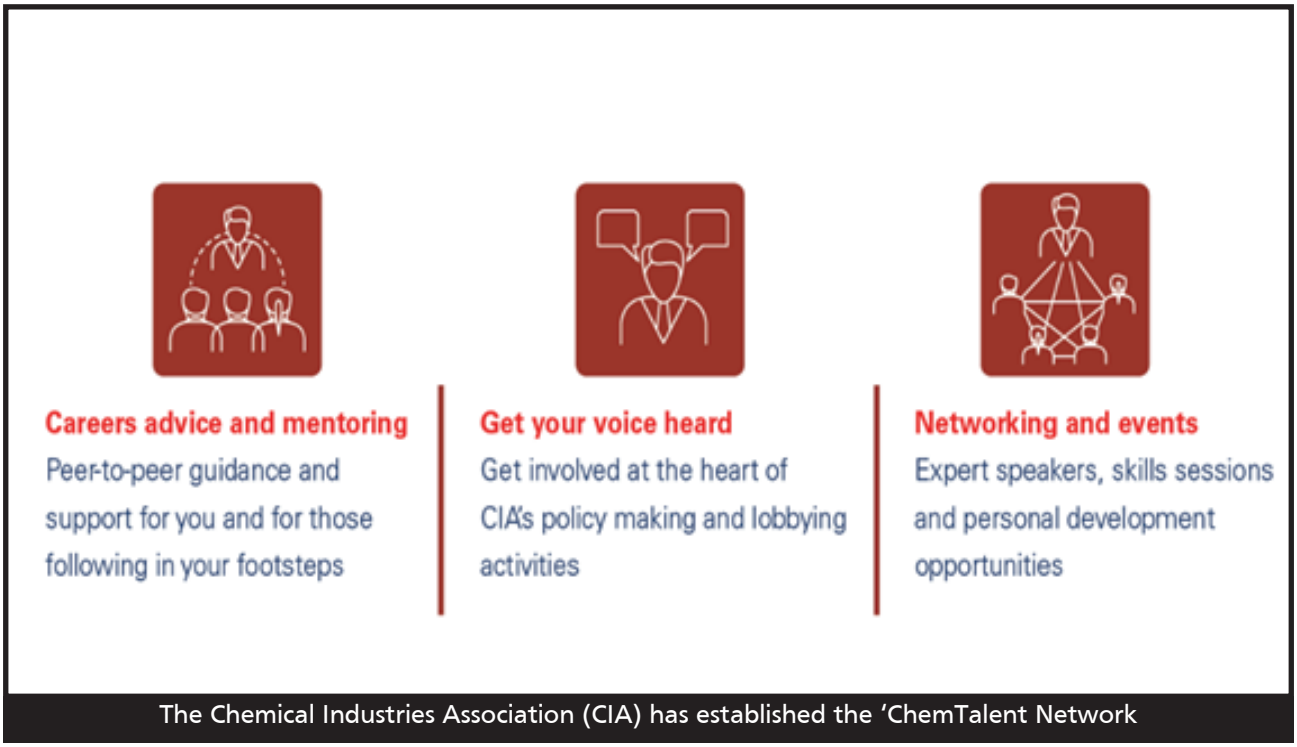
The transition should not be seen as a challenge, but as an opportunity to utilise the skills available. The chemicals and pharmaceuticals industries are the best placed industries to deal with transition - they are innovative, are able to deal with change easily, and many of the skills needed for the green economy already exist amongst the workforce.

- Securing a Just Transition:

We need to secure good, well paid, and sustainable jobs for workers. A national just transition plan is essential, but government action on this is lacking and companies are largely dominating the discussion. It was noted that several companies are looking to invest in blue/green hydrogen and carbon capture and storage. In Spain, workers have secured a skill transition agreement which focuses on the transferability of skills to secure green jobs. In Germany, DGB (the German Trade Union Confederation) has an example of a transition agreement. Supply chain mapping can be a useful tool to build power and put pressure on companies for a just transition.

- Political Engagement:

There is a need for a strong industrial strategy, but there is concern around the lack of engagement from the Labour Party about these issues. It was noted that Unite has recently commissioned a piece of research focused on the transition to a green economy to support the development of policy.



The Chemical Industries Association (CIA) has established the 'ChemTalent Network

CPPT Sectors – The Downstream Oil Distribution (DOD)

This is an edited version of a report that has been constructed by Georgia Montague-Nelson (Global Labour Institute) on behalf of the Unite Environment Taskforce.

Between 17th -21st October, a Change at Work course was held in Eastbourne for senior representatives in the Downstream Oil Distribution (DOD) sector. The course was designed to enable delegates to develop a deeper understanding of the key challenges facing the sector, and to build strategy in response to these challenges. The course covered a range of different issues, including the broader political challenges and the need to build international organisation, health and safety, the challenges of new legislation, equalities and the climate crisis and the fight for a Just Transition.

Colin Potter (Unite Research Officer for the Environment) was invited to the course to speak with delegates about the climate crisis, key environmental issues facing the DOD sector, as well as how workers can take action. The presentation and discussion that followed covered a range of issues, including:

- What is climate change? Why is the weather changing?
- What is a Just Transition?
- How can we transition in transport?
- What is the scale of the challenge?

In summary:

Climate change impacts on our environment and increasingly on our workplaces, communities, and wider society. Temperatures are rising. Small increases in average temperatures leads to more extreme heat events. Rising temperatures have broken records across the world, causing forest fires and hurricanes. Most emissions come from energy use and energy generation (73.2%), agriculture, forestry, and land use (18.4%), and industry (5.2%). In the UK, 60% of all UK surface transport sector emissions are from cars.

'Just Transition' means that no one should be left behind in the transition to a low carbon economy. Workers should be retrained and reskilled and should have a 'seat at the table.' Unite has established an 'Environment Taskforce' to push the environment work forward, capture, and disseminate information, support internal capacity building, and develop best practice, and raise members' awareness.

The government has introduced laws to transition road transport. This has included a ban on new petrol and diesel cars by 2030 and a ban on new petrol and diesel lorries by 2040. The type of cargo that workers in downstream oil distribution will transport will change as we transition to a low carbon economy. The government needs to invest in skills for workers in new industries. We also need to work with companies to invest in future industries.

We need to campaign for the government to better invest in the transition. To reach 'Net Zero' we need to replace all natural gas supplies to businesses and domestic properties with electric alternatives or hydrogen. This means that we need to build 7.5 times the current capacity. We need to campaign for policy that incentivises businesses and homeowners to be more environmentally responsible. Workers also need to put pressure on employers to ensure that workers maintain their terms and conditions in industries that are transitioning. We also need to educate our members about climate change and the impact on jobs. This should include information for households about how they can reduce energy usage.

CPPT Sectors – The National Oil Refineries and Terminals

The following is an edited version of a report that has been constructed by Tony Devlin (Unite National Officer for the CPPT sector), Frank Gray (Unite Researcher for the CPPT sector), and Georgia Montague-Nelson (Global Labour Institute – GLI).

National Oil Refineries and Terminal Conveners Committee (NORTCC) Conference 30th-31st August 2022, London:

On 30th and 31st August 2022 the Unite National Oil Refineries and Terminal Conveners Committee (NORTCC) held a conference in London. The conference provided an opportunity for Unite reps in the industry to discuss the key challenges facing the industry, and an opportunity to develop strategy. It also included a tour of the Carbon Capture Storage (CCS) pilot plant at Imperial College London. The conference set out to explore key questions including:

1. What are the global trends we are facing in the industry?

2. What challenges and opportunities does decarbonisation pose for the sector?

3. What are our priorities for future strategy?

Following introductions from delegates, Tony Devlin (CPPT National Officer), Colin McKay (NORTCC Chair) and Cliff Bowen (Executive Committee [EC] Member for CPPT) introduced the purpose of the conference. They highlighted the need for workers to have ownership in future-proofing the industry and leading on the agenda for change. This included the challenges posed to the industry by the current energy crisis.

Mike Smith, Chair of National Oil Bargaining at United Steelworkers (USW) in the USA, opened the conference with a presentation (via Zoom). Mike's presentation focused on the oil refining industry in the USA, the challenges being faced by the industry (including those related to the green transition) and the actions that USW members are taking.

The USW represents workers in refineries, chemical plants, terminals, and pipelines. Since the 1960s, USW oil workers have had a National Oil Bargaining Programme.

Mike's presentation looked at the following areas:

- Industry Changes: Over the last decades, oil majors have been exiting the refining industry. This has brought new companies

Unite reps had an opportunity to tour the Carbon Capture Storage pilot plant at Imperial College, London

into the industry. Many do not have a history of dealing with unions which has made negotiations and engagement far more difficult for unions.

- Pandemic: The pandemic has contributed to a shutdown of refineries. Some pre-pandemic refining capacity drop off took place because of business decisions or due to damaged refinery facilities.

- Energy Transition: Companies are increasingly moving into the renewables industry. Although seen by some as an 'easy transition' for members, this is not necessarily the case.

- Impacts: Shutdowns have led to mass layoffs. There has also been a lack of investment in facilities and maintenance which has put pressure on facilities.

- Refining Sector Performance: Refineries have been operating at 90% utilization rates in 2022. US oil companies and refiners are making record profits.

- Future: USW will continue its fight to stop the shutdown of plants, focus on investment in plants and look to new opportunities, e.g., carbon capture and storage (CCS). Central to the USW's plans is the strategy of securing jobs and communities in the green transition process.

Following the presentation, delegates discussed the key themes that they had identified in the talk. Key ideas and questions that emerged from the discussion included:

- Pressure on Refineries: There is growing pressure on the refining industry because it does not have the capacity to process crude oil. This problem has been exacerbated by the energy crisis and the insecurity of energy supply.

- Difficult Political Environment: In the US, there is strong government engagement with workers around just transition and the future of the industry. The US President Biden administration – which is pro-labour/pro-union - emphasises securing workers' livelihoods and their rights. The USW is working alongside the Biden administration to help achieve this aim. This is starkly different to the UK Tory government. It was noted that the Labour Party's engagement with the unions is too weak. It was believed that Unite and the Labour Party needed to work together to develop an inclusive, common industry strategy. It was also highlighted that union members are politically divided, which makes strong engagement more difficult.

- Protecting Communities: The fight for a just transition does not end at the workplace. We need to ensure that the future of working-class communities is protected.

- Education & Internationalism: Workers are fighting against global capital ("we create wealth that they walk away with"). As a union and as communicators within workplaces, we need to educate members. As an international sector, we need to emphasise the importance of internationalism and build links with workers across the globe. We need to share good practices and experiences and build international solidarity.

- Opportunities: Workers should not have to give up good conditions and wages to transition to non-unionised jobs with low wages and poor conditions. The transition must be an opportunity for workers to secure better rights, wages, and benefits with strong union representation.

US President Biden's Administration is pro-labour and pro-union according to Mike Smith, Chair of National Oil Bargaining at the United Steelworkers (USW) union in the US

Following the discussion, Asle Reime, National Secretary of Industri Energi introduced some of the major challenges and opportunities facing the industry in Norway. A summary of Asle's presentation is presented below:

In Norway, 80% of oil exports are represented by Industri Energi. Industri Energi do not negotiate with companies. Industri Energi (Norwegian for "Industry Energy") is a Norwegian trade union for employees in the petroleum industry, the chemical industry, the pharmaceutical industry, the aluminium and metal industry and the forest industry. The union is a member of the Norwegian Confederation of Trade Unions. The union has national agreements and collective bargaining with associations of employers. In Norway, the labour led government is supported by the socialist party. The unions feel like they have a government that they can trust to get things done. Oil and gas are still essential to the Norwegian economy. The war in Ukraine has added to the global energy crisis and created an insecurity around energy supply. Before the energy crisis there was a lot of talk within the industry about shutting down sections of the industry. But this is no longer the case. There is new interest in developing the industry to secure energy supply. Rising energy costs have enabled us to see our importance and connections with the rest of the world. It has also opened up the conversation about how to build a long-term and sustainable industry to ensure a security of energy supply.

Hydropower is still the mainstay of Norway's electricity system. There is a push in Norway to make greener energy.

This includes:

- The development of portable wind turbines on drilling rigs.
- Running oil rigs with clean energy
- New licenses to develop offshore wind farms
- Building industries on hydropower
- Investment in hydrogen and carbon capture and storage (CCS).

A new commercial project has been launched to transport and store CO2 captured from an ammonia and fertilizer plant in the Netherlands.

Norway is also working on a project to bury captured carbon underneath the sea (called 'Project Longship')

The biggest challenge is transitioning the industry without the loss of skilled workers. We can't build a new industry on nothing. The new green industry needs to be built on the shoulders of oil and gas workers. We need to make sure that we consider workers' views on just transition. Oil workers are green workers, and the industry gets greener each day.

Project Longship is a project in Norway to bury captured carbon underneath the sea

Key ideas and questions from the discussion that followed included:

- Engaging Workers: How do we engage people in the conversation around just transition? No one knows where the green jobs are, what they are going to be, or what skills will be needed. This makes it more difficult to persuade workers to take action for a just transition.

- Investment in Essential Industries: Oil and gas are foundation industries that every country needs. UK refining is essential for energy security, but there is insufficient government investment in the industry. There are opportunities for investment in carbon capture, hydrogen, and renewables. The skills and equipment needed for hydrogen make it an easy transition process. Some companies are already investing in the green transition.

- Energy Security & Public Ownership: We need to diversify our energy supply, or our industry will remain precarious and volatile. Unions need to work together with governments to secure a coherent and interventionist strategy to face up to global capital.

- Mental Health: What impact will the transition have on the mental health of workers? How comfortable will they feel in transitioning to new and different occupations?

- Changing Demands: How will the phasing out of sales of new internal combustion engine (ICE) vehicles affect our industry? It was noted that second hand vehicles are not banned, which could maintain some demand.

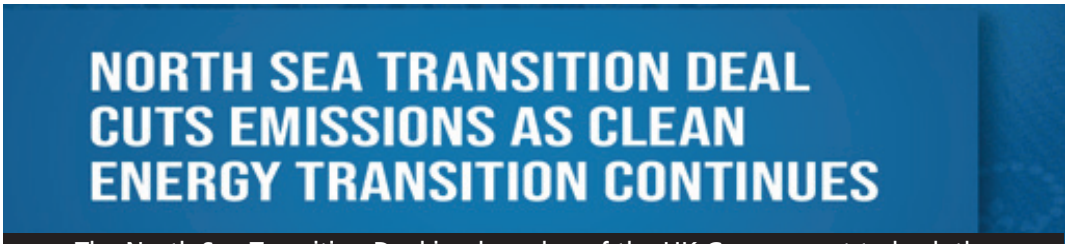
Following the break, the group came back for a discussion with Kerry McCarthy MP, Shadow Minister for Climate Change, who introduced the Labour Party's priorities for strategy. Kerry's presentation focused on the following areas:

We are facing political uncertainty. Labour is making a 'Climate Investment' pledge to decarbonise the country in a way that secures green jobs, ensures energy security, and does not leave communities behind. Key priorities include home grown renewables, retrofitting, manufacturing, and investment in skills and apprenticeship. Our challenge is to put just transition into practice.

The world of energy has changed. People are concerned about rising energy costs. The energy crisis and push for decarbonisation has led to more people questioning the government's energy strategy. Government action around energy has been piece-meal. We need a long-term and holistic strategy. The Conservative Government believes in a market-led approach, but we need the government to lead. They pay lip service to skills, but there is uncertainty about what new green jobs look like. The North Sea Transition plan doesn't go far enough.

We need to raise the alarm, transition out of these harmful industries, decommission plants, and invest in new energy supplies. The push for net zero means keeping most reserves in the ground. We are experiencing huge shortages in some sectors of the labour market (plumbers, drivers, NHS). We need to utilise the green transition to fill these gaps.

Following Kerry's presentation there was a discussion amongst delegates who expressed disagreement with some of the points that had been made.



The North Sea Transition Deal is a key plan of the UK Government to back the decarbonisation of the oil and gas sector while protecting the UK's energy security, according to the UK Government

- A Just Transition: Cutting jobs and closing plants will lead to a loss of skilled workers and a loss of livelihoods. It also poses risks for local communities. These industries cannot be shut down immediately. It was noted that the Forties Pipeline System will be open until 2040+. We need to focus on making our jobs greener, securing livelihoods and communities, and building a strategy for skills retention and development to enable workers to transition into good, well-paid jobs.

- Opportunities & Alternatives: International examples and experiences (e.g., Norway) shows that there are alternative technical opportunities (e.g., CCS, hydrogen) to control emissions from refineries and move towards decarbonising the industry.

- Company Engagement: Corporations are dominating the transition conversation. Many companies are investing in hydrogen. Workers and members need to take ownership of the transition and build agreements with employers to future proof sites and industries. Workers have essential knowledge and need to lead the conversation.

- Freeports & Industrial Clusters: What role do industrial clusters play in the transition? What impact are freeports having on the transition? How can we ensure a government-led approach to future strategy? The introduction of freeports has the potential to lead to declining working conditions, wages, and environmental regulation, and displace good unionised jobs. What impact will this have on SMEs?

- Industrial Strategy: Workers need to work together with the Shadow BEIS team to build an industry transition strategy that ensures jobs are maintained in local communities and develop skills for the future. This includes developing apprenticeships for the skills needed (e.g., for hydrogen, retrofitting). We also need to ensure that jobs are not outsourced and are kept in the UK. The transition pathway is much clearer in some sectors (e.g., transport, retrofitting), but some sectors are lagging behind.

- Engagement with Labour: There is a lack of aligned thinking between Unite and the Labour Party. This conference must be the start of a dialogue to build a common industry strategy. It seems like the Labour Party do not understand the priorities of the workers. The Labour Party needs to commit to engage with Unite around the future of jobs within these industries. It was noted that a follow-up conversation should take place between Unite and the Labour Party, to share information about affected sectors and to work towards a common industrial strategy.

The Ineos owned Forties Pipeline System (FPS) is a 235-mile pipeline system linking North Sea oil and gas assets to the mainland and the Ineos site in Grangemouth

Labours vision for the future of the UK is a green one

Kerry McCarthy MP, Shadow Minister for Climate Change

This article was originally published in Net Zero Week.

It's been eight months since the UK hosted COP26. In the time since, the Government should have been pushing to strengthen and deliver on the agreements made at the summit. Instead we have seen nothing but backsliding.

Even as a heatwave has engulfed Europe, emissions have continued to rise, and the global price crisis has pushed up bills and highlighted the urgent need to accelerate the energy transition, the government has back-pedal on climate.

It is no secret that COP26 fell far short of what was needed. Before the summit the world was on track for 2.7 degrees of warming; now it is set for 2.4 degrees. Any reduction on warming is welcome but this far exceeds the 1.5 degree target of the Paris Agreement and would still prove catastrophic.

The Government's priority following the COP26 summit should have been to do everything possible to show climate leadership at home and to push for more ambition on the international level.

As energy prices spiralled, Ministers should have sprinted for clean, home-grown renewable energy. But when the Government published its energy security strategy, it caved to its backbenchers, turning away from onshore wind and solar and opening the door to destructive and unpopular fracking.

Then in June the Government shocked the automotive industry by scraping grants for electric vehicles. This has added £1,500 to the price of a zero-emission vehicle overnight in the middle of a cost-of-living crisis. It is punishing consumers for doing the right thing for the planet.

That decision came only weeks after the Government finally adopted Labour's policy of a windfall tax on record oil and gas profits, but with the bizarre inclusion of a huge tax break for fossil fuel companies that invest in the UK. Bafflingly this tax break will not apply to investments in renewable energy, rewarding polluters and neglecting green industry.

This Government is yanking back support for the green industries of the future just when they need it the most. This undermines commitments made at COP26, stops the creation of green jobs, and deters consumers who want to benefit from clean, cheap technologies. The fact that these decisions are being taken while the UK still holds the COP26 Presidency is shameful and undermines us on the world stage at a crucial moment.

Tackling climate change is the great challenge of our times, and one that will require huge ambition and dedication to solve.

That is why I am honoured to have been appointed Labour Shadow Minister for Climate Change and will do everything I can to call out Government backsliding and give the issue the attention it deserves.

Labour has a plan to tackle the climate emergency in a way that rebuilds our economy for working people. Our historic Climate Investment Pledge will do just that – rebuilding our industries, creating jobs in every community and cutting bills and costs. That includes plans to retrofit 19m homes in a decade, double onshore wind capacity and deliver an electric vehicle revolution.

This is in stark contrast to a Government that seemed to forget about COP26 climate commitments the moment the cameras left Glasgow.

Time is running out for climate action. But Labour's vision for the future of the UK is a green one, and we have the ideas and ambition to rapidly deliver it.

Docks, Rail, Ferries and Waterways (DRF&W) Sectors

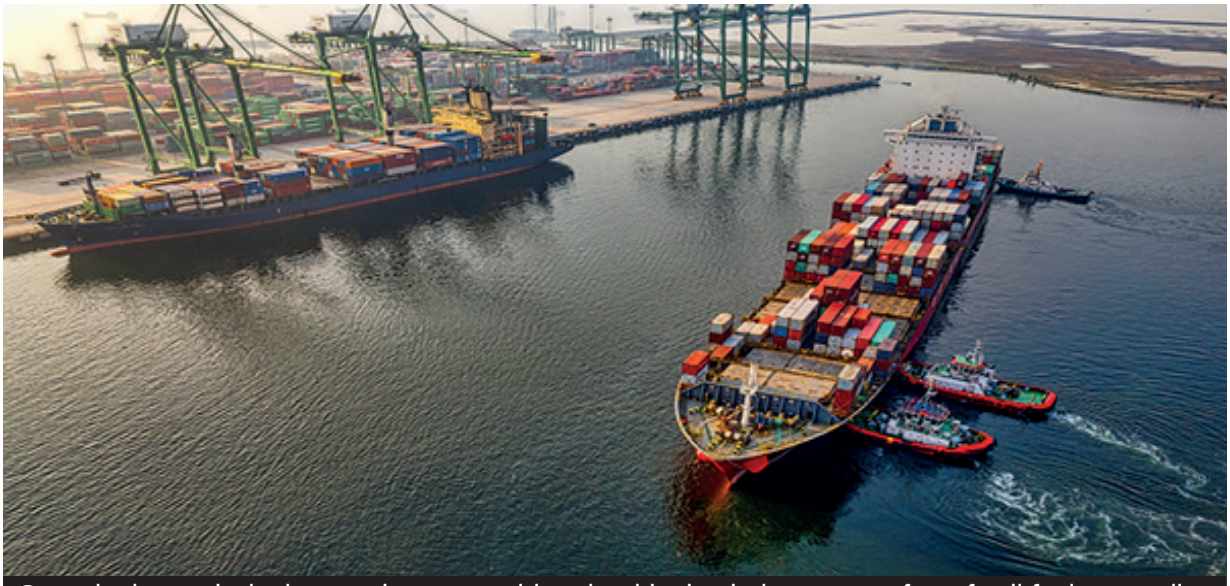
The following is an edited version of a report that has been constructed by Bobby Morton (Unite National Officer for the DRFW sector) and Colin Potter (Unite Researcher for the DRFW sector).

In the ports the role out of environment "improvements" by management is joining a bank of issues that are being raised in disputes. Connections for cruise ships in ports, to use shore power instead of running their engines, now means that whilst in these ports the ships are pollution free at point of use. Given the design of the UK power grid they are not totally carbon free, even more so as each cruise ship requires enough power for a small town or very large village. Concerns have been raised about the safety of dock workers conducting their duties so close to such high voltage connections and water.

More work is being conducted on the roll out of ammonia and 'Power to X'. 'Power to X' is a synthetic shipping fuel oil made from captured CO2 from the air, sea and factory flues mixed with Green hydrogen, all powered by renewable energy and nuclear power. This synthetic fuel could make shipping zero carbon in the same way as ammonia by replacing the fuel oil derived from the dregs of the crude oil cracking process. In some ports they are now powering their tugs on used vegetable oil.

Ammonia can be burnt in an engine to power the engine or be used in a fuel cell to produce electricity. When used, Ammonia's only by-products are water and nitrogen, making it a zero-carbon fuel. The Maritime industry has been identified as a potential early adopter of ammonia to replace the use of fuel oil in marine engines.

From Q1 2023, greenhouse gases from shipping will have a price tag, and this cost will eventually be passed on to charterers under various carbon emission trading schemes. Ship chartering involves hiring out the use of a ship by a vessel owner to another company, the charterer, for the transportation of goods.



Green hydrogen is the best option to transition the shipping industry away from fossil fuels, according to a 2022 report by Ocean Conservancy and its partners at UCL Energy Institute's UMAS (Maritime consultancy)

The shipping industry is looking at new technological ways to reduce the speed of their steaming to coincide with berth openings in ports. This reduces the amount of time the ship will be at anchor burning fuel just to keep the lights and equipment on. Slow steaming is a process of deliberately reducing the speed of cargo ships to cut down fuel consumption and carbon emissions. In slow steaming, a container ship travels at a speed of around 12-19 knots instead of the usual 20-24 knots. This results in a reduction of engine power and fuel consumption.

The resistance of travel in shipping increases as the ship travels faster through the air and water. This increases the fuel used as more energy is required to travel faster. Sailing too fast into a port, and then having to wait for a berth to be free is a waste of fuel. The shipping industry has already reduced the speed of shipping to save fuel and emissions. This can add weeks to journey times in some cases, but this tracking and emissions prediction service provides a way to individually tailor a journey to minimise the 'dwell' time outside ports.

In the rail sector, there has been successful trials in using hydrogen as a replacement fuel for diesel powered passenger trains on non-electrified rail routes. In September 2022, Siemens demonstrated its Mireo Plus H Hydrogen train. Siemens has stated that the electrification of the UK's rail infrastructure could take until 2060 and beyond to fully complete. This could mean that there would be a need to keep diesel trains on the UK rail network for up to ten years after the 2050 net zero emissions commitment of the UK Government. If this was the case, the use of hydrogen as a replacement fuel for diesel powered trains would be needed to ensure the rail industry met its 2050 net zero emission commitments.

If the UK cannot electrify over 300 miles of rail track every year between now and 2050, there is a clear case for introducing more bimodal trains. Bimodal trains work by fitting a bank of hydrogen fuel cells to electrically powered trains. This will enable electrically powered trains to travel on rails tracks that have not been electrified due to economic and environmental reasons, e.g., the volume of concrete and steel that would be needed to provide overhead wires and supplies to substations on the route. The hydrogen train can be refuelled anywhere, from an HGV trailer or from a permanent base. This helps to resolve any refuelling infrastructure concerns.

In a bid to combat human-caused climate change, one state in Germany is rolling out a fleet of passenger trains powered entirely by hydrogen. Five of these "zero-emissions" trains began running in late August 2022 in Lower Saxony, a state in the northern part of the country.

The UK's first hydrogen powered train began trials on the mainline railway in September 2022. The 'HydroFLEX' hydrogen train has been constructed through collaboration between Porterbrook and the University of Birmingham. The trial version of the hydrogen train is a demonstrator unit. The version that will go into production will be configured so that it can operate using both overhead-electric wires and hydrogen for non-electrified routes. This will make the HydroFLEX particularly attractive to regions and routes where there is only partial electrification of the network.

The University of Birmingham is developing a hydrogen and battery powered module that can be fitted underneath the HydroFLEX train, to provide more space for passengers in the train's carriage. This is the next stage evolution for the HydroFLEX hydrogen train.

Hydrogen powered trains have been tested in Lower Saxony, Germany, since 2018. In August 2022, five zero-emission hydrogen trains began running in Lower Saxony

Mary Grant, CEO of Porterbrook, announced that: "Porterbrook is committed to innovation and the delivery of a carbon neutral and sustainable railway". "It is our intention to start producing HydroFLEX trains, creating the world's first electric and hydrogen powered bi-mode rolling stock, as well as generating significant opportunities for the UK supply chain."

Professor Stephen Jarvis, Head of the College of Engineering and Physical Sciences at the University of Birmingham stated that: "The University of Birmingham is setting pace for rail innovation both in the UK and globally. The HydroFLEX project is a great example of how world class R&D, together with the right industry partnerships, can deliver decarbonisation technologies that are both innovative and practical. Successful mainline testing is a major milestone for HydroFLEX and is a clear demonstration of the important role hydrogen has to play in the UK's rail industry."

An innovative hydrogen train project is also being led by the University of St Andrews in Fife. The project has completed its next stage of testing and is on track to help the Scottish Government to meet its overall 2045 net zero carbon emissions target. The Scottish Government has set a target for Scotland's rail transport to be decarbonised by 2035.

The project is a partnership between government, industry, and academia, and includes the University of St. Andrews, Transport Scotland, Scottish Enterprise, Ballard Motive Solutions, Abbott Risk Consulting, ARUP, Aegis, and Angel Trains.

The hydrogen powered train was tested at the Scottish Rail Preservation Society on August 2022. This included a series of workshops to plan future strategy in the decarbonisation of rail in Scotland, with demonstration runs of the hydrogen powered train. The project involved the conversion and re-use of a 40-year old three car Class 314 train to a hydrogen fuel cell electric powertrain. The testing that has taken place on the track in order for the conversion to take place has resulted in the growth of a critical skills base that will be needed for hydrogen trains. During the project demonstration, green hydrogen was produced from the electrolyser that was connected to the temporary refueller. Refuelling infrastructure and its location will play a crucial role in the roll out of hydrogen trains.

This innovative project has produced important learning lessons regarding the conversion of existing rail rolling stock. It has also created new supply chain opportunities and skills for the emerging green economy, and opportunities to reduce emissions from Scotland's rail sector.

Mainline Testing of UK's First Hydrogen Train Gets Green Light. The HydroFLEX project is a collaboration between Porterbrook and the University of Birmingham

Dr Ben Todd, CEO of Ballard Motive Solutions, stated: "We are delivering a converted hydrogen-powered train in a live rail environment – including an advanced pre-production engineering design and green hydrogen infrastructure – while developing supply chain capability and new, green jobs. Hydrogen traction power offers a safe, reliable, and zero-carbon alternative for Scotland's rail network".

Professor John Irvine, Chair of the Hydrogen Accelerator at St. Andrews University said: "Hydrogen has a very important role in seeking to address climate change. It is essential to show that it can be implemented in real application at scale. The achievements of our team in delivering a smoothly operating train is an excellent exemplar of hydrogen technology and its capabilities, which is also critically informing our progress to removing fossil fuelled trains from our railways".

In Q4 2022, the UK Government has been consulting on the development of sustainable fuels. This has included:

- From biomass such as plant materials.
- Municipal solid waste, that would generally be destined for land fill or an incinerator to create electricity.
- Captured CO2 either taken from the air or extracted from industrial factory chimney gasses.

When combined with hydrogen each of these sustainable fuels could create a drop in fossil fuel use. If the level of funding to create sustainable fuels was equivalent to just 4 years of oil industry development budgets, there would be enough capacity to replace all fossil fuels in the shipping industry globally. This could significantly bring the date to achieve net zero emissions far closer than 2050. A copy of the Unite response to this consultation can be found along with the responses to all Unite consultation responses by going to the Politics @ Home website.

Scottish hydrogen train project on track to deliver climate targets. The project is led by the University of St Andrews in Fife

Energy & Utilities Sectors

The following is an edited version of a report that has been constructed by Simon Coop (Unite National Officer for the Energy and Utilities sectors) and Colin Potter (Unite Researcher for the Energy and Utilities sectors).

In his previous role as the Secretary of State for Business, Energy and Industrial Strategy (BEIS), in Liz Truss' ill-fated UK Government, Jacob Rees-Mogg said in response to the ongoing conflict between Russia and Ukraine:

"In light of Putin's illegal invasion of Ukraine and weaponisation of energy, strengthening our energy security is an absolute priority, and – as the Prime Minister said – we are going to ensure the UK is a net energy exporter by 2040.

To get there we will need to explore all avenues available to us through solar, wind, oil, and gas production - so it's right that we've lifted the pause to realise any potential sources of domestic gas.

We need to be thinking about exploiting every last cubic inch of gas from the North Sea. We are not going for net zero tomorrow – 2050 is a long way off".

The UK is now on its third Prime Minister since the start of 2022. Ahead of the COP27 Conference in Egypt (6 November 2022 – 20 November 2022), new Prime Minister Rishi Sunak committed to delivering on the Glasgow Climate Pact. Sunak committed to speeding up the transition to renewables to create new high-wage jobs, protect UK energy security and deliver on net zero.

Sunak stated that Russia's invasion of Ukraine has highlighted that the world needs to move further and faster to become less reliant on fossil fuel energy by investing in cheaper, cleaner, and safer sources of energy. The provision of reliable and affordable energy for homes and businesses requires a solution to the climate crisis by ensuring that renewable energy is at the heart of our energy security.

It was noted by Sunak, that up to 430,000 jobs in low carbon businesses and their supply chains had been created across the UK, supported by £30 billion of investment from the UK Government's Green Industrial Revolution programme which was launched in Q4 2020. Sunak reiterated that renewables would create more high wage, high skill jobs across the UK in the green industries of the future.

At COP27, it was Sunak's intention to have discussions with fellow world leaders to discuss new partnerships on energy security, green technology and environmental protection following Russia's invasion of Ukraine. Sunak stated that Russia's manipulation of the energy process reinforces the importance of ending our dependence on fossil fuels. Citing that he wants the UK to be a clean energy superpower, Sunak emphasised that the UK must move further and faster to transition to renewable energy. Sunak also planned to attend a roundtable on energy transition partnerships, to discuss public and private sector funds to support low and middle income countries to move away from fossil fuels and grow their own green economies.

The current UK Prime Minister, Rishi Sunak, has stated that he wants the UK to be a clean energy superpower. However, Sunak originally cancelled his appearance at COP27 in November 2022, before recommitting to the appearance after former Boris Johnson announced that he would be attending COP27

This announcement by Sunak in the run-up to COP27, and his speech at COP27, shows how disjointed the UK Government's commitments are to energy strategy in the UK. The rhetoric of Sunak and Rees-Mogg over a two- month period on energy strategy was, on the surface, markedly different. Rees-Mogg was proposing an energy strategy with an increased use of fossil fuels. Whereas Sunak, at least in his COP27 guise, was promoting the replacement of fossil fuels with renewable energy. Sunak had originally announced that he did not have the time to attend COP27 due to work commitments around the Autumn Statement. However, on the day that Boris Johnson confirmed that he was attending COP27, a statement came from Sunak's office stating that he would now be attending COP27 after all. This is another example of the UK Government using the climate emergency debate as a political football to achieve scoring points amongst themselves.

The Progress Report of the Climate Change Committee (CCC) published in June 2022, highlights the failure of the UK Government to take the decisive action needed to meet its net zero 2050 commitments.

The report states that the UK Government needed to do more to make the UK an energy efficient nation. The report identified that making the UK's residential and commercial buildings more energy efficient through retrofit programmes would go along way to making the UK a more energy efficient nation.

The UK is expected to exceed its national share of the 1.5°C carbon emissions budget in 2024. After 2024, the UK will be eating into the rest of the worlds unused budget for carbon emissions unless and until we start to capture more CO2 than we release. At the COP27 Conference at Sharm El-Sheikh in Egypt, it will be important for global leaders to show progress with the implementation of climate policies that were agreed at COP26 in Glasgow in 2021. This led to the construction of the Glasgow Climate Pact. A key goal of COP27 is gaining further agreement from the parties (nations) to the recommendations in the Glasgow Climate Pact. The evidence of the UK exceeding their share of the 1.5C carbon emissions budget by 2024, highlights the disappointments that surrounds the United Nations Conference of Parties (COP) Conferences. The UK Government presided over the COP26 event in Glasgow in November 2021 and the Glasgow Climate Pact that came out of it. And yet, the UK is failing on its own commitments to reduce carbon emissions.

In Quarter 1 2022, UK electricity generation totalled 84.0 TerraWatt hours (TWh) which is similar in value to the same period last year. This was despite a 1.5% decrease in electricity demand over the same period, which saw total electricity supply down by 1.7% to 84.8 TWh. The difference between generation and supply came from a substantial fall in net imports, which fell 22% to 4.9 TWh. Fuel consumption during Quarter 1 2022 totalled 15.3 Million tonnes of oil equivalent (Mtoe), a fall of 2.9 % when compared to Quarter 1 2021. Fuel use fell in line with higher wind and solar generation, continuing long term trends of decreasing fossil fuel consumption, as fossil fuel energy generation falls in line with demand and the energy generation mix moves increasingly toward renewables.

The big problem has been the price of crude oil and gas. The UK generation fuel mix includes the use of gas turbines to generate almost half of this nation's power and hence as the price of gas rises sharply, the price of electricity is dragged along with it. While the UK derives most of its gas from the UK and Norway, the impact of the reduction in Russian gas supplies has made the whole of Europe contemplate the fear of energy black outs. Consequently, many European nations have been rapidly building up their energy supplies for winter 2022/23. The UK's gas storage facility was reduced back in 2017 when Centrica's gas storage facility was closed. Critics have argued that Liz Truss, in her then role as Chief Secretary to the Treasury, was influential in the closing of this gas storage facility in Yorkshire.

An article by Energy Voice in August 2022 stated:

"Liz Truss needs to urgently explain what her involvement was in shutting down the Rough gas storage facility and plummeting the UK into close to zero storage stocks. The decision shows a blatant disregard from this government to protect our energy supply and keep bills down".

As a result of Liz Truss's decision, the UK gas network does not have enough storage capacity to hold all of the UK's unused gas production. The UK exports the gas it doesn't use during the summer months and buys it back in the winter. Even during times when

Critics have argued that Liz Truss, in her then role as Chief Secretary to the Treasury, was influential in closing a gas storage facility in Yorkshire

there wasn't a gas supply problem, this is no way to run an industry because it means selling cheap in summer to buy it back in winter when it is more expensive because of increased demand.

The UK Government is taking a series of measures to offset the massive rises in the wholesale price of gas. Wholesale prices of gas have gone from 17p per therm in June 2021 to over £6.39 a therm in August 2022. The current price trend is going down, but it is still at £3.21 a therm at the time of writing. The UK Government's measures to protect consumers from these gas price hikes include a £150 saving by temporarily transferring the cost of environmental and social costs, including green levies, to the Exchequer for 2 years. This means customers don't bear these costs, but will benefit from the low-carbon electricity generation. The government will also cover the losses of energy companies, from the loss of their energy price guarantee. Every household will receive £400, paid in six instalments from October 2022 as part of the Energy Bills Support Scheme. An additional payment of £100 will be provided to compensate for the rising costs of alternative heating fuels for those UK households who are not able to receive support for heating costs through the Energy Price Guarantee. The most vulnerable UK households will also receive an extra £800 paid in instalments.

For businesses and non-domestic properties the government is to set up the Energy Bill Relief Scheme (EBRS). This will provide support with energy bills for all non-domestic consumers in Great Britain and Northern Ireland (including charities and public sector organisations). This 6-month scheme will protect them from soaring energy costs by providing a discount on wholesale gas and electricity prices. It will apply to energy usage for all non-domestic energy users from 1 October 2022 to 31 March 2023.

Equivalent support will be provided for non-domestic consumers who use heating oil or alternative fuels instead of gas. In Northern Ireland, the scheme will be established on the same criteria and offering comparable support, but recognising the different market fundamentals.

Because of the energy crisis, EDF has announced that it has agreed to the UK Government's request to keep two of its UK nuclear reactors open for longer than their original retirement date. Over the 2023-25 period, EDF plans to invest £1 billion into the UK fleet to sustain output and help maintain security of supply. The case to extend generation at Hartlepool and Heysham 1 power stations (2.2GW) - beyond the current estimated end date of March 2024 - will be reviewed in the coming months, with an ambition to generate longer if possible. This does not compromise safety in any way as the reactors and support equipment are subjected to round the clock testing and monitoring.

Whilst it is natural for these nuclear reactors to deteriorate with age, concerns have been raised over changes to their physical properties, e.g., electric conductivity as this will get worse over time. Extra funding will therefore overhaul the equipment to overcome any issues that may arise. In the United States they have successfully extended the life of their nuclear reactors from the originally planned 40 years to 60 years with no issues. So, extending the life of these stations should not be an issue.

By the end of 2021 the current EDF fleet of UK nuclear stations alone had supplied the UK with enough green electricity to power the country for 18.5 years.

EDF has also agreed to the Governments request to keep the 'West Burton A' coal fired power station open for a further six months (until March 2023).

In the Autumn Statement in November 2022, Chancellor Jeremy Hunt committed the UK Government to the Sizewell C Nuclear Reactor project. Hunt confirmed that the UK Government was in talks with EDF to create 10,000 highly skilled jobs at the Sizewell C plant, which would produce low carbon energy for around 6 million homes for 50 years.
The UK Government has also been consulting on the development of sustainable fuels. It has discussed the expansion of renewable energy and nuclear energy in order to power the extraction of the fuels main components, Hydrogen and CO2. A copy of the Unite response to this consultation can be found along with the responses to all Unite consultation responses by going to the Politics @ Home website.

Chancellor of the Exchequer, Jeremy Hunt, committed the UK Government to the Sizewell C Nuclear Reactor project in his Autumn Statement in November 2022

The UK Government is in talks with EDF to create 10,000 highly skilled jobs at the Sizewell C plant. The plant is expected to produce low carbon energy for around 6 million homes for 50 years

Food, Drink & Agriculture (FDA) Sectors

The following is an edited version of a report that has been constructed by Bev Clarkson (Unite National Officer for the Food, Drink & Agriculture sectors) and Bridget Henderson (Unite National Researcher for the Food, Drink & Agriculture sectors).

Free trade agreements: never a level playing field:

The UK needs to secure its food supply more than at almost any time in its history. Global shocks – such as droughts and floods linked to the climate emergency, military conflict, pandemics, and energy shortages – are now regularly interrupting supply chains for food and other commodities alike. But when food chains are broken, the impact destabilises societies, with vulnerable citizens most at risk. At the same time, global food production adds to the climate emergency because it is heavily reliant on water and pollutes water sources.

Yet even though food security has rarely been more critical, the UK Government is desperately seeking to sign up to post-Brexit trade deals. These trade deals can lead to increasing pollution and threaten UK jobs, in return for food produced to lower standards and with worse climate and environmental impacts.

According to the World Food Summit (1996), "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active, and healthy life".

Since it was signed in December 2021, the UK- Australia free trade agreement has been scrutinised in detail by politicians and food campaigners alike. They conclude that this deal undermines UK food standards and worsens the climate crisis. UK jobs won't get a boost. In meat production, for example, Australian farms and ranches dwarf the size of UK farms and because of economies of scale, produce meat more cheaply, though to a lower standard.

MPs on the UK Cross-Party International Trade Committee were dismayed that Australian food will not have to meet core UK food production standards, e.g. on pesticide use. They also found that any 'cushioning' for UK food producers will peter out in the name of the free market.

"The almost complete liberalisation of unprocessed agri-food trade with Australia is a significant step, especially given the UK's strong defensive interests and minimal offensive interests. The Committee acknowledges the Government has sought to cushion negative impacts on UK producers with long-lasting phase-in arrangements. However, the duration of those arrangements is not necessarily a long period for the sectors concerned, given their lengthy planning horizons."

A more hard-hitting analysis came from a collaboration of consumer and environmental non-governmental organisations (NGOs). Compassion In World Farming (CIWF), Greener UK, RSPCA, Which? Magazine, World Wide Fund for Nature (WWF), and the Sustain Alliance for better food and farming (of which Unite is a member) analysed the full UK trade deal with Australia. They found the UK-Australia trade deal to be a disaster for a wide range of environmental reasons, along with animal welfare and public health concerns.

COMPASSION in world farming

Compassion in World Farming (CIWF) are involved in a collaboration of consumer and environmental NGOs, that are concerned about the UK trade deal with Australia. The concerns are based around environmental, animal welfare and public health issues

[The deal] contains "no safeguards" for environmental protections or animal welfare, and will:

- increase the impact of UK consumption on important habitats overseas
- expand the supply of meat produced to lower animal welfare standards
- raise the risk of UK food standards and food safety being lowered over time ...

'.... the zero-quota, zero-tariff deal agreed with Australia will also increase UK farmers exposure to "unfair competition with outdated, cruel, and unsustainable farming practices the UK has already moved away from".

In theory, the UK government was going to protect the UK's current environmental standards, together with animal welfare and food safety, in this post-Brexit trade deal. The negotiating objectives were: ... 'that the UK will "ensure high standards and protections for UK consumers and workers and build on our existing international obligations. This will include not compromising on our high environmental protection, animal welfare and food safety standards."

But the analysis by the NGOs looked at the pledge to not compromise on standards and found this was not embodied in the trade deal. Not only that but those standards couldn't have been protected by the trade deal alone. To have a chance of protecting these standards, the UK will have to look at other ways to fully protect them. Whether the current UK Government is going to do that looks unlikely, given its libertarian commitment to the free market and to a small state.

Australia applies significantly lower environmental, animal welfare, food safety and public health standards to its food and farming sector. Australia is one of the worst performers on the climate, nature conservation and antibiotic use in livestock, globally.

UNITE Community members on the picket line supporting members in struggle

Negotiating objectives	Does the Australia deal safeguard UK standards?	Rating
No compromise on high environmental protection standards	No, it provides no safeguards: No environmental conditions are set for imports and, while the Environment chapter's general climate commitment is enforceable, it is insufficiently specific to address the difference in the regulatory baselines between the parties' food and farming sectors. The range of environmental issues regulated in UK farming are not covered.	
No compromise on animal welfare standards	No, it provides no safeguards: No animal welfare or antimicrobial resistance (AMR) conditions are set for imports. The Animal Welfare and AMR chapter's commitment to non-regression is not enforceable and, in only covering future reductions in standards, does not address the current gap in animal welfare standards between UK and Australian farming.	
No compromise on food safety standards	No, it weakens existing safeguards: While neither the agreement nor any side letters to the agreement require the UK to reduce its food safety standards, the agreement does commit UK and Australian regulatory authorities to identify areas where their respective regulation could be deemed 'equivalent'. It also refers to regional conditions being taken into account and agrees a narrower basis for regulation, all of which increase the likelihood of UK food safety and wider food standards being eroded over time.	

Source: Analysis by CIWF, WWF, and others, Safeguarding the UK's food and farming standards in trade: Lessons from the Australia-UK Free Trade Agreement, 30 March 2022.

The UK Department for International Trade did an environmental impact assessment, which noted Australia's poor environmental farm standards. But the NGOs' analysis says the Department for International Trade understated 'the extent of climate change impacts by failing to capture the full impact of Australia's livestock industry on land use change and deforestation. Australia has the highest rate of deforestation in the OECD, rising by 34% between 2016 and 2018'. Water stress was also noted but not calculated, '... despite the overgrazing of sheep and cattle in Australia increasing the severity of droughts, making vegetation and trees more vulnerable to wildfires which devastate wildlife populations and further contribute to climate change'.

The NGOs' analysis also highlighted:

- Weak federal and state laws on land clearing make it legal for products linked to deforestation to be imported into the UK.
- A weak approach to regulating pesticides sees Australia use 71 highly hazardous substances and thousands of pesticides that are banned in the UK, including neonicotinoids, which harm pollinators such as bees.
- Australian cattle and sheep industries are a significant source of emissions and a contributor to deforestation and drought, which in turn makes vegetation and trees more vulnerable to wildfires and further contributes to climate change. Yet Australia's plan for net zero allows for continued expansion of the meat industry.

The deal allows each side to change their laws in the future and lower environmental standards in farming; either side have the rights to set their own levels of environmental protection. For agriculture this is made worse because it only applies to national laws and doesn't cover environmental regulations for farming which in Australia are set at state level.

Finally, the Australia-UK trade deal talks about safeguards if the quantity of imports rises sharply, but nothing about the quality of production or how to use environmental impact to differentiate between products.

This is not an environmental level playing field for UK produce, and there is no way to control imports that are produced unsustainably, or that increase the UK's green footprint in other countries. In fact, the conclusion is that: '... the deal provides new incentives for products produced to lower environmental standards and associated with the most damaging environmental practices to enter the UK market. It therefore makes it more difficult for UK customers to make sustainable choices.'

This sticks in the throat of Unite members in food and agriculture. Farm subsidies in the UK are due to be linked to a 'public money for public goods' approach – better water quality, biodiversity, reducing greenhouse gas emissions, supporting eco-systems, soil quality, animal health – and producing food in a sustainable way. Thousands of jobs in agriculture are needed, while skills in managing landscape and sustainable farming are in short supply. But as part of the government's 25-year environment plan, this at least is looking towards the long-term future of both UK food production and environmental health.

How does this sit with an aggressive free trade deal which puts out a welcome mat for low-quality imports that undermine UK food production and worsen the climate crisis?

The UK Government launched its 25 Year Environment Plan in 2018 under the heading of a 'vision for a greener future'

Government, Defence, Prisons & Contractors (GDP&C) Sectors

The following is an edited version of a report constructed by Caren Evans (Unite National Officer for the Government, Defence, Prisons and Contractors (GDPC) sectors.

The Ministry of Justice is seeking to achieve the gold-standard 'outstanding' rating in Building Research Establishment Environmental Assessment Method (BREEAM) for its four new prisons. BREEAM is an independent scheme which assesses the sustainability of infrastructure projects. The four new prisons being built in England will use heat pumps, efficient lighting systems and thousands of solar panels, to reduce energy demand by half and cut carbon emissions by at least 85% compared to prisons already under construction. This is expected to reduce CO2 emissions by 280,000 tonnes and cut £100 million in energy costs over the next 60 years. Future prison expansions will also be built to similar standards. The new designs will learn from the construction of HMP Five Wells in Wellingborough, Northamptonshire, and the new jail in Glen Parva, Leicestershire, which are being constructed more sustainably than existing prisons using recycled materials and incorporating green energy.

The four new prisons will use an all-electric design that eliminates the need for gas boilers, meaning they will produce net-zero emissions when the National Grid decarbonises. During construction, 40,000 tonnes of carbon will be prevented by using recycled concrete and steel. Existing prisons are also benefiting from a £15 million investment to cut their emissions. Solar panels are being installed at a further 16 sites to meet 20% of their power demand - bringing the total number of solar panels across the estate to over 20,000. More than 200 electric vehicle charging points are also being installed across 40 prisons. Habitats for wildlife will be cultivated at each prison to promote biodiversity and ensure the local ecology is stronger than before construction began.

Today with fuel crisis and the soaring costs of heating in prisons, the introduction of differentiated electricity pricing may tempt employers to impose new shift patterns onto our members in order to cut costs by having prisoners eat dinner later to attract cheaper electricity.

The new Glen Parva prison in Leicestershire is a sustainable construction project using recycled materials and incorporating green energy

Local Authorities Sector

The following is an edited version of a report constructed by Claire Keogh (Unite National Officer for the Local Authorities sector).

Local government workers are on the front line of government plans to tackle climate change and protect the environment. In particular, workers within refuse and waste services play an essential role in ensuring targets on recycling, waste prevention and management and reducing litter are met.

The UK Government is planning major reforms in this area, which includes the introduction of consistent recycling collections for all households, tackling plastic pollution, and creating a more circular economy. As part of the EU's Circular Economy Action Plan, the UK needs to achieve a 65% municipal recycling rate by 2035 with a maximum of 10% being landfilled. This compares to the 2020 household recycling rate of 44%.

Unite members in local government, and refuse services, will be at the heart of this strategy. The Local Authority sector has embraced a neoliberal race to the bottom economic model for many years now. There have been decades of outsourcing services which has resulted in the stagnation of wages and cuts to jobs in the sector. This has been tied in with austerity policies that have been implemented by successive Conservative Chancellors from UK Governments since 2010. The result has been severe reductions in real terms funding to local government. These changes to the Local Authority sector over recent decades have led to, what is a very difficult and demanding job and one that is vital to tackling climate change, now becoming an often low paid job, with poor terms and conditions and increasing recruitment and retention problems.

Unite has been fighting back on this issue and has been organising and winning disputes across the sector, putting power back into the hands of workers. This includes campaigns within both outsourced employers, such as major companies like Veolia, Serco and Biffa, and also in workplaces where members are directly employed by councils such as in the national dispute across Scottish local authorities in 2022. To beat the climate crisis, the UK will need a workforce in refuse and recycling that is skilled, well-paid, secure, and sustainable.

Unite's position is that insourcing and direct employment will be key to tackling this problem and we have long campaigned on this issue. We have made the case for insourcing in both industrial and political spheres and there have been notable examples of contracts being brought back in house after years of being run by private companies.

The Labour Party report for democratising local public services sets out how decades of privatisation have failed to deliver decent public services, but has achieved its aim of decreasing trade union density and power.

The report sets out a framework for bringing local services back into public hands and improving democratic accountability. This will ensure that services are run for improving the environment and the wellbeing of a local area, rather than being run for profit and the benefit of shareholders. These principles underpin Unite's work in organising the sector. Well-paid, unionised, and secure workforces will undoubtedly benefit entire communities, as we transition towards a green economy and society.

Section Two:

Retrofitting

The Unite Environment Taskforce has identified that the retrofitting of buildings is an important area where Unite can have a major role in addressing the climate emergency. As a result, we have dedicated a whole section of this issue of the Unite Environment Quarterly on the issue of retrofitting buildings. Retrofitting is an integral part of UNITE's ambition to defend and expand jobs for our members and potential members.

Our section on retrofitting includes the following information on the subject:

- A definition of retrofitting by the UK Government
- Building to net zero: costing carbon in construction: First Report of Session 2022-23: Environmental Audit Committee (Q2 2022).
- A statement from the Unite North East, Yorkshire, and Humber Retrofitting of Homes Taskforce (Q2 2022).
- A report from the Unite Environment Taskforce on the Retrofitting Workshops planned, constructed, and delivered to the City of Edinburgh Council Unite Branch (Q3 2022).
- The Our Climate: Our Homes report of the Scottish Trade Unions Congress (STUC) - (Q4 2021).
- A trade union guide to action on local authority and retrofit – Greener Jobs Alliance (Q3 2022).
- An Insulation report – Greener Jobs Alliance (Q4 2022)
- Glasgow's retrofit programme: rival agendas - Les Levidow, Open University (Q3 2022)
- Retrofitting Workshop: University of Westminster (Q4 2022).

A definition of retrofitting from the UK Government:

The UK Government describe retrofitting as 'the introduction of new materials, products and technologies into an existing building to reduce the energy needed to occupy that building.

Building to net zero: costing carbon in construction – First Report of Session 2022/23 – The Environmental Audit Committee:

The Environmental Audit Committee (EAC) published this report to the House of Commons on the 26 May 2022. The report identified that 25% of the UK's greenhouse gas emissions were attributed to the UK's built environment, which is made up of residential and commercial buildings. The report concluded that the UK Government had shown a lack of impetus and policy levers to reduce emissions from the UK's built environment. With climate deadlines looming, the report stated that urgent action was now needed.

The Environmental Audit Committee (EAC) report stated that the UK was lagging behind countries like the Netherlands and France for whole-life carbon assessments for buildings. Whole-life carbon assessments for buildings calculate emissions from the construction, maintenance, and demolition of a building, and from the energy used in its day-to-day operation. The EAC recommended that the UK Government introduce a mandatory requirement for whole-life carbon assessments for buildings, to reduce the levels of CO2 in construction, from the use of cement and steel. Once these whole-life carbon

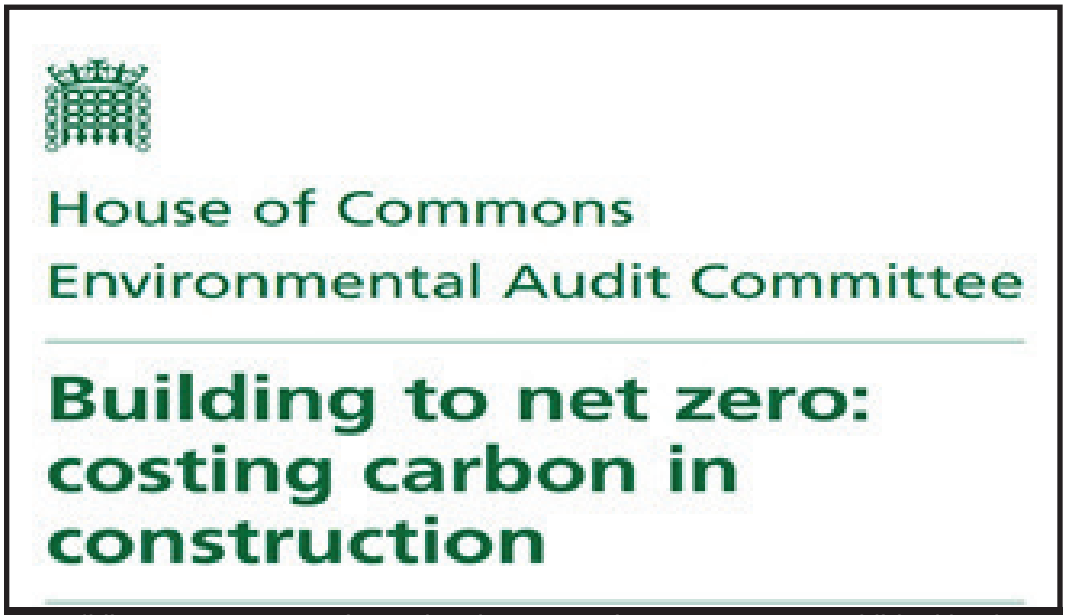
assessments are in place, the EAC advised the UK Government to develop carbon targets for buildings that were aligned with the UK's net zero goals. The EAC stated their recommendations should be introduced by no later than December 2023.

The EAC report recommends that retrofitting and reuse of buildings should be prioritised over new builds, because this keeps carbon locked into buildings. The EAC highlighted that although the UK Government has stated that it prioritises retrofitting and reuse of existing buildings over new builds, government reforms to development rights have created incentives for demolishing old buildings and replacing them with new buildings. The EAC recommends that the UK Government implement incentives to encourage retrofitting and the reuse of existing buildings.

Low carbon building materials are recommended by the EAC where retrofit is not possible. This could include recycled steel and recycled building materials. The EAC recognised that timber was also a low carbon construction material. However, there were currently several complications to using timber on a wide scale, such as the appropriate sourcing of timber, enhanced tree planting and a skills gap in using timber for construction.

The EAC identified that the UK's chronic skills gap in energy efficiency construction and retrofit had not improved. This had been highlighted in previous EAC reports. The EAC stated that unless these vital green skills became abundant in the UK economy, the UK Government's net zero ambitions would not be achieved. The EAC concluded the report by reiterating the recommendations in its previous reports, that the UK Government needs to develop and publish a retrofit strategy and an accompanying upskilling programme. The education system should ensure that training in whole-life carbon assessments was available.

The chair of the EAC, the Rt Hon Philip Dunne, in his concluding statement said: "As in many other areas in the drive to net zero, the UK must have the green skills to make its low carbon future a reality. Before the summer recess in July 2022, I urge the Government to publish a retrofit strategy and upskilling programme that can ensure the UK economy will have the green jobs necessary to deliver a low-carbon built environment."



Building to net zero: costing carbon in construction - was a report published by the House of Commons Environmental Audit Committee in May 2022

North East Yorkshire & Humber Retrofitting of Homes Taskforce Statement – June 2022

The following is an edited version of a statement from the Unite North East, Yorkshire, and Humber Retrofitting of Homes Taskforce.

Background:

The North East, Yorkshire & Humberside (NEY&H) Committee's April 2021 motion, titled: "Retrofitting of Homes", has been adopted as policy under the remit of the Unite Executive Council.

The NEY&H Unite Retrofitting of Homes Task Force was subsequently established to pursue this policy decision of the union.

The Task Force is recommending the formation of retrofit subgroups within the localities of the North East, Yorkshire, and Humber, and this being established practise within the NEY&H region. It is hoped that the NEY&H region can develop a best practice template which can be shared across the other regions in Unite.

Retrofit subgroups:

- Establish local Unite Retrofit subgroups, including all interested parties and Unite community groups who are members of Unite the Union. Strategy planning of the Retrofit subgroups should focus on Local Authorities, and the aim to achieve a Just Transition for workers. This would involve the opportunity for workers to transition into a retrofitting job, with secure employment, high health and safety standards, and skills and apprenticeship training.
- Retrofit subgroups will report back on their progress to the Regional NEY&H Retrofitting of Homes Task Force, under the auspices of the Regional Council. The Task Force will coordinate to share best practice, experiences, and collaboration between groups where applicable. The Task Force and retrofit subgroups should ensure the engagement of Local Authorities, Unite Regional Industrial Sector Committees (RISCs) and Construction RISCs to identify any unintended industrial relations implications and ensure compliance to recognised national occupational and industry standards.
- Encourage Local Authorities to map out the costings for the requisite jobs, skills, training, design, planning, installation, commissioning, repair and maintenance, administration, materials, and equipment etc. required, to deliver full retrofit programmes meaningfully and effectively within their jurisdictions to achieve decarbonisation targets.
- That Local Authorities scope anticipated energy savings and carbon reduction requirements and goals and undertake impact assessments on the financial implications to householders, residents, occupiers, and the local community (both positive and negative). To seek financial assistance from central government for effective delivery of such programmes for creating a low carbon future for the wellbeing of the planet in the locality. This should include free energy consumption assessments by qualified assessors to assist residents in achieving energy efficiency through reducing energy leaks and cutting the cost of energy bills.

- Engage with the relevant Local Authority including Councillors and Civil Servants, to identify and use green homes grants, environmental and decarbonisation funding initiatives, and campaigning for increased assistance from the UK Government. To seek further financial methods of funding for whole house retrofits, plus the environmental retrofitting of public buildings, facilities, and infrastructure under the control of the Local Authority.

- Ensuring works conducted are undertaken by those with the appropriate skills, training, qualifications, and competence. To undertake thorough assessments of each dwelling, using safe and good quality materials. Completed works are to be inspected for full compliance to building safety and energy efficiency standards. This would include necessary related remedial works. All individual operatives and apprentices shall be registered with the relevant Construction Skills Certification Scheme (CSCS) partner scheme appropriate to their occupation and level of competence. Companies shall also be registered with their relevant third-party certification schemes to ensure building safety and quality standards are adhered to and monitored under an independent process, for the safety and protection of residents, clients, the tax payer, and the public.

- Ensuring that the skilled workforce is available and bona fide industry recognised and regulated apprenticeships and training are provided, using the facilities of the building departments within colleges of Further Education and industry recognised Training Providers.

- That as part of the discussions, the Local Authority should seriously consider creating an "in house" direct workforce, with full trade union negotiated terms and conditions of employment.

- Subgroups shall actively advocate to the Local Authority that they specify that contractors, whether major, SME or micro businesses, must adhere to the relevant construction national collective agreements, direct employment, and the Unite Construction Charter under the Local Authority's procurement process. All workers will be encouraged to be members, in good standing, of their relevant independent trade union. All construction and specialist contracting employers shall be encouraged to be members, in good standing of their relevant signatory employers' trade association.

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& HUMBERSIDE

The Unite North East, Yorkshire & Humberside region are the first region within Unite to set up a 'Retrofitting of Homes Taskforce'

Unite Environment Taskforce working with the City of Edinburgh Council (CEC) Unite Branch to plan for Retrofitting Workshops across Scotland and beyond

This report has been compiled by Mick McGrath and Iain Reekie, both members of the Unite Environment Taskforce and Unite Deputy Regional Secretary for Scotland, Mary Alexander," The report was written in Q3 2022.

Following a series of discussions with Officials and Representatives of the City of Edinburgh Council (CEC) Unite Branch, along with the Unite Deputy Regional Secretary for Scotland, the following Retrofitting Workshop programme has been developed. During these meetings, it became clear that amongst the many environmental issues facing Unite Branch members, one of the key priorities of the Branch was identified as retrofitting. Retrofitting can clearly be seen to engage many key elements of tackling the climate emergency. For a start, unlike some other environmentally located actions, the Local Authority has no choice but to undertake this massive programme of work. It is also the case that retrofitting brings to the fore the stark issues of direct labour and the threat of contracting out to the private sector. Retrofitting involves issues around recruitment, selection, and training for this vast project. If we are to eliminate or drastically reduce private sector involvement, we need to be acting now to ensure that the Council's workforce has the capacity to manage such a project. Retrofitting involves issues of job security and adequacy of remuneration. As such, it is an issue were Unite members can be mobilised with maximum engagement and commitment to action, where necessary, secured.

This Unite Facilitated Workshop Programme engages the Scottish Government's retrofitting programme. A more direct approach to delivery is needed with the Scottish Government providing the finance necessary for local authorities to establish municipal energy companies and deliver street by street retrofitting programmes supported by a national infrastructure company. The whole of the built environment, including Local Authorities, Housing Associations, the private rented sector, and employer premises needs to be included.

The key objectives of this nationally run out workshop is to ensure UNITE plays a key role in driving this programme forward. It is evident that at a time of national energy crisis, government retrofitting programmes, instead of increasing have decreased. We also know that houses are at present still being built without considering requirements for adequate insulation. The Unite Facilitated Workshop Programme outlined, will be a set of Scottish based workshops which would bring the key UNITE Branch Officials and reps together. Discussions will be based on how they can work to engage with employers to ensure the retrofitting effort in their Local Authorities is conducted in-house or with limited private sector involvement. This will involve issues of recruitment, training and upskilling along with remuneration and much else. While the current programme has a distinct Scottish focus, with minor alterations it could be run anywhere in the UK and beyond. Where Unite Reps are collaborating with sister unions, it may be appropriate to invite their collaboration along with Housing Associations, Tenant Groups, and other relevant organisations.

This initiative arises from discussions at the Unite Environment Task Force meetings. In particular, the canvasing of Scottish Local Authorities for information on how they are engaging with Unite and other trade unions in taking action to address the climate emergency. The focus of this Unite Facilitated Workshop Programme is on retrofitting. It should be emphasised that this Workshop model is entirely flexible and can be adapted to address a wide range of environmental issues that are important to workers and our union. These include: a Workers' Just Transition; Environmental Auditing; Evaluating Employer Supply Chains and Negotiating for a Fair Share of the Gains. Other Workshop programmes on environmental issues could be Unite specific or involve sister unions and / or interested Community organisations.

A note of caution is required here. At the time of writing (August 2022), Local Authority workers in Scotland are taking industrial action following a derisory pay offer. As are many other workers across the UK who are fed up with stagnant wages, rampant inflation, and the avarice (greed) of corporate Britain. Until the dust settles, this workshop proposal will, of necessity, have to remain on ice, as it were. When we can resume, the plan is for us to brief relevant Full Time Officers and Senior Lay Officials as to the programme we are offering. From then, we will roll out the programme to be accessed by relevant constituencies.

The Unite City of Edinburgh Council (CEC) Branch is collaborating with Unite's National Education department to develop a series of Retrofitting Workshops

Unite the Union – Environment Project: A Facilitated Workshop for Unite Branch Officials and Unite Environment Reps

This Retrofitting Workshop outline was constructed by Mick McGrath and Iain Reekie, members of the Unite Environment Taskforce. The workshop outline was constructed in Q3 2022.

Objectives:

- Consider the opportunities and barriers to the creation of high skilled, well-paid jobs to assist in achieving the Scottish Government's Retrofitting programme.
- Identify the practical steps necessary to provide training to upskill workers within Local Government and Construction to deliver the Retrofitting programme.
- Contribute to the implementation of the Scottish Government's Retrofitting programme of publicly owned buildings and homes, and the creation of municipally owned energy companies.

Workshop Structure:

Session 1:
Participant introductions followed by keynote speaker and commitment to Workshop objectives.

Session 2:
Evaluation of extent of Retrofitting in participants' Local Authorities. What is Retrofitting and how will this assist in delivering Unite objectives and help meet the challenges ahead?

Session 3:
What are the opportunities and barriers to upskilling the workforce and creating jobs? How do we exploit the opportunities and address the barriers?

Session 4:
What specific actions will your Branch take to secure your objectives in respect of Retrofitting? What are the timescales for these actions.

Session 5:
Summary of key action points

Indicative Resources for the Workshops:

Sturgeon warned £33bn for decarbonising homes will be needed by 2025 | HeraldScotland

Ambitious scheme to insulate the Region's 428,000 homes has potential to support the transition to net zero and economic recovery, creating thousands of new local jobs

New investment in green energy needed for north of Scotland to help nation meet net zero | HeraldScotland

TUC Retro-fitting briefing

Our Climate: Our Homes – Scottish Trade Unions Congress (STUC)

This is an edited version of a paper that was written in the run-up to COP26 which took place in Glasgow between 31 October 2021 and 12 November 2021.

The paper focuses on seven key areas. These are:

1. The social, economic, and environmental benefits of retrofitting
2. How much will retrofitting cost?
3. Where are we now?
4. Learning from previous transitions
5. The need for a publicity owned infrastructure company
6. Public investment and control
7. The STUC is calling on

The introduction to the paper states that it is focused on identifying the potential benefits of retrofitting Scotland's buildings as a way of climate proofing them. Maximising social and economic benefit, whilst reducing emissions as quickly as possible is the goal of the STUC paper on retrofitting. The paper recommends a direct financing approach, where the Scottish Government provides the necessary finance to Local Authorities to establish municipal energy companies and deliver street-by-street retrofitting companies. A National Infrastructure Company would support this.

1. The social, economic, and environmental benefits of retrofitting:

- In 2018, greenhouse gas (GHG) emissions from buildings accounted for 23% of Scotland's overall emissions. Household buildings accounted for 13% of emissions. To meet Scotland's 2045 net zero emission targets, emissions from buildings and homes need to be reduced.

- Fuel poverty is experienced in 613,000 households in Scotland, with extreme fuel poverty experienced in around 50% of these households. Scotland's island and rural communities have particularly high rates of fuel poverty. It is estimated that COVID-19 and the increase in working from home, will put 30% of households in Scotland into fuel poverty. This figure was calculated before the increases in gas prices and cuts to Universal Credit occurred. It is calculated that for every £4 spent on heating a household, £1 of heating leaks out of the home. This means that making homes more energy efficient is crucial to tackling fuel poverty.

- The UK is particularly exposed to the spiralling increases in wholesale gas prices. This is because the UK Government have allowed the UK's gas storage capacity to reduce over recent years. Retrofitting will make homes more energy efficient, this will reduce the need for imported gas and improve the UK's energy security position by reducing energy demand.

- Retrofitting will make homes warmer by reducing heating leaks. Cold homes are a cause of numerous health issues in Scotland, so retrofitting will have the additional benefit of helping an overstretched NHS service.

- The STUC commissioned research has identified that decarbonising buildings in Scotland could create between 61,000-136,000 jobs over a ten-year period. A further 22,000-37,000 jobs could be created over a three-year period through building new social housing.

- According to the Existing Homes Alliance, 12,900-13,800 skilled jobs in the energy efficient sector could be created and sustained in Scotland per year. It also estimates that 3,300-7,800 skilled jobs could be created and sustained in the low carbon heat sector.

- Retrofitting jobs are difficult to offshore, unlike offshore wind jobs. This is because most of the work around retrofitting is delivered on-site, in specific buildings. It is estimated that retrofitting will mostly create work for the local workforce. This will be of particular benefit for rural and island communities in Scotland.

2. How much will retrofitting cost?

- The vast majority of the 2.6 million dwellings in Scotland, require retrofitting.
- The implementation of energy efficiency measures and low carbon heating systems is estimated to cost between £9,000-£20,000 per dwelling. The Heat in Buildings Strategy of the Scottish Government estimates that it will cost £33 billion to transform homes and buildings in Scotland. The £1.8 billion of funding committed in this session of the Scottish Parliament is clearly insufficient. At a UK level, it has been suggested that for every £1 invested in energy efficiency programmes in the UK, GDP could be increased by £3.20 and UK Government tax take by £1.27.

3. Where are we now?

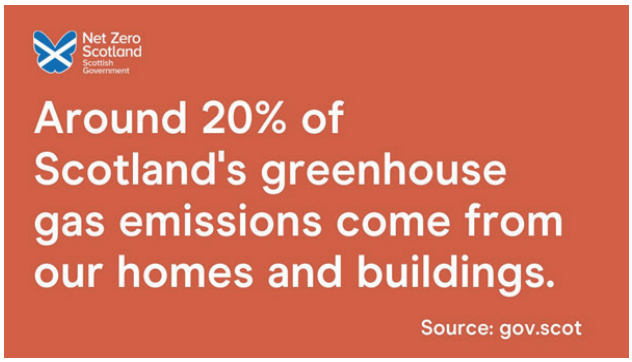
- The Existing Homes Alliance states that there were 27,700 retrofitting measures in Scotland during 2017/18, benefiting approximately 15,500 households.
- However, it is estimated that only around 4% of Scottish homes have had any renewable heating installed. It has been identified that around 70,000 renewable heating solutions are needed each year for the Scottish Government to reach its climate targets. This contrasts with the current rate of around 1,500 installations each year.
- Achieving these targets presents a huge skills challenge. This is further complicated by a large number of self-employed contractors in the construction sector being reluctant to take time out of their working schedule to learn new skills. This significant skills challenge could be addressed through public work programmes delivered by Local Authorities, and funded through the Scottish Government. This could provide the necessary capacity to reach the Scottish Government's climate targets.

4. Learning from previous transitions:

- The conversion of 'town gas' to 'natural gas' in the UK between 1968 and 1976, involved converting around 40 million appliances for 14 million customers, mainly households. The UK Government took a central coordinating role alongside 12 regional gas boards. A nationalised Gas Council gave the state direct control of the investment required for this project.
- Sweden's transition to district heating is an example of where a high security of heating supply was achieved. District heating provided low carbon dioxide emissions, and an efficient use of available heat sources. Further evidence from Europe highlights the key role of municipalities in the energy transition, with the delivery of publicly owned renewable energy and the delivery of retrofitting programmes.
- The above examples provide lessons about the scale of government intervention that is required to ensure a successful wide-scale transition to low carbon heating and energy efficiency in buildings.

5. The need for a publicly owned infrastructure company:

- The construction industry has a reputation for corruption. The directors of Carillion, which held contracts with the Scottish Government and the West of Scotland Housing Association, were found to have enriched themselves at the public expense.



- Well known corruptible practises in the construction industry include procurement fraud, supply chain fraud, tax fraud and embezzlement. Financial insecurity and health and safety risks are passed onto workers through poor employment practises (including bogus self-employment), umbrella contracts, a lack of health and safety standards and the blacklisting of workers. Price fixing is a common tactic that is passed onto clients, many of which are public sector institutions.

- The Scottish Government have talked about the creation of a National Infrastructure Company. Commonweal, the Scottish think tank and advocacy group, and the Scottish Greens have suggested that if aligned with municipal energy companies, a National Infrastructure Company could play an important role in decarbonising homes and creating well-paid, unionised, green jobs. However, the Scottish Government's Heating in Building Strategy, published in October 2021, makes little or no mention of a publicly owned energy company, a national infrastructure company or municipal energy companies.

6. Public investment and control:

- If done correctly, decarbonising Scotland's homes could reduce emissions, tackle fuel poverty, and create green jobs across Scotland. If done incorrectly, the decarbonising of homes could increase costs to tenants, increase fuel poverty and result in work needing to be redone.

- Steps need to be undertaken to ensure that the decarbonising of Scotland's homes is done correctly. These steps include:

- Sufficient investment levels and appropriate resources to support Local Authorities to develop and deliver new Low Carbon Heating and Energy Efficiency Strategies.

- Local Authorities having access to information on local housing conditions, with the ability to identify low-income families that need extra support. This information will help the new National Energy Agency support action at a local level.

- Investment in advice and support services.

- Investment in skills and training is a huge requirement.

- We need to ensure that tenants are not left to pay for the bill of refurbishment by introducing regulation and rent controls.

- A direct employment approach, where publicly owned companies deliver 'whole house retrofit' programmes.

7. The STUC is calling on:

- Local Authorities to establish Municipal Energy Companies through Scottish Government funding. The Municipal Energy Companies would develop, own, and deliver low carbon heating and energy efficiency infrastructure at local / regional level.

- The Scottish Government to establish a National Infrastructure Company to support Local Authorities in decarbonising buildings.

Roz Foyer, STUC General Secretary, concluded by saying:

"Never has it been clearer that we need to upgrade our homes. Warmer homes mean healthier, happier people and less pressure on the NHS.

The STUC's campaign sets out to do this in a way which creates good quality green jobs, tackles fuel poverty, reduce emissions, and provides better value for money for the taxpayer. With the right level of funding Municipal Energy Companies could truly be transformative, and the creation of a National Infrastructure Company would ensure that Local Authorities can be supported to decarbonise buildings."

A Trade Union Guide To Action On Local Authority Retrofit And Energy Programmes - Getting The Union Voice Heard On Green Jobs And Green Skills: Greener Jobs Alliance (July 2022)

Our colleagues at the Greener Jobs Alliance (GJA) have produced this guide on retrofitting and energy. The guide includes a background section and then splits into two parts. Part 1 explains why trade unions should get involved in tackling the climate emergency. Part 2 highlights action points to help trade unions negotiate with local authorities on the policies to increase the energy efficiency of buildings through retrofitting programmes.

Background:

- The Greener Jobs Alliance have been campaigning for union involvement in jobs and skills relating to a green economy for over a decade. Following the UK Government's 2019 declaration of a climate emergency and a commitment to achieve net zero emissions by 2050, many of the UK's local authorities followed suit by declaring a climate emergency themselves. This led the Greener Jobs Alliance to publish 'Engaging with regional and local authorities on climate change' in 2020. By Q4 2021, around 525 councils in Britain had declared a climate emergency, covering 93% of Britain's population.

- Many of the climate emergency policies developed by local authorities involved little or no consultation with the workforce and their trade unions. Deeper analysis of these policies suggest that Local Authorities' climate emergency measures will fail to achieve their net zero targets.

- Decisions taken by local authorities on tackling the climate emergency have a direct impact on union members that work for the local authorities, and an indirect effect on union members that live in the local authority area. For that reason, union members should have a pivotal role in determining local authority policies on tackling the climate emergency.

- This guide from the Greener Jobs Alliance (GJA) is designed to assist trade unions in their discussions with local authorities around tackling the climate emergency. It is particularly focused on the construction industry and construction unions. The construction industry sector has the potential to create thousands of new jobs and new skills if local authorities and central government implement the necessary measures to decarbonise the UK economy to meet their net zero target commitments.

The Greener Jobs Alliance have been campaigning for union involvement in jobs and skills relating to a green economy for over a decade

Part 1 – Why trade unions need to be involved in tackling the climate emergency through retrofitting programmes to increase the energy efficiency of buildings:

Maximising opportunities in the Construction Industry:

The British Energy Security Strategy, published in April 2022, states that all UK buildings will be energy efficient with low carbon heating by 2050. The strategy suggests that 700,000 UK homes will have been upgraded to become energy efficient with low carbon heating by 2025.

Energy efficiency programmes create jobs, address the climate emergency, and reduce fuel poverty. They are dream programmes for politicians because they benefit the economy, the environment and society. However, the UK Government has failed when trying to implement these programmes on previous occasions. The UK Government's rhetoric on tackling the climate emergency in general, and specifically on making UK buildings more energy efficient, has not been backed up with credible plans and actions.

The Progress Report of the Climate Change Committee (CCC) published in June 2022, highlights the failure of the UK Government to take the decisive action needed to meet its net zero 2050 commitments. The CCC report stated that with the increasing energy prices experienced since 2021, the UK Government needed to do more to make the UK an energy efficient nation. Making the UK's residential and commercial buildings more energy efficient through retrofit programmes would go a long way to achieving this. However, the report was critical of the fact that many new homes in the UK are still being built without meeting minimum standards of energy efficiency. This will mean that both old housing stock and new housing stock will require significant retrofitting for them to meet minimum energy efficiency standards in the future.

The CCC stated that they were concerned about the timeframes for the introduction of the UK Government's Future Home Standard. This states that all new homes built from 2025 will produce 75-80% less carbon emissions than homes delivered under current guidelines. The UK Government has introduced an update to the Building Regulations. New homes built from 2022 should produce 31% less carbon emissions than homes built before 2022. The UK Government plans to consult on technical aspects of the Future Homes Standard before updating Building Regulations so that there is alignment by 2025. The CCC report referred to the UK Government's current insulation programme as "shocking".

The Climate Change Committee (CCC) published their progress report titled 'Progress in reducing emissions - 2022 Report to Parliament' in June 2022. The report highlighted the UK Government's failure to take the decisive action needed to meet its 2050 net zero emission commitments

Local and regional authorities need to step up:

In 2021, the New Economics Foundation (NEF) published the Great Homes Upgrade report (2021). The report identified that the UK needed to retrofit around 19 million homes by 2030 and make all housing net zero carbon by 2050 to meets its climate targets. The NEF report suggested that the UK Government's retrofitting strategy had been a failure, due to a lack of funding and coherent programmes. As a result, local authorities had been left to create their own retrofitting programmes, which caused a huge variation in local authority performance. The NEF report concluded that there were significant opportunities to generate skills and jobs in the green economy if the political will was there. A more extensive insight into the Great Homes Upgrade report is provided later in this section.

Union involvement:

The Green Jobs Taskforce recommended that 'employers and sector bodies should set out business and skills plan for the net zero transition, engaging unions and workers'. The Green Jobs Taskforce was launched in November 2020. It formed part of the UK Government's Ten Point Plan for a Green Industrial Revolution. It was assembled by ministers from the Department for Business, Energy, and Industry Strategy (BEIS), and the Department for Education (DfE). The Taskforce included members from industry, trade unions and the skills sector.

There is little evidence to suggest that the above recommendation of the Green Jobs Taskforce is taking place. The following examples have been identified as reasons for the lack of consultation between Local Authorities and Unions on retrofitting programmes:

- Trade unions were refused consultations by local authorities.
- Trade unions did not request consultations because of:
  - A lack of capacity within the union branch or trades unions council to take the consultation request forward.
  - A lack of priority due to other pressing issues.
  - A reluctance to take the consultation on because of a lack of information on what is viewed as a complex issue.

The Green Jobs Taskforce report was published in July 2021.

The Green Jobs Delivery Group held their first meeting on 11 May 2022.

The Greener Jobs Alliance's guide addresses some of the problems faced by unions in negotiating with local authorities on retrofitting programmes and low carbon energy.

Skills:

A key issue that needs to be addressed with retrofit / energy efficiency programmes is the availability of skilled labour in the numbers required to undertake the work. The UK Government needs to collaborate with local authorities to construct a retrofit plan. This plan needs to ensure that there are necessary investment funds available to train the numbers of skilled labour required to retrofit the building stock of the UK.

The UK Government has a history of insufficient planning of retrofit campaigns. Future plans need to ensure that local authorities are linked into Further Education Colleges, Construction Skills Academies, or other training institutions that provide skills training for retrofit and energy efficiency work.

The skill set needed for retrofit and energy efficiency programmes include:

- Retrofit co-ordinators and assessors
- Gas engineers, plumbing and heating technicians with the skills to install and retrofit air and ground source heat and hydrogen pumps
- Electrical installation and maintenance roles to install and retrofit electric vehicle (EV) charging points, photovoltaic (PV) solar panels, and other electronic green technologies
- Building design and building information systems advisors
- Waste and recycling management
- Energy insulation installers
- Roofers

Finance:

Adult education budgets for local and regional authorities should link with funding streams available for energy efficiency schemes for buildings. Local Skills Improvement Plans and Local Enterprise Partnerships can also help. New energy efficiency funding schemes like the Social Housing Decarbonisation Fund can also be acted on by unions.

Skills Gaps – What to Avoid:

A shortage of labour and skills to carry out work related to the UK Government's Green Homes Upgrade programme, meant that two councils in the West Midlands had to return £900,000 of government funding.

Inequalities:

The involvement of trade unions in retrofit campaigns can be an opportunity to tackle the current lack of diversity of employment in the construction industry. Trade unions could be engaged in the monitoring of employment opportunities for the retrofit programmes to ensure that women and members of the BAME community have the opportunity of taking up some of these job opportunities. Tackling inequality will also mean ensuring that low-income households are given priority support in the retrofitting campaigns, because their need to reduce energy bills is likely to be the greatest.

Public Ownership:

Trade unions and local authorities should make the case for public ownership models of energy. A reliance on the market has failed to deliver at the scale required to meet local and national net zero targets. If local authority housing and construction were brought back into the public sector, this would allow a direct labour relationship and an opportunity to deliver housing and construction programmes at the scale needed. Glasgow City Council's retrofit plan is an example of how public ownership can be at the heart of a local authority energy efficiency programme.

Part 2 – Action points to help trade unions consult with local authorities on energy efficiency programmes:

Current state of play:

- Green jobs and skills should be discussed at your union branch and/or trades union council.
- Nominate a branch member to undertake research on the local authority climate policy, e.g., find out who the council leader is and cabinet member(s) responsible for climate policy.
- Send written questions to the councillors about their climate policy.
- Obtain climate emergency plans from the council website or councillors.
- Cross reference council policies on climate emergency plans, and what is taking place with retrofit and associated skills planning in the local authority.

1. Funding:

- Do you think that the current funding levels are sufficient to pursue ambitious programmes on retrofitting, renewable energy generation and the construction of energy efficient affordable homes?
- What funding mechanisms will you be exploring in the short term, and in the medium term (next four years), to increase the available resources?
- Will you be bidding for Wave 2 of the Social Housing Decarbonisation fund?

2. Delivery:

- Are you considering establishing a direct labour organisation within the council to retrofit existing buildings and build new social housing?

3. Skills:

- How will you ensure that local people can acquire the skills needed to become part of the growing green economy?
- How will you link up with Further Education colleges and other training providers in your area to facilitate this green skills training?

4. Supply Chains and Procurement:

- How will you ensure that existing contractors meet acceptable standards on the living wage, union rights, employing local workers, and environment / climate policies?

5. Equalities:

- How will you address equality issues in relation to the green economy? E.g., the lack of female and BAEM workers in the construction industry.

6. Targets:

- What are your targets for retrofitting social housing?
- What targets do you have for retrofitting all properties in the local authority area?

7. Jobs:

- Do you know the number of workers that will be required to deliver retrofitting targets?
- What new trade jobs will be needed to deliver the energy efficient targets?
- How will you ensure that workers can be trained in sufficient numbers in the skills that will be required to meet the energy efficient targets?

8. Energy advice and information service:

- Do you have an advice and information service set up regarding energy efficiency that can be accessed by employers, landlords and households to support the meeting of energy efficient targets?

9. Climate emergency policies and action plans:

- Do you have policy and procedures in place for updating the local authority's commitments to green jobs and green skills.

10. Trade union and community involvement:

- What guarantees can you provide to ensure that recognised trade unions in the local authority, including the local trades union council, will be involved in the construction of housing and climate policy throughout the entirety of this process?

Greener Jobs Alliance: Insulation Special

The Greener Jobs Alliance have published an Insulation Special with several good articles on retrofitting, and energy efficiency programmes to tackle the climate emergency. The following articles were part of this Insulation Special:

- The Great Homes Upgrade – New Economics Foundation (NEF).
- Building a workforce to tackle the climate emergency – Climate Jobs: Campaign against Climate Change Trade Union Group (CACCTU).
- A highly qualified workforce is needed for retrofitting programmes – Centre for the Study of the Production of the Built Environment (ProBE).

The Great Homes Upgrade – New Economic Foundation (NEF):

The Great Homes Upgrade is an investment and policy package to futureproof UK housing. It is a national campaign around retrofitting by the New Economic Foundation (NEF). The NEF see retrofitting as a vehicle for creating a huge number of jobs, and a Green New Deal opportunity for communities up and down the UK.

Compared to other countries in Western Europe, the UK has some of the most energy inefficient buildings. The UK's damp and leaky housing stock is a big emitter of carbon dioxide.

It is estimated that around 20% of the UK's carbon emissions comes from the use of energy in homes. To keep in line with the UK Government's targets of tackling the climate emergency, 19 million homes in the UK need to be retrofitted by 2030.

Retrofitting involves the upgrading of buildings to install new features to make them more energy efficient. This can include better insulation and double or triple glazed windows. It also includes replacing fossil fuel heating appliances, such as gas boilers, with clean energy alternatives, like heat pumps.

Retrofitting programmes can provide a number of benefits from an environmental, economic, and social perspective. Buildings will become warmer and safer, energy bills will be lower, thousands of jobs will be created, small businesses and supply chains will flourish, and greenhouse gas emissions reduced.

A Great Homes Upgrade will require long term planning and funding from central government. However, local authorities will need to manage local retrofitting programmes for them to be a success. A national funding scheme for retrofitting financed by the UK Government, would enable local authorities to grow their local economies and create thousands of in-house jobs. Skills and supply chains in the local economies would improve also, and this should reduce the cost of upgrading homes.

The Great Homes Upgrade is a national campaign around retrofitting by the New Economics Foundation (NEF)

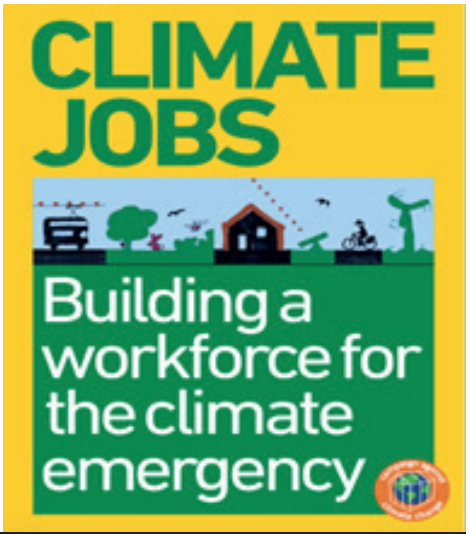
The NEF argue that climate activists need to get involved in community organising to put pressure on local authorities to demand that their housing is upgraded to include energy efficient features. This would also involve the trade union movement, who need to seize this opportunity to support the creation of hundreds of thousands of well-paid skilled green jobs. Trade unions and climate activists could work together to set up retrofit taskforces with local authorities. This could include meeting with local further education colleges and training organisations to plan the training programmes needed to create the skilled workforce required to undertake the retrofitting programmes. It could also include consultations about how local residents can work with housing associations to upgrade their homes.

The aim of the NEF Great Homes Upgrade plan is to make retrofitting a national agenda to provide warm, safe homes which do not pollute the planet.

Climate Jobs: Building a workforce for the climate emergency (2021)– Campaign against Climate Change Trade Union Group (CACCTU):

This new publication from CACCTU in Q4 2021, provides an update to the influential publication 'One Million Climate Jobs' that CACCTU published in 2014. The publication uses data from the New Economics Foundation, the Green New Deal group, and others, to produce the concept of a 'National Climate Service.' The National Climate Service would coordinate the transformative changes needed to produce a decarbonised economy and society to tackle the climate emergency and achieve the UK's net zero emissions targets.

The publication is written from a trade union perspective and provides proposals for green jobs growth in retrofitting and energy efficiency programmes, amongst other green industry programmes. It shows how the UK economy can upskill millions of workers over a ten-year period to transition to a decarbonised economy and society. The CACCTU group believe that higher taxes will be needed to fund retrofit programmes, rather than complicated loans and grants.



The 'Climate Jobs' publication from the Campaign against Climate Change Trade Union Group (CACCTU) in 2021, was an update to their previous influential publication, 'One Million Climate Jobs' (2014)

Retrofitting needs a highly qualified workforce - Centre for the Study of the Production of the Built Environment (ProBE):

Greener Jobs Alliance steering group member, Linda Clarke, is a member of ProBE. ProBE is a multi-faculty research centre spanning Westminster Business School and the School of Architecture and the Built Environment.

This is an edited version of Linda's article.

Many estates in Britain suffer from fuel poverty. A contributing factor to this is the fact that Britain has the highest proportion of buildings built before 1945 in Europe. These buildings are often damp and leak energy.

In Q4 2020, the government of Boris Johnson introduced their 'Ten Point Plan for a Green Industrial Revolution'. Part of this package included £1.5 billion for household grants of up to £5,000 or £10,000 for insulation and or low carbon heating. Compared to comparable economies in Europe, e.g., France and Germany, this is a low-level investment.

The French and German Governments invested £12bn and £36bn respectively in similar initiatives, and they have lower levels of damp and energy leaking buildings.

Six months after the announcement of the £1.5 billion for household grants, the energy efficiency programme for households was scrapped. Only 5,800 energy efficient measures had been installed in this six-month period. This was the second time in the last decade that a much-heralded energy efficiency programmes for homes by the UK Government had fallen into difficulty and ended prematurely.

Studies from Europe have highlighted the need to upgrade vocational and educational training (VET) systems to ensure that the necessary skills are in place to make energy efficient programmes a success. Performance gaps were identified between the design of energy efficiency programmes and the actual energy efficient measures on-site. Notably, this was the case for heat pump installations.

Stephen Craig, Unite National Development Officer

ProBE have identified that zero energy construction requires a high skill set, including physics, and good teamworking skills which need to be displayed between the different occupations and professions that participate in energy efficient programmes. However, the number of construction trainees and apprentices have dramatically declined over many decades. The construction industry now faces a shortage of skilled workers, and this has increased following the UK's withdrawal from the European Union. Fifty per cent of construction workers are self-employed, and the industry is reliant on micro firms (usually employing nine or fewer people) and extensive subcontracting. This means that opportunities for work-based training is minimal, and Further Education (FE) colleges have been starved of funding and facilities.

ProBE have recommended a solution to this problem, suggesting that local authorities employ their own construction workers, and work with FE colleges, unions, and local organisations to produce a skilled construction workforce to undertake large-scale retrofitting programmes. Glasgow City Council have become a pioneer of this alternative approach by directly employing 2,200 construction workers in its City Buildings workforce to work on low energy, new build housing and retrofit schemes. Glasgow City Council have also introduced a 4-year training programme for 250 trainees carried out at its own training centre and FE colleges.

Other local authorities have been in-sourcing the repair and maintenance of their properties, and training and employing the required workforce directly. Cardiff and Vale College, along with other FE colleges have been upgrading their construction workshops to include sustainable construction methods, such as air tightness principles and heat pumps, and solar panels for electrical and plumbing trainees to learn more about their installation.

Local authorities in partnership with unions and civil society groups can play a major role in addressing the climate emergency, by conducting retrofitting programmes to a high standard with their own well-trained workforce, employed under good conditions. This is ProBE's vision for an accountable, large-scale, high-quality retrofit programme which is focused on saving energy rather than cooperating with the demand for energy.

Important Retrofit Statistics:

- An NEF survey found that 65% of voters supported a National Retrofitting Task Force.
- National Energy Action identified that home insulation had fallen by 95% between 2012 and 2019.
- Onward Housing Group estimated that the current rate of replacing gas boilers with heat pumps, would take until 2187 for all gas boilers to be replaced.

Panel involved in discussions at the Retrofit Workshop, hosted by the University of Westminster. Panel includes Stephen Craig of Unite and Linda Clarke of the University of Westminster

Glasgow's retrofit programme: rival agendas – Les Levidow, Open University – Q3 2022:

This is an edited version of the article by Les Levidow which focuses on the work undertaken by the Scottish Trade Union Congress (STUC), Common Weal (a Scottish pro-independence think tank and advocacy group which campaigns for social and economic equality in Scotland), and Glasgow City Region local authority.

Background

The article begins by citing the STUC's 'Our Climate: Our Homes' campaign (2021), which we have looked at extensively in the earlier part of this section on retrofitting. The STUC's campaign is a multi-stakeholder proposal for a 'whole house retrofit' approach for decarbonising heat in homes. The STUC identified that previous UK Government initiatives on retrofitting have been limited and have failed. The STUC approach advocates significant input from civil society groups and trade unions, and the creation of a National Infrastructure Company and municipal energy companies to be funded by the Scottish Government. The plan would result in the creation of many unionised, green jobs to undertake high-quality retrofit programmes. The STUC proposal was an extension to a proposal put forward by Common Weal in 2019, 'Our Common Home Campaign'. The Common Weal proposal emphasised the development of 'genuine public-good private-public partnerships,' with government intervening directly where it needs to. This was part of a broader plan for a 'Green New Deal for Scotland.'

Levidow argues that the neoliberal policy framework of Glasgow City Region Local Authority, which dates back to at least the 1980s, is a major obstacle to implementing an adequate retrofit programme. This neoliberal framework uses public expenditure to promote free market principles such as incentivising entreprenuralism and attracting private business investment. According to Levidow, the neoliberal framework has reduced the decision-making powers of the public sector. As a result, the labour movement's (STUC, Common Weal's) retrofitting plans to prioritise the public good, conflicted with the historic neoliberal framework of the Glasgow City Region Local Authority.

The 'Our Common Home Campaign' by Common Weal (2019) emphasised the development of 'genuine public-good private-public partnership' for their retrofitting strategy

Scottish Government funding of retrofit and renewable energy programmes in the Glasgow City Region (2021)

In 2021, the Scottish Government funded a retrofit and renewable energy programme in the Glasgow City Region, which targeted half a million houses. The programme was designed to address fuel poverty, heat efficiency and decarbonisation. As part of the Glasgow Green Deal programme, the Glasgow City Region put forward an ambitious programme to retrofit their housing stock by 2032. This was part of a bigger ambition to ensure a fairer and more equal economy and society.

Glasgow City Council identified several challenges that would need to be addressed in the retrofit programme. This included the need for 'collaboration between government, industry, and training providers' to achieve Glasgow's aspirations of being carbon neutral by 2030. A pilot scheme was introduced to retrofit Glasgow's tenement blocks. The run-up to the COP26 event in Glasgow in November 2021 focused the Scottish Government's attention on decarbonisation programmes.

A pilot retrofitting scheme was introduced by the Glasgow City Council to retrofit Glasgow's tenement blocks in the run-up to the COP26 event in Glasgow in November 2021

Neoliberal Obstacles:

The historic neoliberal policy framework of the Glasgow local authority has posed numerous challenges to the roll-out of a credible retrofit programme. It is anticipated that a full retrofit programme of Glasgow's housing stock could last until at least 2040, but the Scottish Government has only given a financial commitment for the 2021-2026 Parliamentary term.

This short timescale of 2021-2026 has proved to be a disincentive for business investment in the skills and local manufacturing capacity required for a competent retrofit programme. The gap in the local skill sets and manufacturing capacity for a sizeable retrofit programme are already well known. Short term funding streams fail to give business a long-term confidence in their being a pipeline of work for many years. Consequently, this fails to encourage an acceleration and expansion of business investment in skills and manufacturing capabilities.

This current inadequate framework means that retrofit programmes depend on long supply chains. This includes imported expertise, equipment, and materials. Common Weal proposed an alternative to this, where the Scottish Government could commit to creating a local manufacturing capability to produce local economic and environmental benefits.

Initial discussions between the local authority and contractors agreed pilot projects with a high standard of energy efficiency, such as the Passivhaus model. However, the overall retrofit programme set a minimal energy performance standard, Energy Performance Certificate (EPC) level C. This minimal energy performance standard may only achieve modest energy efficiency gains and could be replaced with a higher energy performance standard in the future. This would require a further retrofit upgrade project, which would mean more cost down the line.

It is suggested that initial retrofit programmes need to make householders experience visible savings on their heating costs. This will then encourage householders' engagement with retrofit programmes. The 'fabric first' approach to retrofit aims to maximise the benefits of retrofitting from the start. This involves installing effective insulation before alternative heat sources. However, Levidow suggests that whilst the 'fabric first' approach is necessary it is insufficient because it prioritises technical considerations. Levidow highlights the occupant-centred "folk first" approach put forward by Common Weal.

This approach has less restrictions and provides greater options for improving energy efficiency.

By adopting a minimal energy performance standard, (EPC) level C, the Glasgow retrofit programme simplified the competitive tendering process. The neoliberal framework which promotes the competitive tendering process, has driven most retrofit programmes in the UK. The problem with this is that it promotes competition between organisations, which instead could act cooperatively to raise overall standards on retrofit programmes.

Rather than there being a strategic approach to funding retrofit programmes, funding is being allocated through a bid process which leads to organisations competing against each other. A Scottish Minister suggested that the roll-out of retrofit programmes could be speeded up through 'innovative collective models of transition.' However, this has not taken place because the competitive tendering process has focused on technology-based market place fixes (techno-market fix).

The competitive tendering process was also seen to favour large foreign companies that have minimal standards for energy efficiency, but the administrative capacity to produce competitive tenders. The emphasis on price competition in the tendering process often leads to the driving down of quality in practise.

Small local suppliers that often have the skills to provide higher standards of energy efficiency are often excluded from the tendering process, because the larger organisations have the economies of scale benefits to produce more price competitive bids. This prevents the large-scale cooperative programme needed for the investment in skills, mutual learning, and different approaches to diverse building types. It is argued that the decades old neoliberal approach of the Glasgow local authority has limited the public good benefits of retrofit programmes.

Along with many cities in the UK, Glasgow lacks the construction skills required for the repair and maintenance of its housing stock, as well as the new skills required for energy efficient building projects. Across the UK, there is a huge incentive for local authorities to invest in training their workforces to be competent in retrofitting skills. The proposal from the labour movement in Scotland (STUC, Common Weal) highlights that the scaling up of retrofit programmes presents a major skills challenge. This is compounded by the fact that the construction industry has large numbers of self-employed contractors that are reluctant to take the time of paid work to learn new skills.

The Glasgow local authority introduced a retrofitting training programme in 2021, but the take up was minimal. Several reasons have been identified for this low take up. It was identified that there was little incentive for building trade workers to take up the training because of the Scottish Government's short term financial commitment to the retrofitting programme (2021-2026). It was also found that workers with existing building skills (electricians and plumbers) who obtained retrofit skills, had difficulties returning to their original trade after short term retrofit projects. This has resulted in there being little enthusiasm for building workers to undertake retrofit training.

Public-good alternative:

The obstacles to successful retrofit programmes from neoliberal local authority frameworks and short-term government commitments, had been anticipated by Common Weal in their comprehensive decarbonisation plan. Common Weal produced a 'Common Home Plan' as part of their 'Green New Deal for Scotland.' The 'Common Home Plan' provided an alternative solution to the technological-market place fix (techno-market fix) of the Glasgow local authority.

Common Weal's 'Green New Deal for Scotland' emphasises that the plan would produce better food, better homes, better jobs, cleaner air, less waste and pollution, and an economy that is based around repairing the things we need

rather than throwing away the things that we do not need. The Green New Deal plan of Common Weal is based around providing green solutions and exporting these green solutions, skills and innovations to others. The plan rejects the established drive for GDP growth, like the Green New Deal Bill which was tabled in the 2021-2022 session of the UK Parliament, and instead promotes an economy based on sufficiency. The Scottish people are invited to create the innovations which will prioritise repairs, refurbishments, digital services, and a better use of resources.

The decarbonisation of heating in houses is centred around replacing the use of natural gas, reducing greenhouse gas (GHG) emissions, and addressing fuel poverty. District heating systems would be a low-cost heating alternative through distributing surplus heat. The use of heat pumps in rural areas is logical. Common Weal reject the agenda of the gas industry for decarbonisation solutions based around carbon capture and storage. They suggest that this poses a serious risk to the decarbonisation of energy supplies in Scotland.

The Department for Business, Energy & Industrial Strategy's (BEIS), definition of District Heating is:

Heat Networks / District Heating

'Heat Networks (also known as district heating) supply heat from a central source to consumers, via a network of underground pipes carrying hot water. Heat networks can cover a large area or even an entire city or be local supplying a small cluster of buildings. This avoids the need for individual boilers or electric heaters in every building. Heat Networks (District Heating) are sometimes called "central heating for cities."

Common Weal's public-good approach to energy efficiency programmes for homes is based on current and old technology, rather than the future techno-solutions favoured by the neoliberal market approach. It is argued that the market based, and subsidy approach would increase inequality, so the Common Weal plan emphasises public-sector responsibility. The transactional-based profit approach is replaced with a state procurement approach based on public service.

This involves establishing a National Housing Company to retrofit all existing homes to achieve 70-90 per cent thermal efficiency. Building regulations would need to be changed and investment in local supply chains so that all new construction materials in Scotland are either organic or recycled. District heating systems are preferred because they are cheap and are a viable solution for providing renewable heating to homes. The public sector would be responsible for implementing these solutions, and overcoming the potential obstacles with their implementation, such as skills training and short-term financial commitments.

The Common Home Plan of Common Weal had anticipated the problems that arose with the Scottish Government's 2021 retrofit programme with the Glasgow City Region. This led to the labour movement (STUC, Common Weal) suggesting to the Scottish Government that what was required was a long-term commitment, higher standards, and an institutional framework. This included a National Infrastructure body that would oversee the overall decarbonisation of the Scottish economy. The labour movement tried to persuade Glasgow City Council to replace the competitive tendering process with a more flexible system that allowed more diverse bids and higher quality standards.

It was identified that technical solutions alone, would not be sufficient to achieve successful retrofit programmes. A political solution was also an important part of a successful retrofit programme. The political solutions identified by the STUC, and Common Weal were those that included necessary economic changes, such as shorter, high-quality supply chains that supported long-term skilled livelihoods. Political change should be backed by a high-profile campaign linking labour standards, housing quality, environmental protection, and fuel poverty, amongst others.

ScotE3 (employment, energy, and environment) had advocated for climate jobs within a Just Transition framework. ScotE3 was set up by a small group of rank-and-file trade unionists (working in construction and defence) and climate activists. ScotE3 are engaged in taking climate action into workplaces and communities. The inspiration for the group was the 'One Million Climate Jobs' publication by the Campaign against Climate Change Trade Union (CACCTU) group and the Just Transition principles that originated from the US Trade Unions in the 1970s. ScotE3 have positive proposals around a Just Transition framework but have also attacked what they believe to be false solutions to decarbonisation. This includes the carbon capture storage technology fix for decarbonising fossil fuels. The carbon capture storage technology fix for decarbonising fossil fuels is the basis of the UK Government's North Sea Transition Deal which has been endorsed by the Scottish Government.

The devolution arrangements in Scotland provide the opportunity to implement a socially just, environmentally sustainable decarbonisation agenda. This is because it has a larger budget and greater legal powers than regional authorities in the UK. According to Levidow, the Scottish Government have been guilty of false promises around retrofitting campaigns, due to the continuation of a neoliberal retrofit framework and a focus on technological-market place fixes. This has resulted in them avoiding responsibility for the failure of these decarbonisation programmes. The danger here is that a passive public could accept these false promises, and they need to be challenged by a strong climate justice alliance.

In summary, the Glasgow retrofit programme attracted different agendas under a Green New Deal policy platform. These different agendas resulted in a rivalry between market competition and community worker cooperation. To maximise the benefits of a retrofit programme it is recommended that a public good agenda is adopted to replace the current dominant neoliberal framework based on market competition and technological fixes.

ScotE3 was set up by a small group of rank-and-file trade unionists and climate activists


Roz Foyer: STUC General Secretary

Retrofitting Workshop: University of Westminster, London, November 2022

The following report is an edited version of an article by Professor Linda Clarke (Greener Jobs Alliance, University of Westminster, and Centre for the Study of the Production of the Built Environment) that was published in the December 2022 edition of the Greener Jobs Alliance's newsletter.

Background:

A Retrofitting workshop was held at the University of Westminster on 18 November 2022. The workshop focused on the large-scale retrofitting of social housing. Retrofitting is increasingly being discussed as a major way to address rising energy bills and tackling the climate emergency.

Discussions on retrofitting are often technical and focus on market economy led solutions. They often ignore the social and structural challenges that prevent current retrofitting programmes from achieving climate emergency targets, and improvements in the UK's housing stock. This is particularly the case with social housing.

These challenges include:

- A construction industry which is fragmented and exclusive, based around micro firms (9 or less employees), large-scale self-employment and a mainly white male workforce.
- The increasing density of people living in urban areas (a process called densification by planners, designers, developers, and theorists) can result in unhealthy housing situations, a lack of decent housing, with poor air quality and ventilation.
- Severe shortages in construction workers and the skill sets required for sustainable construction, a shortage of comprehensive vocational education and training (VET) systems for construction occupations and for sustainable construction needs.

Attendees at the Workshop:

Those attending the Retrofitting Workshop included individuals from local government, unions, employers, architects and educators. The aim of the workshop was to discuss how current issues relating to retrofitting programmes could be resolved. There was a particular focus on the London boroughs of Camden, Islington, and Wandsworth.

Given the current energy price crisis and net zero emission commitments, there is now an urgent need to develop an alternative retrofitting strategy. This alternative retrofitting strategy will be designed to improve social housing and to transform the construction sector into a sustainable industry with good employment and working conditions.

Prior to the election of Margaret Thatcher in 1979, and the subsequent introduction of Thatcherite neoliberal economic policies, similar crisis situations in local authorities were tackled through direct labour employment conditions. This included developing and renovating social housing. An important part of the workshop is to ask the question, 'why can't we use that model now to implement a successful nationwide retrofitting programme'?

The UK must move faster to insulate homes, says Chris Stark, head of the UK's Climate Change Committee

Session 1 of the Retrofitting Workshop:

The first session of the workshop focused on the social housing situation, with contributions from councillors from Camden, Islington, and Wandsworth councils. They spoke about the funding issues in their councils, and what they were doing to develop retrofit programmes in their local authority areas. These discussions centred on:

- Pilot schemes
- The insourcing of housing repairs and void services (services to empty council properties)
- Setting up a construction network for women
- Ensuring good quality training and apprenticeships through procurement processes
- Developing a public retrofit taskforce

A representative from London South Bank University introduced a project that they were working on with Islington council, regarding the extension of the district heat network scheme which extracts hot air from the London underground system.

Session 2 of the Retrofitting Workshop:

The second session of the workshop focused on the construction sector. It included an overview of the current approach to retrofitting by the Unite Union. This included:

- The establishing of a Retrofitting of Homes Taskforce by the North East, Yorkshire, and Humber (NEYH) region of Unite
- The proposal by the Unite Environment Taskforce for a National Retrofitting of Homes Taskforce
- The Construction of an Environment Charter by the Unite Environment Taskforce

Session 3 of the Retrofitting Workshop:

The third session of the workshop looked at the vocational and educational training (VET) system, and how Further Education Colleges (FEC) can prepare young people for large scale retrofit programmes. This included a description of the Green Skills hubs of the London Mayor's Academy Programme.

Concluding discussions of the Retrofitting Workshop:

This involved a panel discussion on the three sessions of the workshop, and how potential synergies within these sessions could help the successful implementation of a large-scale retrofit programme. This discussion particularly focused on the scenarios facing Camden, Islington, and Wandsworth local authorities.

A prominent theme that emerged from the concluding discussions was that the workshop had provided a platform for exploring how local communities could work together to develop an approach to retrofitting that was based around social and labour concerns. This approach concentrated on the provision of appropriate training programmes and future employment opportunities for young people in the sustainable construction sector, alongside the provision of good quality, energy efficient housing.

Synergies were identified in how retrofitting and improving the quality of social housing could lead to the transformation of the construction VET system. This could also improve the construction labour process and employment relations within the construction sector. It was recognised that an initial step towards creating a successful retrofitting strategy was the creation of retrofit taskforces in local authority areas.

Why a National Homes Retrofitting Taskforce is needed:

The December 2022 edition of the Greener Jobs Alliance newsletter highlights reasons why a National Homes Retrofitting Taskforce would help towards the successful

implementation of a large-scale, nationwide retrofitting programme. Following on from discussions in the steering group meeting of the Greener Jobs Alliance in November 2022, it was identified that:

'The successful completion of an any retrofitting programme in the UK is some way off, given the make-up and infrastructure of the construction industry and inadequate training programmes'. These include:

- Inadequacies of the vocational and educational training (VET) programmes for sustainable construction and energy efficiency buildings.

- Studies from Europe suggest that VET programmes require significant changes because the skill set required to undertake sustainable construction, including retrofitting, is different from the historic construction training programmes.

- The make-up of the construction industry in the UK has led to a dramatic decline in construction trainees and apprentices. This has resulted in a shortage of qualified construction workers, and this shortage has increased following Brexit.

- Opportunities for work-based training in the construction sector are minimal. This is because the make-up of the construction industry is 50% self-employed, involves extensive subcontracting, a reliance on micro-firms (9 or less employees), and a further education sector that is starved of adequate funding and facilities.

The Director of the Unite Taskforce has recommended the establishment of a Unite Retrofitting of Homes Working Group covering all sectors and all regions and nations of the union.

For a large scale retrofitting programme to be a success in the UK, it will require a change to the current infrastructure of the UK construction industry and improvements in construction training programmes and apprenticeships

Section Three:

Just Transition

A Just Transition: What does this mean?

Centred on the workplace, Just Transition is about defending jobs, pay and conditions - and is based on practical action. Those of you who are familiar with reading previous editions of the Unite Environment Quarterly, will know that the theme of a Just Transition is at the heart of Unite's approach to tackling the climate emergency. As a quick reminder, we provide the International Trade Union Confederation's (ITUC) definition of what a Just Transition is.

'A Just Transition secures the future and livelihoods of workers and their communities in the transition to a low-carbon economy. It is based on social dialogue between workers and their unions, employers, and government, and consultation with communities and civil society. A plan for Just Transition provides and guarantees decent jobs, social protection, more training opportunities and greater job security for all workers affected by global warming and climate change policies'.

The Just Transition Centre:

The Just Transition Centre was established in 2016 by the ITUC and its partners. The centre's key aim is to promote social dialogue between unions, businesses and governments and stakeholder engagement with communities and civil society. The Just Transition Centre aims to ensure that workers have a seat at the table on discussions and plans relating to decarbonising our economies and societies.

JUST TRANSITION CENTRE

The Just Transition Centre looks to accelerate the Just Transition process by working with key stakeholders to achieve this.

The mechanism that the Just Transition Centre applies to achieve this includes:

Empowering workers and their allies:

- Share examples of Just Transition processes and plans, facilitate peer-to-peer skill and experience sharing, and capacity building on Just Transition. Capacity-building is defined as the process of developing and strengthening the skills, instincts, abilities, processes, and resources that organizations and communities need to survive, adapt, and thrive in a fast-changing world. An essential ingredient in capacity-building is transformation that is generated and sustained over time from within. Transformation of this kind goes beyond performing tasks to changing mindsets and attitudes. The United Nation's (UN) Sustainable Development Goal 17 'Revitalising the Global Partnership for Sustainable Development', commits the UN to transform from within regarding sustainable development.

Documenting:

- This involves documenting best practise examples of social dialogue using interviews, videos, reports, and case studies.

Starting and supporting social dialogue processes:

- This process involves unions, communities, government, and businesses, with participation from investors and experts.

Strategic input:

- Having strategic input in national and global policy dialogues and planning on Just Transition.

Unite's Just Transition Motion At The Trades Union Congress Conference – October 2022

Addressing the TUC Conference on 18 October 2022, Gail Cartmail, Unite's executive head of operations, stated that:

"Just Transition must be a phrase not only for the conference floor, but also for the shop floor. That means putting clear demands on employers through the power of collective bargaining.

In industries where transition is urgently needed, from steel to energy, automotive and transport – each step must be negotiated on the principle of 'nothing about us without us.

Likewise, we demand commitments to upskilling, for education and training to be provided by employers and government. Up and down supply chains – from transport to raw materials – we must defend jobs while we raise pay and conditions.

And politically we must demand a comprehensive climate strategy – from retrofitting homes to taking energy back into public hands, properly funding public services and building a green manufacturing sector."

Gail is spot on and giving leadership.

This motion from Unite shows that a Just Transition is central to the union's climate change policies as the UK economy decarbonises in order for the UK to reach its net zero carbon emission targets. The motion highlighted that Unite believes that a Just Transition is not possible without "adequate state intervention, investment and support to protect jobs, incomes, skills and communities". The Just Transition motion was effectively putting forward a new strategy, committing the TUC General Council to producing a Just Transition strategy which should be endorsed by the whole trade union movement. Key performance indicators for the Just Transition should include:

- An accurate estimate of the number of green jobs that will need to be created for the UK to meets its nationally determined contributions (NDCs) and net zero commitments in line with the Paris Climate Agreement.
- The quality of green jobs to be created, and the timeline for when they will be needed.
- An assessment of the skills, training and education that will be required by workers in the green economy, so that they are able to conduct their green jobs competently.
- A protection of union agreements and organised workplaces in the transformation to a Just Transition and green jobs.
- A commitment to defend jobs and raise pay as the UK heads to net zero.

Gail Cartmail - Unite's Executive Head of Operation

Unite Just Transition Survey: Winning A Just Transition In The Workplace – Evolving The Lucas Plan To Address The Climate Emergency

The following article relates to a future project that will be undertaken by the Unite Environment Taskforce.

The Unite Environment Taskforce is embarking on a Just Transition project. A provisional electronic survey will be distributed amongst Combines and National Industrial Sector Committees within Unite. The survey will initially be distributed to the Aerospace and Shipbuilding and Automotive sectors. We then hope to roll out the project to other industry sectors within Unite.

The project consists of four phases:

Phase 1:

- To complete an electronic survey based around Just Transition and socially useful / environmentally friendly (sustainable) production.

Phase 2:

- Involves interviews and observations with Unite members to ask deeper questions on Just Transition and alternative production methods required for addressing climate change.

Phase 3:

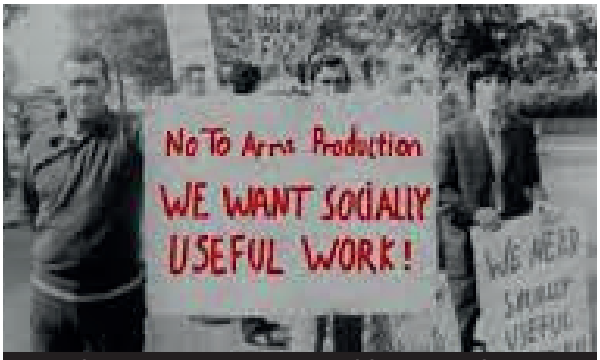
- A write up of the research findings to produce a pamphlet on the research project.

Phase 4:

- To hold education events (in-person and online) to relay the research findings to Unite members and a wider audience.

A project with a difference:

The philosophical background to the project is the inspirational Just Transition strategy of the Lucas Aerospace Combine Committee in the mid-1970s. The Lucas Aerospace Combine Committee produced an Alternative Corporate Strategy, commonly referred to as 'The Lucas Plan.' The Lucas Plan introduced the concept of socially useful production through human centred systems of production. The Lucas Aerospace Combine Committee were attempting to transition their production process, away from producing military aerospace products towards producing socially useful products, including products that were good for the environment.



The Lucas Aerospace Combine Committee constructed an Alternative Corporate Strategy (commonly known as The Lucas Plan) in the mid-1970s. This was based around producing socially useful and environmentally friendly (sustainable) products, against the background of threats of redundancies

Background to the project - 'The Lucas Plan':

The catalyst behind 'The Lucas Plan' was the Labour Government's 1974 Manifesto, which stated that if Labour were elected they would look to reduce government spending on military products. The General Election of February 1974 resulted in a hung parliament with the Labour Party forming a minority government under Harold Wilson's leadership. Wilson found it hard to govern the country with a minority government and went to the country again holding another General Election in October 1974.

Labour won this election and formed a majority government. Aware of the Labour Government's commitment to reduce spending on military products, the Lucas Aerospace Combine Committee began to look for alternative markets for their products to prevent possible redundancies. Many of the people on the Lucas Aerospace Combine Committee felt uncomfortable about making products that could be used to kill people and cause terrible destruction. This led them to think about putting their skill sets and labour to an alternative use. It became known as 'socially useful production', i.e., making products that were beneficial to society. As Secretary of State for Trade, Tony Benn had met with the Lucas Aerospace Combine Committee in November 1974. Benn told the Combine Committee that they should put forward an 'Alternative Corporate Strategy' to the Lucas Aerospace board and the Labour Government as an alternative to potential redundancies. A more in-depth account of the Lucas Aerospace Combine Committee's 'The Lucas Plan' is covered in Issue 2 of the Unite Environment Quarterly.

The Lucas Aerospace Combine Committee met with Tony Benn (then Secretary of State for Trade in the Labour Government) in November 1974 to discuss their Alternative Corporate Strategy

Low carbon alternatives – a movement in the making:

The experience of the COVID-19 pandemic since 2020 has highlighted the excellent collective endeavours of workers, unions, citizens, organisations and government coming together for the common good to reduce the severity of this virus. One such example of this was the 'Ventilator Challenge' which was set up by the UK Government in March 2020 and continued into Q2 2020.

The challenge included a consortium of leading engineering companies collaborating to increase production of an existing, but slightly altered, ventilator produced in smaller quantities by an Oxfordshire based company. One of these companies was Airbus. The Airbus plant in North Wales converted production from producing wings for commercial aircraft to producing ventilators for the COVID-19 pandemic. The majority of the 4,600 workforce are Unite members. Around 80 Unite shop stewards at the Airbus plant in North Wales met on a weekly basis. These meetings were held to address issues relating to the conversion of aerospace production to producing ventilators as part of the UK Government's Ventilator Challenge programme. Unite shop stewards were involved at every stage of the production conversion. This allowed Airbus to continue producing to operate on a 24/7 basis throughout the pandemic. Unite's health and safety representatives were pivotal in ensuring that the workforce were protected from the COVID-19 coronavirus.

The conversion of production provided an opportunity for the company and industry to look into diversifying its production into areas where demand was higher. In this case it was for the production of ventilators to help tackle the COVID-19 pandemic. This was an example of socially useful production. But it also highlights how production could be converted at short notice to produce products that can help address the climate emergency, such as wind turbines and solar power products. Citing the example of the Lucas Aerospace Combine's Alternative Corporate Strategy back in 1976, Unite reps helped Airbus plan to use the skill set and experience of the aerospace workforce to produce ventilators. The successful conversion into producing ventilators for the Ventilator Challenge, showed that the Airbus workforce had the skill sets, experience, and company technology to successfully diversify production at relatively short notice.

Beneath the radar – building of a vested interest in a low carbon economy:

The following section is an edit of an article written by Hilary Wainwright, about the Lucas Plan inspired Just Transition project.

Themes:

The inspirational example of the Lucas Plan has inspired workers and communities to apply the values of mutual care exerted during the pandemic to tackle the greater threat of the climate emergency. The aim of our project is to create a movement of workers and communities committed to progressing a low carbon economy.

Visual and written mapping of all the initiatives that make up the movement to progress a low carbon economy, will hopefully help identify interconnections within the movement. This could lead to common goals being identified, and alliances built with industrial and local roots.

A questionnaire with a difference:

Themes:

The Unite Environment Taskforce has discussed sending a survey to Combines and National Industrial Sector Committees as part of an initial phase of a wider project. The survey starts with the assumption that the transition to a decarbonised economy must be a Just Transition.

A question that may be on any workers' lips is:

"Why can we not use our skills and abilities to save the planet and contribute to society's efforts to reduce carbon emissions; why can't we not produce socially useful low carbon products which will speed up the transition rather than further destroy the planet?"

The purpose of the survey is to gather knowledge which will help map how Unite members answer common sense questions around tackling the climate emergency, and to challenge conventional ideas about what counts as 'knowledge'. The survey should stimulate Unite members to think in new ways. A starting point for thinking about alternative production opportunities in the workplace is to analyse the skills, abilities and available resources in the workplace locally.

That can move on to focusing on the existing capacity within that localised workplace. This involves asking questions about available technological expertise and physical capacity locally. This can include universities and networks of experts working independently of the high carbon industrial military complex. These workers in the high carbon military production industry could become co-workers in the low carbon / sustainable industries needed to decarbonise our economies and societies.

Social norms often lead to individuals being conditioned to view the world through the context of the jobs that they do, the work department they belong to, and their specialism of work. Transitioning to a low carbon economy requires a transformation of the interrelationships that are currently maintaining the present high carbon economy. This is needed to shape the industry required to meet society's needs of tackling the climate emergency through decarbonising our economies.

These interrelationships include those between publicly funded universities and private corporations. Our project will focus on how we can liberate publicly funded capacity to achieve a low carbon economy for the public interest. We are trying to encourage individuals to have a wider view of how their work can connect with wider society. The initial survey / questionnaire is designed to stimulate workers into thinking about what they would do if they had control of the production process in their workplace.

During the construction of the Lucas Plan in the mid-1970s, a Lucas Aerospace shop steward alluded to the response of workers when the Lucas Aerospace Combine Committee asked workers to find out and describe the facilities of the factory and the capacities of themselves and fellow workers: "We had to start thinking as if we were planning; we'd never done that before."

Our project on Just Transition and socially useful production will ask workers what they think they could and should be doing to decarbonise the production process in their workplace. The respondents to the project will be encouraged to answer questions by thinking of themselves in their dual role in society, as producers and consumers. The questioning will try to go beyond the fabricated divisions that suggest that there is one nation that works in factories, offices and schools, and a different nation that lives in houses and communities.

Questions will try to identify what workers do in their workplaces to tackle climate change, and what they do as consumers at home and in their local communities. Questions could involve community campaigns against high carbon emitters like incinerators or campaigns on recycling, reuse and repair.

This wholistic approach suggests that it is equally important for all individual citizens to tackle climate change as workers, consumers, and members of their local community.

Mike Cooley, a leading figure in the Lucas Aerospace Combine Committee and leading thinker on socially useful production, human centred system of production and Technology Networks

Final considerations:

- In mapping the move towards a low carbon economy and society, we envisage that this could lead to workers, consumers and community members experimenting to find new low carbon solutions.
- Practical examples of low carbon alternatives are as important as written statements of low carbon alternatives regarding what is possible.
- Linguistic abilities should not be the only measurement of intelligence. What people do is as important as what people say.
- Manufacturing workers express their intelligence by how they do things, how they organise things in the workplace, rather than how they talk about them.
- The key to this project is finding out the new economic activities and relationships that people are creating. This can be through collective bargaining negotiations regarding products and purpose or creating alternative social, environmental, and cooperative businesses (e.g., Technology Networks) to move towards decarbonising the economy.
- The end goal of the project is to try and create a shared resource that can be used in a worker led Just Transition towards a decarbonised economy and society. The threat of job losses will be replaced by the creation of decent jobs for all.

Workers' Perceptions of Climate Change and the Green Transition in Yorkshire and the Humber: Building the Evidence Base for the Just Transition in the region - December 2021 - Leeds University Business School

This edited version of the above report has been constructed by the Unite Environment Taskforce.

Key Messages:

The report highlights five key messages.

These are:

1. Workers' views on climate change in Yorkshire and Humber (Y&H).
2. Expectations of the transition to a greener economy.
3. Skills and training for the green transition.
4. Delivering a Just Transition.
5. Take-aways for policymakers, business & trade unions

Introduction to the Key Messages:

- The report has been conducted to inform the Yorkshire and Humber Climate Commission on workers' perceptions of the transition to a low carbon economy in the region.
- Although the study had a core focus on workers in the Yorkshire and Humber region, the lessons learnt on employment and skills in the green transition can be of value to everyone.
- The research was conducted by the Centre for Employment Relations Innovation and Change (CERIC) at Leeds University Business School, with funding from UK Research and Innovation (UKRI), England. It was conducted on a nationally representative survey of 2000 workers.

1. Workers' views on climate change in Yorkshire and Humber (Y&H):

Seventy six per cent of workers across the UK expressed concern over climate change. In Y&H workers had a higher concern about climate change at 85%. Sixty five per cent of workers in the UK believe that climate change should be addressed with either a high, or extremely high, level of urgency. In Y&H, this rose to 77% of workers.

Workers' emotions regarding climate change were wide ranging from hope, fear, anger, and outrage. Y&H workers had a higher sense of outrage than workers across the UK. Policies on the green transition should reflect and understand the range of workers' emotions on tackling climate change.

Many workers are already experiencing the green transition. Actions to decarbonise workplaces were identified by 36% of workers across the UK, and 34% of Y&H workers. Only 50% of UK workers were consulted on these changes, with just over 25% saying that they have received relevant training.

2. Expectations of the transition to a greener economy:

Fifty per cent of workers in Y&H expect new green jobs in their local communities. But Y&H workers are not so confident about being able to access new employment opportunities in the green economy. Only 40% of workers in Y&H expect new green jobs to be better quality jobs.

Twenty per cent of Y&H workers expect job losses in the local region due to the green transition. It was identified that 14% of Y&H workers believe that they will need to change their job because of the green transition or relocate to find work. Sixty six per cent of Y&H workers expressed an interest in working in the green economy.

Seventy five per cent of Y&H workers were interested in having a green job, stating that they were motivated by the prospect of having an interesting and meaningful job which helped address climate change.

3. Skills and training for the green transition:

Workers in Y&H feel less equipped to deal with the green transition than workers in other parts of the UK, because they are less likely to have updated their knowledge and skills, and less likely to think that their knowledge and skills would be useful in the green economy. Workers in Y&H believe that they will need new skills to get a green job.

Most Y&H workers want to develop new skills and are confident in doing this. They would like there to be policy enacted by the government to support a skills transition. Workers in lower skilled jobs are more likely to believe that they will need to reskill themselves to get a green job.

4. Delivering a Just Transition:

Workers in Y&H, as elsewhere, want a green transition that is heavily focused on access to training for good quality green jobs. A collaborative bottom-up approach to green transition planning is wanted by all workers. Workers want a greater say in decision making, especially in areas where they can refer to their knowledge and skills. Reducing inequalities in communities is emphasised by workers in Y&H as part of the green transition. Particularly in those communities that have experienced industrial change in the past, e.g. former mining communities and areas that have suffered from deindustrialisation.

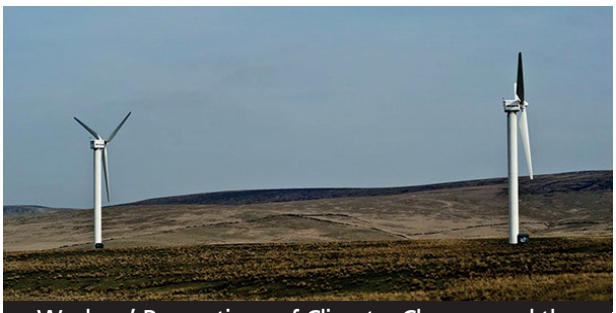
The Yorkshire and Humber Climate Commission's Climate Action Plan

5. Take-aways for policymakers, business & trade unions:

Workers are ready to undertake the training and development required to become workers in the green economy. In addition to occupational training and workplace learning, workers will undertake training in carbon literacy to improve their knowledge of climate change and the green transition.

Workers should be involved in decarbonisation programmes from the start for them to be a success. This will require engaged dialogue between employers, workers, local authorities, and training providers so that workers are aware of how climate change will affect employment opportunities, regarding job change, upskilling or re-skilling and supporting workers transition into new green jobs.

A key responsibility of government is to tackle climate change, a failure to address this could result in political disengagement by a large section of the voting public.



Workers' Perceptions of Climate Change and the Green Transition in Yorkshire and the Humber: Building the Evidence Base for the Just Transition in the region

Just Transition: Actions, Concepts, Debates, and Strategies – An International Comparison across 11 Countries – Leeds University Business School

This is an edited version by the Unite Environment Taskforce of a project proposal by the Leeds University Business School. The project is set to take place between 1 May 2022 to 30 April 2025. The principal investigator for the project is Professor Vera Trappmann (Leeds University Business School).

Description:

For most governments around the world, the decarbonisation of their economies is a primary way to tackle climate change and to address increased energy insecurity following the Russia – Ukraine conflict.

Achieving net zero greenhouse gas emissions by 2050, in line with the Paris Climate Agreement, will require a dramatic transformation of economic production and the ways that humans live their lives. This transition to decarbonised economies will have huge impacts on jobs and employment. The impact on jobs and employment could be positive for workers if the transition is a Just Transition.

The decarbonisation process will also impact the way societies and economies are organised, and the way people work and live in most parts of the world. Societal actors have asked for a Just Transition. These societal actors are led by the trade union movement, who demand that the decarbonisation of the economy should not result in negative consequences for workers.

Trade unions are already spearheading discussions with employers and governments to develop proposals and strategies to ensure a fair economic and social transition to a decarbonised economy for workers and citizens.

- A successful Just Transition requires the protection of workers and vulnerable groups as the economy transitions to a low carbon / green economy.
- Achieving a Just Transition could be difficult. The interpretation of trade unions, employers, and government about the process and policies required to achieve a Just Transition can differ.

Research overview:

The project intends to study concepts of Just Transitions, including policies, initiatives, and strategies. To investigate factors that influence the understanding of Just Transitions, labour activity strategies and environmental Non-Governmental Organisations (NGOs).

To investigate the emergence of key ideas, debates, and strategies in the trade union movement, such as economic, institutional and climate policy frameworks.

Key research questions in the project will include:

- How do social actors dealing with labour policy view the challenges of climate change and decarbonisation?
- What do these labour policy actors consider to be a “Just Transition”?
- What visions of a just and sustainable future have the labour policy actors developed?

- How do the concepts and initiatives developed by labour policy actors relate to governments' efforts to achieve net zero emissions?
- How do labour policy actors participate in shaping structural change?
- What roles does the state play in shaping structural change?
- What are the factors that most influence the strategies put forward by labour policy actors?

The project will take a systematic examination of Just Transition concepts in 12 countries. These are Germany, UK, Spain, Poland, USA, Russia, China, Nigeria, South Africa, Chile, Brazil, and the Canadian province Quebec.

These nations have been chosen because they will allow the project to examine examples of Just Transition in nations that have a great diversity in respect of their trading balances; types of economy; the volumes of emissions linked to their GDP levels; how their governments have constructed their climate policies; and the industrial relations framework in these countries.

The case study findings from the research will result in developing similarities of Just Transition, along with case study reports. Recommendations for successful Just Transition strategies, incorporating climate-friendly structural change, will hopefully be identified.

The results of the project will be delivered through webinars, workshops, and podcasts.

Just Transition action, concepts, debates and strategies: An international comparison across 11 countries

Climate Emergency: Winning a Just Transition – TUC 2022

This is an edited account of a TUC article by the Unite Environment Taskforce.

The TUC's Climate Emergency – winning a Just Transition campaign has six key themes.

These are:

1. A climate and jobs action plan in every workplace – to be negotiated with workers and their trade unions.

2. Government investment in future-proofing the UK's infrastructure, industries, and jobs.

3. A national Just Transition Commission which ensures that no worker is left behind in the transition to a decarbonised economy.

4. The public sector to lead on climate action: including, town councils, health services, education institutions and public energy companies.

5. Policies that protect jobs against offshoring.

6. Environmental reps to have statutory rights in the workplace.

This campaign by the TUC is based around building a network of union reps and activists who would deliver climate action in the workplace, including future-proofing jobs. To achieve net zero emissions by 2050, will require significant planning by each nation in the UK, every town, city, village, and workplace. If the transition is just, then the decarbonisation process should mean the creation of decent jobs, cleaner air, and warmer homes for all. For this to happen the UK Government needs to act now with huge investments in green economic programmes aligned to the climate-science based targets. Failure to do this could mean that we are in danger of losing good, unionised jobs in important UK industries like steel, chemicals, and car manufacturing.

It is estimated that over 600,000 manufacturing and supply chain jobs in the UK are under threat, if a timely and worker-led Just Transition is not delivered. A green recovery which delivers a timely Just Transition is required to meet the UK Government's net zero ambitions. It is estimated that to achieve this the UK Government needs to invest around £85 billion into infrastructure projects, which could create 1.24 million green jobs in the UK over a two-year period.

Climate Emergency: Winning a Just Transition - TUC 2022

Just Transition and the Cost-of-Living-Crisis – TUC 2022

This is an edited account of a TUC article by the Unite Environment Taskforce.

Why we are bringing this to the Executive Committee:

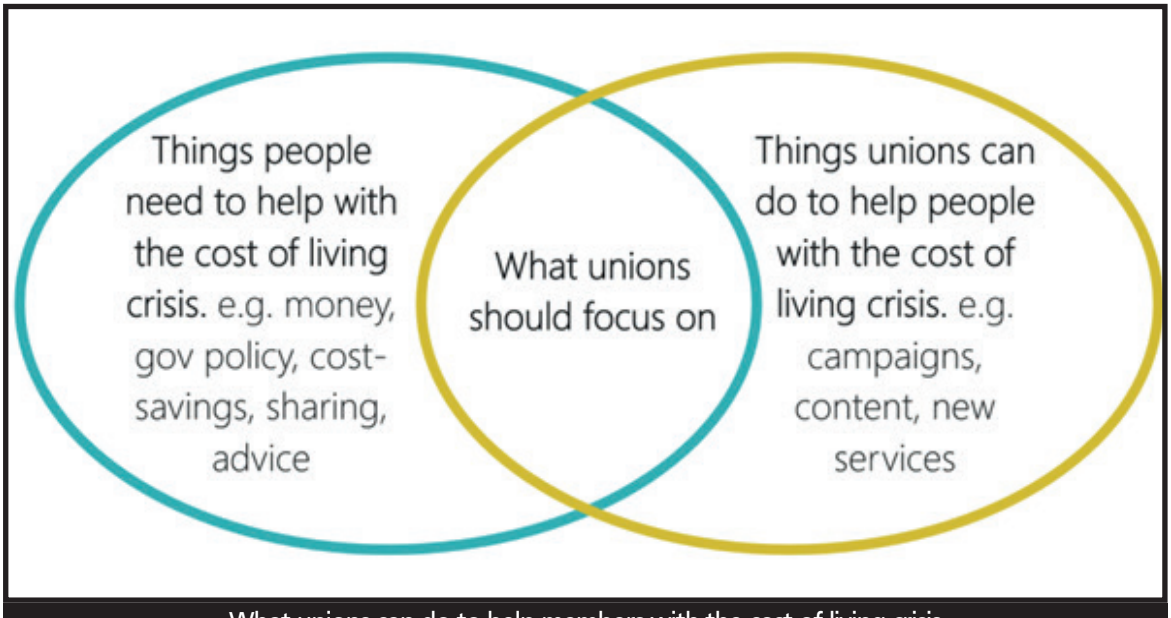
Public debates on energy in 2022 have been reshaped by the cost-of-living scandal, the gas price crisis, and the escalation in the Russia and Ukraine conflict. Significant challenges will be faced by low-income workers and their families, and for manufacturing industries that will struggle with rising energy bills.

The Net Zero Scrutiny Group are trying to blame rising energy bills on tackling climate change. However, the real cause of the spiralling energy prices is the UK's persistence on following a free market approach to energy. This involves poor planning and an undemocratic approach to energy and tackling climate change, which leaves UK workers worse off compared to workers in similar sized economies.

The events of 2022 provide the UK with an opportunity to undertake greater energy production in the UK. This can include making supply chains less complicated by having more supply chain producers based in the UK. Increasing examples of a climate emergency means that the future-proofing of UK industries becomes more and more important every day. Energy efficiency upgrades, such as the retrofitting of buildings and replacing high carbon energy with low carbon energy, provides the opportunity for huge job creation possibilities.

We believe that it is vitally important for the Executive Committee of the TUC to focus on the trade union movement's collective campaigning regarding addressing the climate emergency through a Just Transition. The collective campaigning of the trade union movement should look at how we tackle soaring energy bills, jobs at risk and climate science targets.

The TUC proposes that the Executive Committee creates a strategy that makes a significant difference to the cost of living. This includes advocating for the retrofitting of building stock and for reforms of the energy sector, alongside existing priorities of the trade union movement.



What unions can do to help members with the cost of living crisis

What happens next?

As agreed by the Executive Committee, the TUC will focus campaigning through media interventions, participating in national and local consultative bodies, advocating directly to central and devolved governments and provide materials to support workplace trade union reps promoting our positions in the workplace.

Responding to the energy crisis and the cost-of-living scandal:

The soaring energy prices have led the TUC to call for emergency support for workers and businesses to protect jobs and vulnerable households. The TUC called for a windfall tax and emergency budget, after calculating that energy bills were rising 23 times faster than wages. USDAW estimated that 25% of retail workers are skipping meals to pay bills.

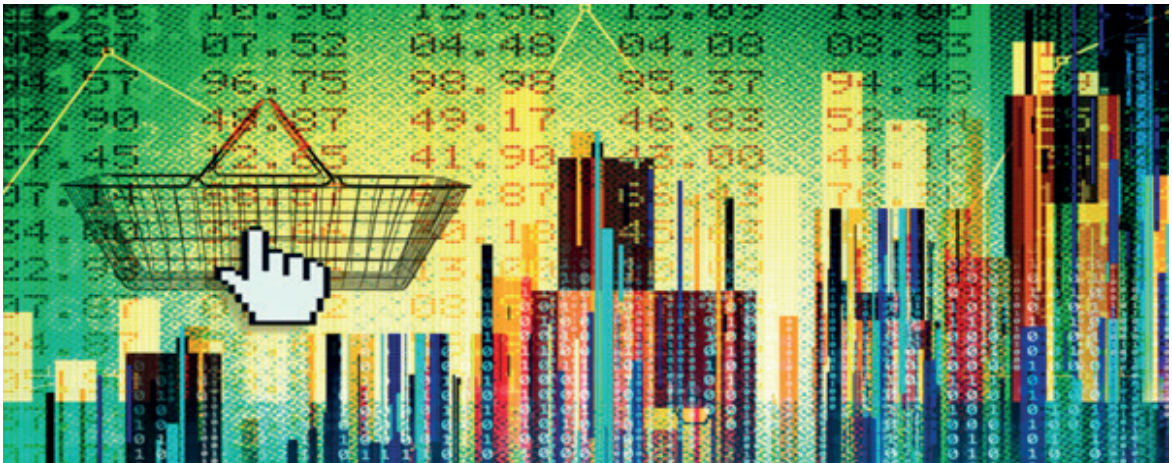
The TUC's advocacy and campaigns by individual unions and affiliates, opposition parties in Westminster, and poverty and environmental groups built a strong consensus for appropriate government action on rising energy prices and the cost-of-living crisis.

As a result, the Chancellor provided an extra £600 for the poorest households towards paying their energy bills, including pensioners and those on benefits. A windfall tax was also introduced on the excess profits of energy companies.

However, the government has failed to introduce a fundamental review of UK energy policy. The failure of the UK Government's reliance on the free market to provide our energy supply is still in place. As wholesale energy prices have risen, this has resulted in many smaller energy companies going to the wall and the nationalisation of the Bulb Energy Company. This has shown that when wholesale energy prices are low, energy supply companies have been allowed to profit. However, when wholesale energy prices rise then the cost of this has been absorbed by households and government.

At the same time, companies providing energy transmission and distribution networks continue to make profits. In a lot of cases these profits continue to be made by these companies without them investing in upgrades of energy transmission and distribution networks required to deal with the challenges of decarbonisation and energy security. The TUC is committed to energy being provided as a public good by the public sector.

The British Energy Security Strategy was introduced by the UK Government following the escalation of the Russia and Ukraine conflict in Q1 2022. However, this strategy fails to take the action required to tackle the problem as quickly as possible to reduce energy bills. This would be achieved by introducing a wide scale retrofitting programme to make buildings more energy efficient. By insulating the average home



Union responses to the cost of living crisis are vital to changing the narrative around this subject matter

from the energy efficiency rating D to C, it is estimated that this will result in saving £200 from the average energy bill.

The TUC is calling for a retrofitting of homes programme led by the public sector. This should be delivered by local councils using labour employed directly by local authorities (councils). The TUC also calls for £10 billion of investment to retrofit schools, alongside Unite, Unison, GMB, NEU NASUWT & NAHT. It is estimated that this could create 42,000 jobs. The TUC has been developing a programme of support for trade union reps to negotiate on retrofitting of workplaces to make these buildings energy efficient and improve workplace health and safety.

Protecting and onshoring heavy industry and manufacturing jobs:

There has been limited success in future-proofing UK industries and protecting UK jobs against offshoring:

- Targets for hydrogen production to 10GW of annually produced hydrogen, is a doubling of the UK Government's targets by 2030 in this area. This includes a much higher ambition for green hydrogen production (electrolysis).
- A feasibility study has been announced by British Steel regarding using green hydrogen for steel production at a Teesside plant.
- The UK Government have pledged eight new small modular nuclear reactors.

The announcement by the UK Government and British Steel is of a minor scale compared to the TUC's research which suggests that around 660,000 manufacturing and supply chain jobs in the UK are dependent on timely action to invest in decarbonisation. Many manufacturing companies have warned that they could be at the brink of closure if energy prices continue to rise sharply. The future of industrial jobs in the UK will require significant public investment on a scale to that invested by other G7 nations. Workers will need to have their voice heard in the decision-making process. The UK Government needs to construct a procurement framework which encourages quality jobs and shorter supply chains.

The involvement of unions helped to secure the green steel pilot project in Teeside

Workers in the steel industry and automotive manufacturing in the UK, are leading the way in developing future-proofing plans specific to their workplaces. The involvement of unions secured the green steel pilot in Teesside, with steel being produced with green hydrogen (electrolysis).

To future-proof high carbon industries a range of technologies need to be developed and delivered. These include hydrogen, carbon capture use and storage (CCUS), alternative feedstocks for chemical industries, and electrification. Workers and trade unions need a voice in developing these plans for their workplaces, including the investment proposals.

Increasing domestic job creation in new industries:

The 'jobs bonanza' associated with new green industries has not really materialised. This has left a bitter taste for workers and communities that were promised new green jobs as part of the Coalition Government's green initiatives, and as part of Boris Johnson's levelling up programme.

The offshore wind industry is one example of this. Jobs in this industry sector were created, but the failure of not having an active industrial strategy in the UK supported by

public investment, meant that there wasn't the required industrial framework in the UK to undertake this work. Consequently, much of the manufacturing work involved in the offshore wind industry has been undertaken by companies located in Spain, Italy, UAE, and South East Asia.

However, the trade union movement cannot afford to become dejected by these examples of reality of what has happened in the past in the offshore wind industry. Going forward the potential job opportunities in the offshore wind industry is massive. It is estimated that the future pipeline of work in the UK offshore wind industry is five times greater than the current size of the industry.

The missed opportunities of previous years at BiFab in Fife, highlighted by the campaigning of Unite and GMB, have resulted in the UK Government becoming more committed to co-investing with the private sector in renewable industry sites in Teesside, Wallsend and Nigg.

The trade union movement has to demand more active decarbonisation strategies from the UK Government. This should drive regional programmes and deliver the creation of good quality unionised green jobs in all regions of the UK. These decarbonisation programmes should include the manufacturing of green hydrogen electrolysers, batteries and electric vehicles, low carbon heating systems (hybrid boilers and heat pumps), floating offshore wind and tidal stream turbines and re-manufacturing.

New routes to social dialogue:

The conclusion of the Government led Green Jobs Taskforce, where the TUC had two seats, resulted in recommendations being made. One of these recommendations was for a long-term body that coordinated the setting up of a workforce transition.

Following calls from the TUC, employer bodies and other bodies that were represented on the Green Jobs Taskforce, the UK Government has set up the Green Jobs Delivery Group. The TUC is represented on the Green Jobs Delivery Group by Sue Ferns (TUC President). Sue will report on the body's progress and opportunities to feed in via the TUSDAC meetings.

On a regional level, a Green Jobs Taskforce has been set up by the West Yorkshire Combined Authority, where the TUC is represented. The TUC has run workshops in London and the West Midlands on advocacy to Combined Authorities regarding social partnerships and consultative bodies on climate change.

From left to right: Angela Rayner (Deputy leader of the Labour Party), Frances O'Grady (TUC General Secretary, 2013-2022), Sue Ferns (Deputy General Secretary of the Prospect union and TUC President, 2021-2022)

Responding to right wing attacks on climate action:

Those on the right of the political spectrum, e.g., Nigel Farage and the Net Zero Scrutiny Group, are trying to put pressure on the UK Government to scrap the net zero emissions target of 2050. Their aim is to promote a culture war (like the Brexit debate), to direct the attentions of workers from the examples of their exploitation and the cost-of-living crisis.

The TUC are committed to addressing the climate emergency in an urgent manner, and meeting the demands associated with achieving the net zero emissions 2050 climate science targets. The TUC believes that these campaigns by right wing groups are aimed at spreading fear in workers about the decarbonisation process. They will look to blame the cost-of-living crisis and high energy prices putting industry and jobs at threat, down to the UK Government's net zero emission commitments. However, these right wing groups are likely to put forward the argument of a continued free market led approach to energy generation and supply in the UK, and a decarbonisation process led by the free market with the emphasis on short term profit gain and little or no worker-led Just Transition.

The TUC's approach to decarbonising the UK economy and society is the opposite to these right wing groups. The TUC back a worker-led Just Transition, and a rapid implementation of the decarbonisation process. This should include energy being provided as a public good by the public sector, not a vehicle to make huge profits by the private sector. Retrofitting programmes and transport upgrades should also be governed through the public sector. There needs to be substantial government investment in future-proofing existing industries, especially those with high carbon emissions, and ensuring that the new green industries provide good quality unionised green jobs.

We need timely, worker-friendly climate action to protect our planet and future-proof our jobs

Section Four:

Unite Environment Taskforce News Round-Up

The Scottish Perspective – Jackson Cullinane (Unite Scotland)

The following report is an edited version of a report submitted by Jackson Cullinane, Unite Political Officer for Scotland, and Unite Environment Taskforce member.

In this report Jackson highlights the work of Unite Scotland within the Just Transition Partnership. The Just Transition Partnership advocates for action to meet climate change targets in ways which protect workers livelihoods and make Scotland more equal and inclusive. It was set up by Friends of the Earth Scotland and the Scottish Trade Union Congress (STUC) in 2016.

The Just Transition Partnership (JTP) includes Unite, Unison, UCU, the STUC, Friends of the Earth Scotland (FoE), Commonweal and a number of academics. Current representations by the JTP to the Scottish Government include:

- Raising concerns that both the Scottish Government's proposed energy strategy and associated just transition fund appear to be predicated on the belief that a just transition could be delivered by the private sector alone. This is following the Scottish Government's decision to drop their previous commitment to create a National Energy Company. We are consistently presenting the case for the need for public ownership and the involvement of and support for councils in the delivery of just transition initiatives.

- Raising concerns that the recent auction of areas of the Scottish seabed for renewable projects (the so-called ScotWind project) will not produce the level of jobs in Scotland claimed by the Scottish Government. A recent analysis of the successful bids shows that all bids were expected to produce a Supply Chain Development Statement. The Crown Estate can remove licences to operate or issue fines if commitments from the successful bidders are not met. The licence removal option does not apply if the successful bidders meet a mere 25% of their commitments. The maximum fine is £250,000, which is not much of a deterrent for these huge organisations. Across all of the successful bids, only 27.5% of the committed investment is earmarked for construction of turbines and/or infrastructure in Scotland, with most of it set to go to EU countries. For example, in the case of the "Region 1" field, to be operated by BP and EnBW, only 16.7% of the investment is committed to Scotland. Common Weal have put together a report following the ScotWind Auctions titled: 'ScotWind: Privatising Scotland's Future Again.' The paper indicates, the "foreign direct investment" celebrated by the Scottish Government is looking more and more like "outwards profit extraction".

A more detailed analysis of this report from Common Weal is provided later in this section.

Other issues that Unite in Scotland are involved in include:

- Scottish Freeports / Greenports: There are five bids for Freeport / Greenport status in Scotland, of which two bids will be chosen. The five bids come from: 1. Clyde Green Freeport, 2. Aberdeen City and Peterhead Green Freeport, 3. Opportunity Inverness and Cromarty Firth, 4. Firth of Forth Green Freeport, 5. Orkney Green Freeport.

- Unite Scotland have continued to raise their concerns with Members of the Scottish Parliament (MSPs) and the Scottish Labour Party (who have agreed to circulate Unite's briefings on this issue to all Labour representatives in Scotland). Unite Scotland are establishing alliances with potentially supportive groups (e.g. Global Justice Now in Scotland are distributing Unite's briefings from their street stalls). Unite Scotland have had initial discussions with reps in the Forth Valley area regarding the potential to set up a cross-sector combine in the area to organise and respond should the Firth of Forth Estuary be one of the successful bidders.

- On 13 January 2023, the winning bids for the Scottish Green Freeports were announced. The successful bidders were Inverness and Cromarty Firth Green Freeport and Firth of Forth Green Freeport.

- Unite Scotland continue to push Glasgow City Council and the Scottish Government for more financial support for taxi conversion and an extension of an exemption for taxis from the application of Low Emission Zone (LEZ) rules in Glasgow, which poses a threat to the jobs of taxi drivers and operators. An extension until 2024 has been achieved in Edinburgh, Dundee, and Aberdeen – but Glasgow City Council are pushing ahead with plans to apply the LEZ from 2023. Unite Scotland will be meeting with our taxi reps and organisers to consider our next campaign steps.

Five bids received for green ports in Scotland

News from the Unite National Industrial Sector Committees and the Unite National Education Programme - Barry Faulkner

The following report is an edited version of a report submitted by Barry Faulkner, Unite National Political Education Coordinator, and Unite Environment Taskforce member.

Barry delivered Environment sessions to the Finance, Engineering and Manufacturing Services and Local Authorities National Industrial Sector Committees (NISCs), alongside Adam Heppell.

The finance sector NISC was very positive and one of the attendees had been on our pilot Environment course and was most complimentary about it. She has already made great strides with her employer, AXA insurance. There were three Executive Council (EC) members present, all of whom were very supportive throughout the session.

We were informed that NatWest Bank were making good advances in ethical and environmentally sound investments, and discussions in this area continue to take place across the sector.

The reps were engaged and they had some knowledge of how trade unions can help to address climate change. The Finance sector put forward a motion on environmentally friendly investments at the last Unite policy conference, and NISC members were aware of this. The most vocal supporter was the colleague from the Insurance sector who attended the Environment course in January. This member managed to make some positive environmental changes to their workplace, following their attendance on the Unite Environment course. They did this through negotiations with their employer.

We attended the Engineering and Manufacturing Service NISC which was lively and engaging throughout. There was a mixture of positive and more challenging opinions voiced by delegates. The responses to these delegates were centred around Unite's 'Build back Britain' and 'Manufacturing Matters' campaigns. There was a good debate on climate and jobs, on members' disinterest about climate change, and around the importance of examining supply chains and linking with public sector comrades to explore procurement opportunities for UK based manufacturers.

Northern College near Barnsley, Yorkshire, is a great venue for UNITE education courses

Sharon Graham, Unite General Secretary advocating Unite policies on Sophy Ridge on Sky News

There were a couple of vocal colleagues who felt this agenda either did not exist or was nothing new and that we should concentrate on pay related issues and local workplace challenges.

Ultimately, the arguments won over the majority of the room with some very powerful responses from numerous reps and commitments from several to attend courses. Even the main naysayer in the room approached me at the end for contact details as he is interested in opportunities for his workforce developing wave power technologies in Rugby.

The third NISC that was attended was for the Local Authorities, and this went well. There was solid positive feedback from attendees for our Environmental national course, and from one comrade who has collaborated with our national tutors, Mick McGrath and Iain Reekie in Edinburgh.

There was a great level of debate and positive support from EC members, one of whom has a rep who has attended our course and who is now making a big difference undertaking environmental audits for their Local Authority employer.

A national Environment course was delivered at Unite's National Education Centre in Birmingham. The course had 11 delegates, 3 were from Public Transport, 3 from Aerospace, 1 from Civil Air Transport, 1 from Local Authorities and 3 from the Not-for-Profit Sector.

The course went well and action plans on the final day of the course included fighting for environmental reps to be included in facilities agreements, developing policy with employers, encouraging other activists to attend education courses, promoting environmental matters with the workforce, and the initiation of discussions with employers. All reps plan to do environmental audits of their workplaces and report back to their fellow workplace and safety reps.

ScotWind: Privatising Scotland's Future Again – Common Weal

This report from Common Weal is in response to the ScotWind auction, the largest offshore wind project in Scottish waters. The plan from Common Weal is for the nationalisation of this offshore wind project as an alternative to the mass-privatisation that took place with Scotland's oil. This is an edited version of the Common Weal report.

According to the report, the ScotWind auction has 'effectively privatised Scotland's next generation of energy assets before they have even been built.' It has been done 'for an unbelievably small fraction of the potential profits to be extracted from the resources and has not done nearly enough to secure the local ownership and supply chain benefits that should come to Scotland as a result of this project'.

The report estimates that Scotland may receive annual rents from the project of between £50 - £90 million. However, the return on investment to the companies that were successful in the auction process is estimated to be between £3.5 - £5.5 billion in collective shared profits. These profits are many times higher than the annual rents to be received by the Scottish Government. The Common Weal report presents a plan that would have retained ownership and operations of the ScotWind project in the hands of the Scottish public, with policies endorsed by both the Scottish National Party (SNP) and the Scottish Greens.

Companies that were successful in the ScotWind auction are a mix of major fossil fuel companies, private energy companies, and state-owned energy companies. Between them, BP and Shell have won more than 20% of the energy capacity from the auction. Many of the private energy companies are owned by a complex web of financial holdings, such as hedge funds and investment banks. A holding company has been identified as owning shares in many of the companies that were successful in the auction process.

The previous commitment of the Scottish Government that Scottish supply chains would be promised a major chunk of the work associated with the ScotWind project, looks to have been an overpromise. Supply chain commitments to Scottish firms have been excluded from the current bids within the ScotWind project. It is suggested that binding commitments to this will take place in future negotiations around ScotWind. However, Scotland's lack of manufacturing capacity will mean that it will be cheaper for the successful bidding companies to import manufactured materials for the project, rather than invest in building up Scotland's manufacturing base to undertake the work.

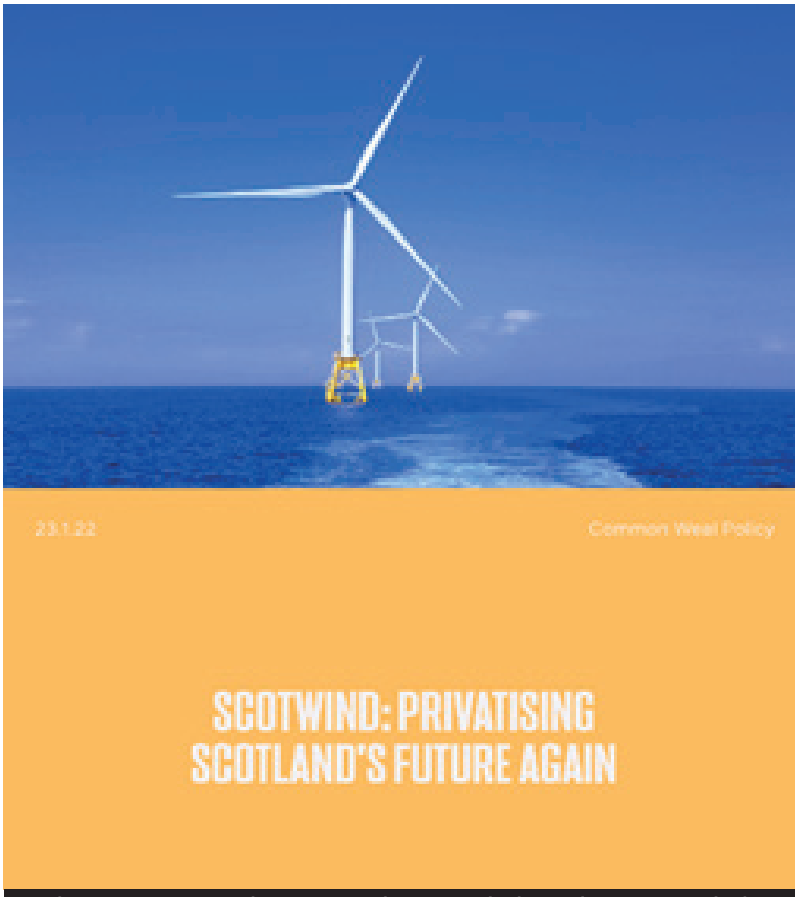
Common Weal have suggested that these problems could be overcome by launching a National Energy Company that would own the ScotWind Offshore Wind Project. This could deliver billions of profit a year to the Scottish Exchequer which could be reinvested into improving Scotland's manufacturing base. By allowing private capital to control the ScotWind project, these billions of pounds in annual profits will go to overseas private shareholders or invested into the public services of those nations that have deployed their own nationalised companies to win contracts for the ScotWind project.

Scotland set to lose billions in windfarm profits: Anger at the Scottish Governments failure to set up a new state-owned energy company

Unless Scotland builds up its own manufacturing base now, this scenario is likely to happen in the next round of the ScotWind auctions. The Scottish Government needs to spearhead investment in the Scottish manufacturing base, so that it will be in a position to nationalise ScotWind assets in the next round of auctions for the offshore wind licences. Common Weal have suggested that this could be achieved if a network of agencies were able to take on different aspects of the ScotWind project.

These agencies would include:

- A National Investment Bank to provide stable finance and anchor investment (e.g. sovereign wealth fund).
- A Scottish Energy Development Agency to strategically plan where the next offshore wind projects should be deployed, to identify support infrastructure (e.g. National Grid) and manage supply chain gaps.
- A National Infrastructure Company to coordinate the construction contracts that would be required to fulfil the project. This could include commissioning the training of all workers currently working in the high carbon energy sector, so that they have the skill set to be employed in the renewable industry sector.
- A National Energy Company to own and maintain the energy assets associated with the next phases of the ScotWind project. To be responsible for delivering energy to customers and returning profits to the public purse.



The Common Weal report on the ScotWind Auctions - ScotWind: Privatising Scotland's Future Again

The Labour Party's Plan For A Fairer, Greener Future

The Labour Party introduced their current policy to tackle climate change and protect the environment for future generations at the Labour Party Conference in Liverpool in October 2022. The headline for this policy is 'A Fairer, Greener Future.'

The policy states that 'Britain's cost of living crisis is unsustainable.' The UK is currently in a national economic emergency, and the Conservative Government is putting the profits of oil and gas companies before the circumstances of the British people. Labour's plan would cut high energy bills for good, and in the process create thousands of good jobs and provide the UK with a secure energy source.

Labour's plan for a Fairer, Greener Future would include:

- Freeze energy bills by introducing a windfall tax on the huge profits of oil and gas companies.
- Insulating 19 million UK homes to keep household energy bills down in the long term.
- Establish a new publicly owned energy company, called GB Energy, to offset the potential for the UK to be held to ransom over energy supplies.
- Create thousands of good, well-paid jobs across the UK, e.g., plumbers, electricians, engineers, and technicians.
- For Britain to become a provider of clean energy power by 2030 through harnessing the power of marine and tidal energy, quadrupling offshore wind, doubling onshore wind, tripling solar power, and ensuring the long-term security of nuclear power.
- To introduce a Clean Air Act to safeguard nature and our children's future, and crack down on water companies who dump sewage into our rivers and seas.
- Watch the following You Tube film by the Labour Party: Five ways Keir Starmer will deliver a fairer, greener future.

A Fairer, Greener Future - Labour's flagship policy to address the cost of living crisis and the climate emergency

Labour's plan for the state to provide green jobs growth

The following report is based around an article in the Sunday Times on 25 September 2022. It focuses on Labour's green growth strategy ahead of their annual conference in October 2022, which was held in Liverpool.

Labour's central argument on the economy is based around addressing the performance of the Coalition and Conservative Governments over the last 12 years. During this period, the UK economy has stagnated, and our public services have been decimated by a right-wing neoliberal ideology that wants to rid the UK of any presence of the welfare state created by the post second world war Labour Governments. The shadow cabinet recognises that economic growth has to be achieved across the UK, and not centred around London and the South East as it has been since the first Conservative Government of Margaret Thatcher (1979-83).

Labour sees addressing climate change as the key part of their economic plan. The shadow cabinet have outlined a "middle way" to address climate change, which will involve the public and private sector. This approach will be backed by a robust Labour Government that will provide investment initiatives for the private sector and public sector. It will include a commitment to invest billions in green technologies such as hydrogen power, carbon capture, and electric vehicles (EVs).

A future Labour Government would commit to investing in green technologies and green industries, believing that this will encourage the private sector to back 'Labour's green revolution', with their own investment commitments. The investment from the public and private sector in green technologies and green industries will, Labour believes, lead to the creation of highly skilled, well-paid green jobs.

Keir Starmer is leading Labour's plans for a Fairer, Greener Future

The shadow cabinet state that they have received a positive response from business to their proposals on the green revolution, with businesses saying that they want an "active partnership" with a future Labour Government. According to Labour, UK business has stated that they want the certainty that government will support and reinforce big projects aimed at supporting the UK Government's commitments to reaching its net zero emission targets. Business has told Labour that there is lots of investment funds in the pipeline, but it is not yet being invested due to the current uncertainty over the Conservative Government's plans on tackling climate change.

Labour argues that if they are elected as the next UK Government, they would ensure that the state would work in partnership with business to address the climate emergency and meet the net zero emission commitments. This is the opposite approach to the right wing of the Conservative Party, who would prefer the state to keep out of economic activity as much as possible, and allow free market – laissez faire economics to address climate change.

A key part of Labour's green economic strategy is to create well-paid, highly skilled, green jobs throughout the UK. This is seen as the best way to create a levelling up situation in the UK. A Labour Government would want to end the situation where wealth is created in regional pockets of the UK, like London and the South East, and then handed out to more deprived areas of the UK in the form of tax credits or similar transfer payment initiatives. Labour believes that this legacy of Thatcherism (unequal regional economic development in the UK) needs to be addressed once and for all.

Labour backs the state to provide green jobs growth

Global Carbon Capture Storage Institute - Global Status of Carbon Capture Storage 2022

The impetus for Carbon Capture Storage (CCS) continues to build. There has been significant progress around the world from both countries and companies. According to the Global CCS Institute, ambitions around CCS need to move to an urgent status with large-scale action required in order to preserve a liveable climate on Planet Earth.

The Global Status of Carbon Capture Storage 2022 report is a detailed analysis which provides information on:

- Global project pipeline
- International policy
- Carbon markets
- Carbon removals
- The evolution of storage

The report provides an overview of four regions around the world where there has been a speedy development of CCS. These are North America, Asia Pacific, Europe and the UK and the Middle East and North Africa (MENA) region.

Access to the report can be found through the following link.

INEOS, the global manufacturer of petrochemicals, speciality chemicals and oil products has announced that its primary goal is to cut emissions at source. The company which is fully unionised, has been capturing Green House Gasses (GHGs) emissions for decades; indeed INEOS aid the lead employer in the Greensand Project which aims to develop and demonstrate that Carbon Dioxide (CO2) can be safely stored in the Danish Sector of the North Sea.

The project is designed to save 1.5 million tonnes of CO2 per year by 2025 and 8 millions tonnes by 2030.

As the lead negotiator in INEOS, Jim Mowatt alongside Cliff Bowen our senior shop steward and EC member will report back regularly on the Greensand Project to our union and all the unions recognised by INEOS.

The impetus for Carbon Capture Storage (CCS) continues to build

International Energy Agency: Renewable power's growth is being turbocharged as countries seek to strengthen energy security

On the 6 December 2022, the International Energy Agency (iea) produced a report titled: Renewables 2022.

The report highlights the unprecedented rise in renewable energy power and estimates that the growth in renewable energy in the next five years will match, if not exceed, the rate of growth over the last twenty years. The global energy crisis, with the spiralling prices for oil and gas and the escalation of the Russia – Ukraine conflict, has resulted in this drive for greater renewable energy in the energy mix. Addressing the cost of energy crisis and greater energy security are seen as the key reasons for this.

The worldwide total capacity growth in renewable energy is expected to double over the next five years. Renewable energy is expected to overtake coal as the main source of electricity generation. The iea report states that this could go a long way to keeping alive the hope of limiting average global temperatures below or at 1.5C.

Nations have been motivated to focus on renewables, such as solar and wind, and turn away from a reliance on imported fossil fuel energy following the escalation of the Russia-Ukraine conflict in 2022. Fossil fuel prices (oil, gas, and coal) have been rising markedly as the global economy increases production following the COVID-19 pandemic. Conflict in Eastern Europe has taken these prices even higher as European nations try to reduce their reliance on Russian fossil fuels. The sale of fossil fuels from Russia to other European nations, has gone a long way to financing Russia's military aims in Ukraine. Hence, the reason why the EU and the UK want to limit their purchase of Russian fossil fuels.

Wholesale prices (the price which energy suppliers pay for gas and electricity) have risen due to an increase in global demand as major economies have climbed out of the pandemic-induced recession, all at the same time. According to the Renewables 2022 report, the capacity of global renewable energy power will increase by 2400 gigawatts (GW) between 2022 and 2027, this is equal to the current energy power of China today.

The IEA report estimates that global solar photovoltaics (PVs) capacity is likely to treble over the 2022-2027 period, overtaking coal as the largest source of energy power capacity in the world

The expected growth in renewable energy is 30% higher than was forecast last year. This is due to governments reactions to increasing energy prices and issues around energy security due to the Russia-Ukraine conflict. Renewables are expected to account for over 90% of electricity expansion over the next five years. By 2025, renewable energy is set to overtake coal as the largest source of global electricity. The iea report estimates that the growth in renewable energy over the next five years will be equivalent to its growth in the last twenty years. The International Energy Agency's Executive Director Fatih Birol said: "This is a clear example of how the current energy crisis can be an historic turning point towards a cleaner and more secure energy system. Renewables' continued acceleration is critical to help keep the door open to limiting global warming to 1.5C".

In Europe, the Russia-Ukraine conflict is being seen as a pivotal point for governments and businesses to look beyond Russian gas and seek more secure energy alternatives which also meet Europe's net zero emission ambitions. It is estimated that Europe's renewable energy power capacity in the 2022-2027 period, will be double that of the previous five-year period. The iea report argues that Europe's take up of renewable energy could be deployed even faster if EU member states agreed to rapidly implement a number of policies. These include streamlining and permission timelines, improving auction designs, providing better visibility on auction schedules, and improving incentive schemes that support rooftop solar power.

The report also looks at the influence of China, the United States and India on driving the growth in renewable energy between 2022-2027. These three nations are implementing policies and introducing regulatory and market reforms more quickly than they had originally planned to tackle the current energy crisis. The recent 14th Five-Year Plan of China, will result in China accounting for almost half of the growth in global renewable energy power capacity over the 2022-2027 period.

The Inflation Reduction Act (2022) is a landmark US Federal Law. The Act aims to cut inflation by allowing the US Government to invest BILLIONS of US dollars into "Green Growth" by encouraging domestic production in the green economy and the promotion of clean energy. The US Government will channel 369 billion US dollars into energy security and climate change programmes. This will solely be invested into US companies over the next decade. Another 300 billion US dollars will be invested into deficit reduction programmes, including Medicare.

This Act provides a great incentive for the US economy to increase its green transition, whilst supporting US producers at the same time. It is likely that the EU will follow suit and invest similar sums as the US to progress the green transition in the EU, and support EU producers at the same time. The UK could find it difficult to compete for investment funds for its own green transition, as the US and EU programmes are likely to attract greater investment sums because they are greater trading blocs.

A Channel 4 news item titled, 'UK economic crisis: Car production hits six decades low' in January 2023, refers to the influence that the US Inflation Reduction Act could have on global automotive production.

The Act will subsidise US electrical vehicle manufacturers and green energy firms and provide tax breaks to US consumers that buy US produced electric vehicles.

The United States Inflation Reduction Act (2022) provides support and a long term plan for expanding renewable energy capacity in the United States

The German Chancellor, Olaf Scholz, responded to this at the World Economic Forum in Davos in January 2023 by suggesting that protectionist measures hinder competition and innovation which are instrumental to climate change mitigation.

The then UK Trade Minister, Greg Hands, met with his EU counterpart in January 2023 to discuss their shared concerns about the US Inflation Reduction Act. One response the EU is considering is to relax its own state aid rules, which the UK can also do as it is no longer part of the EU.

The UK automotive industry could be heavily impacted in the green transition process as it may struggle to compete with the huge investment sums that are likely to be committed by the US and EU into electric vehicle (EV) production and the associated supply chains. A key part of the green transition in the automotive industry is battery production. The EU is planning to build 35 EV battery plants, the UK currently has one. The EV battery start-up company, British Volt, collapsed before it became operationalise. The Times reported on 6th February 2023 that the Australian battery start-up company, Recharge Industries, is the preferred bidder with the administrators for BritishVolt.

In most nations worldwide, the cheapest options for new electricity generation is onshore wind and utility-scale solar photovoltaics (PVs). Utility-scale solar photovoltaics (PVs) take advantage of solar power, using large arrays of PV panels to capture solar energy and transform it to electricity. They operate at a utility scale like conventional power plants but have dramatically lower greenhouse gas emissions. The iea report estimates that global solar PV capacity is likely to treble over the 2022-2027 period, overtaking coal as the largest source of energy power capacity in the world. The report also expects there to be a rapid acceleration in the take up of solar panels on residential and commercial rooftops. This is expected to help consumers and businesses reduce their energy bills.

Global wind capacity is expected to double over the 2022-2027 period, with offshore wind projects estimated to account for 20% of this growth. Wind and solar power, together, are expected to account for 90% of the growth in renewable energy power capacity over the next five years. The report notes patterns of diversification in global PV supply chains, with new policies in the United States and India expected to boost investment in solar manufacturing to the sum of around USD 25 billion over the next five years. China will remain the leading player in solar manufacturing capacity, but its share is likely to fall from 90% to 75% by 2027.

The global demand for biofuel is set to increase by 22% over the next five years. The United States, Canada, Brazil, Indonesia, and India are expected to make up 80% of the global expansion in biofuel use. All five of these nations have comprehensive policies in place to support the growth of biofuels.

The iea report also puts forward the case for an accelerated rise in renewable power capacity, where renewable energy capacity grows by an additional 25% to the main forecast in the report. The report states that in advanced economies, the faster growth in renewable energy capacity will require the tackling of regulatory challenges and a rapid penetration of renewable electricity in the heating and transport sectors. The acceleration of renewable energy capacity in emerging and developing economies, would require addressing uncertainties in policy and regulations, poor grid infrastructure, and a lack of access to affordable financing that is preventing new projects in this area.
The accelerated case for a global expansion of renewable energy capacity will require improved supply chain networks, an expansion of grids and the deployment of resources to securely manage larger shares of variable renewables. If the accelerated case for the growth in renewables were to happen, then this would be more likely to achieve the net zero emission targets by 2050 and limit global warming to 1.5C.

UK Government makes U-turn on Onshore Wind Farms

On 7 December 2022 the UK Government announced plans to build new onshore wind turbines. Previous UK Prime Minister David Cameron (2010-2016), introduced planning restrictions in 2015 which effectively banned the construction of new onshore wind turbines. Pressure has mounted on the UK Government within its own party, as 50 Tory MPs have pushed for an end to this construction ban in an attempt to boost growth and make Britain more energy independent. It is also hoped that those living near to the new onshore wind turbines will receive a discount on their energy bills.

The UK Government will undertake a consultation period on the construction of new onshore wind turbines. The green light for their construction will require local support, and concerns about their impact will need to be satisfactorily addressed. The consultation period will run from December 2022 to April 2023, with the UK Government stating that it will address concerns regarding protecting important landscapes, such as areas of natural beauty and national parks.

Tory MP, Simon Clarke the former levelling-up secretary, has led the push for more onshore wind turbines. Clarke stated that onshore wind is the cheapest form of energy, and it is an important part of the UK's future energy mix, alongside oil, gas, offshore wind, solar and nuclear. It will strengthen the UK's energy security and help deliver the UK's commitments to tackling climate change. Former Tory minister, John Hayes a vocal opponent of new onshore wind farm constructions, believes that this new announcement by the UK Government led by Rishi Sunak is not a significant change. Hayes stated that the construction of new onshore wind turbines could still be vetoed where there was local community opposition.

The UK Government are also considering upgrading existing onshore wind turbines that are more than 20 years old, as the modern turbines are bigger and more efficient.

Energy experts have suggested that this announcement by the UK Government is not likely to result in significant increases in onshore wind farms in the UK, particularly in the south of England, because average wind speeds are low making them inefficient.

The UK Government will undertake a consultation period on the construction of new onshore wind turbines between December 2022 and April 2023

UK Government gives the go-ahead for a new coalmine in Cumbria

The UK Government has given its approval for the building of a new coalmine in Whitehaven, Cumbria. It will be the first new coalmine to be built in Britain for three decades. Michael Gove, the levelling up secretary, agreed the project on 7 December 2022, the same day that the UK Government announced its consultation period on the construction of new onshore wind turbines. The Cumbrian coalmining project is expected to create 500 new jobs in the region from the estimated £165m of investment. The project is expected to produce 2.8m tonnes of coking coal a year, which will primarily be used for steelmaking.

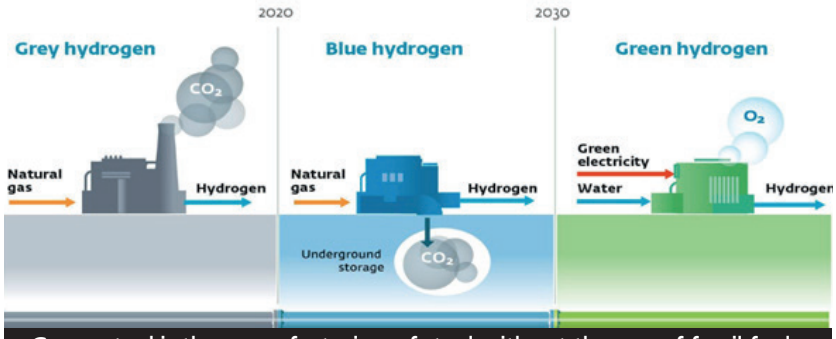
However, critics of the project have stated that the Cumbrian coalmining project will create an estimated 400,000 tonnes of greenhouse gas emissions a year. This will increase the UK's emissions by the equivalent of putting 200,000 internal combustion engine cars on the road.

The majority of UK steelmakers will not use the coal produced at the Cumbrian site, because it is high in sulphur and their needs are already being met. It is believed that most of the coal produced at the Cumbrian site will be exported to overseas steelmakers. However, there is an uncertainty over where the coal will be exported to because most European steelmakers are reducing their use of coal in the production process and increasingly adopting green steelmaking production methods. Essentially, green steelmaking is the manufacturing of steel without the use of fossil fuels. So-called 'green hydrogen' is one solution that could help reduce the steel industry's carbon footprint. When burned, hydrogen emits only water.

According to the UK Government, the Cumbrian coalmining projects meets its climate legislation commitments of achieving net zero emission by 2050, because the operation will be shut down by 2049. The report from the Planning Inspectorate to Michael Gove, stated that the Cumbrian coalmining project would have "an overall neutral effect on climate change", because the amount of coal used in steelmaking would be "broadly the same with or without" the new Cumbrian coal mine.

A spokesperson for the UK Government said the coal would be used for making steel in the UK, which would have otherwise been imported into the UK. The UK Government does expect to meet some legal challenge from those who believe that this project puts their net zero commitments in to doubt.

Ed Miliband, shadow climate change secretary, stated the Cumbrian coalmining project was not a solution to the energy crisis and does not benefit UK steel producers. It also ridicules the government's claims that it is a leader on tackling climate change. A Labour Government would invest in Britain becoming a "clean energy superpower", creating sustainable jobs in renewable energy. Zarah Sultana, Labour MP for Coventry South, suggested that this was another example of the Tories putting the fossil fuel industry before people and the planet.



Green steel is the manufacturing of steel without the use of fossil fuels. Green hydrogen is one solution that could help reduce the steel industry's carbon footprint

The rush for green jobs has led to 'left behind' regions in the UK

The following report is based on an article in The Times on 12 December 2022. The report sheds light on the potential risk of regions in the UK being left behind in the creation of green jobs, as the UK Government attempts to decarbonise the UK economy to meet its net zero emission commitments by 2050.

Research by accountancy firm PwC suggests that London and the South East has experienced the highest growth in green job creation over the last 12 months to the end of July. Scotland was identified as having the most green jobs in the UK, this was largely due to the prevalence of energy and utilities roles in the renewables energy sector. London had the second most green jobs in the UK and had the highest growth in green jobs in the last 12 months, with the South East placing fourth. The North East of England and Northern Ireland had the lowest number of green jobs, with the highest carbon emissions per employee, alongside Wales.

One in five new green jobs created in the last 12 months were based in London. If this growth pattern continues, then it could lead to London becoming the dominant region for green jobs growth in the UK. The PwC analysis identified that the growth of green jobs in London and the South East is largely down to scientific, technical and professional roles being concentrated in these regions of the UK.

The PwC analysis was based around a green jobs barometer that identified movements in green jobs creation, job losses and the carbon intensity of employment. Green jobs were identified as job roles that sought to produce or provide environmentally friendly products and services, or where work processes were adapted to become less carbon-intensive or use fewer natural resources.

PwC's UK head of regions, Carl Sizer, stated that it was alarming that one in five new green job roles were based in London. The growth in green jobs needed to be nationwide to meet the UK's net zero commitments and drive green growth throughout the nation.

Scotland has been a hot spot for wind farms, a key form of cleaner energy, including this turbine outside Lerwick in the Shetland Island

Nuclear Fusion Energy Breakthrough Announced

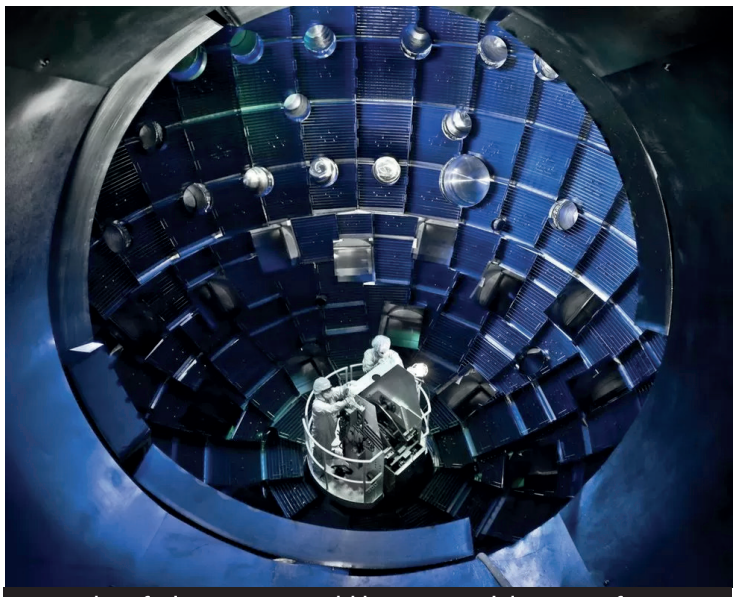
On the 13th December 2022 the National Ignition Facility at the Lawrence Livermore National Laboratory (LLNL) in California confirmed that they had produced more energy from a fusion experiment than the energy that was put in. Overcoming this previous major barrier to fusion energy, is a significant step towards a potential source of near-limitless clean energy.

However, experts say that we are still some way off before fusion energy will be able to power our homes. Nuclear fusion energy is often referred to as the 'holy grail' of energy production because it is this process that powers the Sun and other stars. Nuclear fusion works by taking a pair of light atoms and forcing them together. This fusion then releases lots of energy.

Nuclear fusion is the opposite of nuclear fission. Nuclear fission is the process where heavy atoms are split apart, it is the technology that is currently used in nuclear power stations. This process produces nuclear waste which causes radiation over long periods, which needs to be stored safely.

Nuclear fusion produces a lot more energy than nuclear fission, with only a small amount of short-lived radioactive waste. It produces no greenhouse gases, and therefore will help in the battle against climate change. Until this week's successful experiment, previous experiments had not produced more energy than the amount of energy put in. A major challenge with nuclear fusion is that forcing and keeping the elements together to create the fusion, requires very high temperatures and pressures.

The experiment at the National Ignition Facility in California has cost $3.5 billion (£2.85bn). The experiment starts with putting a tiny amount of hydrogen into a capsule the size of a peppercorn. The hydrogen fuel is heated and compressed by a powerful beam laser. The capsule is heated to 100 million degrees Celsius, hotter than the Sun's centre, which compresses the capsule to more than 100 billion times that of the Earth's atmosphere. These forces cause the capsule to implode, which then forces the hydrogen atoms to fuse and release energy. It was confirmed that the successful experiment had used 2.05 megajoules (MJ) of energy to the target, which produced 3.15 MJ of fusion energy output.

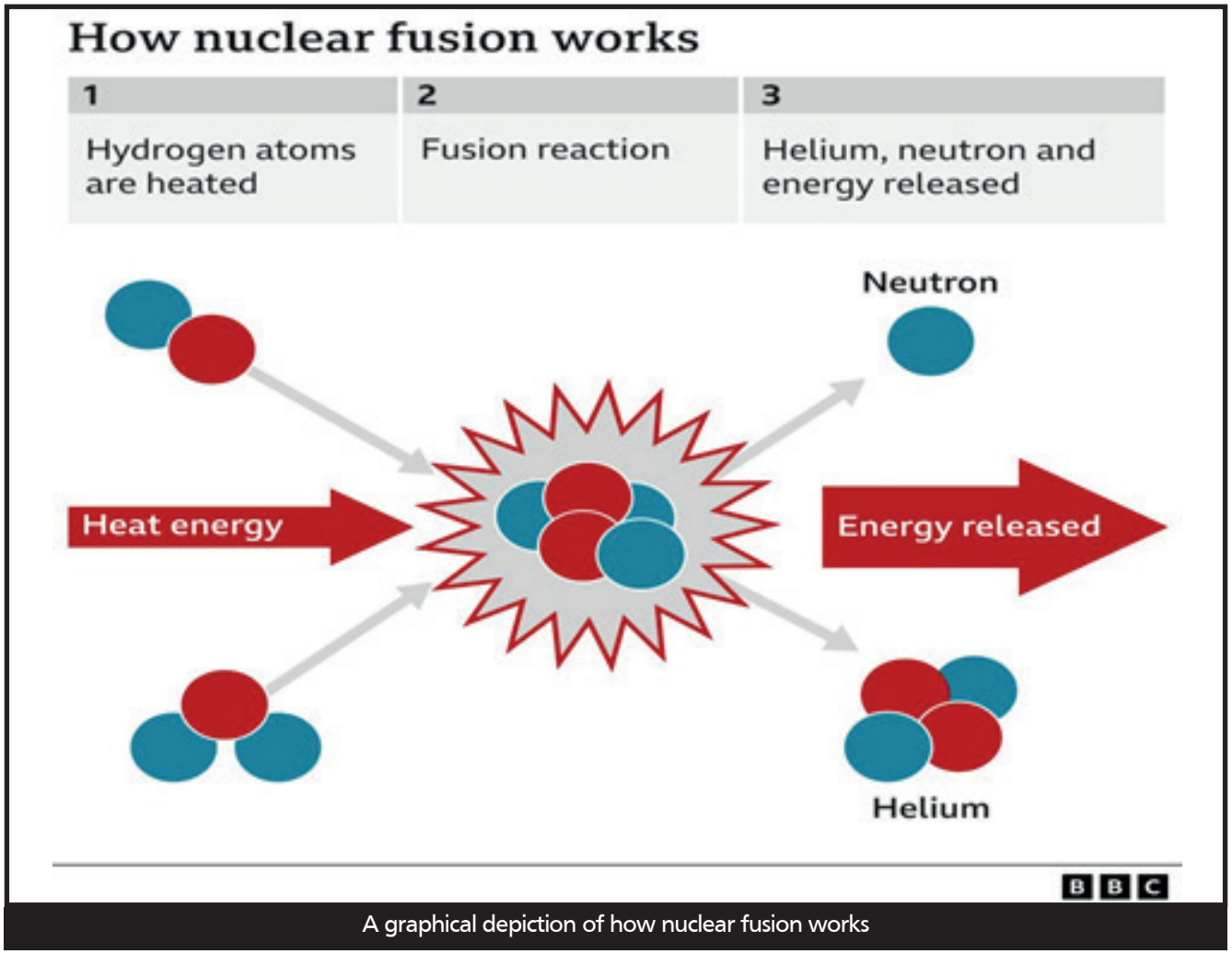


Nuclear fusion energy could be a potential source of near-limitless clean energy in the future

According to Dr Budil, the LLNL director, with a few more decades of research on the underlying technologies around nuclear fusion we could be in a position to build a nuclear fusion power plant. A major hurdle to achieving this is reducing the costs associated with the creation of nuclear fusion energy and increasing the energy output from nuclear fusion.

The successful experiment only produced enough energy to boil about 15-20 kettles, and it cost billions of dollars of investment to do this. Also, although the experiment produced more energy output than the energy input, this did not include the energy needed to make the lasers work. This was far greater than the amount of energy the hydrogen produced.

The value of this experiment is that it shows that the science behind nuclear fusion works. Before this experiment is scaled up, it will need to be repeated, perfected and the amount of energy that the experiments generate needs to be significantly more. Although this nuclear fusion experiment has cost billion of dollars, if it can become a source of clean energy in the future the incentive to continue with these experiments will probably overcome any challenges ahead.



A graphical depiction of how nuclear fusion works

Section Five:

The United Nations Conference of the Parties 2022 – COP27

Reactions to COP27 – Sharm el-Sheikh, Egypt, November 2022:

ITUC – COP27 establishes work programme on Just Transition with social dialogue and social protection at its heart:

The ITUC welcomed the establishment of a work programme on Just Transition within the 'Sharm el-Sheikh Implementation Plan.' The plan states that Just Transition will be established around Social Dialogue. Outgoing ITUC General Secretary, Sharan Burrows, said: "Workers must have a place at the table for a transition that stabilises the planet, our economies, and our societies. Transition plans need to include both climate and employment plans. That requires unions to be involved and to own the process, otherwise we risk stoking the fear of those who feel left behind and left out of decision making".

The ITUC stated that the inclusion of social protection is a major step forward. Eric Manzi, ITUC-Africa Deputy General Secretary, said that comprehensive and universal social protection systems are needed to build resilience for workers, families, and communities. Social protection is needed for transition skills training and ensuring decent jobs in the green transition. This will deliver for workers in richer and poorer nations. The ITUC regrets that nations were unable to commit to respect labour rights and human rights. The ITUC recognises that a Just Transition requires the right to free trade unions, collective bargaining and occupational health and safety. The labour movement views the reluctance to guarantee the respect of human rights as a major concern. Labour rights and human rights are needed for progressive climate policies to succeed.

COP27 has seen disappointing results in relation to climate mitigation, with nations backtracking on commitments to phase down coal. The focus on renewable energy to tackle the climate emergency has been widened to include 'low-emission' energy. Sharan Burrows commented on discussions on market mechanisms at COP27 noting that objectives in this area, agreed in the Paris Climate Agreement, were being undermined by proposals allowing double counting and unsustainable removal technologies. A major priority for COP28 next year is to increase mitigation ambitions. That will be a challenge for the UAE COP28 presidency.

A key aim of the ITUC delegation at COP27 was to keep the commitment to limit average global temperatures to 1.5C or below

COP27 – One Step Forward – ITUC Blog:

This is an edited version of a blog from Stephen Smellie (Unison) who attended COP27 as part of the ITUC UK delegation.

The key points of Stephen's blog include:

- It was agreed to set up a Loss and Damage Fund. The fund has no money yet, and it has not been agreed which countries should pay into the fund and which countries are to receive from the fund. The US believe that China should be included as a nation that pays into the fund. The Loss and Damage Fund is an historic decision that the trade union movement helped to achieve, with those nations responsible for the climate emergency compensating those nations that suffer most from the climate emergency.

- It could be argued that the 'Sharm-el-Sheikh Implementation Plan,' negotiated at COP27, is a backward step compared to the Glasgow Climate Pact negotiated at COP26 and the Paris Climate Agreement negotiated at COP21. A key achievement of the Glasgow Climate Pact was the commitment to 'phase down unmitigated coal.' It was hoped that this could be built on at COP27 with a commitment to 'phase down the use of all fossil fuels.'

- However, these aims came up against notable resistance at COP27 from fossil fuel companies and the hosts, Egypt, who want to develop their own gas reserves. Then there was Saudi Arabia who were intent on protecting their huge oil reserves, alongside the most powerful nation in the world, the United States, who are granting licences to fossil fuel companies to expand gas exploration.

- The 'Sharm-el-Sheikh Implementation Plan' commits to an energy transition towards "lower emissions and renewables". This effectively gives a green light to the continued exploration of gas, because it has lower emissions than coal.

- The trade unions wanted greater ambition in this area, with a commitment to reducing all carbon emissions that are causing the climate emergency. Unions believe this can be achieved through social dialogue, with workers in the fossil fuel industries negotiating with employers and governments to progress this matter. This would include providing the fossil fuel industry workforce with alternative employment opportunities or training in the green industries that will replace the high carbon emission industries.

- Just Transition commitments have been endorsed in the Paris, Glasgow, and Sharm-el-Sheikh agreements. However, different nations have a different take on what a Just Transition entails. Whilst unions view Just Transition as a commitment to protect workers in the green transition process, employers are more concerned with protecting their profits and their power in the employer-employee relationship. Union calls for 'labour rights,' within the Just Transition commitment, have so far been ignored. So, the trade union movement will continue to take the fight on this to COP28 which takes place in Dubai, United Arab Emirates, between 30 November 2023 and 12 December 2023.

- COP27 took place against the background of Egypt's record on human rights, which includes suppressing climate change activists and trade unionists. Achieving climate justice will require both labour rights and human rights.

Stephen Smellie (Unison), who was a UK representative in the ITUC's delegation at COP27

COP27 Initial Reflections – Jenny Cooper (National Education Union – NEU):

The following article was written by Jenny Cooper (NEU). Jenny was a UK representative at COP27 as part of the International Trade Union Confederation (ITUC) delegation

This is a slightly edited version of Jenny's article.

I attended the UN climate negotiations (COP27) as part of the ITUC international trade union delegation. To start with there were two big issues with COP 27:

1. Holding a huge event in the desert means a huge carbon footprint and a load of greenwashing.

2. Holding COP in a nation with a history of poor human rights means a load of human rights washing and risking being complicit with that regime (An estimated 60 thousand political prisoners are detained without fair trial in Egyptian jails).

As the ITUC delegation, we were there primarily to push the Just Transition agenda with labour rights and human rights at its core. The Saudi government were calling for a Just Transition with an entirely different definition, which was more about protecting their right to extract oil.

The ITUC wanted a Just Transition of the workforce through social dialogue (involving government, labour, and employers), decent work, labour rights, social protection, and additional consultation with affected stakeholders consistent with human rights and equity. This is articulated in the Paris Climate Agreement (2015-16) and the International Labour Organisation's (ILO's) Guidelines on Just Transition.

At the close of the COP, there was a mention of human rights in Just Transition but only with regards to "considering human rights with reference to the host country's laws". So, little protection there. In relation to labour rights and social dialogue, this has yet to be included.

As a delegation we were also lobbying to keep the aim to limit average global temperatures to 1.5C alive, in common with the UK and other governments (in words if not action!) and other civil society groups.

Why 1.5C? Because of all the stories I had heard for years about 1.5C being a tipping point for average global temperatures. At COP27, I heard the descriptions of people living in low lying Pacific Islands, Pakistan, Bangladesh, Somalia, and indigenous lands. These places are already suffering the effects of climate change and are badly impacted by the current average global temperature level which is currently around 1.1C.

In one of the education side events, we heard from Sifiso from the Zimbabwe teaching union. Twenty of their schools were swept away this year in cyclones which are becoming increasingly powerful with more severe consequences.

If the rate of growth in carbon emissions since last year's COP26 event was to continue throughout this century, then we are heading for an average global temperature of 2.7C. Most climate scientists believe that this would be catastrophic for most living species on Planet Earth.

My most emotional reaction was hearing from four indigenous young people who'd experienced oil spills, sea level rises and forest decimation on their lands. They were utterly despondent with their situation, and fiercely angry but very determined to do something about it. A YOUNGO representative from the Brazilian rainforest said: "We are now fighting with our lives to protect the small amount of the Amazon rainforest that is left".

Regarding education, (my sector), quality climate education was a prominent topic at COP, led by youth activists. It was noticeable that governments liked to have their photos taken with the youth activists.

This was viewed by many as an exploitation exercise for political gain and is referred to as 'Youth washing'.

As a trade unionist, the key topics for me at COP27 included the need for resilience to the effects of climate change; the sustainability of the education system; retrofitting of buildings; the health and safety and protection of workers; all through a just transition. Me and my UK co-delegate also hold the proper funding of public services as a key priority, and we would like to see this having a higher profile in future COPs and in all discussions around climate change.

I experienced a great deal of avoidance from UK negotiators that I attempted to lobby, in common with my co-delegate from UNISON. I also experienced UK Government representatives making exaggerated claims about climate education in the UK in public meetings. Baroness Barran spoke about the initiatives the UK Government had implemented in terms of climate education and sustainability. However, we know this strategy has not yet been implemented.

No funding has been announced for this climate education strategy, and the strategy has not even been shared with teachers and educators yet.

The thing that gave me most hope at COP27 was the march and rally for human rights and for people-not-profit, on my penultimate day. The protest was massive, angry, and determined, and blocked areas that we had been told to keep clear. People power won and I believe this contributed to the one big progressive step made by international negotiators at this year's COP, the Loss and Damage Agreements made at the eleventh hour. Alaa Abd El-Fattah's (Egyptian-British writer and political prisoner in Egypt) sister Sana'a was there against all odds. Shortly afterwards her mother received a letter from Alaa and an agreement for her to visit.

Sharan Burrow, General Secretary of the International Trade Union Confederation (ITUC) between 2010 and 2022 talking at COP27

Section Six:

Notes from TUSDAC & TUSNE Meetings – Q4 2022

TUSDAC

TUSDAC stands for Trade Union Sustainable Development Advisory Committee (UK).
The Trade Union Sustainable Development Advisory Committee (TUSDAC) was established in 1998 with the role of bringing trade unions and Government together to discuss issues relating to trade unions, the environment and sustainable development. TUSDAC has the following core objective:

- To provide Government with a trade union perspective on the employment consequences of climate change, and the response to it and to allow the trades unions to enter into constructive dialogue with the Government on sustainable development and environmental issues.

The terms of reference for TUSDAC are:

- To direct trade union input into the policy process to enable constructive dialogue with Government on sustainable development and other related environmental issues.
- To provide a trade union perspective on the employment consequences of climate change, and the response to it.
- To help mobilise the trade union movement to become involved in the move towards better environmental practice in the workplace, building on existing initiatives and activities, disseminating information and experience.

Members of the Unite Environment Taskforce attend TUSDAC's bi-monthly meetings. A copy of the summary notes for the TUSDAC meeting on the 29 November, 2022 are provided.

Summary notes of TUSDAC meeting held on 29 November 2022:

Agenda

Item 1: COP27 report back

Item 2: Draft findings of analysis on manufacturing jobs threatened by the high gas prices, by Paul Dillon and Stephane Portet, Syndex.

Item 3: Energy Demand Reduction in Industry, by Mari Martiskainen from the EPSRC National Centre for Energy Systems Integration

Item 4: Standing updates:
- Green Jobs Delivery Group
- Climate Change Committee Advisory
- Group on workers & skills
- Upcoming consultations

Item 5: Disputes and negotiations

Item 6 AOB

Item 1: COP27 report back Stephen Smellie (Unison)

Big outcome of the COP is agreement to set up a global loss and damage fund, but no funds yet committed to it. US and EU pushing for China to contribute.

Advocated for agreement to Just Transition. Definition of the concept being broadened by negotiators – including by Global South countries; Saudi Arabia.

Workers are not the primary focus of Just Transition approach but recognised as an important element.

Not much progress on carbon markets and carbon trading.

Human rights a major issue (60k political prisoners in Egypt). No international agreements around human rights – very strong resistance to including human rights in UN agreements. Ala'a Abdel Fattah still in prison, little progress on his case.

South Africa – Global North countries made commitments of finance to coal mine closures, to be replaced by renewable industries. Similar deal with Indonesia. But finance is provided as loans. Vietnam and Cambodia are also in similar negotiations.

UK delegation was not open to contact and collaboration with TU delegates. But good contact with UK Gov lead for international clean energy.

Jenny Cooper (NEU)

Important to have overlap between UK delegates, to participate in the ITUC strategy day on the middle Sunday of COP.

Education discussion at COP narrowly focused on climate education, not on education system more broadly.

Governments happy to speak to youth activists but not to teacher representatives about climate education.

Trade Union delegation worked well with NGO delegations. All civil society groups joined together for protests.

There needs to be more work preparing for COP throughout the year to make the most of the opportunities at the annual COP event.

UK negotiators didn't engage with any attempts to advocate.

Energy Demand Reduction in Industry, by Mari Martiskainen from the EPSRC National Centre for Energy Systems Integration // University of Sussex Energy Group

Energy demand research champions chosen by UKRI.

Research themes: Equity; Flexibility, Governance; and Place.

Key questions for input:

- What are the most urgent cases in energy demand?
- Who are key partners to involve?
- What research outputs do you find useful?

Discussion

Q. Price controls for electricity networks will be released tomorrow. Will you investigate network infrastructure capacity to handle the electricity required for Net Zero?

Q. Work on retrofits & place-based approaches in Yorkshire.

Q. Good use case on private transport. Infrastructure for electric vehicles and who delivers it. Employee benefits related to energy efficiency. Design of schemes around encouraging higher earners to invest in efficiency measures VS subsidising measures to benefit low earners.

Q. Investigating overlaps between construction industry business models, skills provision, job quality, and quality of installation work.

Q. Energy advisors, smart meters fitters.

Brief standing update: Green Jobs Delivery Group (Sue Ferns)

Consultations:

Environmental Audit Committee: Environmental Change and Food Security enquiry: Closed 15 December 2022

BEIS: Design of the Energy Company Obligation (ECO): 2023-2026: Closes 23 December.

Disputes and negotiations: No update.

AOB: TUC Yorkshire and Humber is hiring a Green Bargaining Officer to work with unions on advocating for building retrofits jobs.

TUC upcoming conference on Thursday 1 Dec: TUC project to support worker-led transition plans in high carbon or energy intensive industries will be going ahead; updates to follow.

TUC briefing on the Energy Charter Treaty to be published next week. Grant Schapps announced Energy Bill will be going through parliament.

TUSNE

TUSNE stands for Trade Unionists for Safe Nuclear Energy. Trade Unionists for Safe Nuclear Energy (TUSNE) are a campaign group of trade unions that represent many thousands of workers in the civil nuclear sector.

Members of the Unite Environment Taskforce attend TUSNE meetings, and Jim Mowatt (Director of the Unite Environment Taskforce) is the current Chair of TUSNE. TUSNE unites around a single aim: the wellbeing of the civil nuclear industry and its employees.

To achieve their goal, TUSNE works with the civil nuclear industry and politicians of all parties to ensure there is a contribution from nuclear in a low carbon balanced energy mix.

On Monday 24th October, TUSNE hosted a Plenary Session in the Thames Pavillion at the Houses of Parliament. It was a chance for Jim Mowatt to provide a broad update on the nuclear industry, including a focus on the aims of TUSNE in the forthcoming year. Lay Reps from across the sector also raised awareness of specific points relating to their workplace. During the Plenary, TUSNE welcomed Women In Nuclear and Greens for Nuclear Energy at the Plenary, with both providing a brief summary of their work and answering questions from Lay Reps in attendance. More on this can be found in the following minutes.

Following the Plenary, a Reception was held in conjunction with Nuclear Waste Services. Parliamentarians and other stakeholders learned how plans for one of the UK's most significant environmental protection projects, the Geological Disposal Facility, are developing. At the Reception, we heard from Jim Mowatt (TUSNE Chair), Karen Wheeler (CEO of NWS), Professor Claire Corkhill (University of Sheffield) and Bill Esterson MP (Shadow Business Minister), who also kindly hosted both events.

TUSNE meeting: October 2022

Sources of Information - Reports, Articles and Images:

Section One Unite Industry Sectors' Environment Reports (Q3 & Q4 2022)

Page 6: UK weather: 2022 was warmest year ever, Met Office confirms - (Article): https://www.bbc.co.uk/news/uk-64173485

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Page 19: Unite are working with the HSE's Building Safety Regulator, set up after the Grenfell Tower fire, on developing sector specific competence frameworks for the craft trade and construction occupations - (Image): https://bsrevents.co.uk/home

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Page 42: The UK Government is in talks with EDF to create 10,000 highly skilled jobs at the Sizewell C plant. The plant is expected to produce low carbon energy for around 6 million homes for 50 years - (Image): https://www.bbc.co.uk/news/uk-england-suffolk-63664140

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Page 52: The Unite North East, Yorkshire & Humberside region are the first region within Unite to set up a 'Retrofitting of Homes Taskforce' - (Image): https://mobile.twitter.com/uniteneyh

Page 53: Fighting for Jobs, Pay and Conditions (Image): https://twitter.com/unitetheunion

Page 54: The Unite City of Edinburgh Council (CEC) Branch is collaborating with Unite's National Education department to develop a series of Retrofitting Workshops (Image): https://www.surveymonkey.co.uk/r/VQX3VC6

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Page 66: Stephen Craig, Unite National Development Officer - (Image)

Page 67: Panel involved in discussions at the Retrofit Workshop, hosted by the University of Westminster. Panel includes Stephen Craig of Unite and Linda Clarke of the University of Westminster - (Image)

Page 68: The 'Our Common Home Campaign' by Common Weal (2019) emphasised the development of 'genuine public-good private-public partnership' for their retrofitting strategy - (Image & Report): https://transitionedinburgh.org.uk/2020/10/07/our-common-home-plan/

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Page 75: For a large scale retrofitting programme to be a success in the UK, it will require a change to the current infrastructure of the UK construction industry and improvements in construction training programmes and apprenticeships - (Image): https://www.theguardian.com/environment/2022/aug/18/master-all-trades-retrofit-firm-climate-cost-of-living-crisis-b4box

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Page 78: The Lucas Aerospace Combine Committee constructed an Alternative Corporate Strategy (commonly known as The Lucas Plan) in the mid-1970s. This was based around producing socially useful and environmentally friendly (sustainable) products, against the background of threats of redundancies - (Image): http://theplandocumentary.com/

Page 79: The Lucas Aerospace Combine Committee met with Tony Benn (then Secretary of State for Trade in the Labour Government) in November 1974 to discuss their Alternative Corporate Strategy - (Image): https://www.lucasaerospacecombine.co.uk/p/the-combine.html

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Page 89: The involvement of unions helped to secure the green steel pilot project in Teeside - (Image): https://www.tuc.org.uk/blogs/fight-greener-and-cleaner-steel

Page 90: From left to right: Angela Rayner (Deputy leader of the Labour Party), Frances O'Grady (TUC General Secretary, 2013-2022), Sue Ferns (Deputy General Secretary of the Prospect union and TUC President, 2021-2022) - (Image): https://www.independent.co.uk/news/uk/politics/protest-march-tuc-london-cost-living-b2104244.html

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Page 94: Northern College near Barnsley, Yorkshire, is a great venue for UNITE education courses - (Image): https://www.northern.ac.uk/look-inside/

Page 95: Sharon Graham, Unite General Secretary advocating Unite policies on Sophy Ridge on Sky News - (Image): https://news.sky.com/video/union-leader-accuses-government-of-lying-and-suggests-it-is-looking-to-privatise-the-nhs-12792654

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Page 102: The IEA report estimates that global solar photovoltaics (PVs) capacity is likely to treble over the 2022-2027 period, overtaking coal as the largest source of energy power capacity in the world - (Image): https://www.gettyimages.co.uk/detail/news-photo/an-overhead-view-shows-the-photovoltaic-solar-panels-making-news-photo/1244488969

Page 102: IEA Renewables 2022 report - (Report): https://www.iea.org/reportsrenewables-2022

Page 102: Wholesale gas and electricity prices - (Article): http://www.greenenergyuk.com/blog/news/gas-electricity-prices-changed-explained

Page 103: The United States Inflation Reduction Act (2022) provides support and a long term plan for expanding renewable energy capacity in the United States - (Image): https://www.theguardian.com/commentisfree/2022/aug/10/joe-biden-green-economy-us-britain-inflation-reduction-act

Page 103: The Inflation Reduction Act - (Report): https://www.democrats.senate.gov/imo/media/doc/inflation_reduction_act_one_page_summary.pdf

Page 104: Australian start-up Recharge wins bid to revive Britishvolt - (Article): https://www.thetimes.co.uk/article/recharge-industries-chosen-as-preferred-bidder-for-britishvolt-vvgtzcczv

Page 105: The UK Government will undertake a consultation period on the construction of new onshore wind turbines between December 2022 and April 2023 - (Image & Article): https://www.thetimes.co.uk/article/mps-replace-onshore-wind-farm-turbine-uk-98bf8rxn0

Page 106: Green steel is the manufacturing of steel without the use of fossil fuels. Green hydrogen is one solution that could help reduce the steel industry's carbon footprint - (Image): https://www.weforum.org/agenda/2022/07/green-steel-emissions-net-zero/

Page 107: The rush for green jobs has led to 'left behind' regions in the UK - (Article): https://www.thetimes.co.uk/article/regions-left-behind-in-green-jobs-rush-lqkth59cv

Page 107: Scotland has been a hot spot for wind farms, a key form of cleaner energy, including this turbine outside Lerwick in the Shetland Islands - (Image): https://www.thetimes.co.uk/article/regions-left-behind-in-green-jobs-rush-lqkth59cv

Page 108: Nuclear fusion energy could be a potential source of near-limitless clean energy in the future - (Image & Article): https://www.bbc.co.uk/news/science-environment-63950962

Page 109: A graphical depiction of how nuclear fusion works - (Image): https://www.bbc.co.uk/news/science-environment-63950962

Section Five: The United Nations Conference of the Parties 2022 – COP27:

Page 110: A key aim of the ITUC delegation at COP27 was to keep the commitment to limit average global temperatures to 1.5C or below - (Image & Article): https://www.ituc-csi.org/COP27-work-program

Page 111: Stephen Smellie (Unison), who was a UK representative in the ITUC's delegation at COP27 - (Image & Article): https://www.unison.org.uk/news/2022/11/blog-cop27-one-step-forward/

Page 113: Sharan Burrow, General Secretary of the International Trade Union Confederation (ITUC) between 2010 and 2022 talking at COP27 - (Image): https://euagenda.eu/news/785378

Section Six: Notes from TUSDAC & TUSNE Meetings – Q4 2022:

Page 114: Terms of Reference for TUSDAC - (Report): https://publications.parliament.uk/pa/cm200405/cmselect/cmenvaud/84/84we43.htm

Page 115: Energy Demand Research - (Report): https://www.creds.ac.uk/#

Page 116: Environmental Change and Food Security - (Article): https://committees.parliament.uk/work/7063/environmental-change-and-food-security/

Page 116: About TUSNE - (Article): https://www.tusne.org/about-us

Page 116 TUSNE Plenary - (Article): https://www.tusne.org/tusne-events/tusne-plenary-october-22

Page 116: BEIS: Design of the Energy Company Obligation (ECO): 2023-2026: - (Report): http://www.gov.uk/government/consultation/design-of-the-energy-company-obligation-eco-2023-2026

For more information on how to get involved in the challenges and opportunities presented by the climate crisis, confronting you and your members in their workplaces and communities, please contact one of the following:

- **Workplace Rep Shop Steward**
- **Full Time Official: contact details below**
- **National Official at Unite's headquarters: Unite House, 128 Theobalds Rd. London, WC1 X 8TN Tel: 0207 611 2500**

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unite the union

ENVIRONMENT CHARTER

Unite believes there is a climate emergency. Trade unions are central to the fight to ensure it is not working people, here and around the globe, who are left to pay the price of climate destruction. This crisis must be met in a way that delivers better jobs, a better society and a better world for all.

Unite calls for:

The decarbonisation of our workplaces, industries and society

Decarbonising workplaces and industries to be included as core collective bargaining discussions at workplace, employer and sectoral level, with workplace, environmental, equality and health and safety reps all given the support they need to achieve this. The Government at Westminster, national and devolved administrations must pledge the necessary resources to transition sectors. We need large scale public investment to upgrade our infrastructure, such as housing, energy, transport, to transition us as to a net zero society and improve all of our lives and local communities.

The creation of a green society must mean a socially just and equal society

Policies to decarbonise and tackle the climate crisis must also be policies that improve people's quality of life, and prioritise equality and social justice. This includes achieving full employment with all jobs being good jobs, rebuilding and expanding our public services and public ownership, achieving equality and addressing discrimination, raising incomes, ending poverty and reversing our escalating wealth inequality. If we are mobilising unprecedented national resources to meet the threat of climate crisis we must ensure they are mobilised for the benefit of all.

Jobs guarantees to protect the jobs of current workers and to ensure that all new jobs are good jobs – the right to decent work

Working people must not pay the price for the crisis they have not created. At every level, from workplace employers to government, Unite will use all the levers to fight and win job guarantees, protecting members' existing jobs and ensure where workers are transitioned to new work, all new jobs created are good, unionised jobs. This is part of our fight to win stronger employment and trade union rights, sectoral collective bargaining and to end the insecurity in work and to raise wages. That is the basis of our Organising Strategy, which is the cornerstone of our Union's Industrial Strategy – Work, Voice, Pay.

The workers must lead the 'Just Transition' in those industries affected

Workers themselves are best placed to shape and determine what a 'just transition' means. From understanding how to utilise peoples' existing skills; to the training and development required for a green job; the pay and terms and conditions of their jobs, and the organisation of their workplaces. Determining the future of their industries and supporting local communities that are affected by the decarbonisation process.

International solidarity to ensure the creators of the climate crisis contribute their fair share to the solution

Unite members are part of international supply chains, multinational companies, and global trade union federations. International solidarity has always been a central component of our union. We will not allow working people across the world to be divided in the workplace. As a country, the UK must take the lead in its contribution towards tackling the climate crisis.

www.learnwithunite.org/environment

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