

CLIMATE CHANGE, ENERGY AND ENVIRONMENT

# THE ROAD TO A CARBON-FREE SOCIETY

United Kingdom

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While there is a consensus in the UK on the need to decarbonise the economy, there is no clear roadmap for how to do this on the timeline or the scale necessary to prevent irreversible damage to the climate.



Five areas of the economy are closely associated with two-thirds of all UK greenhouse gas emissions: fossil energy supply; energy intensive manufacturing; aviation; automotive; and meat and dairy production.



Tripartite dialogue is rare at the national level and the level of public investment is far behind what is required to decarbonise at pace and to protect workforces, but workplace climate organising is pressing ahead despite government inaction.

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Shortly before the publication of this paper, the UK government announced its Net Zero Strategy. Unfortunately, despite this announcement, the recommendations contained within the FES-TUC paper remain unchanged. The missing elements of a global strategy are still missing; namely an absence of social dialogue, a sectoral based approach, and an investment approach that meets the enormous challenge of a Just Transition. Therefore the analysis and urgent critique in this paper stands.

*The authors, October 2021*

## 1

## CURRENT STATE OF PLAY

Table 1  
Overview

	UK	EU-28/OECD
Population 2019 (EU-28 and Norway + Iceland)	66,647,000	519,160,000
Real GDP aggregates per capita	€ 32,91	€ 28,63
GHG emissions CO <sub>2</sub> e per capita (excl. LULUCF), 2017		8.5t
GHG emissions CO <sub>2</sub> e (excl. LULUCF), 2017		4.323mt
Difference (excl. LULUCF) from 1990 to 2017		-23 %
Net GHG CO <sub>2</sub> e emissions/removals from LULUCF, 2017		-258mt
Share of renewable energy in gr. final energy consumption, 2018	11 %	18 %
Workforce, »active population« (aged 20–64), 2019	33,862,300	238,515,000
Collective bargaining coverage	27 %	32 %
Union density	24 %	16 %

## 1.1 THE IMPACT OF CLIMATE CHANGE ON THE UNITED KINGDOM

The United Kingdom is already experiencing changes in the climate. Average temperatures have risen by around 1°C over the past century. According to the official Climate Change Committee's latest UK Climate Change Risk Assessment, the twenty-first century has so far been warmer overall than any 20-year period in the previous three centuries. Coastal waters have been 0.3°C warmer than in the period 1981–2010. Summer temperature extremes are warming faster than the mean temperature, and the likelihood of heat waves has increased. Sea levels around the United Kingdom have been rising at an average of 2.39 mm/year in recent years, and this rate is accelerating. Rainfall is increasing throughout the United Kingdom and already »challenging our resilience« in Scotland and the West of England, according to the report.<sup>1</sup> Sea levels globally and around the United Kingdom have risen by 15–20 cm since 1900.<sup>2</sup>

<sup>1</sup> Slings, J. (2021): Latest scientific evidence for observed and projected climate change, in Betts, R.A., Haward, A.B. and Pearson, K.V. (eds): The third UK Climate Change Risk Assessment Technical Report. Prepared for the Climate Change Committee, London.

<sup>2</sup> Climate Change Committee (2016): UK Climate Change Risk Assessment 2017 Synthesis report: priorities for the next five years; available at: <https://www.theccc.org.uk/wp-content/uploads/2016/07/UK-CCRA-2017-Synthesis-Report-Committee-on-Climate-Change.pdf>.

The impact of these changes will be felt across society, and are not limited to the material changes in our weather or environment. The United Kingdom is a country in transition, but without a proper plan. There is a consensus on the need to decarbonise the economy, but no clear roadmap for how to do this on the timeline or the scale necessary to meet our Paris climate commitments, and to prevent irreversible damage to the climate. These necessary changes entail that jobs and industries must change.

The United Kingdom has grappled with this issue before and failed. Areas of the country that were the centre of its coal mining and power generation industries in the first half of the twentieth century remain some of the most deprived regions today. Low job density, poor quality of available work, lack of opportunities, combined with low education and health outcomes, are all evidence that communities that depended on high carbon industries in the 1980s have not recovered, transitioned or thrived over the past 40 years.

Climate change was not the motivating factor for the transition of the late twentieth century. But it remains a lesson and a warning for how we must approach this new climate transition. Worker voice and social partnership must be central to addressing the climate emergency. Without this, decarbonisation will lose the popular legitimacy it needs to urgently and fundamentally transform the economy.

## 1.2 CLIMATE TARGETS

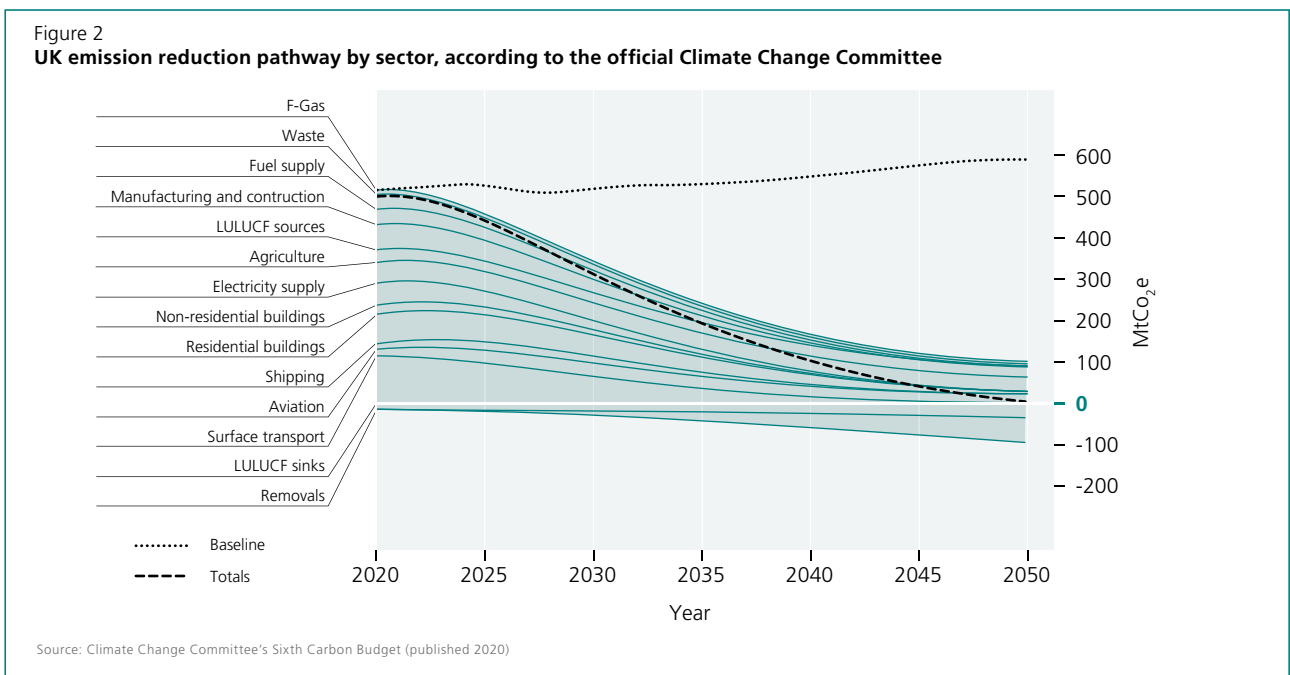
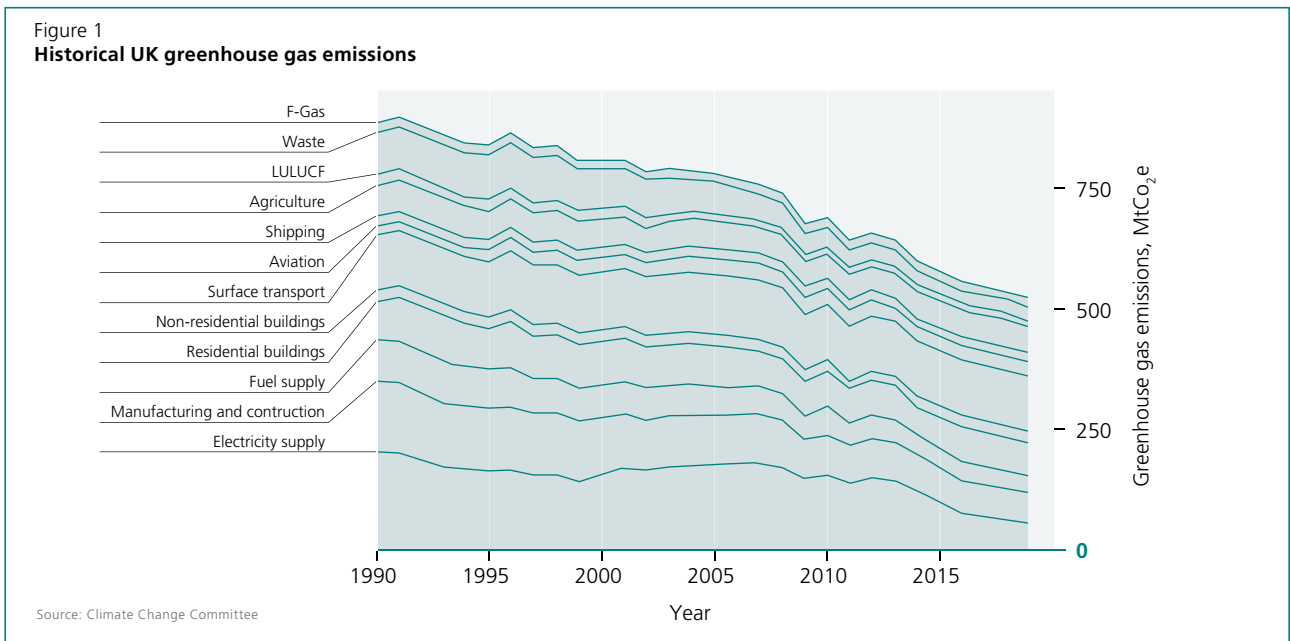
### GOVERNMENT TARGETS FOR EMISSIONS REDUCTION

Official emissions reduction targets in the United Kingdom are set by an independent committee of experts (the Climate Change Committee), while the government is responsible for putting in place policies to meet Carbon Budgets set by the committee.

Working from a target of net zero by 2050, the UK's Climate Change Committee (CCC) in its Sixth Carbon Budget

has mapped a carbon reduction pathway that requires a 78 per cent reduction in UK territorial emissions between 1990 and 2035, and a 68 per cent cut by 2030, as part of the United Kingdom's »nationally determined contribution« (NDC) to the UN process. These recommendations would bring forward the UK's previous 80 per cent target by nearly 15 years.<sup>3</sup> The UK government is putting these targets into law.

(See Figure 1 for an overview of the United Kingdom's historical emissions trajectory, and Figure 2 for the current emissions reduction pathway proposed by the Climate Change Committee.)



<sup>3</sup> The Sixth Carbon Budget, required under the Climate Change Act, provides UK government ministers with advice on the volume of greenhouse gases the United Kingdom can emit during the period 2033–2037.

The CCC has identified specific changes across sectors of the economy that will need to be made in order to meet its targets. These include:

- Take-up of low-carbon solutions. People and businesses will choose to adopt low-carbon solutions, as high carbon options are progressively phased out. By the early 2030s all new cars and vans, and all boiler replacements in homes and other buildings, are low-carbon – largely electric. By 2040 all new trucks are low-carbon. UK industry shifts to using renewable electricity or hydrogen instead of fossil fuels, or captures its carbon emissions, storing them safely under the sea.
- Expansion of low-carbon energy supplies. UK electricity production is zero carbon by 2035. Offshore wind becomes the backbone of the whole UK energy system, growing from the Prime Minister’s promised 40GW in 2030 to 100GW or more by 2050. New uses for this clean electricity are found in transport, heating and industry, pushing up electricity demand by one half over the next 15 years, and doubling or even tripling demand by 2050. Low-carbon hydrogen scales up to be almost as large, in 2050, as electricity production is today. Hydrogen is used as a shipping and transport fuel and in industry, and potentially in some buildings, as a replacement for natural gas for heating.
- Reducing demand for carbon-intensive activities. The United Kingdom wastes fewer resources and reduces its reliance on high-carbon goods. Buildings lose less energy through a national programme to improve insulation across the country. Diets change, reducing our consumption of high-carbon meat and dairy products by 20 per cent by 2030, with further reductions in later years. There are fewer car miles travelled and demand for flights grows more slowly. These changes bring striking positive benefits for health and well-being.
- Land and greenhouse gas removals. There is a transformation in agriculture and the use of farmland, while maintaining the same levels of food per head produced today. By 2035, 460,000 hectares of new mixed woodland are planted to remove CO<sub>2</sub> and deliver wider environmental benefits. Some 260,000 hectares of farmland shifts to producing energy crops. Woodland rises from 13 per cent of UK land today to 15 per cent by 2035 and 18 per cent by 2050. Peatlands are widely restored and managed sustainably.

It should be recognised, however, that in order to limit temperature increases to 1.5 degrees, as laid out in the Paris Agreement, wealthy countries such as the United Kingdom will probably need to reduce emissions to net zero before 2050.<sup>4</sup> Given the historical role of such countries, strong arguments have been made at the UNFCCC for more ambitious timelines for industrialised countries. The ratcheting up of ambition over time, combined with growing climate

impacts means that the Paris Goals could require more ambitious national CO<sub>2</sub> reduction goals over time.

## IMPACTS OF EMISSIONS REDUCTION ON JOBS AND THE ECONOMY

According to research from the London School of Economics (LSE) and the University of Leeds, approximately 6.3 million jobs in the United Kingdom – about one in five – are likely to be affected, either positively or negatively, by the transition to a green economy.<sup>5</sup> While climate transition is generally thought to have negative implications for many types of job, especially high quality unionised jobs, the data suggest that moving to a green economy has the potential to lead to an increased number of UK jobs, if jobs at risk can be upskilled appropriately.

Changes to income and wealth distribution will depend on the extent to which the government intervenes in the economy to support communities in need of transition. Historically, the UK government has been reluctant to intervene appropriately, and this has led to adverse impacts for communities in post-coal and post-industrials regions. Higher levels of deprivation and joblessness persist in the coalfield communities, and access to well-paid jobs is increasingly limited to the south of England and major cities.<sup>6</sup>

Many of the UK industries most exposed to climate transition are heavily clustered in particular regions, in particular the North and Midlands in England, South Wales, and the North East of Scotland. Many of these areas are still suffering the economic effects of earlier processes of deindustrialisation, and existing high carbon industries are often a critical source of local, better paid jobs, economic value creation and local tax revenues.<sup>7</sup>

## 1.3 ECONOMY

There are already clear indications of the sectors that are most likely to be significantly impacted by decarbonisation. Five areas of the economy are closely associated with two-thirds of all UK greenhouse gas emissions (GHGs), and collectively support just under 1.7 million direct jobs, 5.1 per cent of all employment in the country (as of 2019).<sup>8</sup> These sectors are: fossil energy supply; en-

<sup>4</sup> IPCC (2018) Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development; available at: [https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15\\_Chapter2\\_Low\\_Res.pdf](https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15_Chapter2_Low_Res.pdf).

<sup>5</sup> Grantham Research Institute on Climate Change and the Environment (2019), Investing in a just transition in the UK: How investors can integrate social impact and place-based financing into climate strategies; available at: [https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2019/02/Investing-in-a-just-transition-in-the-UK\\_Full-policy-report\\_40pp-2.pdf](https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2019/02/Investing-in-a-just-transition-in-the-UK_Full-policy-report_40pp-2.pdf).

<sup>6</sup> IPPR (2019) Divided and connected: Regional inequalities in the North, the UK and the developed world – State of the North; available at: <https://www.ippr.org/research/publications/state-of-the-north-2019>.

<sup>7</sup> Prospect (2020): A Just Transition Plan for the UK Power Sector; available at: <https://d28j9ucj9uj44t.cloudfront.net/uploads/2020/12/JTS.pdf>.

<sup>8</sup> All GHG emissions figures used in this briefing are taken from BEIS (2020): Final UK greenhouse gas emissions national statistics: 1990 to 2018; available at: <https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2018>.

ergy intensive manufacturing; aviation; automotive; and meat and dairy production.

The five key sectors that currently offer high levels of employment in the United Kingdom and are most exposed to decarbonisation:

- *Fossil energy supply*: this sector, which is connected to roughly 25 per cent of UK GHG emissions, encompasses fossil fuel extraction (predominantly offshore oil and gas), refining, distribution (including gas networks), retailing (including petrol stations), and fossil fuel power generation, all of which will be heavily impacted by decarbonisation over the next 10–15 years. As of 2019, there were around 134,000 direct jobs in fossil energy supply, plus an estimated 204,000 supply chain jobs, together accounting for roughly one per cent of all UK employment.<sup>9</sup>

In order to meet emissions targets, large parts of this sector will face fundamental, disruptive change. Offshore oil and gas production will be steadily wound down, and workers need to be supported to transition into new sectors, potentially including offshore renewable energy and carbon capture and storage. The future for onshore gas networks will depend heavily on the chosen pathway for heat decarbonisation; for example, the widespread electrification of domestic and industrial heat would probably require substantial retraining for the existing gas workforce and lead to reduced numbers of jobs in energy distribution and transmission.

For other parts of the sector, including refining and fossil fuel power generation, there may be viable routes for workers into new jobs in hydrogen production, CCUS or renewable energy. There are also approximately 50,000 jobs connected to the wholesale and retail of petrol and diesel. It is unclear at this stage how these workers would be impacted by transport electrification, but it is likely that many would need support to retrain and upskill for alternative jobs in the green economy.

- *Energy intensive industry*: four manufacturing sectors account for around seven per cent of total UK GHG emissions, and 55 per cent of emissions from industry: iron and steel, chemicals (including plastics), glass and ceramics, and cement and concrete production. In total, as of 2019, these sectors directly employed around

335,000 workers, which equates to roughly 11 per cent of manufacturing employment, and one per cent of all UK employment.<sup>10</sup> There are likely to be several hundred thousand more workers in supply chain companies who will be affected.

It is important to stress that the aim of just transition policies with regard to these sectors is not to manage a process of closure and transfer of workers, but to support these industries to decarbonise, while retaining (and potentially expanding) their existing workforces. As the Climate Change Committee (CCC) noted in its Sixth Carbon Budget Report, the policy aim should be to avoid »carbon leakage«, in other words, displacing high carbon industries to other countries, both for climate and »just transition« reasons.<sup>11</sup>

The nature of disruption to these sectors is not yet fully clear and will depend on the decarbonisation pathway that is ultimately chosen. But some workers in these sectors may require substantial retraining if industrial processes have to be redesigned for a low carbon world.

- *Aviation*: UK aviation accounts for roughly 8 per cent of UK GHG emissions, and as of 2018 the industry directly employed 341,000 workers, with another 350,000 in supply chain companies.<sup>12</sup> This includes jobs in aerospace manufacturing, as well as in air transport services. The sector has already been badly hit by the Covid-19 pandemic and major aviation employers have announced large-scale redundancies during 2020. The short-to-medium term outlook for aviation will depend heavily on the path of a post-Covid recovery, and the sector is likely to need significant economic support to get back on its feet.

As the CCC recently highlighted, the medium-to-long term outlook for aviation in a decarbonising world is highly uncertain.<sup>13</sup> If solutions such as synthetic fuels prove viable, the impact of transition on aviation could be relatively small. But if such solutions do not prove to be workable then it is likely that air travel will have to be substantially reduced in order to limit emissions, with clear impacts on aviation employment.

- *Automotive*: the UK automotive sector directly employs 469,000 workers as of 2019, including 159,000 in auto manufacturing (accounting for just over five per cent of all UK manufacturing employment) and 259,000

<sup>9</sup> Direct job estimates taken from ONS (2020): Business register and employment survey: 2019; available at: (<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/employeesintheukbyindustry/2019>). Supply chain estimates taken from Oil & Gas UK, Workforce Report 2019; available at: <https://oilandgasuk.co.uk/wp-content/uploads/2019/08/Workforce-Report-2019.pdf>; and UK Petroleum Industries Association, Economic contribution of the downstream oil sector; available at: <https://www.ukpia.com/our-contribution/economic-contribution-of-the-uk-downstream-oil-sector/>.

<sup>10</sup> ONS (2020): Business register and employment survey: 2019; available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/employeesintheukbyindustry/2019>.

<sup>11</sup> Climate Change Committee (2020) Sixth Carbon Budget, chapter 6.

<sup>12</sup> Sustainable Aviation (2018) UK aviation industry: socio-economic report (<https://www.sustainableaviation.co.uk/wp-content/uploads/2018/06/SA-Socio-Economic-Report.pdf>).

<sup>13</sup> Climate Change Committee (2020) Sixth Carbon Budget, chapter 3.



Table 2  
Key sectors' emissions and workplaces

Sector	Direct jobs (as of 2019)	Emissions (Mt of CO <sub>2</sub> equivalent, as of 2018)	Notes
Fossil energy supply	134,000	104.9	Emissions from extraction, refining, distribution, and power stations
Energy intensive manufacturing	335,000	33.5	Emissions from iron and steel, chemicals, glass and ceramics, and cement and concrete
Aviation	341,000	38.2	Emissions from domestic and international air travel
Meat and dairy production	389,000	45.4	Total agriculture emissions (majority are connected to livestock farming)
(includes vehicle servicing and repair)	469,000	109.8	Total agriculture emissions (majority are connected to livestock farming)
<b>Total</b>	<b>1,668,000</b>	<b>332</b>	
<b>% of UK totals</b>	<b>5.1 %</b>	<b>66.9 %</b>	

Source: Research by Prospect trade union.

in vehicle servicing and repairs.<sup>14</sup> Road transport emissions account for roughly 25 per cent of UK GHG emissions, and the government has already committed to end the sale of new petrol and diesel cars by 2030.

As with energy-intensive manufacturing, the aim of just transition policy should not be to manage the decline of the UK auto industry, but to support a transition to low carbon transport manufacturing and servicing, likely centred around electric vehicles (EVs). There are significant challenges to overcome to make this a reality, however. As the Faraday Institution noted last year, for EV manufacturing to be viable the United Kingdom will probably need to develop a strong domestic battery supply chain; without this, a UK EV industry will probably struggle to survive, and existing automotive manufacturing jobs will be at risk.<sup>15</sup> One major auto manufacturer, Toyota, has already announced they will not invest in EV production in the United Kingdom until at least 2027.<sup>16</sup>

Even if a transition to electric vehicle production is achieved for the auto manufacturing sector, employment in vehicle servicing and repair is still likely to be impacted. Electric vehicles are generally much easier to maintain than fossil fuel vehicles, and the CCC is forecasting that annual UK spending on vehicle maintenance will be £ seven billion lower by 2050 as a result of transport electrification.<sup>17</sup> A significant net reduction in employment in this sector is therefore likely.

- *Meat and dairy industry*: agricultural emissions account for just under 10 per cent of the UK total, arising mainly from meat and dairy livestock farming. The CCC has recommended that the United Kingdom will need to substantially reduce its consumption of meat and dairy products in order to reduce emissions connected to livestock production, and to free up land for reforestation and energy crop production.<sup>18</sup> At present, an estimated 389,000 direct jobs are connected to the meat and dairy industry in the United Kingdom, including jobs in farming, and in the meat and dairy processing industries.

There will be new employment opportunities in low carbon land management, and the existing agricultural workforce will need to be supported to take advantage of them. There will need to be a viable transition plan for workers in meat and dairy processing plants (which employed approximately 102,000 workers as of 2019), where existing skills are likely to be less directly transferrable to sectors in the green economy.

Major gaps in current decarbonisation policy, particularly covering critical areas such as heat, transport and industrial processes, mean that considerable uncertainty surrounds the scope, scale and timing of the disruptive change that these economic sectors will face. This is why any just transition process can be developed only in conjunction with a robust, properly funded roadmap for achieving net zero that clearly lays out decarbonisation pathways for specific sectors.

<sup>14</sup> ONS (2020) Business register and employment survey: 2019.

<sup>15</sup> Faraday Institution (2019) UK electric vehicle and battery production potential to 2040 ([https://faraday.ac.uk/wp-content/uploads/2019/06/Exec-Summary-Report\\_May2019\\_FINAL.pdf](https://faraday.ac.uk/wp-content/uploads/2019/06/Exec-Summary-Report_May2019_FINAL.pdf)).

<sup>16</sup> Guardian (2020) »Toyota will not invest in electric cars in UK until after 2027« (<https://www.theguardian.com/business/2020/dec/07/toyota-will-not-invest-in-electric-cars-in-uk-until-at-least-2034>).

<sup>17</sup> Climate Change Committee (2020): Sixth Carbon Budget, chapter 6, p. 286.

<sup>18</sup> Climate Change Committee (2020): Sixth Carbon Budget, chapter 3.

## 1.4 SOCIETY

### A LEGACY OF UNJUST TRANSITIONS

The story of the UK economy over the past half century is one of a managed decline of manufacturing and productive activity, and a parallel growth of the service sector. A primary cause of the unemployment and wage stagnation across many parts of the United Kingdom (for example, North, Midlands, Scotland and Wales) is industrial job losses over a number of decades.<sup>19</sup> This form of government-enabled decline in the manufacturing sector is notably different from the deliberate termination of some types of production, such as coal mining in the 1980s, but has comparably damaging consequences for the communities affected. The persistent neglect of the UK manufacturing sector risks limiting possibilities for modernising those industries to take advantage of new opportunities in electrification and green industries, such as has been seen most recently with the car manufacturing industry.

The UK track record on carbon transition can be described as unjust, and informs how we view the country's approach today. The abrupt closure of the country's mining industry is well documented. Communities that for generations had relied on mines to provide well-paid unionised jobs were abandoned, with no alternative employment prospects or any meaningful government intervention to support retraining or access to work.

In these post-coalfield areas, which represent a combined population of 5.5 million people, this has left a legacy of communities with high levels of deprivation, low density of local jobs and persistent unemployment.<sup>20</sup> Across the coalfields as a whole, there are just 50 jobs for every 100 residents of working age. Recent research for the Coalfields Regeneration Trust shows that residents in work are more likely to be employed in lower-grade or manual occupations, and the coalfield workforce is more likely to lack higher grade qualifications. Some 43 per cent of all neighbourhoods in the coalfields fall into the hardest-hit 30 per cent in Britain, according to Indices of Deprivation.<sup>21</sup> Business stock and the business formation rate in the coalfields are both well below the national average.

While this evidence demonstrates the need for state intervention to support a just climate transition, these same mistakes have been repeated as recently as 2015 with the closure of the last deep coal mine in England, Kellingley Colliery in North Yorkshire. Chris Kitchen, General Secretary of the National Union of Mineworkers (NUM) reported that meaningful employment and retraining were not

made available to the affected communities. According to the NUM, support for affected workers consisted of a two-day visit by representatives of the Department for Work and Pensions, while the initial redundancy of a majority of workers ahead of plant closure left a skeleton staff of miners with little opportunity to access retraining or job placement schemes during work hours.<sup>22</sup>

The government's approach to industrial strategy has improved over the past five years, but it remains piecemeal. The recently established and then disbanded Industrial Strategy Council typifies the haphazard and unpredictable approach to state intervention.<sup>23</sup> Meaningful sectoral bargaining, in the sense that wages, terms and conditions are negotiated, remains limited to a very small number of sectors, such as higher and further education, and to a limited extent construction and theatre.

The government's »sectoral deals« are intended to provide long-term strategic partnership between the government and industry.<sup>24</sup> Industries covered by these deals include: aerospace, artificial intelligence, automotive, construction, creative industries, life sciences, nuclear, offshore wind, rail, and tourism. Decarbonisation features in some of these deals, but both trade unions and sector-wide workforce transition planning are conspicuously absent from the sectoral deal framework. This leaves company-level collective bargaining as the main mechanism for inserting the union voice into these sector-wide approaches.

With this landscape of lessons unlearned from our last energy transition, and a patchy approach to social dialogue, the challenges to securing a just transition at a national level remain considerable. However, some government initiatives point in the right direction, such as the Green Jobs Taskforce for the United Kingdom and the Just Transition Commission in Scotland. These are discussed under »National Instruments« below.

### THE TRADE UNION POSITION

The trade union movement recognises that there is overwhelming scientific evidence for the need to decarbonise our economy. Energy-intensive industries, including the energy, transport, manufacturing and construction sectors, will be key to achieving this transition, but this is a project that will require change right across our economy, and trade union members have the expertise to deliver it. The voices of workers who are at the forefront of dealing with the challenge of climate change must be at the centre of achieving a successful transition to the economy we will need.

<sup>19</sup> Beatty, C. and Fothergill, S. (2018): *The Contemporary Labour Market in Britain's Older Industrial Towns*. Sheffield Hallam University.

<sup>20</sup> Foden M. et al. (2014): *The State of the Coalfields: Economic and social conditions in the former mining communities of England, Scotland and Wales*. Sheffield Hallam University; available at: <https://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/state-of-the-coalfields.pdf>.

<sup>21</sup> Foden (2014).

<sup>22</sup> Kitchen (2021): author's interview with Chris Kitchen, General Secretary of the National Union of Mineworkers.

<sup>23</sup> The Guardian (2021): »Business leaders condemn decision to axe UK industry strategy panel«; available at: <https://www.theguardian.com/business/2021/mar/04/business-leaders-condemn-decision-axe-uk-industry-strategy-panel>.

<sup>24</sup> Industrial Strategy Council (2018) *Sector deal success metrics* <https://industrialstrategy.org/sector-deals-success-metrics>.

In 2019, the Trades Union Congress (TUC) published a statement of Just Transition principles to support timely decarbonisation that protects jobs. The four foundational principles are:

1. A clear and funded path to a low-carbon economy
2. Workers must be at the heart of delivering these plans
3. Every worker should have access to funding to improve their skills
4. New jobs must be good jobs

## 2

## NATIONAL INSTRUMENTS

The current UK government has set out a number of measures aimed at achieving net zero greenhouse gas emissions by 2050. Most of them are intended to be market led or are designed to support a market-led transition.

UK climate policy is framed by the Climate Change Act 2008, and the independent, statutory body it created, the Climate Change Committee (CCC). The purpose of the latter is »to advise the UK and devolved governments on emissions targets and to report to Parliament on progress made in reducing greenhouse gas emissions«. Overall targets recommended by the CCC have responded to the IPCC 1.5 degrees report in 2018 to move to a »Net Zero by 2050« target adopted by the UK government in June 2019.<sup>25</sup> Progress towards the overall target is measured against carbon budgets set for each five-year period.

Since the 2019 General Election the government has set out a series of policy proposals to chart a course to net zero. The Ten Point Plan for a Green Industrial Revolution, released in autumn 2020, aims to invest £12 billion in public finance to support decarbonisation in manufacturing, energy generation and infrastructure, as well as green financing. The government's Industrial Decarbonisation strategy, released in spring 2021, focuses specifically on the United Kingdom's »industrial sector«, covering foundational industries, and claims to provide »industry with the long-term certainty it needs to invest in decarbonisation«. Upcoming strategies include a promised Heat and Buildings Strategy, a Transport Decarbonisation Strategy, a Hydrogen Strategy and a Net Zero Strategy.

The government has taken a sector-based approach to oil and gas extraction through its North Sea Transition Deal, which claims to »support the oil and gas industry's transition to clean, green energy while supporting 40,000

jobs«. <sup>26</sup> The government claims that it will work with the sector and trade unions to deliver the skills, innovation and new infrastructure required to decarbonise North Sea production. <sup>27</sup> The trade unions view this deal with some scepticism, however, pointing to an inadequate level of trade union consultation, and a lack of strong commitments from industry to invest in decarbonising and securing the future of the sector. <sup>28</sup> In addition, there is no formal union involvement in this deal. The deal omits key union principles on transition, such as significant public investment and inclusion of local content in future supply chains. As the first of the government's planned »transition deals« this cannot be considered best practice from a trade union perspective.

The Welsh government has had a comprehensive Climate Change Strategy since 2010, and the Environment (Wales) Act 2016 imposes a legal duty on Welsh government ministers to ensure that net emissions are at least 80 per cent lower by 2050 than the 1990 baseline. The 2050 target was revised to net zero by Senedd Cymru (the Welsh Parliament) in 2021, along with a revised 63 per cent reduction target for 2030. The Welsh public sector has a 2030 net zero target. Specific Welsh Carbon budgets have been set since 2016, based on the CCC's advice to the Welsh government, which provides a deeper analysis of the needs for the Welsh economy.

Building on climate legislation passed in 2009, the Scottish Parliament passed the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019, which sets annual emissions reductions targets, as well as a net zero target for Scotland for 2045, ahead of the rest of the United Kingdom. <sup>29</sup> The Scottish government also performs carbon assessments in its annual financial budgets.

<sup>25</sup> IPCC (2018) IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways <https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>; BEIS (2019) UK becomes first major economy to pass net zero emissions law <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law>.

<sup>26</sup> BEIS (2021): North Sea deal to protect jobs in green energy transition; available at: <https://www.gov.uk/government/news/north-sea-deal-to-protect-jobs-in-green-energy-transition>.

<sup>27</sup> BEIS (2021): UK enshrines new target in law to slash emissions by 78% by 2035; available at: <https://www.gov.uk/government/news/uk-enshrines-new-target-in-law-to-slash-emissions-by-78-by-2035>.

<sup>28</sup> RMT (2021): RMT responds to the North Sea transition deal; available at: <https://www.rmt.org.uk/news/rmt-responds-to-the-north-sea-transition-deal/>.

<sup>29</sup> Scottish Government (2019): Scotland to become a net-zero society; available at: <https://www.gov.scot/news/scotland-to-become-a-net-zero-society>.

In practice, these measures have not met their full potential. For example, the Scottish government have missed their last three annual emissions reductions targets.<sup>30</sup> But the 2021 power-sharing agreement between the SNP and the Scottish Green Party in Holyrood has accelerated policy moves towards decarbonisation and just transition. The power-sharing document references »a ten-year £500m Just Transition Fund for the North East and Moray«, as well as »Learning from the Grangemouth Future Industry Growth Board, we will work with industry, workforce and local communities to consult on the best way to develop and implement sectoral Just Transition Plans. This includes sectors such as chemicals, nuclear and other energy intensive industries. As part of this we will consult on the requirement for large businesses to produce Just Transition Plans.«<sup>31</sup> Geographical, sector-wide and company-based just transition plans, enforced by law, would be the most significant development within the United Kingdom towards achieving worker-centred decarbonisation.

Northern Ireland does not yet have legislation related to decarbonisation. At the time of writing, two alternative climate change bills are under discussion in the Northern Ireland Assembly. Of these, one (backed by a cross-party coalition of assembly members) would set a 2045 net zero target for Northern Ireland, while the other (tabled by the Northern Ireland government) would require »an equitable contribution to the UK 2050 target«.<sup>32</sup>

Where measures have already been established, it is clear that these do not match the scale of the challenge we face. The ITUC's NDC scorecard says that the United Kingdom's ambition as regards achieving its targets has increased, but still does not go far enough.<sup>33</sup> The Climate Change Committee, in its 2021 progress report to Parliament, has criticised the existing set of strategies as »often missing the mark«, as well as pointing out prolonged delays to crucial policy announcements.<sup>34</sup>

The United Kingdom makes no mention (except for the Scottish Just Transition Commission) of just transition in its

NDC. Nor does it have any concrete just transition plans. While the establishment of the Green Jobs Taskforce, the Scottish Commission and the Yorkshire Climate Commission are positive first steps (see below), they do not constitute fully worked out plans agreed through social dialogue and ready to be implemented, sector by sector. The ITUC does consider that the United Kingdom's approach to social dialogue is positive, referencing in particular the Green Jobs Taskforce.<sup>35</sup> For trade unions, it is clear that an accelerated approach to decarbonisation can be achieved only through social partnership, and this is the major missing element to the government's current approach.

The TUC and the wider trade union movement welcomes the steps the government has taken in legislation and through funding mechanisms to accelerate the climate transition. But the measures taken so far are not considered to go far enough, and do not meaningfully address the urgent need for a just transition that centres on the needs of workers. It is clear that the government's rhetoric on greening the economy does not match its actions. Policy announcements on job creation, skills and financial support for transition regularly fail to match the targets set in the government's own carbon budgets, or its Paris commitments.

## JUST TRANSITION PLANNING AND SOCIAL PARTNERSHIP

The Climate Change Committee recently identified the need for a national just transition strategy in order to achieve net zero: »Only a transition that is perceived as fair, and where people, places and communities are well-supported, will succeed. UK Government policy, including on skills and jobs, must join up with local, regional and devolved policy on the just transition. Vulnerable people must be protected from the costs of the transition and benefits should be shared broadly.« [REF]

The TUC and the wider trade union movement are clear that the principal barrier in the formulation and implementation of effective CO<sub>2</sub>-reduction policies is the absence of embedded social partnership structures that put workers on a level footing with employers, and in which the government gives equal weight to the voices of worker representatives.

As with the general approach to social partnership in the United Kingdom, statutory just transition measures are rare and limited. The most developed just transition structures can be found at a devolved level, with the Scottish and Welsh governments establishing various just transition structures in law.

The most significant UK-wide measure is the Green Jobs Taskforce, established in 2020. The taskforce was a time-limited body without any statutory powers, which is intend-

<sup>30</sup> Herald Scotland (2021): SNP fails to hit greenhouse gas target for third straight year; available at: <https://www.heraldsotland.com/news/19373171.snp-fails-hit-greenhouse-gas-targets-third-straight-year/>; The Scotsman (2021): Scottish climate target missed despite greenhouse gases being halved; available at: <https://www.scotsman.com/news/environment/scottish-climate-target-missed-despite-greenhouse-gases-being-halved-2885678>.

<sup>31</sup> Scottish Government (2021): Scottish Government and Scottish Green Party: draft shared policy programme; available at: <https://www.gov.scot/publications/scottish-government-and-scottish-green-party-shared-policy-programme/documents/>.

<sup>32</sup> Mulholland, Sarah (2021): Second Climate Change Bill for Northern Ireland, TLT LLC; available at: <https://www.tltsolicitors.com/insights-and-events/insight/second-climate-change-bill-for-northern-ireland/>.

<sup>33</sup> ITUC (2021): Governments' failure to live up to Paris Agreement promises puts planet stability at risk; available at: <https://www.ituc-csi.org/governments-fail-paris-agreement>.

<sup>34</sup> Climate Change Committee (2021): 2021 Progress Report to Parliament <https://www.theccc.org.uk/publication/2021-progress-report-to-parliament/>.

<sup>35</sup> Accessed 26/4/21: <https://climateactiontracker.org/climate-target-update-tracker/>.

ed to make recommendations to government, industry and the skills sector. Membership of the taskforce was heavily weighted to the private sector, but there were two trade union seats. The inclusion of trade unions in this body is a significant and welcome step, and represents the closest involvement in climate transition policymaking that unions have experienced at national level. The Taskforce published its concluding report in July 2021 with a set of fifteen recommendations. The recommendations include:

- endorsing the trade union movement’s long-standing call for a Just Transition Commission, by calling for a national body with employer, government and union representation;
- recommending measures to maximise job creation and protecting jobs in high-carbon sectors: increasing government green recovery spending in line with G7 peers, investing in high-carbon sector retooling, introducing funding equivalent to the EU Just Transition Fund for diversifying regional economies;
- calling on employers to make net zero business and skills plans in consultation with workers and their unions, and on government to mandate just transition agreements with unions in any high-carbon employer relying on public support to decarbonise;
- calling on government to outline how it will use its levers to ensure that green jobs are quality jobs.

The Prospect and Community trade unions recently identified gaps in the government’s response to the steel industry and coal-fired energy generation, calling for an institutional framework for social partnership at national and local level as a key way to ensure that workers’ voices are heard, as part of the successful management of difficult industrial transitions.<sup>36</sup>

In the United Kingdom’s nations and regions we have seen positive collaboration between government, unions and employers. The Welsh government recently published plans to put social partnership principles into law, the first instance of its kind in the United Kingdom. Through the Social Partnership Council, trade unions in Wales have formal standing to be consulted on all manner of policy areas. Trade unions are represented on the Welsh Industrial Decarbonisation Task and Finish Group and the Local Government Decarbonisation Strategy Panel, both set up by the Welsh government to shape local governments’ and industries’ decarbonisation action plans.

The Scottish government established a Just Transition Commission, with a remit to provide independent advice on a net zero economy for Scotland »that is fair for all.«<sup>37</sup>

<sup>36</sup> Coats, D. (2020): A Just Transition? Managing the challenges of technology, trade, climate change and COVID-19. University of Leicester; available at: [https://library.prospect.org.uk/documents/202100146\\_a\\_just\\_transition\\_\\_managing\\_the\\_challenges\\_of\\_technology\\_trade\\_climate\\_change\\_and\\_covid-19](https://library.prospect.org.uk/documents/202100146_a_just_transition__managing_the_challenges_of_technology_trade_climate_change_and_covid-19).

<sup>37</sup> Scottish Government (2019): Just Transition Commission terms of reference; available at: <https://www.gov.scot/groups/just-transition-commission/>.

Trade unions were represented on this Commission but the absence of social partnership structures for the implementation of the Commission’s recommendations is a major impediment to the delivery of a just transition. The Commission published its final advice to the Scottish Government in March 2021.<sup>38</sup>

## PUBLIC INVESTMENT

Given the scale of the transition required, the United Kingdom needs an ambitious green job creation programme, as laid out in the TUC’s call for £85 billion to be invested in upgrading the UK’s green infrastructure over the coming two years, with a longer-term commitment to the infrastructure upgrades that are necessary for the net zero target, including significant expansion of public transport and rail freight, alongside decarbonising buildings and industry.<sup>39</sup> The TUC commissioned research in June 2020 which found that these immediate-term investments in projects such as broadband, green technology, transport and housing could deliver a 1.24 million jobs boost by 2022.<sup>40</sup> Unite the Union’s »Magnificent Seven« research, presented in their February 2021 Plan for jobs in the UK manufacturing sector, identified seven key »shovel ready« manufacturing projects that could deliver 250,000 green jobs by 2030 alone.<sup>41</sup>

The Climate Change Committee confirms the need for more substantive investment, calling for £50 billion a year in low carbon investment to deliver net zero on time.

The government’s existing green recovery programmes are not creating significant or sufficient job opportunities to match demand from those needing opportunities because of the Covid-19 crisis.<sup>42</sup> The government’s Ten Point Plan for a Green Industrial Revolution states an ambition to create 250,000 green jobs by 2030. But individual initiatives begun under this plan have already failed and been rolled back, including the government’s flagship green job creation programme, the Green Homes Grant, which was scaled down despite widespread public criticism.<sup>43</sup> Recent

<sup>38</sup> Just Transition Commission (2021): Just Transition Commission: A National Mission for a fairer, greener Scotland; available at: <https://www.gov.scot/publications/transition-commission-national-mission-fairer-greener-scotland/>.

<sup>39</sup> TUC (2020): Rebuilding after recession: a plan for jobs; available at: <https://www.tuc.org.uk/research-analysis/reports/rebuilding-after-recession-plan-jobs>.

<sup>40</sup> TUC (2020) Rebuilding after recession: a plan for jobs; available at: <https://www.tuc.org.uk/research-analysis/reports/rebuilding-after-recession-plan-jobs>.

<sup>41</sup> Acuity Analysis (2021): Breathing new life into the UK economy: Reshaping and rebuilding in the wake of the COVID-19 pandemic and Brexit; available at: [https://www.unitetheunion.org/media/3658/final\\_acuity\\_shovel-ready.pdf](https://www.unitetheunion.org/media/3658/final_acuity_shovel-ready.pdf).

<sup>42</sup> House of Lords Economic Affairs Committee (2020): 3rd Report - Employment and COVID-19: time for a new deal; available at: <https://committees.parliament.uk/publications/3958/documents/39777/default/>.

<sup>43</sup> The Guardian (2020): We are all seeing red over the government’s green homes grant; available at: <https://www.theguardian.com/money/2020/dec/03/we-are-all-seeing-red-over-the-governments-green-homes-grant>.

Table 3  
Level of green infrastructure investment per person (£)

Country	Investment level per person (£ per person)	UK % of other G7 green recovery plans
USA	2,961	6.1 %
Italy	1,389	13.1 %
Canada	866	21.0 %
France	711	25.6 %
Germany	595	30.6 %
UK	182	100.0 %
Japan	108	168.7 %

Source: TUC analysis.

TUC analysis has also shown that the Ten Point Plan is just a fraction of the transition investment pledged by France, Canada, Italy, Germany and the United States – only Japan scores worse.<sup>44</sup>

## SKILLS PLANNING

The scale of the training crisis we face is exemplified by the Construction Industry Training Board's analysis that the construction industry will require the equivalent of 350,000 new roles to be created by 2028 to meet the government's net zero commitments by 2050.<sup>45</sup> Research by Friends of the Earth shows that 250,000 green apprenticeships in energy and environmental stewardship could help address the post-Covid-19 crisis in youth unemployment.<sup>46</sup> The major barrier facing both of these proposals is the absence of a coordinated skills infrastructure and delivery mechanism. Without this, we risk being forced down a low employment decarbonisation pathway, with people more likely to be made redundant than retrained and redeployed.

The UK government recently ended funding for the Union Learning Fund, which provided access to education and training for 250,000 union members in work. This demonstrates their lack of commitment to investment in retraining.<sup>47</sup> The ULF was an effective vehicle with unparalleled reach into workplaces that could have delivered the green jobs retraining necessary to accelerate decarbonisation.

## ACTION AT LOCAL GOVERNMENT LEVEL

In large parts of the country, the unequal and patchy nature of devolved government has left a gap in regional policymaking. The legacy of centralised government in England has left many local authorities without institutional expertise, resources or indeed legal powers to develop meaningful policy to address the climate transition at a local level.

Despite this, there has been some development of voluntary and collaborative work between local government and social partners. Yorkshire, while having no overall devolved government, has a mix of metropolitan mayors and local councils that have cooperated with the TUC and industry representatives to establish a Yorkshire Climate Commission, with a specific remit for skills and employment, and just transition as one of the core work streams. This body has no statutory footing, and there is no region-wide level of government to empower it. But the design of the Commission has sought to overcome these hurdles by offering independent advice in the same manner as the Scottish Commission, and by bringing all relevant parties together, including unions, business and all local government leaders. The ultimate aim of this quasi-autonomous commission is to produce comprehensive reports for their respective policymakers on what is needed at local and regional level to deliver a just transition. Similar bodies with trade union representation have also been established in the Liverpool City Region (Liverpool City Region Climate Partnership) and the North East of England (North East Climate Coalition).

The coincidence of the Covid-19 pandemic and accelerated English devolution has also allowed local government to think more expansively about how economic recovery and planning might be coterminous with climate transition. A number of metropolitan areas in the United Kingdom have now received devolved powers and funding in a limited number of areas, including transport, housing, environment and adult skills. While they do not have legislative powers, the elected leaders (mayors) of these city regions have executive powers in these specific policy areas.

<sup>44</sup> TUC (2021): Ranking G7 Green Recovery Plans and Jobs; available at: <https://www.tuc.org.uk/research-analysis/reports/ranking-g7-green-recovery-plans-and-jobs>.

<sup>45</sup> Construction Industry Training Board (2021): Net Zero: 350,000 new construction roles to be created by 2028; available at: <https://www.citb.co.uk/about-citb/news-events-and-blogs/net-zero-350-000-new-construction-roles-to-be-created-by-2028/>.

<sup>46</sup> Friends of the Earth (2021): Quarter of million green apprenticeships needed to fix youth unemployment crisis; available at: <https://friendsoftheearth.uk/climate/quarter-million-green-apprenticeships-needed-fix-youth-unemployment-crisis>.

<sup>47</sup> The Guardian (2021): UK ministers accused of »settling scores« by axing union adult learning fund; available at: <https://www.theguardian.com/education/2021/feb/06/uk-ministers-accused-of-settling-scores-by-axing-union-adult-learning-fund>.

as.<sup>48</sup> Many have already pledged action to support retrofitting of domestic heating and insulation, and state intervention in public transport infrastructure. The convening powers that these mayors have are also important. In Greater Manchester, Sheffield City Region and West Yorkshire, mayors have committed to linking adult skills and retraining to their economic recovery and climate resilience plans, and to establish fora to bring business and unions together to discuss these issues. This matters because of an absence of coordination from central government. The lost opportunity with offshore wind is one example. Another is the mass redundancies that took place in the industrial rail hub of Doncaster in 2020, which have been followed by new investment commitments for mass transit in the region.<sup>49</sup> A lack of government direction meant that workers who could have retrained from heavy to light rail production have simply lost their jobs.<sup>50</sup>

At a town and city level, progressive local councils have innovated to push the boundaries of their policymaking power. Many have declared climate emergencies. Wakefield's tree-planting programme seeks to use capital funding to repopulate the district's green space, but it lacks a clear job creation dimension. Preston's leading role in Community Wealth Building includes specific measures to support climate transition. Their procurement framework seeks to use local government's purchasing power to achieve their social value objectives. The council have specifically included climate resilience as a criterion in their tenders to service providers. This is coupled with tender criteria that encourage local content production and job creation.<sup>51</sup>

Some local councils have established city-wide climate commissions, such as in Leeds and Edinburgh, drawing institutional support from the local authority and universities. All of these measures emanating from regions, nations and local communities across the United Kingdom are limited and sharply constrained because central government in London controls the purse strings. There has been criticism of the government's competitive bidding approach to disbursing funding, which leads to unequal distribution of funding across the country.<sup>52</sup>

<sup>48</sup> Institute for Government (2021): What are metro mayors? Available at: <https://www.instituteforgovernment.org.uk/explainers/metro-mayors>.

<sup>49</sup> West Yorkshire Combined Authority (2021): West Yorkshire Mass Transit Vision 2040: A new transport system to support the Northern Powerhouse; available at: <https://www.westyorks-ca.gov.uk/improving-transport/connectivity/>.

<sup>50</sup> RMT (2021): Restructuring and redundancies – Wabtec Doncaster; available at: <https://www.rmt.org.uk/news/members-updates/restructuring-and-redundancies-wabtec-doncaster210121/>.

<sup>51</sup> CLES (2019): How we built community wealth in Preston; available at: [https://cles.org.uk/wp-content/uploads/2019/07/CLES\\_Preston-Documents\\_WEB-AW.pdf](https://cles.org.uk/wp-content/uploads/2019/07/CLES_Preston-Documents_WEB-AW.pdf).

<sup>52</sup> Doncaster Free Press (2020): Spending Review »pits regions against each other« – Sheffield City Region mayor; available at: <https://www.doncasterfreepress.co.uk/news/politics/council/spending-review-pits-regions-against-each-other-sheffield-city-region-mayor-3047705>.



# 3

## EUROPEAN INSTRUMENTS

The United Kingdom ratified the Paris Agreement while still an EU member. Since then, the »Brexit« UK–EU trade deal enshrined several commitments on both sides,<sup>53</sup> including:

- a 40 per cent reduction in EU greenhouse gas emissions, and the United Kingdom’s share of this reduction (this corresponds to now outdated emissions reduction commitments);
- referencing both parties’ »ambition of achieving economy-wide climate neutrality by 2050«.

Compliance with the Paris Agreement is enshrined in the trade deal as an »essential element«, in other words, if either party were to fail in its Paris Agreement obligations, the treaty could be suspended. EU environmental regulations have been carried over into UK law and the treaty has a non-regression clause that should prevent either party from rolling back environmental or labour protections. However, the non-regression mechanism has been criticised for only applying to cases that materially impact trade, which in practice is difficult to prove.

The TUC is a member of the European Trade Union Confederation (ETUC) and participates in the debate on the European Green Deal in that forum.

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<sup>53</sup> Carbon Brief (2021): Q&A: What does the Brexit deal say about climate change and energy? Available at: <https://www.carbonbrief.org/qa-what-does-the-brexit-deal-say-about-climate-change-and-energy>.

## 4

## TRADE UNION LEADERSHIP

Beyond government structures and public bodies, unions have been building industrial capacity to bargain over climate transition issues in the workplace. Best practice organising is already taking place at workplace level.

When the Cottam coal power station was scheduled to close, Prospect reps there negotiated with their employer, EDF, to create a transition plan, offering each worker tailored support. As a result, some workers were offered relocation assistance to take up jobs at EDF's other sites, while others received trial secondments and training to help them into alternative roles.<sup>54</sup>

Unite reps across several automotive manufacturing sites (including Ford's Halewood transmission plant and GKN's Erdington manufacturing facility) have been working to develop plans for their workplaces to switch to manufacturing parts for zero emission vehicles.<sup>55</sup> Unite the Union pioneered new tech agreements in the automotive sector, setting out how jobs that are affected by the development of new technologies in the workplace can be re-trained and redeployed, guaranteeing security to the affected workers.<sup>56</sup>

The UCU union ran a campaign at Cardiff University in which staff pressured management to declare a carbon emergency and commit to becoming carbon neutral by 2030, focusing in particular on carbon leakage in the university's large property portfolio.<sup>57</sup>

In support of this activity, unions and union federations have been developing training tools to roll out this best practice campaigning across the trade union movement. The Wales TUC recently launched a Just Transition toolkit, designed to help workplace representatives and shop

stewards in worksite and company-level negotiations.<sup>58</sup> Individual unions such as BFAWU (food production sector) and the UCU (higher and further education) have strategies to include climate demands in their collective bargaining demands with employers. The UCU has launched a joint project with the National Union of Students to support the introduction of Green New Deal principles into collective bargaining with universities and colleges.<sup>59</sup>

A number of unions have »Green Reps« training programmes, which aim to train workplace reps or shop stewards in how climate change demands relate to their workplace-level pay claims and collective bargaining. Unite, UNISON, Prospect, UCU and PCS all offer some form of union member training on green issues. This is supplemented by the TUC's central training programme, which offers a variety of »green skills« training programmes for union members on a national and regional basis, as well as negotiation courses for workplace reps that focus on introducing green demands into collective bargaining.

<sup>54</sup> Wales TUC Cymru (2020): Prospect reps help workers at the IPO »climate-proof« their workplace; available at: <https://www.tuc.org.uk/news/prospect-reps-help-workers-ipo-climate-proof-their-workplace>.

<sup>55</sup> TUC communication with Unite the Union, August 2021.

<sup>56</sup> Unite the Union (2017): Draft New Technology Agreement; available at: <https://unitetheunion.org/media/1237/new-tech-agreement.docx>.

<sup>57</sup> Wales TUC Cymru (2020): UCU environment rep shows the way to a greener future at Cardiff University; available at: <https://www.tuc.org.uk/news/ucu-environment-rep-shows-way-greener-future-cardiff-university>.

<sup>58</sup> Wales TUC Cymru (2021): Greener workplaces for a just transition – a Wales TUC toolkit for trade unionists; available at: <https://www.tuc.org.uk/greener-workplaces-just-transition-wales-tuc-toolkit-trade-unionists>.

<sup>59</sup> UCU (2021): The UCU's Green New Deal; available at: <https://www.ucu.org.uk/green-new-deal>.

# 5

## CONCLUSION

The UK government has enshrined targets that align with official scientific advice on climate change. While it has publicly announced very ambitious goals it has only hesitantly taken up steps to support the decarbonisation of domestic industries. The country still lacks a comprehensive industrial strategy that would align its economy with the propagated targets and protect or transform jobs.

Tripartite dialogue is rare at the national level and the level of public investment is far behind of what is required to decarbonise at pace and to protect workforces. However, the ambitious targets, the limited tripartite initiatives that have taken place at the national and devolved level, international initiatives, and successful trade union workplace-level organising on decarbonisation have at least created the space necessary to advance the case for a just transition. This space needs to be filled with a coherent and comprehensive strategy.

A strategy for an industrial transition should be socially and ecologically sustainable. It should have an approach that leaves no one behind. It would need to incorporate interim targets, concrete deadlines and indicators. It would need to be developed in a participatory approach, including workers' voices, community representatives and minority groups. It would be gender-sensitive.

To achieve a just transition massive public and private investments in zero-carbon technologies, sustainable infrastructures and decent jobs are necessary. Financing for transition is vital. It should be driven by an integrated, cross-cutting and holistic approach. Most importantly, a just transition must be co-designed by and with workers and trade unions. This means proposals from the factory floor must be given equal weight to plans from government and business. Social justice, gender justice, decent work and collective bargaining are essential components of this historical structural change, achievable only through worker participation, and without them a just transition will be impossible to realise.

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## THE ROAD TO A CARBON-FREE SOCIETY



The impact of climate change will be felt across society, and is not limited to the material changes in our weather or environment. The United Kingdom is a country in transition, but without a proper plan. There is a consensus on the need to decarbonise the economy, but no clear roadmap for how to do this on the timeline or the scale necessary to meet our Paris climate commitments, and to prevent irreversible damage to the climate. These necessary changes entail that jobs and industries must change.



Climate change was not the motivating factor for the transition that began in the late 20th century, but this remains a lesson and a warning for how we must approach this new climate transition. Worker voice and social partnership must be central to addressing the climate emergency. Without this, decarbonisation will lose the popular legitimacy it needs to urgently and fundamentally transform the economy.



To achieve a just transition massive public and private investments in zero-carbon technologies, sustainable infrastructures and decent jobs are necessary. Financing for transition is vital. It should be driven by an integrated, cross-cutting and holistic approach. A just transition must be co-designed by and with workers and trade unions. This means proposals from the factory floor must be given equal weight to plans from government and business. Social justice, gender justice, decent work and collective bargaining are essential components of this historical structural change.

Further information on the topic can be found here:  
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