

A JUST TRANS ITION?

Managing the challenges of
technology, trade, climate change
and COVID-19

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David Coats
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Forewords

In the UK we are entering a pivotal decade in terms of whether and how we meet our climate obligations, obligations that will likely require strategic adjustments in the energy sector as well as throughout the broader economy.

The impact of these changes will be felt most proximately and most profoundly by workers and their communities, and it is therefore vital that their concerns, desires and expertise are not only heard, but placed firmly at the centre of the process. A just transition will only ever be truly just to the extent that it maintains such a commitment.



Sadly, as this timely report shows, the UK does not have a good track record in this regard and has instead too often proceeded with minimal or inadequate concern for the stakeholders that matter most; workers and the organisations that represent them. Such a tendency is particularly concerning as we consider the prospect of transitions being undertaken during a perfect storm of uncertainty: COVID19, rapid developments in automation, changing trade relationships due to Brexit and a volatile environment both economically and politically.

A Just Transition? Managing the challenges of technology, trade, climate change and COVID-19 demonstrates powerfully that such a damaging approach is not inevitable. On the contrary, through the use of instructive case studies, the report shows that alternative strategies are not only possible, but have an observable record in delivering less disruptive and damaging outcomes over the medium and long term. That is the golden thread that runs through this report; that the impact of any transition is not a question of destiny but a question of contestation, strategy and solidarity.

As a Foundation committed to increased access to good work, both today and in the future, we are proud to support this report, which makes an invaluable contribution to one of the most important industrial and social debates of our time.

Keiran Goddard
Deputy Director





Our industries have never stood still but the current pace of change is unprecedented, with huge implications for our economy and society. The formidable contemporary challenges of climate change, automation, Brexit and COVID-19, combined with the more familiar impacts of recession and globalisation, demand a national conversation about the management of industrial change.

The UK does not have a good record here, and as the report highlights we can do so much better. The case of SSI demonstrates what happens when a strategic business and major employer is allowed to collapse in such a chaotic way. SSI was an avoidable tragedy that must never be repeated, and tribute should be paid to the steelworkers who told their stories to inform this powerful case study.

The report tells us we must both learn from our history and draw on global best practice to develop proactive consensus-based strategies for industrial change. The international examples indicate that common to the most positive experiences of transition is a collaborative approach incorporating an integral role for workers and their representatives.

While the case studies in the report are taken from the steel and energy sectors, the lessons taken can be applied across our economy. Industrial change can be necessary, it can be devastating, it can bring new opportunity, but always it has disruptive impacts on people and communities. If a transition is to be fair then all stakeholders need a seat at the table, and workers must have the support and tools they need to adapt to change and retain high quality employment.

We hope the stories, lessons and best practice presented in this report will contribute to the case for industrial change to be planned and managed with workers at its heart. We urge the government to take note and reflect the principles of just transition in an ambitious industrial strategy.

Alasdair McDiarmid
Operations Director



The concept of just transition is well established in international policy terms, securing its place in the UNFCCC 2016 Paris Climate Agreement and reaffirmed in the COP24 Katowice Climate Change Conference (COP24).

However, there is little evidence that it is as yet a widely understood term, let alone one that is routinely put into practice in the UK. On the contrary, the UK experience is largely one of unjust transition – including in the coal and steel industries which form the focus of this report.

The reality is that more workers in high carbon energy generation and energy-intensive industries are at imminent risk of losing their jobs, as shown in Prospect's report 'A just transition plan for the UK power sector'. So there is some urgency to addressing this issue in a more practical way.

The UK economy is experiencing multiple causes of industrial change – recession, Brexit, climate, automation – making it essential that we learn now how to manage it fairly and proactively. This report demonstrates that it can be done, and it shows that workers and their unions have an integral role to play in securing just outcomes.

It is not a 'how to' manual. There isn't a one size fits all solution. But it is clear from more positive case studies in the report that consultation and involvement with all stakeholder at national, regional and workplace level are essential, backed by government support for implementation measures. In other words, we need an active industrial strategy to achieve full employment and decent work.

This should not be a controversial objective and, in the run up to the COP26 Glasgow Climate Change Conference in November 2021, there is a golden opportunity for the UK government – informed by this report - to demonstrate leadership.



Sue Ferns
Senior Deputy General Secretary





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Executive Summary

Introduction

The purpose of this report is to explore how industrial transitions can be managed fairly and effectively. All change is disruptive for workers whether it is inspired by competition in global markets, technological developments or the imperative to respond to climate change. The UK's record in managing industrial change is patchy at best.

The Intergovernmental Panel on Climate Change has set a target of net-zero carbon emissions by 2050 which, in their view, will require “unprecedented transitions in all aspects of society”. Making progress towards this target is made more difficult by the impact of Covid-19 on the global economy and problems that afflicted the UK before the advent of the virus – excessive income inequality, stagnant wage growth over the previous decade, the persistence of low pay and the disconnection of wage growth from productivity growth.

The report explores how industrial change has been handled in two sectors – coal fired electricity generation and steel making. Both are assessed against the

principles of just transition developed by the International Labour Organisation (ILO). While initially devised in relation to climate change and its impact on employment, the ILO's principles are applicable to all forms of disruptive change and emphasise:

- National consensus and dialogue involving government, employers and trade unions
- Respect for fundamental rights at work
- Equal treatment for men and women
- The integration of government policy across a number of domains (economic, environmental, social and education/training) "to provide an enabling environment for business"
- The availability of decent jobs in an environment where the government is committed to full employment
- Flexibility in implementation to take account of the diversity of the economy
- Integration of these principles into the model of sustainable development

Coal fired electricity generation

Government policy is for all coal-fired power stations to close by 2025 – with the possibility that the closure date might be brought forward to autumn 2024. A series of interviews was conducted with full-time union officials and workplace representatives to assess the closure process to date.

There was no national closure plan for the coal fired stations negotiated by the government, employers, and trade unions, nor was there any sectoral dialogue between unions and employers about how the transition was to be managed – everything was left to individual companies operating in a regulated market

Even at the company level, the closure of each site was treated as a unique event. Decisions were left to the management teams on that site and the quality of the dialogue with workers and their representatives depended on the commitment of those managers to the process.

Negotiations related to each closure focused on the redundancy package and the implications for pensions. Employers did offer job search and outplacement support but workers used these opportunities sparingly. One company encouraged workers to make use of the internal labour market to find alternative employment, but in all other cases the approach was unsystematic. While most workers achieved their desired outcome, only a minority transferred to high quality jobs elsewhere in the industry.

In one case, the employer did not recognise a union for collective bargaining in relation to skilled and professional staff, which is an obvious breach of the ILO's guidelines.

The impact of the closures on the local economy did not inspire a wider discussion with either national government, local authorities or other agencies responsible for regional development.

Steel

The closure of the Redcar steelworks was unanticipated and was caused by pressures in the global market for steel – principally a glut of Chinese products that depressed prices and created cash-flow problems for Sahaviriya Steel Industries (SSI), the owner of the plant. Information was gathered for this report through a survey of the workers affected and a series of semi-structured interviews. By definition, this was an unmanaged transition where unions and the employer had limited opportunities to prepare. Workers were surprised and shocked to find that their jobs had disappeared overnight when the business went into liquidation.

The initial response from government was improvised. Despite the persistence of industrial restructuring over a long period, the reaction suggested limited preparedness and an absence of learning from earlier experiences.

A Taskforce was established that brought together central government, local authorities, trade unions and members of Parliament with a budget of £50 million. This was used to fund training, emergency loans and other support for workers who had lost their jobs. Progress was often slow because critical decisions still had to be taken in London.

Much of the training funded by the Taskforce seemed to have a limited impact on employability, with four in five workers reporting that the training they received had made no difference. Even though most workers (80%) were re-employed within a year of the closure, almost half said it was either difficult or very difficult to find a suitable job.

The closure had a big impact on workers' pay. Four in five workers reported earnings of £30,000 a year or more while employed at SSI, whereas just over one in three did so for their new jobs. It is hardly surprising, therefore, that workers reported that the closure had put them under severe financial stress, with negative effects on physical and mental health.

Most workers (more than 80%) blamed the government for the closure. The UK government seems to lack a strategy for the future of domestically produced steel. Other countries are making faster progress in their efforts to decarbonise their steel industries, with governments and employers working in partnership to achieve that outcome.

International experiences

To provide a contrast to the experiences in the UK four international case studies were examined: the Canadian taskforce established to ensure a just transition in coal mining and coal fired electricity generation; the commission in Germany charged with devising a plan for the closure of coal mining and coal fired power stations; the transition to green steel production at SSAB in Sweden; and, a similar initiative to produce green steel at voestalpine AG in Austria.

The themes emerging from these experiences might be summarised as follows:

- Commitment to national dialogue involving government, employers and trade unions.
- An understanding of the importance of continuing dialogue at sector level as the industrial transition unfolds.
- Commitment to workplace dialogue and, in Germany and Austria, to statutory guarantees that workers will be informed and consulted before critical decisions are taken.
- Board level worker participation in strategic decisions in Germany, Austria and Sweden.
- The preparation of a *national* plan that clearly delineates the importance of action at regional and local level, with the responsibilities of the various actors specifically identified. Flexible implementation of this plan to account for diversity across the economy and the differential impacts on regions or localities.
- The importance of offering an optimistic but realistic prospect for the future, with a strong commitment to high quality new jobs to replace jobs destroyed as a result of the climate transition – or, indeed, other industrial transitions.

An outline policy prospectus for the UK

It would be presumptuous to present a fully developed programme that can be applied immediately in the UK. A clear message of this report is the importance of dialogue between government and the social partners, with a view to reaching a national consensus on the management of industrial change, whether driven by the climate imperative, technology or the integration of global markets leading to increased competitive pressure.

What the coal and steel case studies confirm, however, is that five institutional gaps that must be filled if the UK is to move forward successfully in managing difficult industrial transitions. All parties must therefore commit to action in the following areas:

- Developing a national dialogue between government, employers and unions on the principles of just transition and practical implementation measures. Specifically, a Just Transition Commission should be created with responsibility for ensuring that all industrial transitions meet the ILO's standards.
- Re-establishing a sectoral framework for dialogue between unions and employers to develop a shared approach to just transition.
- The devolution of power and resources to decision makers at regional and local level, consistent with a national framework for the delivery of policy.
- A comprehensive framework for the involvement of workers and their representatives in processes of workplace change.
- Obligations on listed companies to report their performance on a number of environmental indicators alongside a comprehensive account of the management of the workforce to secure a just transition.

The Department for Business, Energy and Industrial Strategy must ensure that the just transition principles are reflected in its review of industrial policy, which is currently in train.



1. Context

Multiple challenges – Covid-19, globalisation, technology and climate change

We live in extraordinary times — times that, in the words of Thomas Paine, “try men’s souls”. For much of the first half of 2020 the world economy was in a state of suspended animation following the global lockdown to slow the transmission of Covid-19. Governments of all political complexions implemented measures to offset the immediate consequences of the virus, with varying degrees of success. In the UK there have been emergency changes to benefit entitlements, support for those who are renting their homes (to reduce fear of eviction), sector specific initiatives like “eat out to help out” to support industries facing particular difficulties and, most importantly, the furlough scheme to ensure that workers keep their jobs.

All these interventions were necessary and have ameliorated the worse effects of the lockdown. At the time of writing (December 2020), however, the situation

appears to be deteriorating once again. Infection rates are on the increase, the test, trace and isolate system is underperforming and the government's second lockdown in England has failed to break the chain of virus transmission. Levels of public indebtedness are rising; the economy is slowing and each passing week brings with it the announcement of more job losses¹.

Nobody alive today has witnessed a comparable period of such deep economic uncertainty. It is as if we are participants in a slow-motion traffic accident, where it is certain that *something* will go wrong, but the timing of the impact and the consequences for those involved is supremely unclear. A deep and lasting recession is inevitable unless the government, in concert with governments across the developed world, takes compensatory action to sustain economic activity and support the incomes of working people². These problems affect all countries and the case for international co-ordination of monetary and fiscal policy is strong. But, in the context of Brexit, close collaboration between the UK and other major European economies looks like wishful thinking and, despite Joe Biden's victory in the US presidential election, it may be some time before that country is equipped to offer decisive economic leadership given the domestic problems confronting the new administration.

Even though the virus has precipitated an unprecedented crisis, the global economy faced profound challenges *before* Covid-19 appeared on the scene. Many people were worried about the impact of globalisation (the integration of markets and supply chains) on high quality secure employment in developed countries. There was a similar concern about income inequality in the more prosperous parts of the world, and strong evidence to show that economic growth alone was failing to deliver rising living standards for a growing group of citizens (Commission on Living Standards 2012). In the UK, for example, wage growth for those in the middle of the earnings distribution and below became disconnected from productivity growth in the early 1990s (Pessoa and Van Reenen 2012). Income inequality was one of the causes of the financial crisis of 2008-2010 and a reason for the sluggish growth in the modest recovery that followed (Kumhof and Ranciere 2010).

Restrictive fiscal policies (otherwise known as austerity), had put extreme pressure on households with low incomes and those dependent on public services for a decent and dignified life. In the UK, low pay was (and remains) a problem with almost one in five people at work experiencing low pay according to the internationally recognised definition – their earnings are below two-thirds of the median.

Much of the commentary on labour market change in the last five years has focused on the impact of digital technologies on employment. Most notoriously, one study found that 47% of jobs in the USA could be automated by the middle 2030s, with artificial intelligence substituting for human endeavour (Frey and

1 At the time of writing one vaccine had been authorised and the immunisation programme had just begun, with the prospect of a second vaccine being authorised early in 2021. Nonetheless, vaccinating the entire population will be time consuming and it is unlikely that "normality" will return for at least another year.

2 The chancellor's recent announcements suggest a degree of ambivalence about the correct policy mix. On the one hand there is a willingness to continue borrowing for the duration of the crisis and on the other a commitment to reducing public borrowing at the earliest opportunity – witness, for example, the freeze on public sector pay, (largely hidden) cuts in departmental budgets and the abandonment of the commitment to overseas aid.

Osborne 2013). The Organisation for Economic Co-operation and Development (OECD), delivered a more measured assessment, suggesting that around one in ten jobs in the UK (just over three million people) is at high risk of automation (Arntz et al 2016). A more recent study from the Office for National Statistics (ONS) has produced a slightly lower figure, with 7% of jobs, or just over two million workers, at high risk (ONS 2019). Leaving aside the wilder outlying forecasts, the scale of the change is significant but ought to be manageable. The problem, of course, is that the impact of automation varies widely by sector and those industries at high risk, (in manufacturing, for example), may be located in areas where high quality employment is already relatively scarce. Moreover, the UK has a poor record of handling industrial transitions fairly and effectively, whether those changes have been inspired by trade (new sources of competition in global markets), technology, or policy mistakes by government – witness, for example, the high exchange rates and deflationary budgets of the early Thatcher period, both of which had a devastating impact on employment in British manufacturing.

More important than all of these phenomena, not least because of the existential threat to humanity, is the challenge of climate change. The United Nations' Intergovernmental Panel on Climate Change (IPCC), has comprehensively documented rising CO₂ emissions and the potential impact on the planet. The Paris Agreement of 2015 commits signatory states to limit global warming to between 1.5 and 2 degrees above pre-industrial levels, with individual countries being required to submit national plans that reflect their resources and capacities. While the specified goal is to reach global peaking as soon as possible and reduce emissions thereafter, for developed countries it is understood that the aim must be to reach net zero CO₂ emissions by 2050 and if possible, at an earlier date. The UK's Climate Change Committee (CCC, discussed in more detail in section 5 of this report) has suggested that faster progress should be made, with an 80% reduction in the nation's carbon emissions by 2035 (CCC 2020b).

These are ambitious but necessary goals, the achievement of which, as the IPCC suggested in 2018, "would require unprecedented transitions in all aspects of society" (IPCC 2018). Every sector of the economy will be affected, as will many features of private life. Most of the existing housing stock will need to be retrofitted to improve energy efficiency. Domestic heating will have to transition from natural gas to either hydrogen or some other form of carbon neutral fuel. The energy sector will need to abandon fossil fuels completely – not simply coal but gas too, demanding a more ambitious set of interventions than anything witnessed so far, with a particular focus on the implications for the workforce. Transport policy will need to be radically recast, along with associated patterns of use. Covid-19 has already encouraged increased homeworking, but there is a strong case for saying that meeting the net zero by 2050 target requires a reduction in commuting. Governments will need to encourage the adoption of electric vehicles alongside public investment in charging infrastructure. There will be consequential effects on the commercial property market, on the utilisation of office space and on the service economies of town and city centres³.

³ The prime minister published his ten-point plan for a green industrial revolution in November 2020. Most notable for the purposes of this report is that the plan makes no reference whatsoever to the notion of a just transition. The interests of affected workers are given no attention at all and there is no understanding that disruptive change must be justified and legitimised if it is to be successfully implemented. The contrast with the international examples discussed in this report is striking. The ten point plan is reviewed at greater length in section 5 of this report.

Even though the world economy was effectively shut down in the first half of 2020, preliminary assessments have detected no reduction in CO₂ levels in the atmosphere. Most disturbingly, CO₂ levels in May 2020 were the *highest* ever recorded. The muted effects of a global shutdown serve to highlight the scale of the challenge and the extent of the change needed if the net zero in 2050 target is to be achieved.

It should be clear, therefore, that the response to climate change, leaving aside the impact of flooding, high temperatures and other extreme weather events, will be more disruptive in the medium to long term than the impact of either the virus or digital technologies. Some industries (anything related to fossil fuel extraction and use) will either have to disappear completely or be significantly reduced from in scale. The skill requirements of a low carbon economy will be very different from the needs of a carbon-based world.

The biggest immediate impact will be in energy intensive industrial sectors like steel production, where innovative technological solutions are required if the net zero ambition is to be met. Many of these technologies are embryonic rather than fully developed, and bringing them to fruition will require sustained, patient investment as well as appropriate government support for the manufacture of “clean steel” – an issue explored later in this report.

Energy intensive industries, as with those at high risk of automation, are often located in areas where, on average, unemployment is higher, skill levels lower, conventional secure employment under pressure and the prospects of finding a decent alternative job quite limited. For many regions in the UK, the decline of manufacturing employment in the 1980s was matched in subsequent decades by expansion in logistics and private services. In large measure, these experiences are the obverse of the rise in income inequality to which we have already referred and, as we shall see, these new jobs generally offer lower earnings than the jobs they have replaced.

The present government is ostensibly committed to “levelling up” less prosperous regions, but the focus is on historic decline, not the challenges of the future, whether a result of Covid-19, globalisation, technology or climate change. Indeed, while levelling up may be a noble ambition it is hardly a new departure for policy; the 1997-2010 Labour government was committed to an analogous objective, seeking faster productivity growth in less productive regions so that they could catch up with their more affluent counterparts. As a House of Commons select committee observed at the time, this was an arithmetically challenging goal, not least because the richest regions were continuing to forge ahead (ODPM Select Committee 2003). In practice, the only way the target could have been met in the early 2000s would have been to *restrain* economic growth in London and the south east of England.

This is not to decry any effort to make poorer regions richer, but experience since at least the 1960s suggests that the process is fraught with difficulty and complexity. If it were easy to achieve regional equalisation then governments would have found that magic formula many years ago. Industrial transitions of whatever kind, however well managed, can involve disruption and upheaval,

combined (if policy mistakes are made) with profound economic and social pain for individuals, households and communities.

The purpose of this report: energy and steel as case studies

A comprehensive response to all of the challenges outlined above would be a lengthy and indigestible document. The purpose of this report is much narrower, however, and focuses on two sectors, electricity generation and steel production. In the case of power we will look specifically at the closure of coal-fired power stations and in the case of steel we will look at the closure of the Redcar steel works owned by the Thai corporation Sahaviriya Steel Industries (SSI). In both examples, survey data has been collected from the individual union members affected, and this has been supplemented by qualitative material drawn from interviews with participants in the drama. In the case of coal, the transition was managed to the extent that the closure was planned as part of the employer's strategy to decarbonise their activities – a process mandated by government policy and the impact of the carbon pricing regime on the economic viability of coal fired power stations. In most cases there was detailed consultation with Prospect, the union representing skilled and professional staff, and most workers retired, accepted a redundancy payment or, for a minority of people, found work elsewhere in the employer's business⁴. Nonetheless, in the majority of cases workers achieved their desired outcome. In the steel case, the closure process was unplanned and unmanaged, as a result of changing supply and demand conditions in the global steel market.

A contrast will be drawn between the two industries, exploring the impact on the affected workers, the role of the trade unions and the attitudes of the employers. In both cases compensatory measures were put in place – access to training and skills development together with support for finding alternative employment. The effectiveness of these arrangements will be evaluated and some assessment made of the role of public authorities including Jobcentre Plus and those institutions responsible for local economic development and regional economic strategy. The intention is to tell a story with life and colour that records real experiences and sheds light on the usefulness or otherwise of a range of interventions. While the report does not offer a comprehensive menu of policies for the future, it does emphasise the importance of industrial policy, skills policy and regional policy for the effective management of industrial transitions.

So far, our discussion of what constitutes a well-managed transition has been rather general, and a more precise definition is needed if lessons are to be learned from the experiences recorded in this report. The International Labour Organisation (ILO), the UN agency responsible for employment and labour market issues, has devoted considerable attention to the question of just transition, as has the International Trade Union Confederation (ITUC). It is to the ILO's definition of a just transition that we now turn, principally because it is a so widely recognised as an appropriate global standard.

⁴ One employer operated a system of personal contracts as an alternative to collective bargaining – Prospect was involved through participation in the non-union information and consultation machinery.

Defining a Just Transition

Perhaps the most important feature of the ILO is that it has always been a tripartite body. Its recommendations are the product of discussions between experts representing governments, employers and trade unions. A frequent criticism is that dialogue of this kind produces unclear commitments that are so generalised as to be useless. A better interpretation, however, is that the ILO's approach offers a set of benchmarks against which policy effectiveness can be judged. How a particular goal is to be reached will differ from one country to another. The critical point is that all countries, whatever their circumstances, make use of a common set of principles in the pursuit of shared objectives, reflecting national traditions, laws and practices.

At the heart of the ILO's approach is the notion of *decent work*. This rests on the so-called core conventions of the organisation (no child labour, no forced labour, respect for the rights of trade unions to organise and bargain collectively with employers) supplemented by the following (Box 1):

Box 1: Defining decent work

Full employment – Nobody should be deprived of work because of an absence of employment opportunities.

Social protection – If people lose their jobs their incomes should be protected. There should also be universal access to healthcare and decent pensions in retirement.

Rights at work – Including the right to work in a healthy and safe workplace; protections against arbitrary dismissal; rights to rest periods, breaks and paid holidays; and minimum wage protection.

Social dialogue – Workers and their representatives have the right to be informed and consulted about critical decisions affecting their futures. Social dialogue can operate at multiple levels (workplace, enterprise, region, nation, internationally) and should be viewed as an elementary form of industrial democracy.

Source: International Labour Organisation

The idea of decent work is now integrated into the UN's development goals and offers a standard that developed countries ought to meet and to which developing countries can aspire. Securing the rights associated with decent work is, for our purposes, the bedrock level of what constitutes a just transition in response to industrial change.

In 2015 the ILO developed a series of guidelines for the achievement of a just transition (Box 2). These principles refer specifically to environmental sustainability, but are just as applicable to any process of industrial change, wherever the motive power for that change might be found. For these purposes, the notions of consensus (the objectives and process have been agreed), the integration of policies across several domains, the involvement of the citizens affected (through social dialogue) and the indispensability of decent work create

a template against which the fairness or otherwise of any particular transition can be judged. It is clear that skills development plays a critical role in the process, alongside the creation of worthwhile job opportunities for workers who are displaced. What really matters here is whether workers are treated with respect as the process of transition unfolds and whether they can find a secure place for themselves in the economy that emerges after the transition. If these principles are not respected then the transition is unjust and workers have every reason to be disaffected and aggrieved. Their legitimate expectations have not been met and the social contract has been broken.

Box 2: Guiding Principles for a Just Transition

The following principles should guide the transition to environmentally sustainable economies and societies:

- (a) Strong social consensus on the goal and pathways to sustainability is fundamental. Social dialogue has to be an integral part of the institutional framework for policymaking and implementation at all levels. Adequate, informed and ongoing consultation should take place with all relevant stakeholders.
- (b) Policies must respect, promote and realize fundamental principles and rights at work.
- (c) Policies and programmes need to take into account the strong gender dimension of many environmental challenges and opportunities. Specific gender policies should be considered in order to promote equitable outcomes.
- (d) Coherent policies across the economic, environmental, social, education/ training and labour portfolios need to provide an enabling environment for enterprises, workers, investors and consumers to embrace and drive the transition towards environmentally sustainable and inclusive economies and societies.
- (e) These coherent policies also need to provide a just transition framework for all to promote the creation of more decent jobs, including as appropriate: anticipating impacts on employment, adequate and sustainable social protection for job losses and displacement, skills development and social dialogue, including the effective exercise of the right to organize and bargain collectively.
- (f) There is no “one size fits all”. Policies and programmes need to be designed in line with the specific conditions of countries, including their stage of development, economic sectors and types and sizes of enterprises.
- (g) In implementing sustainable development strategies, it is important to foster international cooperation among countries. In this context, we recall the outcome document of the United Nations Conference on Sustainable Development (Rio +20), including section VI on means of implementation.

Source: ILO Guidelines for a Just Transition (2015)

While this report is focused on the impact on workers and their representatives, it is essential to record that securing a just transition requires respect for the principles of citizenship too. In other words, major changes have to be justified and legitimised following a process in which members of the affected communities can express their views and receive a reasoned response from those making the decisions. Perhaps we can go further and conclude that many of our current political preoccupations can only be resolved by intensifying the process of participation. Disaffection with elites and declining trust in the enterprise of politics make it much harder to respond creatively to Covid-19, globalisation, technological change and Brexit. The perception that some communities have been ignored has fuelled the rise of right-wing populism which, despite its supposed concern with “ordinary people”, has precisely nothing to say on the need for a just transition, preferring instead to promote culture wars that further divide, rather than unite, already fractured societies.

Now that we have a principled understanding of the meaning of a just transition, we can turn to our two examples. What precisely happened in the closure of the coal fired power stations and the Redcar steel works owned by SSI. Was the idea of decent work applied in practice? Did social dialogue offer real opportunities to workers to influence their futures? Was the policy framework consistent with the integrated model envisaged by the ILO? These are the critical questions considered in the remainder of this report. But before we turn to the substantive issues it might be useful to make some observations about the research methodology.

A note on methodology

Background material on the international and domestic policy context was gathered through desk research. Community and Prospect collected survey data from their members affected at SSI and coal fired power stations respectively. This has been used to assess whether either process met the standards of a just transition. The survey data has been supplemented by face-to-face interviews with significant individuals involved in the closures⁵. In addition, international case study material is included (in section 4) to provide a contrast to the UK’s experience, highlighting the somewhat different and in some cases more forward-looking approaches that have been adopted elsewhere.

⁵ As a result of the Covid-19 pandemic all interviews were conducted by either telephone or Zoom video conferences.



2. King Coal's Demise: The Transformation of Electricity Generation in the UK

Introduction

The UK's emergence as a modern industrial nation was fuelled by coal. Coal powered the steam engines that built the factory system, it propelled the ships that delivered British goods across the world and, from the establishment of the first coal fired power station in 1882, it supplied the electricity that drove the second industrial revolution, provided the lighting for our homes and powered complex urban transport systems.

A coal-based economy also created communities with distinctive cultures and, following the growth of trade unionism amongst mineworkers, engendered a highly developed class consciousness that, in conflict conditions, mounted a

significant challenge to the power of capital. Throughout the twentieth century, profound disagreements between miners, employers and governments were responsible for political and industrial turmoil leading, in the early 1970s, to the disruption of coal supplies, power cuts and the defeat of Edward Heath's Conservative government⁶. Until 1979, certainly, having a proven capability to manage relationships with the trade unions was a necessary condition for success in a general election, exemplified by Labour's narrow victory in the "who governs Britain?" election in February 1974⁷.

The world has now changed utterly, in part because the UK is no longer a coal-based economy. The Thatcher and Major Conservative governments successfully disempowered the mineworkers' union (the NUM) by significantly reducing the scale of the industry. A defeat in the long strike of 1984-85 meant that the NUM was no longer able successfully to oppose the extensive programme of pit closures that was announced in the autumn of 1992. Employment in coal mining peaked at just over a million workers in 1920, fell to 250,000 in the middle 1970s, 44,000 by the middle 1990s and stands at fewer than 4,000 today.

The UK was reliant on imported supplies to maintain coal fired electricity generation both before and after the implementation of the pit closure programme. For the Conservative governments of the 1980s and early 1990s these policies had an impeccable logic; if UK producers charged more for their coal than overseas suppliers then overseas suppliers were to be preferred. The closure of "uneconomic" coal mines in the UK was a price worth paying for lower energy costs. That some communities would be devastated by the upheaval was not seen as a relevant factor to be weighed in the balance. In this case the transition was much less than just and economic recovery in former coal communities has been slow. Almost thirty years later, the scars of the pit closures are still visible on Britain's physical and emotional landscape.

The challenge of climate change and the UK's policy framework

While the fundamental principles of the science of climate change have been understood for more than forty years, the question of reducing CO₂ emissions rarely featured in the fraught political arguments about the future of the coal industry in the UK. Nonetheless, as we shall see from the German case (discussed in Section 4 of this report), it would have been impossible for the UK to sustain a large coal industry and meet the climate change objectives of the Paris Agreement⁸. Concern about CO₂ emissions and the UK's commitment to act responsibly has driven decisions about the energy policy mix that will lead to the

⁶ See, for example, the miners' strike of 1916, the dispute that led to the General Strike of 1926, strong support for industrial action in 1935, rising militancy from the end of the 1960s onwards, the strikes of 1972 and 1973-74 and the long strike of 1984-85. Conversely, the period from nationalization in 1947 to 1972 was characterized by joint planning by the NUM and the Coal Board, with investment in upskilling, relocation and support for miners who were made redundant.

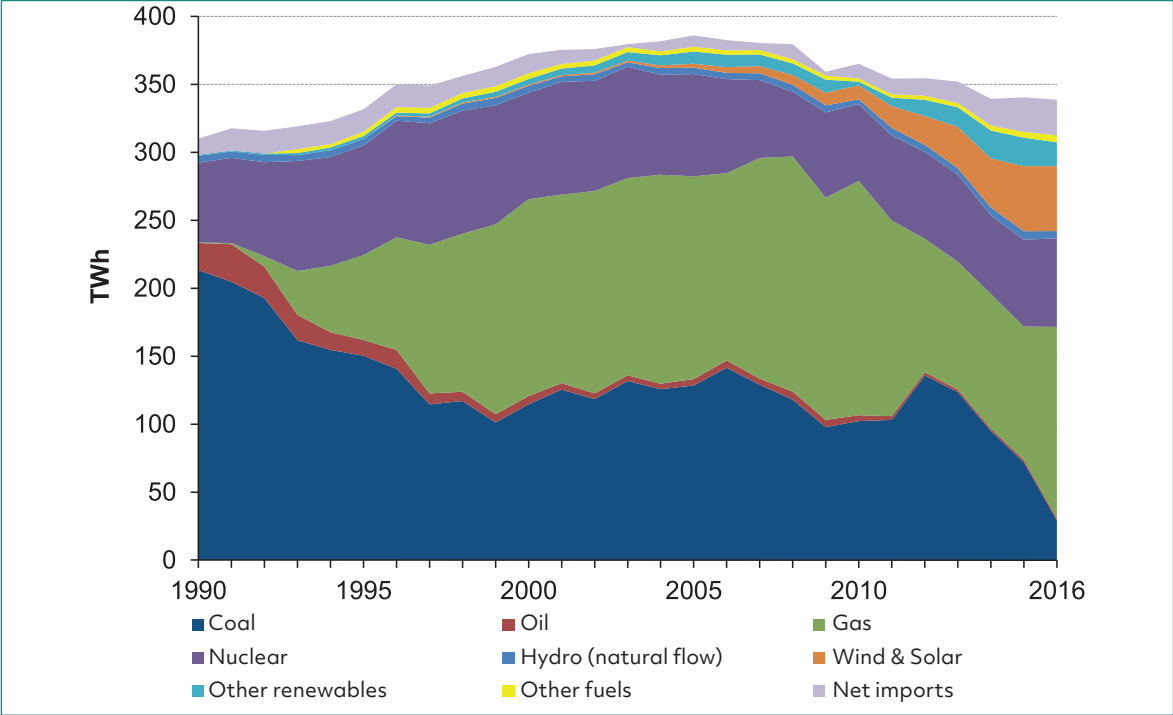
⁷ Although Labour's reputation was shattered by the Winter of Discontent in 1978-79 following the collapse of the Social Contract – the government's understanding with the trade unions that traded off wage restraint against improvements in the social wage (investment in public services, pensions and benefits).

⁸ The German *Commission on Growth, Employment and Structural Change* also offers a more humane approach to the closure of coal mining and coal fired power generation than anything witnessed in the UK to date. See section 4 below.

closure of all “unabated” coal fired power stations in Great Britain by the autumn of 2025 at the latest, and possibly by the end of 2024 (BEIS 2018)⁹.

The scale of the change is striking (see figure 1). In 1990, two thirds of the UK’s electricity was generated by coal fired power stations. By 2016 only 9% of electricity came from coal and in April 2017 there was a period when, for the first time, no electricity produced by coal fired power stations was on the system. In 2020 (to the time of writing) there were 67 continuous days of electricity generation without coal. From a purely environmental standpoint, this looks like a remarkable achievement. The UK appears to have made real progress in meeting the ambitions set out in the Paris agreement. On the other hand, the flight from coal has been matched by a dash for gas and, while less problematic than the direct burning of carbon, natural gas is still a fossil fuel that will, at some stage, need to disappear from the grid¹⁰. Of course, there has been a significant (but smaller) expansion of wind and solar generation, but the UK remains some distance away from zero carbon energy generation.

Figure 1: Electricity Supplied by Fuel Type 1990-2016



9 For these purposes “abatement” can be achieved through either carbon capture and storage (but the age of the coal fired stations makes investment in this technology unattractive) or by burning biomass in a previously coal fired station (which some environmentalists question as a genuinely carbon reducing option). The government is currently consulting on the 2024 closure date following an announcement by the prime minister in February 2020.

10 The process may be gradual and current practice indicates that gas is likely over time to become a “back-up fuel” for periods when wind farms are generating less electricity due to weather conditions. This makes it more likely that a just transition can be achieved in gas powered electricity generation if there is proper preparation and an application of the ILO’s principles.

The policy goal was clearly articulated January 2018:

The government's objective is to ensure that the closure of the remaining unabated coal fired power stations in Great Britain takes place in a way that minimises the impact on the electricity system and provides certainty for investors (BEIS 2018).

This definition has several features worthy of comment. First, there is a political concern with security of supply. Action has to be taken to ensure that the lights stay on and that industry has access to the electricity it needs. Power cuts will be an obvious indication of policy failure. Second, investors are singled out as a particularly important group of stakeholders. Electricity generation in the UK is privatised, fragmented and subject to extensive regulatory oversight. Obviously, it is important to keep the lights on, but guaranteeing profitability (and earnings) for investors is seen as essential too. Third, there is no specific attention given to the notion of a just transition. There is a reference in the 2018 policy document to the government's industrial and clean growth strategies but taken as a whole the interests of affected workers are given only cursory attention. The assumption appears to be that a well-functioning (by which the government means a lightly regulated) labour market will ensure an appropriate matching between workers and new employment opportunities:

We expect that the losses in activity associated with the closure of unabated coal generators will be compensated by increased activity in new, clean generation (BEIS 2018).

There is no understanding that the achievement of this expectation depends upon other conditions being met. For example, jobs in the renewables sector may not be located close to the jobs being lost at the coal fired stations. Skill requirements in renewables may be somewhat different from those relevant to coal. People may struggle to relocate, may be either reluctant to travel or unable to do so (because of family commitments) or may find it difficult to access the training needed to find a job in industries with robust employment growth. Most importantly, perhaps, there is no sense at all that a *sectoral/just transition* strategy is needed, bringing together all relevant elements of policy. These weaknesses are likely to become more acute as the shift to zero-carbon energy accelerates. Reliance on gas must be reduced before 2050 and, even though gas fired stations have smaller workforces than their coal fired counterparts, far more people will be affected overall than is the case with the current closure programme. Assuming that the labour market will operate to guarantee jobs to all those who want them is at best heroic and at worst a wilful flight from economic and industrial realities.

Moreover, the fragmented nature of the industry (where employers compete more often than they co-operate) makes it especially difficult to develop a common approach. As we shall see, employers have treated each closure as if it is a stand-alone event rather than a process mandated by national policy. Some employers recognise Prospect for collective bargaining whereas others do not and operate personal contracts, albeit with some opportunities for the union to represent individuals in grievance and disciplinary processes alongside participation in the non-union information and consultation machinery. Contrary to the ILO's just transition model, this group of employers does not universally accept that trade

unions are legitimate social partners or that recognition for collective bargaining is a minimum standard of industrial citizenship.

It is interesting to note that an employer's attitude to trade unions and social partnership does not depend at all on the arrangements that apply in their home base of operations – a number of power stations in the UK are subsidiaries of French and German companies. In those countries there may be strong, sectoral collective agreements in operation, well developed social dialogue mandated by law, and discussions between employers, unions and government on strategic energy policy¹¹. Such companies also operate European Works Councils that, for the time being, also cover their UK operations. Yet practices that are widespread in continental Europe are not necessarily reflected in management practice in the UK.

“People may struggle to relocate, may be either reluctant to travel or may find it difficult to access the training needed to find a job in industries with robust employment growth.”

Transition in Practice

The next part of the discussion is informed by interviews with Prospect officials and workplace representatives. It seeks to capture the realities of the closure process as they were experienced by those directly affected. There are two elements of the ILO's Just Transition framework that are particularly relevant. First, was there adequate, informed and continuing consultation with all stakeholders? Second, was a coherent set of policies in place to create high quality alternative employment where basic employment rights were respected, including the right to organise and bargain collectively? In each of the cases considered the workforce knew that closure was certain to happen but, as we shall see, the precise timing of each closure and the way that it was managed was subject to a high level of uncertainty. People knew that their jobs were going to disappear, but when and under what conditions remained unclear, often until the closure date was announced.

One facility operated a Business Review Forum (BRF) rather than recognition for collective bargaining as conventionally conceived. Prospect's lay representatives and a full-time officer were able to attend, but the BRF was essentially an information conduit, a mechanism for communicating management decisions that had already been taken. BRF members were able to ask questions of senior managers on the site but there was little or no discussion about planning for the closure or the practical consequences for the workforce.

¹¹ See, for example, the role of works councils in Germany and comités d'entreprise in France, both of which guarantee workers and their representatives the opportunity to influence significant employer decisions.

The initial anticipated closure date for this facility was brought forward by sixteen months. Prospect members were obviously disappointed that they had lost a further year's work and some people had delayed looking for alternative employment because they believed there was no immediate need to do so. It was clear, however, that it would be extremely difficult to challenge the employer's decision and the focus then shifted to managing the consequences for the workforce. An initial proposal from the employer for an enhanced redundancy package was presented and, following discussions, improvements were made to the compensation available to the whole workforce.

Some government resources were made available to support access to training for re-employment and there was limited trade union representation on the steering group responsible for the administration of the support package. Some effort was made to create a job matching service enabling workers to identify jobs elsewhere in the industry, but interest was limited because people either found it difficult to relocate or were unwilling to move from their home base. They were settled in their communities, were often being invited to move to more expensive areas of the country and had no guarantee that the jobs to which they moved were going to be secure in the medium term. A very small number of Prospect members were redeployed elsewhere, principally to gas fired power stations.

The company timed the closure to coincide with the exhaustion of the coal supplies on the site and then sold the remaining time on their capacity market contract (essentially the opportunity to produce a certain quantity of coal fired electricity) to another generator – it is possible that the revenue from the sale of the licence helped to fund some of the enhanced redundancy package.

The company concerned has a European Works Council (EWC), at which the plan for the management of its British businesses (including the closure of coal fired stations) should have been presented and the views of the union representatives sought, in the context of similar exercises taking place across the EU. That the UK workforce were surprised by the announcement of the precise closure date suggests a lack of transparency and a breach of the spirit if not the letter of European law. The EWC, ought, in principle, to have been fully seized of the plans to move away from coal fired generation across Europe, with a framework agreed for managing the transition at national level in each of the affected countries.

The assessment of the responsible Prospect full-time official is that the outcome was the best that could have been achieved given the absence of collective bargaining for skilled and professional staff.

Experience elsewhere demonstrates that even employers with multiple sites have tended to treat each closure as a stand-alone event - with no template or generally applicable protocol and no strategic discussion with the union at national level.

One facility had been initially scaled back several years before the final closure was announced. A number of staff were made redundant on terms that would prove more favourable than those available to workers affected by the eventual closure. While it had been clear that the site would close at some point in the future, the announcement, when it came, gave the workforce about sixteen months' notice.

Some operational difficulties following the scaling back of activity highlighted the need for additional investment in the remaining facility. The economics of the industry, however, made this an unattractive prospect, at which point closure became the only option that the employer was willing to consider.

Prospect was presented with a settlement by the employer which was described as a final offer. Nonetheless, negotiations took place and enhanced terms were made available. The unions were particularly concerned about the implications for pensions. Some workers were in a final salary pension scheme and others in a defined contribution scheme. Ensuring fair treatment for each group was a priority as the negotiations unfolded. It is noteworthy, perhaps, that these discussions only began in earnest *after* the closure had been announced. The idea that the unions should have been involved in the process at an earlier stage (when the employer was considering strategic choices) was, apparently, never seriously contemplated.

Around 40% of the whole workforce accepted voluntary redundancy, 40% took early retirement and the remainder found employment both within and outside the energy sector in the period between the announcement of the closure and the end of energy generation. Initially, the company seems to have envisaged a much larger transfer of workers to the gas fired stations and made a number of public statements to this effect. The reality proved somewhat different. Some workers moved to the remaining coal fired stations, others to waste to energy facilities, another small group found jobs in the nuclear industry and an even smaller number transferred to gas fired stations. Nonetheless, the employer's other undertakings were generally delivered. Staff who wished to take up training opportunities were enabled to do so; enhanced redundancy terms were available (improved further after the intervention of the unions) and compulsory redundancies were avoided. It is difficult to conclude, however, that this case offers a compelling demonstration of the social partnership envisaged by the ILO's *Just Transition* framework.

A practical example of where earlier dialogue might have offered advantages to the employer concerns the decommissioning of the site. To begin with the intention was that the decommissioning process should be completed in 12 months. The trade unions made clear from the outset that they believed the employer's preferred schedule was wholly unrealistic and experience suggested that more time would be needed to make the site safe. Applying the ILO's principles would have enabled a constructive conversation to take place *before* critical decisions were taken and for a shared understanding of the practical implications of the closure to be developed. In the event, the decommissioning process took three years.

Union representatives also suggested that while the closure was secured by agreement, a more ambitious programme of training and skills development could have equipped the workforce with the skills needed in a low carbon world. Specific reference was made to carbon capture and storage technologies as well as the emerging technologies related to the use of hydrogen as a future source of energy. One of the workplace representatives emphasised that Prospect's members had strong generic engineering skills and experience of working in a health and safety critical environment. In recent years, however, the culture of human capital

development had diminished across the industry, with economic pressures driving employers to look for cheaper alternatives. Ensuring that displaced workers could find a secure place in the low carbon economy would require a revival of the training culture that had been characteristic of the industry in the past.

Another plant owned by the same company had witnessed significant investment in the early mid-2000s, with a complete retrofit in 2008 to comply with the new limits on carbon emissions. Securing further contracts in the capacity market allowed an initial closure decision to be delayed.

As with each of the cases we have examined so far, Prospect and other unions played no part in the most significant decisions leading up to the closure. There was no agreement of a closure plan before the employer announced the date when operations would cease and no discussion, at an early stage, of the arrangements for decommissioning. In the absence of this strategic dialogue, Prospect's priority was to ensure the best possible financial settlement for the workers affected. In the event, the unions secured a somewhat more favourable deal than had been available elsewhere, with significant enhancements to statutory entitlements depending on the nature of the contract of employment and length of service. Specific attention was given to pensions, but the package included provisions relating to the employee share scheme too.

“a more ambitious programme of training and skills development could have equipped the workforce with the skills needed in a low carbon world.”

The principal reason for the enhancement was the company's desire for a rapid decommissioning of the plant – with the employer affirming a commitment to a 12-month decommissioning schedule. Thirty-nine staff were retained for the decommissioning process and, because they had an expectation of no more than a year's further employment on the site, the employer implemented a more generous package for them at the end of this period. Experience will prove whether the decommissioning timetable is realistic or not.

Prospect provided financial advice to its members, focused especially on pensions, the consequences of early retirement and the use of redundancy payments. The employer provided job search and outplacement support, and access to skills development. Most Prospect members opted to take early retirement, with the remainder finding alternative employment in the waste to energy sector, gas fired power generation and the chemical industry. There was some discussion between Prospect and the employer about opportunities for redeployment elsewhere within the business, but as one of the Prospect representatives observed, it could be difficult to relocate, people were not willing to commute for long distances and it was not always clear that the skills developed through working at a coal fired power station were applicable in other parts of the electricity generation sector.

Summarising the experience, Prospect's workplace representatives took the view that the unions had achieved the best possible outcome in the circumstances. The company had been financially generous, had negotiated in good faith with the unions (despite presenting apparently "final offers" that were improved through further negotiation) and sought to cushion the blow for the workers affected. Whether this is sufficient to constitute a just transition will be considered in the final part of this section.

Experiences can be different when there are viable employment options within reasonable travel distance, providing straightforward options to transfer. Moreover, even where closure is an unavoidable reality, albeit at an uncertain date, trade unions and their members may offer an optimistic rather than a pessimistic response. In one case, for example, staff sought to make the power station "the best that it can be" so that contracts could be secured in the capacity market for as long as possible. Prospect workplace representatives from the site were enthusiastic about their role in this process. In the period before the closure announcement the station was running according to the principles of lean production, costs had been stripped out and the workforce was highly efficient. Nonetheless, despite all these efforts, with a relatively low electricity price and a relatively high carbon price (consistent with the government's commitment to reduce CO₂ emissions) it was difficult to run the site profitably.

In this case, the recognised unions had discussed redundancy terms with the employer *before* the closure announcement. An outline agreement was reached, with further details being discussed once the precise date of closure was known, ostensibly through the legally required redundancy consultation procedure. In common with experiences elsewhere, ensuring that pension entitlements were properly protected was a priority for the unions. A difference of opinion with the company led to Prospect seeking legal advice. The threat of court action brought the employer back to the table to reach an agreement on the terms proposed by the union.

While there was no specific agreement on relocation or redeployment, staff were able to make use of the company's internal labour market to find employment elsewhere and were encouraged to do so. Moreover, there was some inevitable turnover in the workforce, as would have been the case in the absence of the closure announcement, with people finding jobs with other employers in the industry. In the period before the closure announcement, nine people went to work elsewhere in the company and in the period after the closure announcement, but before shutdown, four people were redeployed in the company. There was nothing particularly unusual about this process. People were simply applying for jobs and would be appointed if they proved to be the best candidate.

Once all these factors are considered, only 15 members of Prospect received the negotiated redundancy or early retirement package. Initially, the employer and the union had expected the numbers to be higher and a budget was set aside to support outplacement, job search and upskilling. Very few people made use of this facility because, with access to the company's internal labour market and with other power stations in close proximity, workers faced few difficulties in finding alternative employment.

Another shared feature with the previous examples is the employer's treatment of the closure as a unique event – in the words of one Prospect representative: "it was as if they had never closed a power station before". It was suggested that there was a disjunction, perhaps even a contradiction, between declared corporate policies and practical application on the ground, especially the relatively weak implementation of commitments to social partnership. Power stations were treated as individual business units and, as long as targets were met, management style and culture depended on the personalities of the individuals in that part of the business.

Prospect members who transferred to other sections of the employer's business now have direct experience of the diversity of management practice. In some environments trade unions are recognised for collective bargaining, whereas in others the operation is union free, albeit that some information and consultation processes exist on a non-union basis. It is at least arguable that the absence of union representation is a breach of the Just Transition framework. According to the ILO, decent work includes the right to organise and secure collective bargaining in *all* workplaces. In this case, however, employment has disappeared from a workplace in which trade union rights were respected and new jobs have been created in union-free workplaces with relatively weak information and consultation institutions.

The future closure programme

The experience so far should offer guidance for the further closures that will take place up to 2025. There has been a significant change in the situation, however, in that Covid-19 has reduced demand for electricity, which is having an immediate impact on the profitability of the remaining coal fired stations. Some operators have developed admirable expertise in managing capacity contracts between their gas and coal fired operations, but restructuring is taking place across the industry (some gas fired stations are being offered for sale) and assets are being liquidated to realise cash. There are significant challenges ahead.

There are three coal fired stations remaining on the grid in the Great Britain (there is also a coal fired station at Kilroot in Northern Ireland) – West Burton A (EDF), Drax (Drax Group) and Ratcliffe-on-Soar (Uniper). West Burton A is scheduled to close in September 2021; Drax will cease burning coal in March 2021 and will use biomass thereafter; and Ratcliffe is set to close in 2024, although Uniper plan to replace the coal fired station with a waste to energy plant that will, in their words, "create a zero-carbon technology and energy hub for the East Midlands region".

Inevitably these closures will create challenges for trade unions, with tensions between pay or compensation for job losses and the need for a strategic approach to the transformation of the business, cementing the trade union role in the decision making process and ensuring that decent work (and good industrial relations) are maintained after the transition.

At Drax, there is a strong case for saying that a successful transition to burning biomass can only be achieved if the employer is willing to have a developed dialogue with the union about the medium-term future of the plant. Most importantly,

perhaps, the future of the plant depends on whether carbon capture and storage (CCS) technologies can be used successfully. There will be major changes to work organisation and skill needs, the implementation of which will require sustained union engagement.

It remains to be seen whether developments West Burton A can benefit from the experience of other coal-fired stations. In Prospect's view, there is a need for early discussions with the affected workers about the options available to them, in the context of a framework negotiated with the employer by the unions. In other words, there needs to be a proper closure plan agreed by the parties, with particular attention being given to skills and career development.

Ratcliffe-on-Soar is the most modern of the three power stations and investment had taken place to reduce both CO₂ and nitrogen dioxide emissions. This investment was undertaken in the expectation that the station would have a fairly long lifespan, but the government's announcement of the 2025 closure date has forced the employer to adopt a different approach. While the proposal for a waste to energy facility is ambitious, it will still require a managed closure and potentially a transfer of staff to the new operation. Prospect is arguing for a developed strategic dialogue of the kind described above in relation to Drax.

Assessment

A more extensive account of the public policy implications of the closure of coal fired power stations can be found in the final section of the report, and some attention is given to the generalisable lessons for other industries too. The assessment here focuses on the industrial relations issues and the implications for workers. An obvious point to make is that in all these cases the scope of the relationship between the unions and employers is more limited than the full engagement in decision-making described in the ILO's just transition model. The unions were presented with a closure decision and then invited to negotiate an appropriate package of compensation for the workers affected, complemented by support for retraining, reskilling, redeployment and career change.

It is essential to record too that Prospect were seeking, and still seek, a much wider, strategic dialogue with the employers. The union has both the capacity and the desire to do more, but lacks the industrial heft needed to compel employers to consult earlier in the process or be more transparent in the provision of information about medium term planning.

Also conspicuous by its absence is any dialogue at sectoral level between employers, unions and government, leading to a framework agreement that could be used to shape the closure process at company and workplace level. There is no evidence of a joint approach to skills across the industry or a shared understanding of how skills needs will change as the industry moves towards a zero-carbon future.

We shall see in section 4 of this report how the closure of coal fired electricity generation has been handled in Germany and Canada. In both of these countries there is a national strategy in which government is fully involved. Public budgets have been identified to ease the transition and the social partners are embedded

as indispensable participants in the process. Moreover, in both countries attention has been given to creation of worthwhile, decent jobs for the workers affected. None of these conditions appears to have been met in the UK.

Differences between the British and German experiences are often attributed to institutional differences between the two economies. The contrasts between a liberal market economy (the UK) and a co-ordinated market economy (Germany), are profound (Hall and Soskice 2001). In the UK most economic adjustments are secured through the market, which means that impediments to the efficient functioning of markets (including trade unions) should be removed. Corporations are focused on profit maximisation in the short term (to deliver so-called shareholder value) and short-termism in the boardroom is transmitted through corporate hierarchies to short-termism in employment relationships. Companies are portfolios of assets to be managed rather than organisations with a life and personality of their own (Kay 2003).

In Germany, patterns of ownership are different, investors are patient and the principal goal of a corporation is not to deliver immediate value but to build its distinctive capabilities over the long-term to deliver value to committed shareholders. Ensuring that all stakeholder interests are weighed in the balance is an essential element in this long-term approach. Germany is characterised by wide collective bargaining coverage, strong employers' associations and guaranteed participation rights for workers and their representatives at the workplace and in the boardroom.

“Public budgets have been identified to ease the transition and the social partners are embedded as indispensable participants in the process.”

The German approach to the closure of coal fired power stations has been to establish a national commission, engaging all stakeholders, to generate a consensus about the best way forward. In the UK, coal fired power stations are being forced off the grid by the operation of the capacity market (a low price for electricity and a high carbon price), with no real scope for dialogue or agreement on a national plan.

These institutional differences are important, no doubt, but the risk in embracing this “varieties of capitalism” story is that it suggests a liberal market economy, like the UK, cannot be transformed into a co-ordinated market economy. According to this view, there is too much history, too many ingrained practices and too many deep cultural differences to make such a programme possible. In other words, the ILO’s framework for just transition can only be effective in a co-ordinated market economy and the UK is not a co-ordinated market economy.

The Canadian example is a practical demonstration that a different approach *can* be successfully applied in circumstances that are closer to the British than the German case. It confirms that trade unions can participate in adversarial bargaining in one realm but collaborate successfully with government and employers in another realm to secure a just transition. It is neither utopian nor culturally ignorant to suggest that the UK can learn from these experiences and do rather better in the future by involving workers and their representatives in controversial economic transitions¹².

The absence of the state from the process of closing coal fired power stations in the UK is quite remarkable. There appears to have been no consideration of the implications for local economies, particularly the potential loss of a stratum of skilled and professional people from communities already suffering multiple disadvantages.

That responding to climate change will cause disruption and that government has a responsibility to intervene is widely accepted elsewhere in the developed world. The EU, for example, has set aside €100 billion in its current budget to support a Just Transition Mechanism to support sectors affected by the demand to reduce carbon emissions. We will explore all these matters in more detail in the final section of the report. For the time being, however, we need do no more than record that a maintenance of the status quo in the UK's energy generation sector will make it exceptionally difficult to achieve a just transition.

¹² Other English-speaking countries have also developed strong institutions of national social dialogue to manage difficult challenges in economic and social policy. In Australia from 1983-1996 government and unions negotiated a series of Accords, which traded off wage restraint against improvements in the social wage, most notably through the creation of a comprehensive superannuation system. Analogous arrangements were in operation in the Republic of Ireland from 1987-2009, when they were abandoned in the face of the global banking crisis.



3. Cold Blue Steel and Sweet Fire: The Closure of the Redcar Steel Works

A brief history of steel making in the UK

Human beings have used iron tools for almost 4000 years and steel, an alloy produced by smelting iron and carbon, has an equally long history — the oldest artefacts date from the Hittite civilisation of ancient Turkey. Steel is the material that built the modern world. It is indispensable and has multifarious uses in industrial production, transport, construction and defence. No developed economy can thrive without steel, and access to a secure supply is both a public good and a matter of economic and national security.

In the middle nineteenth century, the UK became pre-eminent in steel production, following the introduction of the Bessemer process. Teesside, where the Redcar

steelworks was located, played an especially important role; 91 blast furnaces were in operation within a ten-mile radius at the industry's height. In 1875 the UK produced almost half the world's pig iron, a third of which came from the area around Middlesbrough, and 40% of the world's steel. Around two fifths of this output was exported to the USA – America's industrial revolution was built with British steel too. By the end of the century, however, the position had changed, other countries had developed their own industries, the USA was the largest producer and, contrary to the situation 25 years earlier, the UK was importing steel.

The story is familiar tale of heroic success and painful decline. Britain's first mover advantage as the cradle of the industrial revolution was lost. A degree of complacency, persistent under-investment and short-term thinking damaged the competitiveness of what had been world-leading businesses.

In the immediate post-war period, most steel production was nationalised by the 1945-51 Labour government, privatised by a Conservative government in 1952 and renationalised by Harold Wilson's Labour government in 1967. In principle, the second nationalisation was supposed to lead to higher capital investment, the use of new technologies to improve performance, higher quality management and better industrial relations. The reality, however, was somewhat different, with persistent pressure on the public finances making it difficult for all nationalised industries to meet their investment ambitions. Moreover, at the time of nationalisation, the steel industry was underperforming relative to major international competitors and it would have required an exceptionally stable economic environment for the government's plans to succeed. None of the necessary conditions were in place in the 1960s and 1970s – exchange rate crises, balance of payments problems, inflation and unemployment all conspired to thwart the regeneration of the industry.

That is not to say, of course, that no capital investment took place – the Redcar blast furnace that remained in operation until 2015 was opened in 1979 – but the steel industry was in relative decline (see figure 2). Employment in the industry fell precipitously over a fifty-year period. In 1971, shortly after the 1967 nationalisation, there were around 320,000 steel workers; employment almost halved between 1979 and 1981 (from 157,000 to 88,000), falling to 44,000 in 1991, 30,000 in 2001 and 24,000 in 2016 (House of Commons Library 2018)¹³.

Some of the reduction in employment can be accounted for by technological change, with fewer workers needed to achieve either the same or higher output. But much of the decline is explained by government policy, the fragmentation of the industry after it was privatised in 1988, under-investment and declining competitiveness. As a House of Commons select committee observed in 2015:

...other European countries have both better valued their domestic steel industry and have been able to withstand global competition more effectively than has been the case with the UK (Business, Innovation and Skills Committee 2015).

¹³ Community and the employers' association UK Steel use a slightly more expansive definition, reporting around 30,000-31,000 people employed in the industry.

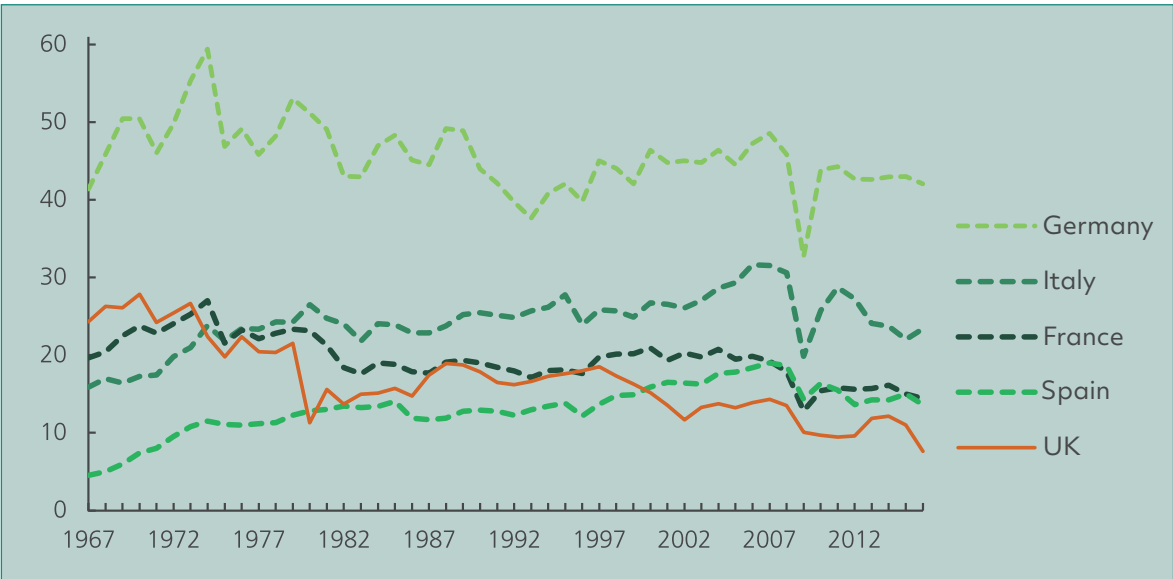
A swift glance at the data for steel output in Europe confirms this story (Figure 2). In 1967 the UK was the second largest steel producer in Europe after Germany. The early 1980s saw a huge decline in output (reflected in the decline in employment), with a brief rally later in the decade, followed by a long slow decline after the middle 1990s. The impact of the Redcar closure can clearly be seen in the data for 2015-16.

At various points in this period some countries (Spain and Italy) saw their industries grow, others experienced cyclical fluctuations but overall stability (Germany, for example, where output before the 2008 recession was at the same level as in the 1960s) and others witnessed decline, but on a less dramatic scale than the UK (France). Perhaps the most telling fact is that the UK is now ranked seventh in the European steel production league, and has only two remaining large-scale primary production sites, Port Talbot (owned by Tata) and Scunthorpe (owned by Hebei Jingye Group).

Challenges: Global Market Conditions and Climate Change

This focus on trends in Europe obscures what is, in reality, the most significant change in steel production over the last forty years – the rise of China as the largest steel producer in the world. The scale of the transformation is astonishing. In 1995 China accounted for only 13% of global output; by 2016 this had risen to 50%. Some of the growth was accounted for by rising domestic demand in China, boosted by the economic stimulus policies introduced to counteract the recession that followed the global financial crisis in 2008. But falling demand in China and a modest rebound in the global economy led to a focus on exports as an alternative to domestic consumption.

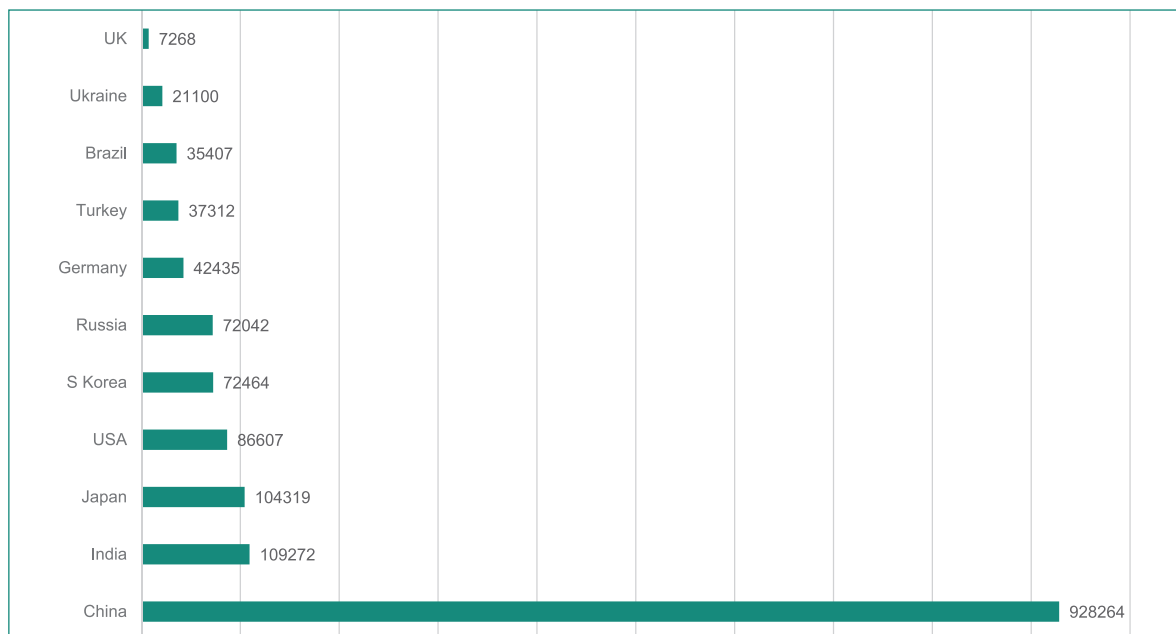
Figure 2: Steel Production in Europe 1967-2016



Source: House of Commons Library 2018

In the last decade, for example, Chinese steel exports to the EU have grown by 300% and a glut of steel on the global market has led to severe downward pressure on prices – which contributed to the closure of the Redcar site. Indeed, it was only *after* the closure of Redcar that the UK government withdrew its objections to the EU’s imposition of import duties on Chinese steel products. Now that the UK is outside the EU the government must decide whether further action is needed to prevent the dumping of Chinese steel. The Department for International Trade has established a Trade Remedies Investigations Directorate to review all the trade defence measures inherited from the EU, including those related to steel. There are some particularly difficult choices ahead, not least because the government is seeking to develop a more open trading relationship with China in the future, which might make punitive tariffs less attractive¹⁴.

Figure 3: Total Production of Crude Steel 2018 (million tonnes)



Source: Worldsteel Statistical Yearbook 2019

The Organisation for Economic Co-operation and Development (OECD), in its most recent review of the prospects for steel, noted that the global economy was slowing down even *before* the emergence of Covid-19 (OECD 2020). While the demand for steel grew modestly in 2019, steel production *fell* in all regions except Asia (principally China) and the Middle East. The prices for some materials also fell (scrap and coking coal), while others were stable (iron ore) but steel prices were on a consistent downward trajectory throughout 2019. Moreover, the demand forecast for 2020 (again before the advent of the global pandemic), was for global growth of 1.7%, with Chinese demand rising by no more than 1%. Despite the Covid-19 inspired disruption to the global economy, current forecasts suggest that China will produce more than one billion tonnes of steel this year. In other words,

14 At the time of writing (December 2020), the EU anti-dumping tariffs are being transferred to the UK. The concern is that, post-Brexit, the UK’s trade defence regime will be light touch and therefore weaker than hitherto. A new statutory body, the Trade Regulation Authority, will replace the Trade Remedies Investigations Directorate once the necessary legislation has been passed by Parliament.

the outlook is uncertain. Much will depend on how long and deep the Covid-19 induced recession proves to be and how governments respond.

The colossal scale of the Chinese industry and its impact on global markets compounds these uncertainties. The relative minnow that is the British steel industry is likely to experience continued instability. Nonetheless, even though the rise of China has been spectacular and might be blamed for the problems confronting the British steel industry it would be wrong to do so completely. As we have seen, the decline of the industry in the UK cannot be entirely attributed to globalisation, not least because other major European producers, most notably Germany, have had a very different experience.

How the government might respond to these challenges is considered in the final section of this report. For the time being, however, we need do no more than note that a strategic political choice must be made. If the UK is going to continue to have a steel industry in the long to medium term then much more government support may be required than has been the case hitherto – particularly given China's dominance, the need for a secure supply of steel in good times and bad and the unavoidable fact that steel, unlike many commodities, is a public good because neither the economy nor society can function without it.

It is always problematic to turn your attention to the medium term when the world confronts an immediate crisis, but the biggest challenge facing the steel industry, leaving aside global market conditions and the impact of technology on employment, is developing an appropriate response to climate change. Steel production accounts for 7-9% of global carbon emissions and each tonne of steel produced emits almost two tonnes of CO₂. The use of fossil fuels must be radically reduced if the targets of the Paris Agreement are to be met. According to the World Steel Association (worldsteel), the employers' association representing steel producers across the globe, all of the following technologies will need to be deployed if the net zero ambition is to be achieved by 2050:

- The use of hydrogen rather than coke to reduce iron ore – with the by-product of water rather than CO₂. This technology has yet to be used at scale in a commercial setting – although some producers have made it the centrepiece of their decarbonisation strategies (see section 4).
- More extensive use of carbon capture and storage (CCS) technologies. This will require the retrofitting of most existing production sites. Whether CCS is a worthwhile investment will depend critically on the age of the plant, the ability to transport CO₂ to a storage facility and the availability of such storage.
- Carbon capture and utilisation (CCU), where emissions of CO₂ are used to produce fuels or materials for the chemical industry.
- Biomass as a reducing agent, as a substitute for coke.
- Electrolysis – where iron ore is reduced using electricity.

The viability of both the first and final options depends on a supply of cheap electricity generated from renewable sources, which suggests in turn that energy policy and industrial policy must be properly integrated, with each supporting the objectives of the other.

Presented in this form, the possibilities may appear to be mostly technocratic and technological rather than exciting. It is important, therefore, not to underestimate the scale of the ambition and the radical consequences for steel and the communities dependent on the industry for their livelihoods. It is likely, for example, that by 2050 every conventional blast furnace in the world will have been replaced by an alternative technology. It is often said that this will lead to fewer jobs because these technologies depend more on machines than people. Nonetheless, there may be opportunities for job creation too. If hydrogen is to be used as a reducing agent, for example, there must be a plant to manufacture the gas, arrangements for storage and an array of associated activities. Similarly, if jobs are lost in primary steelmaking, there may be growth either in downstream activities, with a focus on specialised products or in scrap enrichment facilities. As we shall see in section 4, the transition will proceed in a measured way and, by the time it is complete, the overwhelming majority of the current workforce will be beyond retirement age. There is ample time to prepare for the necessary changes, to invest in skills and, if workers are displaced, to ensure that adequate support is available.

The Austrian case, discussed in the next section, suggests that there will be no displacement of workers at all, although there may be fewer steel workers at the end of the process. The critical task, therefore, if levels of employment in the steel industry are lower, is to ensure that new opportunities are created in steel communities, with good jobs at comparable wages. That steel will remain an indispensable commodity is certain and a vibrant UK green steel industry could find a ready market supplying the renewable energy and automotive sectors. There is no reason why the transition from carbon intensive to green steel should produce unavoidably negative effects. Moreover, failing to sustain a domestic industry will require the import of steel from less environmentally friendly producers across in the world. It would be a little hypocritical to trumpet the achievement of carbon reduction while, at the same time, turning a blind eye to the carbon intensive systems used elsewhere.

Making progress will require government to play a committed role, supporting research and development of green technologies, incentivising the necessary capital investment, offering financial support for energy costs to ease the transition and developing programmes to enable workers who are displaced to retrain and find high quality employment elsewhere. Combined with the extensive involvement of the social partners, this is the policy mix that will secure a just transition.

We will see in section 4 that some countries have already taken the first steps along this path and are beginning to develop integrated policies. It is striking, therefore, that the UK appears to be a laggard on this dimension. The government has an industrial strategy, which is marginally more interventionist than previous approaches (BEIS 2017a), and a green growth strategy was published at almost the same time (BEIS 2017b). But in neither case is any particular attention given to the notion of a just transition and the implications for the workers affected are largely absent from the policy framework. Of course, it could be argued that the context has changed in the last three years, and that the focus on “levelling up” will lead to the development of a more sophisticated approach. This is certainly one possible reading of government policy, although to date levelling up has been

more rhetorical than practical. A focus on major regional infrastructure projects alone is hardly sufficient to secure a just transition and serious policy prospectus would recognise the role that steel can play in the levelling up process, not least because the remaining primary production plants are in areas of the country that have been identified as priorities for action. Moreover, pay levels in steel are approximately 50% higher than the regional average and each steel job supports two other jobs in the wider economy. A successful steel industry should, therefore, be an integral element in the government's regional development policy mix – with regional policy and industrial policy working in harness.

The End of Steel Making in Redcar

It is at this point that we can turn to the closure of the Redcar steel works in 2015. This is an example of an unmanaged transition that was definitionally unjust – the business collapsed overnight; on one day people had what they thought were secure, well-paid jobs and on the next they found themselves unemployed.



The Redcar story reflects similar experiences across the UK over the last forty years. Strong communities had grown up around steel making, with a largely male workforce, a strong trade union tradition and pride in the achievements of the industry – the people of Middlesbrough still celebrate, for example, the fact that the Sydney Harbour Bridge was constructed from Teesside steel. These jobs were seen as long-term, relatively well rewarded and a source of stability, not just for the workers and their families but for the community as a whole. As with the closure of the coal mines, the disappearance of employment in the steel industry was not just a matter of losing one job and finding another. A way of life was destroyed, the assumptions that people had made about the world and their place in it had been overturned, a sense of possibility about the future was shattered. Families and friendships were strained and self-respect undermined.

The Redcar story, while tragic, is recounted here as an example of what *not* to do when confronted with a closure, in the belief that this may offer some guidance as

the industry in the UK goes through the transition to a net zero carbon world by 2050. What happened in Redcar may prove directly relevant to both Port Talbot and Scunthorpe in the future.

Before the closure the Redcar workers were not ignorant of the possibility that their jobs could be at risk. Employees with job tenures of thirty years or more had direct experience of the decline of the industry, the closure of plants elsewhere and the disruptions associated with privatisation, the pursuit of profitability and changes of ownership – from British Steel plc to Corus in 1988, from Corus to Tata in 2007, and then from Tata to the Thai based Sahaviriya Steel Industries (SSI) in 2011.

Moreover, shortly after the Tata takeover, the company announced that it was seeking to rationalise its European operations. The Redcar blast furnace was mothballed with the loss of 1,700 jobs and a Response Group – a more modest version of the SSI Taskforce discussed below – was established to help those affected, providing help with job search and skills development. What really matters here, of course, is that mothballing kept open the possibility that production could be resumed in the future and, in February 2011, the site was bought by SSI. Initially, this seemed to be a wholly positive development – people with long employment histories returned to their old jobs; their expectations of good pay, favourable conditions of employment and a shift pattern that allowed for decent rest periods were all met. In addition, a cohort of younger employees was recruited who found the pay and conditions available superior to anything they had experienced previously.

It was unfortunate that the Redcar plant reopened at precisely the moment when the global steel price began to fall, largely as a result of the glut of Chinese steel on the market. The first indication the workforce had that all was not well came in May 2015, when wages were not paid on the due date as expected. Community and the other recognised trade unions acted swiftly and all sums owed were paid later that day. It became increasingly clear, however, that global market conditions were preventing SSI from raising the money it needed to buy materials – the business was simply running out of cash. In August 2015 it was suggested that the blast furnace might be mothballed again, but the conversations that the unions expected to take place on the practical arrangements never materialised. In September there was a pause in production and in October SSI was declared insolvent. A receiver was appointed to manage the insolvency and the plant was closed. Two thousand directly employed workers immediately lost their jobs, along with another 800 in the supply chain (SSI Taskforce 2019)¹⁵. The effects on the communities of the Tees Valley were immediate and ended more than a century of steelmaking.

In the remainder of this section we will examine the implications of the closure for the workers affected. This material is informed by a survey of Community members conducted shortly after the closure and more detailed interviews with a small sample of workers. Some of these personal testimonies were tragic; others demonstrated the resilience of individuals in conditions of adversity; and, a small

¹⁵ These figures are drawn from the final report of the SSI Taskforce (see discussion below). Community suggest that the numbers affected were larger – 2000 direct employees, 1000 permanent site contractors and 1000 in the supply chain. In other words, the total was closer to 4000 workers.

minority revealed that it is possible to find good jobs on Teesside that offer pay and benefits equivalent to those available in steel. The overwhelming impression, however, is of people experiencing significant financial disadvantage, in a labour market where it is difficult to find a good job at decent wages, in a local economy that has suffered a big demand shock. Interviewees often mentioned, without prompting, the decline of Redcar high street, the closure of shops and other service sector businesses and a belief that the town's past offered a more positive story than its future. There was a strong element of nostalgia, a lament for something admirable that had been lost and a profound uncertainty about what might happen next. The impact was and remains existential. Redcar had been built on steel; it gave the community a sense of pride and a secure identity. At the stroke of a receiver's pen all that was solid had melted into air.

The Impact of the Closure on the Workforce

Shock and disbelief characterised the immediate reaction to the closure. A large percentage of the workforce had long job tenures and, having seen the Redcar plant experience privatisation, multiple changes of ownership, mothballing and, in 2011, a phoenix like rise from the ashes, there was a widespread view that a complete shutdown would never happen. A new owner would be found, the crisis would be resolved and, if necessary, the government would step in to ensure that steelmaking on Teesside continued. Nonetheless, for people towards the end of their working lives, with the prospect of a secure retirement and mortgages that were close to being paid off, the closure may have been a tragic loss, but they believed they had the resilience to continue.

For younger employees, recruited after SSI reopened the plant, the concerns were somewhat different. Working in steel offered much better pay and conditions than the majority of jobs in the locality; people found that they could afford a larger house, a newer car and a more expensive foreign holiday. Expenditure had risen to match earnings and there was a genuine fear that it would soon prove difficult to make ends meet.

Similar concerns motivated those in the middle of their working lives – essentially those aged 45 and above. For many people in this group all they had known was a job at the steelworks. They had left school at 16, joined British Steel and found a firm footing in a workplace with a strong sense of community. Both the interviews and the survey results confirm that most people liked their jobs and had formed enduring friendships. The view that “we are all in this together” was especially strong. A number of respondents emphasised the role played by Community in their personal development as union activists and the sense of solidarity that the union helped to create in the workplace. The question perplexing most people in this group was: what am I going to do now? They had little experience of applying for jobs in the open labour market and, as we shall see, when asked to do so found it hard to describe the marketable skills they possessed.

Finding a new job: A positive element of the story is that four in five (80%) of the survey respondents had found work within a year of the closure. Two-thirds of respondents made use of the services of Jobcentre Plus because they needed to claim benefits while they were waiting for their redundancy payments to materialise. That experience was not necessarily positive and several

interviewees suggested that they were treated as if they had no desire to work and had to be compelled to look for a job. In other words, the system, in their view, was coercive rather than supportive; the emphasis was on benefit sanctions for breaking the rules rather than help with job search. Initial meetings with personal advisers were often fraught with misunderstandings, as workers who had done responsible and safety critical jobs tried to explain their roles to people who had a limited notion of what it meant to be a steelworker. Some of these difficulties were subsequently ameliorated by the SSI Taskforce, the impact of which is considered later in this section.

And yet, despite the relative swiftness with which people found new employment, a third said that it was *difficult* to find work and an additional 15% said it proved to be *very difficult*. The impact of the experience on individuals' mental health, friendships and family relationships should not be underestimated. Almost one in five (18%) reported that it took up to two years to find a new job. Being out of work for that length of time inevitably takes a toll on people's resilience and self-respect; the longer somebody is detached from the labour market the more difficult it becomes to find work.

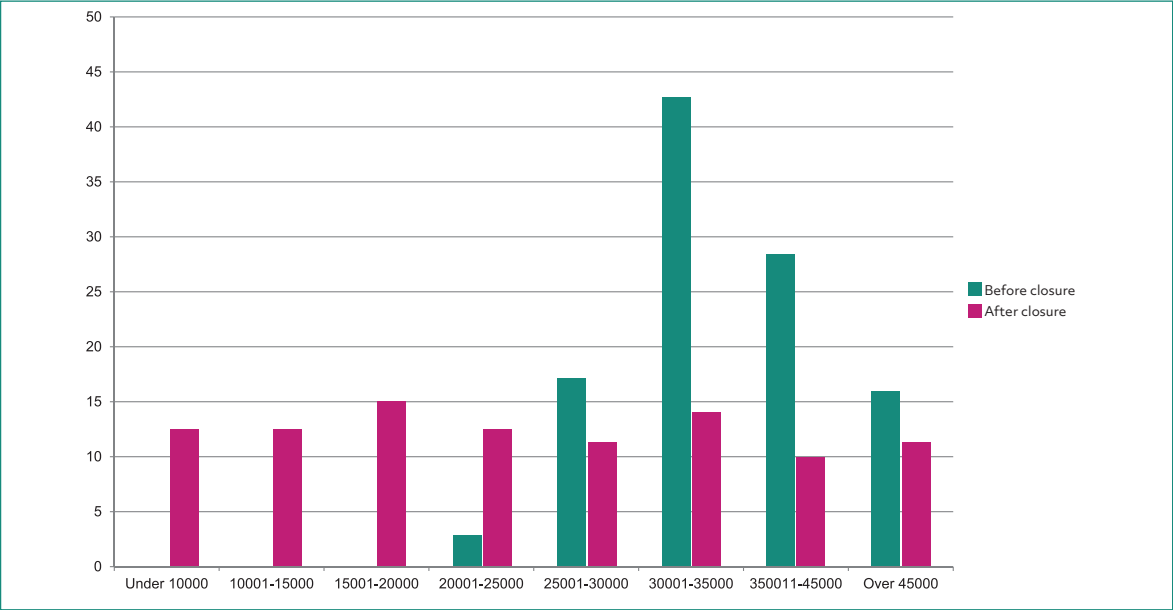
All the respondents to the survey were working full time at the steel works but only two-thirds (64%) were in full-time work in their new jobs. Thirteen per cent were in part-time work and 11% were self-employed. Contrary to the widespread view that such contracts are growing apace, fewer than 2% of the former SSI workers were employed on zero hours contracts.

What happened to pay?: If the experience of finding a new job presents a mixed picture – most people were in full-time employment a year after the closure, even if they found job search hard; a significant minority took longer to find work – the story on pay is much less encouraging (Figure 4). The wages available at the steelworks were higher than in most comparable occupations across the region. Certainly, a premium was paid for work that was difficult, dangerous and physically demanding, but it is also the case that the presence of the trade unions and the effectiveness of collective bargaining institutions ensured that workers received a fair day's pay for a fair day's work. Eighty per cent of the survey sample reported earnings above £30,000 before the closure, whereas only a third (35%) did so for their subsequent employment. It is hardly surprising, therefore, that around a third of respondents said that they were under serious financial stress as a result. The clichéd example of industrial workers losing well-paid skilled jobs and then finding themselves working part-time in retail or logistics may not have been the universal experience of former employees of SSI, but it explains much of what has happened to earnings and pay prospects. Moreover, the face-to-face interviews confirm that, while Community and other trade unions played an essential role on the Redcar site, most people are now working in non-union workplaces.

This is not entirely surprising, principally because trade union density in the private sector is now just above 13% - in contrast with the position forty years ago when almost half the workforce in both public and private sectors was in union membership and collective agreements determined the pay and conditions of four in every five workers. This element in the narrative is identical to the experience of Prospect members in the coal fired electricity generation sector. A workplace with

strong trade unions and developed social dialogue is closed and the displaced workers find alternative employment in workplaces where they are deprived of an effective voice. It is clear that the Redcar closure was unjust when measured against the ILO's criteria, but the experience of working life for those previously employed by SSI appears to be equally unjust *after* the transition. It is impossible to conclude from both the survey data and the interview material that people believed that they had found worthwhile new jobs in industries in which they could take pride and which provided a distinctive identity for Redcar. The sense of loss was and remains palpable.

Figure 4: Earnings before and after the closure of the Redcar plant (£ per year, % of workforce)



Source: Community survey of former SSI workers

The human cost – the impact on individuals and their families: It should be clear from the account offered so far that the human cost of the closure was exceptionally high. Interviews with former SSI employees revealed touching and sometimes heart-rending stories of a desperate search for work, marriages under pressure, relationship breakdowns, a rising tide of family arguments, the loss of family homes and, in one case, a horrific work-related accident leading to a criminal conviction. The survey data tell a similar tale. Four in every five respondents reported that the closure had a negative and enduring impact on their family. More than anything else, perhaps, the inability to provide, to maintain the living standards to which people had become accustomed, inspired feelings of inadequacy and falling short. Former steelworkers who had been confident that they could always make ends meet, were responsible and, in their own terms, successful, found the sources of that success stripped away. These feelings were sometimes transmitted to family members who became equally depressed and stressed as a result. Our earlier discussion of changes in the global market for steel may have seemed a little bloodless and technocratic; the experiences recorded in the interviews and survey responses highlight the tragic realities for workers and their families.

Half the respondents to the survey reported that the closure had a negative impact on their physical and mental health. Around one in five respondents deliberately said they preferred not to answer the question – which might be read as meaning, although reticent about admitting it, that they had experienced problems too. Those reporting difficulties were invited to offer additional comments, which included:

*My confidence was torn to shreds.
I do not sleep properly.
Increased stress and anxiety.
Severe lack of confidence and depression.
Loss of a sense of worth and purpose.
I miss the work and camaraderie.
Stress, stress, stress.*

These are not *universal* experiences and a number of the interviews revealed remarkable resilience in the face of adversity. Some people embraced the idea of learning new skills with enthusiasm, began to understand (despite their negative experiences with Jobcentre Plus) that a lifetime of working in steel equipped them with highly marketable capabilities and, once they had found their feet, discovered they could face the future with confidence. The lesson, perhaps, is that some people take more time to recover from a shock than others and central to a just transition is the notion that the support available must be tailored to the needs of the individual. The SSI Taskforce, which was established to assist people who lost their jobs as a result of the closure, was a critical institution in the mix of policy responses. It is to the work of the Taskforce that we now turn.

Support for Workers: The Role of the SSI Taskforce

The SSI Taskforce was established immediately after the closure and brought together representatives of central government (BEIS and Jobcentre Plus), local authorities, trade unions, employers' organisations and local MPs. The government provided £50 million to the Taskforce, with a further £30 million set aside for statutory redundancy payments to the workers affected by the closure (SSI Taskforce 2019). This was an emergency, ad hoc reaction and inevitably there was an element of learning by doing.

It is surprising, perhaps, that central government in particular appeared to have no model or template for the operation of the Taskforce. SSI was not the first major employer in the UK to have become insolvent and there are many examples of similar experiences in the past. In 2005, for example, the MG Rover plant in Longbridge, Birmingham, was closed with the loss of 6000 jobs. A special Taskforce was established, very much like the SSI Taskforce, and the Work Foundation published a comprehensive evaluation of this intervention in 2006 (Armstrong 2006). It is worth noting the conclusion of that analysis, not least because it appears to reflect many of the experiences of the former employees of SSI:

The results of this study suggest that many of the ex-MG Rover workers have not and will not be able to find "good jobs" and will be forced to accept "bad jobs". A small minority of workers may join the ranks of the long-term

unemployed or withdraw from the labour force permanently. This continuing underemployment and worklessness is likely to have long-lasting negative effects on the health and well being of these workers. The positive effects of becoming re-employed are likely to be limited to those who regain satisfactory new jobs (Armstrong 2006).

As we have already described, former SSI workers witnessed significant deterioration in their pay and conditions of employment after the closure. And, while the data from the Rover study explores questions of job quality and the psychological impact on individuals in more detail, we have no reason to believe that the Redcar steel story is genuinely different. It is almost as if the SSI closure was seen as an entirely new and unprecedented event rather than a tragic and commonplace example of the creative destruction associated with the operation of competitive markets (Schumpeter 1943). As with our previous account of the transition in electricity generation, this reflects both institutional weakness and policy failure, issues to which we return below.

“former SSI workers witnessed significant deterioration in their pay and conditions of employment after the closure.”

Nonetheless, the SSI Taskforce did play a positive role and workers' experiences would have been worse without it. The critique presented here is not intended to suggest that less should have been done, but that with proper preparation and an integrated approach to policy – with proper respect for the principles of social partnership – better results could have been achieved that would have reduced much of the pain associated with the closure.

In the period immediately following the closure the Taskforce organised a face-to-face support hub, a telephone helpline, careers advice and jobs fairs. More specifically, the Taskforce used its budget to support a wide range of interventions (Box 3):

Box 3: SSI Taskforce initiatives

- *Jobs and skills fund:* Over £5 million was committed to a wage subsidy initiative, creating 400 new jobs. Employers willing to offer jobs to former SSI employees, supply chain workers, or the partners/spouses of those affected received time limited financial support.
- *Training:* More than 23,700 courses were completed, with an investment of £11.5 million. Most training was delivered by local colleges and other training providers.
- *Apprentices training and salaries:* All 51 former SSI apprentices were able to complete their apprenticeships. The Taskforce covered 100% of training and salary costs.
- *Safety net fund:* This provided help to people facing severe financial crisis situations. Four hundred and forty-eight households received support to cover mortgage payments, car loans and everyday living expenses.
- *Business support fund:* Growing companies were offered grants from a budget of £16 million to create new job opportunities and help supply chain companies cope with lost revenue and debt. The scheme created 1084 jobs and safeguarded 420 jobs.
- *Business start-up advice and grants:* Over 3000 former SSI workers were helped to start their own businesses. Support ranged from advice on business planning, marketing and finance to grants of up to £10,000 to help with business start-up costs.

Source: SSI Taskforce Legacy Report 2019

Interviews with local political stakeholders suggest that the process of allocating resources was sometimes problematic. That all the money was provided by central government created barriers and bottlenecks – Whitehall’s rules proved to be bureaucratic, cumbersome and inflexible. It sometimes appeared that the BEIS representatives on the taskforce had no independent power of decision and had to refer critical questions to London before action could be taken. In the words of one interviewee: *everything seemed to be so slow.*

This might help to explain why so many people reported financial stress despite the existence of the safety net fund. It might also be the case, of course, that the Taskforce experienced some practical difficulties in determining eligibility. In the period immediately following SSI’s collapse, for example, the Taskforce struggled to get accurate information about the numbers of employees, their personal details and similar information for workers in the supply chain. If the Taskforce found it challenging to identify their target population it is hardly surprising that some people fell through the net.

It was also suggested that the training available was less well targeted than could have been the case. If 2,800 workers were directly affected by the closure and they all had spouses or partners then around 5,600 people were eligible for training support. And if 23,700 courses were delivered, as the Taskforce *Legacy Report* suggests, then on average, each worker must have taken at least four courses.

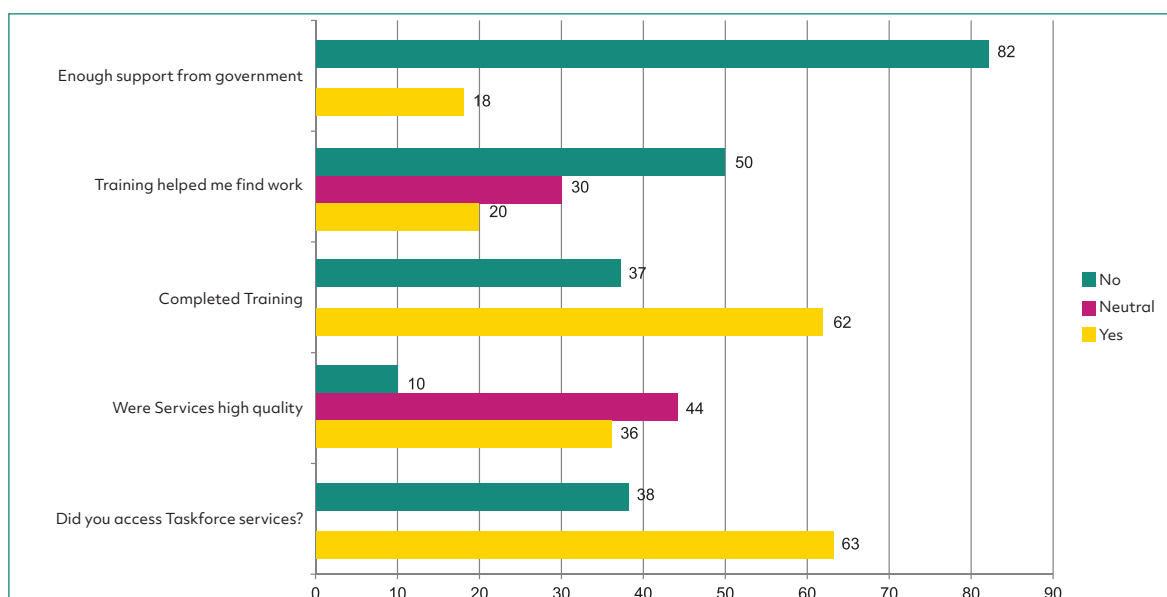
The survey of former SSI employees confirms the widespread availability of training, but calls into question the value of many of these programmes (Figure 5). Indeed, only 62% of survey respondents completed the training which they were offered, which leads to the conclusion that the overall numbers helped were closer to 3,500 and each individual completed around seven courses. Only one in five of those who received training through the Taskforce believed that it had enabled them to find a new job and half believed that the training had done nothing to improve their employment prospects.

Having observed that individuals need tailored support if they are to find a secure job in the future, much of the training effort after the SSI closure seems to have been indiscriminate. There was a poor matching of *existing* skills to labour market demand and less than adequate matching of training and development to *future* employment opportunities. A charitable explanation is that the Taskforce had to proceed at speed and developing a more sophisticated approach would have led to unnecessary delays. A less generous reading of the situation is the local colleges viewed Taskforce funding as an opportunity to increase their revenues and the inability effectively to match people to courses reflected the weakness of the institutional infrastructure. Interviews with individual workers, trade union representatives and local politicians suggest that the situation improved somewhat as the process unfolded. These findings confirm the earlier observation that the government came to the problem with less than adequate preparation, despite the experience of major plant closures in the past.

In addition, there was a very widespread perception that the government had simply not done enough to help former SSI employees, with more than four in five (82%) saying that the support was inadequate. We could read this as a reflection of the anger that the government had failed to intervene and keep the Redcar plant open, but the survey results on the value of training and the findings of widespread financial stress point to problems that were handled less well than might have been expected. Similarly, the experiences of those who used the services of Jobcentre Plus to apply for benefits tend to confirm the perception that “activating” people to look for work is more about coercion than positive support. Interviews with members of the Taskforce indicated that a real effort was made to create a more positive culture at Jobcentre Plus, but local initiatives of this kind were running counter to the direction of national policy and practice, which emphasised benefit sanctions as a penalty for failing actively to seek work. It also took some time for management decisions to take effect.

All of these phenomena offer lessons for the achievement of a just transition in the future. They emphasise the argument that perceived government inaction erodes trust and encourages cynicism. It is in these circumstances that a regressive, nationalist politics can thrive. It is likely that disengagement from the democratic process will continue, with a turn to unconventional political options, unless government shoulders the responsibility for ensuring that workers and their families are protected against the consequences of an unmanaged transition, whether caused by global market conditions, technological developments or a necessary response to climate change.

Figure 5: Workers' assessments of the effectiveness of the SSI Taskforce (% sample)



Source: Community survey of former SSI workers

Could the Closure Have Been Avoided?

An important question, which preyed on the minds of the workers affected by the SSI collapse, was whether the Redcar plant closure could have been avoided? When asked to identify the causes of the closure, four in five of the workers responding to the survey (82%) identified lack of government support for the steel industry and just under two-thirds (64%) referred to the collapse in the steel price. In other words, most of the workforce knew that market conditions were turbulent but still believed that the government had a choice – it could have intervened either to keep the plant open or mothball the blast furnace until trading conditions improved.

Critics of the government's approach to the industry pointed out that in addition to the problems caused by the dumping of Chinese steel¹⁶, the business rate regime increased the industry's costs, the speed of the decarbonisation process was tilting the playing field in the interests of overseas producers and more could have been done through the public procurement process to encourage the use of domestically produced steel¹⁷. Some of these concerns were discussed at a government sponsored steel summit held in October 2015 – but by that time it was too late to save the Redcar plant.

Government policy appeared to be Janus faced, on the one hand suggesting that action would be taken (in line with the steel summit's conclusions) to secure the future of the industry and on the other refusing to intervene to save Redcar because to do so would, in their view, simply provide a bail out to the Thai banks

¹⁶ The Redcar plant closed before the EU imposed duties to prevent the dumping of Chinese steel in European markets.

¹⁷ See, for example, Anna Turley MP, Hansard 17/9/15

to which SSI was heavily indebted. Despite their protests to the contrary, the government appeared to take the view that it was not possible to buck the market, the Redcar site was not profitable, SSI had collapsed and nothing more was to be done. Whether ministers gave any thought to the human and long-term economic cost of the closure is uncertain. They gave no indication at the time that they saw the Redcar site as a national asset or understood the importance of domestic steel production as a public good¹⁸. Most striking, perhaps, is the lack of progress since the steel summit in October 2015. Unions and employers report that no real action has been taken on the areas for action highlighted at that time – the priorities for policy change remain the same for all parties.

Given the subsequent course of events as a result of the Covid-19 pandemic, where government is directly paying the wages of workers covered by the furlough scheme, there is no reason in principle why a more proactive approach could not have been adopted in the SSI case. There is no doubt, for example, that the cost of either mothballing the site for a period or providing the cash to allow full operations to continue would have proved less expensive than the cumulative effects of job losses, redundancy compensation, lower tax receipts and national insurance payments, the impact on the Tees Valley economy and, most importantly (and expensively), making the Redcar site safe, removing toxic materials and creating an environment where redevelopment is possible. By refusing to countenance short-term support from public funds, the government significantly increased the burden on the state in the long term.

Even if the Redcar closure had been avoided, there are still major questions about government policy to be answered. It is all very well seeking the imposition of tariffs to prevent Chinese dumping, but what about the medium to long-term future? There is no evidence, at present, that the government has a strategy for the decarbonisation of the steel industry, no suggestion that there is adequate government support for research and development to achieve that goal, no sign that there is adequate fiscal support for the necessary transformation and complete silence on the question of a just transition. In other words, where there should be policy activism there is currently a policy vacuum¹⁹.

Assessment: Lessons for the Future

We will return to these larger policy questions in the closing section of this report and restrict our observations now to immediate lessons that might be drawn from the Redcar experience.

Industrial change is a constant and public authorities need to be prepared
The closure of the Redcar plant came as a surprise because it happened so quickly

¹⁸ Again, there was a rhetoric reality gap. The government professed to understand the importance of the industry and ministers have made similar claims since the closure. The best that can be said is that action has fallen short of intention.

¹⁹ In August 2019 BEIS issued a consultation document on proposals for a Clean Steel Fund with a budget of £250 million to encourage the decarbonisation of the industry through the application of alternative technologies. A parliamentary answer in March 2020 suggested that the fund was still "in development". Even if it is established, the absence of any reference to just transition and the exclusively technological focus confirms the judgement that the government is unenthusiastic about social partnership. Furthermore, the scale of investment is small when measured against the task in hand and it hardly constitutes a comprehensive strategy for the industry. Contrast this to the €12 million in government support already allocated to the Austrian steelmaker voestalpine AG to manage the transition to clean steel production (see section 4).

and with little warning. Nevertheless, the signs of trouble were clear when the blast furnace was mothballed under Tata's ownership; the impact of Chinese dumping on the steel price was well understood by the workforce. Moreover, the rise and fall of industries is an unavoidable characteristic of capitalism – in the long-term it drives both productivity and prosperity but in the short term it is disruptive to lives and livelihoods. Public authorities at all levels must understand these realities and must be properly equipped to respond. One might see industrial change as a risk to which all public authorities must attend. Almost all public and private bodies today compile risk registers and make contingency plans; responding to industrial change should be no different. Rather than developing an ad hoc response to a major closure after the event, all relevant organisations must be ready to step in and shoulder their responsibilities. It is absurd that the wheel has to be reinvented in response to each Rover or SSI.

What matters most is the overall policy stance since this shapes the context for both preparation and intervention. To date the government has been unwilling to identify “strategic” industries upon whose capacities the prosperity of the nation depends. A pure market driven approach would argue that steel is a commodity traded in global markets and if the domestic industry cannot compete then customers should simply source their steel from abroad. The risk, of course, is that reliance on foreign suppliers leaves the UK dependent on the kindness of strangers to supply an indispensable commodity – indispensable not least because the nation's defence and security depend on access to a supply of high-quality steel, leaving aside questions about security of supply for customers in construction, manufacturing and transport. We return to this issue in section 5.

“Almost all public and private bodies today compile risk registers and make contingency plans; responding to industrial change should be no different.”

Appropriate support for individuals

The support available should be tailored to the needs of individuals. Although improvements took place over time, too much of the training offered by colleges and funded by the Taskforce was generic and did little to enable people to build on their existing skills and find work. The results from the survey suggest that a wiser investment in human capital could have produced better outcomes.

All personal advisers, whether allocated by Jobcentre Plus or through the intervention of a body like the SSI Taskforce, must understand the people with whom they are dealing (generally individuals who have worked uninterruptedly since leaving school), must understand the skills deployed in the job that has been lost and must be able to identify the capabilities that make their clients attractive to employers.

There must also be more emphasis on what people want to do next in their careers. The advantages and pitfalls of self-employment, for example, must be clearly explained along with the financial support available to facilitate a change of career. Jobcentre Plus staff, in particular, must place more weight on the advice and support they offer and much less on the use of benefit sanctions as an incentive to look for work.

Allocated budgets and regional flexibility

A number of interviewees made clear that the centralisation of budgets (Whitehall held the purse strings) slowed down decision-making and limited the scope for a flexible response. We consider the role of regional policy in more detail in the final section of this report. What can be said with confidence now, however, is that the effective management of industrial change depends on decision-makers closest to the ground having access to the resources they need.

Involvement of all stakeholders – the importance of social dialogue

Interviews with former SSI workers suggested that the relationship between the unions and the employer worked well. All the recognised trade unions (Community, GMB and Unite) were viewed as organisations whose legitimacy was not in question. There was regular dialogue, albeit on a conventional range of issues relating to pay and conditions, rather than the more developed discussions about business strategy envisaged in the ILO's Just Transition framework.

The unions played an indispensable role on the Taskforce after the closure, acting as a link to the practical experiences of their members. Improvements in the performance of Jobcentre Plus and efforts to secure a better match between current skills, training opportunities and labour market reality were all influenced by the action of the trade unions. Moreover, Community played an especially important role in ensuring that workers received all the compensation to which they were entitled and enabling people to make informed decisions about their pensions or the possibilities of early retirement. Despite the crisis conditions, the involvement of the unions ensured that the level of unfairness experienced by workers was ameliorated. The transition may have been unjust but, absent the unions' intervention, the injustice would have been much deeper.



4. Take Your Partners: International Experiences of Social Dialogue and Just Transition

Introduction

A consistent theme of this report has been the absence of social partner involvement in the process of just transition in the UK. Historically, trade unions were seen as legitimate organisations by government and employers, with an important contribution to make to economic, industrial and social policy. Much of the institutional architecture was demolished by the Thatcher and Major Conservative governments in office from 1979-97, and no reconstruction project has been undertaken since that period. Other countries have had a very different experience, even those that are often described as liberal market economies,

influenced by British traditions and cultural practices. The most obvious conclusion to be drawn from the material presented below is that the UK can and must do better if the transition to a zero-carbon world is to be achieved successfully.

We will explore examples drawn from four countries, Canada, Germany, Austria and Sweden, seeking to identify the common features and relate the actions taken to the challenges confronting the UK. It is notable that they have all, in their different ways, sought to give practical effect to the ILO's principles that we described in section 1. They all recognise the disruptive effects of change and realise that such changes must be justified and legitimised in the eyes of those affected, while at the same time ensuring that people have access to decent jobs so that community cohesion is maintained. The relative *laissez-faire* stance of the UK government stands in direct contrast to these approaches.

It is important to understand that the UK is not so exceptional that nothing can be learned from other countries – or from our own devolved administrations. The Scottish government, for example, has established a *Just Transition Commission*, which is in the process of preparing its final report. It is not entirely surprising to find Edinburgh developing policies that Westminster will not countenance - after all, the Scottish National Party and the Conservative Party are very different animals - but the reality that such things can be done *within* the UK's boundaries suggests that there is no insurmountable obstacle to a change of approach; a liberal market economy is quite capable of observing the principles of social partnership.

“*the UK can and must do better if the transition to a zero-carbon world is to be achieved successfully.*”

Two of our examples, from Canada and Germany, focus on the move away from coal fired energy generation. Both countries have a larger coal sector than the UK and, to that extent, they have made less progress on the transition path. What distinguishes both cases from the British experience, however, is the conscious use of institutions to accelerate the process and the emphasis placed on the involvement of the communities affected. Our second set of examples, from Austria and Sweden, explore the process of moving to low and zero-carbon models of steel production. In the Austrian case we have the benefit of an interview with the chair of the relevant works council, who places great weight on the involvement of the workforce and their representatives in the process of change.

Any review of international experience comes with the caveat that an effective programme in one country may not work equally well elsewhere. The case made here, however, is not that Canadian or Austrian *practices* can simply be transplanted to the British context and expected to flourish without adaptation. What all these cases have in common is that a shared set of *principles* has been applied which, with suitable modification to the British context, are of equal usefulness in the UK.

Canada: Just Transition for Canadian Coal Power Workers and Communities

Consistent with the commitment to meet the targets specified in the Paris Agreement, in 2016 the Canadian government decided to eliminate all coal fired electricity generation by 2030. The policy framework for carbon reduction is the responsibility of the Canadian federal government, whereas decisions about the structure and regulation of electricity generation are the responsibility of individual provinces.

In 2005, coal was used to produce approximately 16% of electricity in Canada but by 2016 this had fallen to 9%, principally because the province of Ontario had closed all of its coal fired stations. Four provinces have continued to use coal – Alberta, Saskatchewan, Nova Scotia and New Brunswick – and they have all taken different approaches to the ownership and regulation of the industry. Alberta has multiple private companies competing in the market (analogous to the position in the UK), Nova Scotia has a private monopoly in operation and both Saskatchewan and New Brunswick operate public corporations (similar to the situation in the UK before privatisation). By 2018 there were around 2,400 workers in coal fired power generation and 1,500 workers in coal mines that supplied the stations, with a larger number employed in the supply chain.

In February 2018, as a practical demonstration of the commitment to just transition, the Government of Canada established the *Taskforce on Just Transition for Canadian Coal Power Workers and Communities*²⁰. The terms of reference were wide ranging and included engaging with stakeholder groups to explore the impact on affected communities, identifying opportunities for workers to transition to new jobs, using existing budgets to support the transition and highlighting any gaps in the policy framework. Most importantly, the Taskforce was invited to make recommendations to the minister of environment and climate change about the contents of a just transition plan for those involved in both coal mining and coal fired power generation, with a particular focus on minimising negative impacts. It should be clear that this approach is consistent with the ILO's framework discussed in section 1 of this report.

The Taskforce was co-chaired by the president of the Canadian Labour Congress (CLC) (the national trade union centre in Canada) and an environmental campaigner, with additional members drawn from trade unions, employers' organisations, local government and experts in sustainable development. There were 11 members in total and the secretariat was provided by Environment and Climate Change Canada, the relevant government department. Evidence was collected through visits to fifteen affected communities, five power stations, two mines, one port and as many employers as possible in each of these locations. In addition, there were eight public engagement sessions. The final report was delivered in December 2018 and published in February 2019 (Government of Canada 2019).

²⁰ The Taskforce only dealt with coal mines producing for the power sector. They did not examine the future of mines producing coal that was converted to coke for use in the steel industry.

Perhaps the best way to understand the preoccupations of the Taskforce is by reference to their remarks directed to the minister of the environment and climate:

When the government of Canada says it is going to “phase out coal”, coal workers and communities hear that Canada is phasing out their future, livelihood, stability and identity. The impacts of the Government’s decision illustrate that taking action on climate change may come with any number of unintended consequences, including to the mental health of individuals, personal and family finances, and the economic stability of communities (Government of Canada 2019).

Offering a real prospect of a just transition is seen by the Taskforce as the only response that will ensure workers believe they are being treated with respect rather than neglect. According to their account, these workers are in the front line as the first to be directly affected by the government’s carbon reduction programme. A successful transition will signal to everyone that “there is a path forward as Canada takes action on climate change”. In other words, a degree of anxiety is to be expected but offering appropriate support to affected communities means that optimism is rational too.

Seven principles for a just transition have been identified, which again reflect the ILO’s framework:

- Respect for workers, unions, communities and families.
- Worker participation at every stage of the transition.
- A transition to good jobs – in other words jobs consistent with the ILO’s principles of decent work.
- The maintenance of sustainable and healthy communities.
- Planning for the future, grounded in today’s realities.
- Nationally coherent, regionally driven, locally delivered actions.
- Immediate yet durable support.

The Taskforce is clear, additional resources will be needed to ensure these principles are respected. At the time of publication, the government had committed \$35Ca million to the transition process but “considerably more funding, potentially in the hundreds of millions of dollars” will be required.

The Taskforce has essentially recommended a framework in which a just transition plan can be developed; but the report does not constitute, in itself, a comprehensive just transition plan. Nonetheless, the approach government (at all levels), employers and trade unions should adopt is clear: there must be a *national* framework, it must be developed as a *plan* with clear actions attached, the *responsibilities* of the stakeholders should be properly articulated and practical action should be implemented at the *lowest possible level*, by people with a keen awareness of the facts on the ground.

The seven principles are used to frame 10 policy recommendations (Box 4). What is most striking, perhaps, is the extent to which the programme is consistent with the lessons that we might learn from the SSI closure in Redcar. There is an emphasis on individually tailored support with local flexibility in design and delivery, an improvement in the quality of labour market information, with better matching of people to jobs and continuing support, beyond the precise moment of closure, for the affected communities.

Box 4: Recommendations – Taskforce on Just Transition for Coal Power Workers and Communities

Embed the Just Transition principles in public policy

1. Develop, communicate, implement, monitor, evaluate, and publicly report on a just transition plan for the coal phase-out, championed by a lead minister to oversee and report on progress.
2. Include provisions for just transition in federal environmental and labour legislation and regulations, as well as relevant intergovernmental agreements.
3. Establish a targeted, long-term research fund for studying the impact of the coal phase-out and the transition to a low-carbon economy.

Ensure locally available support

4. Fund the establishment and operation of locally-driven transition centres in affected coal communities.

Provide workers with a pathway to retirement

5. Create a pension bridging program for workers who will retire earlier than planned due to the coal phase out.

Transition workers to sustainable employment

6. Create a detailed and publicly available inventory with labour market information pertaining to coal workers, such as skills profiles, demographics, locations, and current and potential employers.
7. Create a comprehensive funding program for workers staying in the labour market to address their needs across the stages of securing a new job, including income support, education and skills building, re-employment, and mobility.

Invest in community infrastructure

8. Identify, prioritize, and fund local infrastructure projects in affected communities.

Fund community planning, collaboration, diversification and stabilisation

9. Establish a dedicated, comprehensive, inclusive, and flexible just transition funding program for affected communities.
10. Meet directly with affected communities to learn about their local priorities, and to connect them with federal programs that could support their goals.

Source: Government of Canada 2019

It would be premature to judge whether the Taskforce's recommendations will be implemented fully or whether they are sufficiently robust to withstand a change of government in Canada²¹. What can be said with confidence, however, is that the simple existence of this framework offers real potential for the future and stands in stark contrast to the absence of planning and preparation in the UK. Much will depend on the capacities of government and on the capabilities of trade unions and employers, about which some uncertainty remains. The Taskforce has been clear, nonetheless, that an approach of this kind will be required across the whole economy as the decarbonisation process proceeds. The report is not at all prescriptive and accepts that in the future just transition frameworks could be either issue/policy based (the closure of coal mines and coal fired power stations) or sectoral/industrial (the development of a zero-carbon electricity generation sector, a zero-carbon steel industry). What remains non-negotiable, in their view, is the need for extensive dialogue and community engagement as the foundation on which a just transition must be built.

Germany: The Commission on Growth, Structural Change and Employment

The German electricity generation sector confronts much the same problem as we have found in Canada and the UK. Maintaining the status quo will leave Germany as a laggard in the effort to reduce carbon emissions and urgent action is necessary to meet the objectives of the Paris Agreement. There is a particular problem with the burning of lignite or brown coal, which generates more pollutants than hard coal (not simply CO₂) and was widely used as the principal source of heat and power in the former German Democratic Republic (East Germany). By 2015 hard coal and lignite together generated around 30% of Germany's electricity (in a 50:50 ratio), having fallen from around 50% in 1970. There was a process of managed decline through to the middle 1990s, largely as a result of German reunification, since when the role of coal in the German energy mix has remained stable. But policymakers, having accepted the Paris commitments, understood the significant difference between managing decline and proposing completely to close an industry, not least because the next steps in the process could cause even greater disruption than had been the case hitherto.

In response to these concerns, in June 2018, the German federal government established the *Commission on Growth, Structural Change and Employment*, generally known as the Coal Commission. The Commission was asked to complete its work in a very short time. It produced an interim report in the autumn of 2018 and published a final report in January 2019.

There are some striking contrasts with the Canadian case. First, the Coal Commission was large; it had 31 members, only three of whom were trade union representatives. It would be challenging to describe the Commission's work as a practical application of the principles of social partnership alone. The intention, perhaps, was to embrace the widest possible range of interests, including representatives of the regions affected, energy users, energy suppliers, environmental campaigners, scientific experts and trade unions. Second, it was tasked with developing a *closure plan* for the whole industry and was *not only*

²¹ The previous Conservative government, in office from 2006-2015 was unenthusiastic about social dialogue.

focused on the conditions under which a just transition could be secured. Third, the Commission produced an analysis of the economic impact on the affected communities that constituted a comprehensive programme, emphasising the importance of industrial and regional policy.

Even though the expression just transition is not used in the Commission's report, the intentions are plain, consistent with the Canadian model and very different from the absence of government intervention that characterises the situation in the UK:

*The reduction and ending of coal-fired power generation...can only succeed and give a good example if a range of requirements are reconciled. These include the retention and creation of new **jobs protected by collective labour agreements** [my emphasis] in the regions affected, the affordable supply of power and heat at all times, and the preservation and ongoing development of coal-mining areas to ensure that they continue to remain liveable, attractive regions (Commission on Growth, Structural Change and Employment 2019)*

The explicit challenge is to create a consensus for change in which the role of all actors (including the unions) is accepted as legitimate. As with the Canadian case, securing a successful coal transition is viewed as an exemplar for the rest of the economy as decarbonisation begins to affect other sectors. And the ambition goes further than that: if Germany manages the process well the rest of the world may take note and learn from the experience. Reference is made to the failed effort to integrate the former GDR into the economy of a unified Germany, where unnecessary economic and social disruption produced damaging political consequences. The message is clear: this time things must be different.

Most impressive, perhaps, is the analytical scope of the Coal Commission's report. It identifies the 20,000 direct jobs that will be affected, with more in the supply chain, describes the current industrial structure of the affected regions and explores the extent of demographic change, the number of business start-ups, the inadequacy of transport infrastructure, current levels of innovation and the extent to which the skills and capabilities of the affected workers create potential for re-employment in a growing energy sector in the future. A detailed account is provided of the economic contribution of coal mining and energy generation along with the impact on tax revenues if the transition is managed badly. There is a clear-sighted view of the costs of failure. An important feature of the report is the establishment of a timetable for the transition. A step-by-step closure process is envisaged with benchmarks set for 2022 and 2030. The final phase-out of coal is fixed for 2035 if possible and by 2038 at the latest.

Because the affected regions already have well-developed energy infrastructure, it is suggested that they can become innovation centres for the development of alternative energy sources, with a particular emphasis on CCS technologies and green hydrogen. The prospect is optimistic – in the Commission's view a successful transition means these regions will be pioneers. We observed that the prevailing sentiment of those affected by the Redcar closure was nostalgia – the Tees Valley has an honourable history and an uncertain future. For the Coal Commission, there is a real possibility that the future can be just as good as or better than the past. Workers will continue to have worthwhile, well-rewarded jobs that engender a sense

of pride and self-respect. This depends, of course, on government at all levels, trade unions and employers being willing to shoulder their responsibilities.

The Coal Commission is a practical demonstration of an approach that could have been applied at a much earlier stage in the UK's transition from coal fired power generation. It is true to say that Germany has made less progress to zero carbon energy than is the case in the UK today, but the struggle to forge a consensus on how to move forward shows "what might have been" here if the British government had taken similar action.

There is also a recognition that the decarbonisation process demands extensive public investment and public subsidies to support the transition. Around €1.5 billion has been allocated in the current federal budget and the Commission has proposed that an agreement should be reached with the relevant lander (German states) on how these funds can be deployed to support a programme of structural adjustment to 2021. There are two other budgetary proposals of particular importance. First, the Commission has suggested an annual national budget allocation of €1.3 billion for 20 years "to finance individual projects...in the federal states affected by a premature phasing-out of coal fired generation". Second, there is a proposal for a further annual allocation of €0.7 billion for 20 years, to "create the ability to react flexibly to projects and requirements for structural assistance that are not foreseeable today". These are substantial sums matched to the scale of the challenge, which exceed anything the UK government has proposed so far for any single sector in the pursuit of "levelling up"²². The message here is clear too: if a government is genuinely committed to a just transition then it needs properly to fund the process.

“The explicit challenge is to create a consensus for change in which the role of all actors (including the unions) is accepted as legitimate.”

German unions were represented on the Commission by the DGB (the umbrella organisation for trade unions in Germany), the Industrial Workers' Union for Mining, Energy and Chemicals (IGBCE) and the United Services Trade Union (ver.di). This was a new experience for the individuals involved, not least because trade unions were unfamiliar with an enterprise focused on the closure of an entire industry. Similarly, consistent with our previous observations, the union representatives found themselves as three members of 31, whereas in normal circumstances they would have been on an equal footing with employers' representatives. Building trust between the diverse members of the Commission demanded a particular effort and the use of issue focused working groups

²² For a longer discussion see Davenport and Zarenko, Chapter 7, *IFS Green Budget 2020* (IFS 2020). It is important to note that the Coal Commission is focused on a single sector. There are no comparable programmes in the UK, some of the funding streams that might contribute to levelling up are due to expire at the end of the current year and the resources allocated in the future will depend on how the government responds to the fiscal consequences of the Covid-19 pandemic.

helped in that process. Areas of agreement were identified rapidly so that proper attention could be given to those questions where conflicts had to be resolved. The DGB member of the Commission highlighted the important intermediating role played by organised labour, with the unions acting as a conduit for dialogue between employers and representatives of environmental NGOs (ITUC 2019). It was also a real achievement to reach agreement on a comprehensive, integrated package. In the words of the DGB member of the Commission: “Cherry picking is not allowed – this applies both to the government and the unions” (ITUC 2019).

Despite the apparently large budget allocations proposed by the Commission, the unions have questioned whether, in practice, the resources available will prove adequate. In the DGB’s view there is a mismatch between the annual €4 billion economic contribution made by the lignite mining industry and the €40 billion allocated over a 20-year period for the structural transition. It is important to ensure that the benchmarks of 2022 and 2030 are met at the same time as a just transition is achieved. In this context, the DGB argues, it makes sense to review budgets in the future if it becomes clear that workers’ expectations are not being met.

As with the Canadian case, the German Coal Commission has established a framework for transition. It is not an example of a successful *completed* transition and everything depends on implementation. What the Commission has done successfully, however, is set the stage on which the various actors in the transition play their roles. Some fundamental features of the German system will facilitate the process, not least the presence of workers in the boardroom (through their membership of the supervisory boards of the coal producers and energy generators), the widespread application of collective agreements and the rights of information and consultation guaranteed to members of works councils (codetermination, to use the technical expression). Workers and their representatives have a reasonable expectation that employers will be transparent in their planning processes, take workers’ representatives into their confidence before critical decisions are made and co-operate with trade unions and works councils on retraining programmes for those affected by closures. In other words, the strength of the industrial relations institutions cuts with the grain of the Coal Commission’s recommendations. Collective bargaining and social dialogue, consistent with the Commission’s express intentions, will be an integral part of the transition process.

Sweden: Prospects for a Just Transition in Steel?

Steel, as we have already observed, is an indispensable commodity. Unlike the transition in coal mining and power generation, where the goal is to close down all operations, the objective in steel is to secure a technological transformation so that the industry can meet its climate obligations at the same time as it maintains its ability to compete in global markets. The next two case studies explore how this transformation is being handled in Sweden and Austria, both of which, unlike the UK, have well developed social dialogue institutions and widespread coverage of collective bargaining; although, as we shall see, in Sweden this does not necessarily give the unions extensive leverage beyond the limits of industrial relations as narrowly defined.

A conventional view of the Swedish system would conclude that both unions and employers are well placed to manage the transition to a low carbon world. Indeed, it is often argued that, historically, Swedish unions have conceived their role as both protecting workers and *accelerating* the process of industrial change to achieve higher productivity growth and higher pay for workers. The collective bargaining system enhanced the position of competitive and profitable enterprises, which could afford to pay the (high) negotiated wage rates, at the same time as it disadvantaged less productive businesses by, essentially, forcing them to close. All this took place in an environment where the government maintained a commitment to full employment and invested heavily in active labour market programmes so that workers who found themselves without jobs could be retrained and re-employed swiftly. This description, however, has been less than wholly true for at least thirty years. Swedish unions now confront the same global pressures as their counterparts elsewhere and the “Swedish Model” looks a little threadbare when judged against its performance in its classical period²³. Moreover, a model focused on productivity and wage growth may be poorly adapted to dealing with the climate imperative – where the focus is on achieving the complete closure of some activities and a rapid technological transformation in others (beyond the limits of remaining competitive in the market) to achieve carbon reduction targets mandated by government. Both employers and unions may need to rethink how they manage their relationships in the future.

The steel industry accounts for about 10% of Sweden’s CO₂ emissions, with 13 plants, 26,000 employees and three blast furnaces. In 2013 the steel employers’ association, Jernkontoret, published their strategy document, *Steel Shapes a Better Future*, which was followed in 2015 by a more detailed roadmap, which aims to achieve a net zero carbon steel industry by 2045. The important point here, perhaps, is the existence of a *national* strategy, agreed by employers at sectoral level and endorsed by the government as consistent with the achievement of the 2045 target.

In 2016 SSAB, which is Sweden’s largest steel producer, formed a partnership with the state-owned mining company LKAB and the energy company Vattenfall (also state owned) to explore the feasibility of replacing the coke used in blast furnaces with hydrogen. We have already referred to the potential of this technology and we will see that it is also being used in the Austrian example considered below. The intention at present is that the company will replace one of its existing blast furnaces with an electric arc furnace in 2025-27, reducing CO₂ emissions by 25%. By 2025 small demonstration plants should be in operation to explore whether the hydrogen reduction technology is feasible and, if it proves to be so, the company will apply the new system on a scale to ensure that the 2045 target is met. It is noteworthy that Sweden embarked on this journey five years ago, whereas the UK government is still struggling with the design of the proposed Clean Steel Fund (see section 3).

There are number of additional considerations that will influence the success of the programme. First, the production of hydrogen requires a supply of cheap renewable energy – and energy prices will determine whether the method allows the steel industry to remain profitable. Second, even if the energy price is fixed

²³ Although union membership and collective bargaining coverage are exceptionally high by international standards.

appropriately, it is likely that the costs of “green steel” will be higher than for steel produced in conventional blast furnaces. This raises questions about how environmentally friendly production can be protected against the dumping of cheaper steel from countries that have made less progress in cleaning up their industries. Trade policy and environmental policy may prove to be in conflict unless careful diplomacy produces a new framework of fair global rules, consistent with open trade *and* the protection of the planet.

A study dating from 2019 highlights the challenges that a just transition in steel poses for Swedish unions and employers (Vogl et al 2019). In the SSAB case, for example, the replacement of a blast furnace with an electric arc furnace will lead to significant jobs losses – the production system simply requires fewer employees. This is a proven technology; the skill and labour requirements are well known and it could be viewed as precisely the kind of productivity enhancing development with which trade unions are familiar. In other words, a change of this kind is firmly within the competence of Swedish trade unions, employers and government.

The introduction of hydrogen reduction technology is not only more speculative but also poses a series of questions that are probably unanswerable today. What skills will be required of the steelworkers of the future? How many workers will the employer require? What will be the impact on the communities affected? The potential pitfalls in failing to find compelling answers that also give workers a meaningful sense of security should be obvious.

Despite the perception that Swedish collective bargaining institutions remain effective (union membership density was 65% in 2018 and 90% of Swedish workers were covered by a collective agreement), the 2019 study suggests that the agenda pursued by employers and unions at company level is still rather conventional – focused on pay and conditions of employment and a quest for consensus rather than a high-level dialogue about the future of the enterprise. This should be contrasted with the climate policies pursued by LO Sweden (the national trade union centre for manual workers’ unions) and IF Metall (which organises steelworkers), both of which evince a strong commitment to the 2045 net zero carbon policy. In other words, there is an apparent disjunction between national policy and workplace reality which, if not addressed, will make it more difficult to achieve a just transition. There is a risk here for both the unions and the employers. For the unions, a gap between leaders and members can undermine the legitimacy of national policy – and the union’s legitimacy in the workplace. And for the employers, a gap between members and leaders can make it much harder to agree a workable plan with the unions. The intention, as we have seen in the Canadian case, must be to ensure that the workers affected have a voice in the process and have confidence that they will receive the support they need as the transition unfolds.

This is particularly important when the impact of the transition on workers’ identities is considered. We have already seen this in relation to the Redcar closure, where the history of steelmaking in the Tees valley was a source of pride and self-respect – it told people something about who they were, rooted them in a community and gave them a compass to navigate the world. But what happens, for example, if the public conversation about carbon reduction stigmatises some industries as climate vandals (no matter what they may be doing to act as good citizens) at the same time as workers in these sectors are losing their jobs? The sense

of loss can be cultural as well as economic and might lead to unforeseen political outcomes. What is most useful, perhaps, about the Swedish study is that it draws our attention to these features of industrial change, emphasises the importance of social dialogue and suggests that more attention should be devoted to how workers *feel* about change, both when it is happening and subsequently. To a degree, we can see a similar concern in the narrative presented by the German Coal Commission, where creating worthwhile jobs and presenting an optimistic (but realistic) prospect for those displaced by carbon reduction is seen as a source of community cohesion and a bulwark of economic and political stability.

Austria: Preparing for the technological transition at voestalpine

Our Austrian example is the steelmaker voestalpine AG. From one standpoint this is very similar to the Swedish case of SSAB, in that the company is seeking to develop hydrogen reduction technology as an alternative to the use of coke, with a view to achieving zero CO₂ steel production by 2050. The difference, however, is in the role played by the trade unions and the works council, where engagement on major questions of business strategy appears more developed than in Sweden.

As with all European steel producers, voestalpine is committed to significant reductions in CO₂ emissions and appreciates that the potential of conventional technologies is exhausted. Three linked options are currently being pursued. First, the use of natural gas as a reduction agent, replacing coke, with the possibility that natural gas can be replaced by hydrogen in the future. Second, a renewable hydrogen electrolysis project that is seeking to develop the technology on an industrial scale, so that the gas can be supplied in sufficient quantities to support large scale primary steel production. At present most hydrogen is derived from natural gas, whereas the experimental plant will produce hydrogen from water. Third, the breakthrough technology of SuSteel, or sustainable steelmaking, to reduce iron ore using hydrogen plasma, which depends on the successful development of hydrogen electrolysis. As in the Swedish case, voestalpine have suggested to policymakers that the decarbonisation process can only work if there is access to a supply of cheap green electricity. They point out, for example, that the equivalent of 50,000 wind turbines will be needed to meet all the energy requirements of a clean steel industry in Europe. In other words, a transition to clean steel is only possible with the simultaneous expansion of green energy. Establishing the right policy and regulatory framework is critical to the survival of the European steel industry.

As has already been noted, these technologies are not yet proven on an industrial scale and voestalpine is committed to a programme of long-term investment that may not bear fruit for thirty years. In these initial stages of the project the company has received €12 million from the EU to support the research and development process and it is likely that further investment of public funds will be essential if the project is to realise its promise. Much depends on policymakers at national and European level understanding these realities.

According to the chair of the voestalpine works council, the employer has been open with the workforce about the proposed path from the outset. There is still an element of uncertainty about the likely outcome because the technologies have not yet been operated successfully in a commercial setting and the funding and regulatory environment remain in a state of flux. Nonetheless, workers' representatives who sit on the company's supervisory board have been fully apprised of progress and there have been regular discussions with the works council too²⁴. The company, unions and works council have presented a united front in making the case for the steel transition and in emphasising the importance of proper attention being paid to the impact on the communities in which voestalpine operates. In the words of the chair of the works council: "Currently, the future of tens of thousands of attractively paid jobs is at stake". Even though the schedule for progress is only roughly defined, there is clarity about the destination and workers representatives have a guaranteed seat at the table as events unfold.

“voestalpine is committed to a programme of long-term investment that may not bear fruit for thirty years.”

Moreover, the risks for employees are clear and well understood by the works council. If the technologies either fail or production proves too expensive then steel will be either sourced from outside Europe or only production from scrap (which does not require the reduction of iron ore) will be possible. On the other hand, if the programme works then the employers' skills requirements will change quite fundamentally – at the end of the process there will be very different people doing very different jobs. The advantage for the works council, however, is that the process is gradual, leaving ample time for preparation. They have already prioritised skills acquisition in IT and digital technologies as well as foreign languages (notably English). The goal is to remodel the content of a standard apprenticeship in the future to include all of these skills.

Because the programme is long-term and relatively slow moving, redundancies seem unlikely. To date, however, no discussions have taken place on the details of workforce planning as the transition develops. It is unclear, therefore, how many people voestalpine will employ in 2050 (if the transition is successful) or what kind of jobs they will be doing. The institutional arrangements in place today will ensure that trade unions and members of the works councils are properly informed about likely developments and can respond appropriately. In other words, there is a capacity to *anticipate* change, consider what the implications might be for the workforce and the wider community, and seek the support of government if necessary. There is a regular dialogue with policymakers about the progress of the project and decision makers at local level are aware of both the risks and opportunities. To that extent, the arrangements that were conspicuously absent in the case of the Redcar closure are well established here.

²⁴ The chair of the works council at the Linz plant (which is the proposed location of the experimental hydrogen facility) is also a member of the supervisory board.

Prediction is always difficult, but the chair of the works council is more optimistic than pessimistic. In his view voestalpine will continue to offer high quality employment, with a skilled and well-rewarded workforce. He rejects the idea that only graduates will be employed in the future because “we will still need skilled workers who know how to operate machines and systems”. Tacit knowledge, acquired through experience is just as important as formal learning, but what will be even more important, in the future is “a diverse group of skilled workers with the willingness to learn and change”. Contrary to the frenzied concern about the impact of automation of jobs, to date voestalpine has witnessed no significant reduction in employment. Instead, automation may destroy and create jobs at the same time. After all, somebody has to maintain the intelligent machines.

What is most striking about these responses, perhaps, is the confidence they express in the role of the works council as a representative institution. There is no suggestion that the employer sees informing and consulting the workforce as a necessary evil, or that some decisions should be made behind closed doors. Openness and transparency appear to be the golden thread woven into the relationship between voestalpine and the works council, which offers much promise in what could prove to be a challenging enterprise.

Prospects for the UK: Is Scotland Breaking New Ground?

Throughout this report we have noted the absence of an overarching UK wide policy framework for the achievement of a just transition. There is no comprehensive statement explaining how the interests of workers are to be safeguarded, nothing as sophisticated as the analysis of the German Coal Commission explaining how the closure of an industry can be used as a spur to regional innovation and no examples of the strategic dialogue on industrial change (along with day-to-day negotiation of the details) that we have described at voestalpine. What this means for future policy is considered in the final section of this report. At this point, however, it is worth noting that one part of the UK, Scotland, has adopted an approach much closer to the international examples presented here.

The Scottish Government appointed the *Just Transition Commission* in September 2018 and it has 12 members – including two trade union representatives. A final report is scheduled for publication in January 2021 and an interim report was published in the autumn of 2019. It is clear from the beginning of the interim report that the Commission is applying the ILO’s principles in framing its activities. Evidence has been collected through formal submissions and visits to communities (reflecting the practice of the Canadian Taskforce).

The Commission has not been afraid to criticise the Scottish government’s performance, most notably in relation to the closure of Longannet, Scotland’s last coal fired power station. Although a task force had been established to minimise the impact on those who lost their jobs there was some dissatisfaction in the wider community about the way the process had been handled. In the Commission’s words:

While Government should always aspire to plan strategically ahead for structural shifts which will inevitably happen, ... we recognise that responding

to events as they develop is sometimes inevitable. However, even in these situations community voices must be central in considerations of any response from the public and private sectors. It was clear to us that, in this specific instance, the expectations of the local community were not met and an opportunity to address questions of local economic development may have been missed (Just Transition Commission 2019).

The Commission's judgement on this question is entirely consistent with our assessment of the SSI Taskforce, discussed in section 3²⁵.

No doubt the final report will contain a systematic statement of how a just transition for Scotland can be secured. What is clear from the interim report, however, is that sectoral transition plans should be prepared containing specific actions to be taken by government, developed jointly with "industry, trade unions, consumer groups and other stakeholders". Moreover, a determined effort should be made to engage with citizens and ensure that equity is placed at the heart of the Scottish Government's approach to just transition.

The Commission neatly summarise their overall approach as follows:

The imperative of a just transition is that governments design policies in a way that ensures the benefits of climate change action are shared widely, while the costs do not unfairly burden those least able to pay, or whose livelihoods are directly or indirectly at risk as the economy shifts and changes (Just Transition Commission 2019).

Inevitably, the focus here is on the climate, but the Commission's core argument is applicable to all disruptive industrial change, whether a result of global market conditions, technological developments or the imperative to decarbonise the economy. Whether this principle can be applied to the UK as a whole and what this might mean for policy and practice is the issue to which we now turn.

25 At the time of writing there was a rising level of concern about the gap between the Scottish government's rhetoric and the realities of implementation. The government is a part owner of a Bifab, a business deliberately designed to supply materials for the offshore renewables programme. Yet despite the government's participation, the decision has been made to import these materials. Not only does this cast doubt on the commitment to green manufacturing in Scotland, but it raises questions about the UK steel supply chain too – because steel made in Scunthorpe and rolled at a plate mill in Motherwell was supposed to be used by Bifab. Perhaps the Just Transition Commission's observations about Longannet have implications for policy more generally. Consistency and long-term commitment are essential. Institutions are important, but they have to be vehicles for action, not talking shops.



5. What Is To Be Done? An outline agenda for policy and practice

Introduction

Throughout this report, the argument has been made that the ILO's just transition principles can only be applied in practice through strong institutions of social partnership and social dialogue – institutions that are largely missing in the UK today. The international case studies have demonstrated the diversity of options available to policymakers, but they all depend on structures that build trust between the parties and ensure that disruptive change is justified and legitimised. The commitment to progress through consensus is a common theme. Most importantly, perhaps, the desire to ensure an *equitable* transition is at the centre of all these examples. There is an understanding that all industrial change, whatever its motivating force may be, has costs and benefits. Abandoning the losers to their fate is not just unfair, but inconsistent with the maintenance of social cohesion and democratic participation. Given the extent of the challenges confronting the UK today – the economic crisis precipitated by Covid-19,

Brexit and the climate imperative – the notion that solutions can be imposed by politicians in Westminster is less than convincing. Policy makers will need to be honest about the choices confronting the nation, open about the dilemmas they face and willing to listen to a plurality of views before critical decisions are taken. There is a strong case for saying, drawing on the findings of this report, that the structures of governance (both political and corporate) are unfit for purpose in a rapidly changing world. Addressing all of these problems is beyond the scope of this discussion; the proposals presented here are unavoidably incomplete and are designed to provoke a conversation. Much more work is needed before it can be said that the UK has a comprehensive just transition programme ready for immediate implementation.

“Policy makers will need to be honest about the choices confronting the nation, open about the dilemmas they face and willing to listen ... before critical decisions are taken.”

To begin with, we consider the current state of policy and institutions relevant to the notion of just transition. The lessons from the coal fired electricity generation and steel case studies are then explored before we turn to an outline agenda for the future, identifying five institutional gaps that demand attention. Finally, some ideas are presented about the importance of citizen participation in the process of managing the adaptation to a net zero carbon economy alongside other disruptive industrial transitions.

Policies and Institutions

While this report has been highly critical of the institutional weaknesses of the current dispensation and the partial nature the policy framework, it would be wrong to say that there is a *complete* absence of either policies or institutions. Most notably, for example, the prime minister announced his ten-point plan for a so-called green industrial revolution in November 2020 (Box 5). While these measures have been criticised for being aspirational rather than practical and the resources available often reflect previous spending promises rather than new funding streams, there is at least a rhetorical commitment to action that can be used by trade unions and climate campaigners as a foundation for a more radical programme.

Box 5. The government's ten-point plan for a green industrial revolution

1. Offshore wind: Producing enough offshore wind to power every home, quadrupling how much we produce to 40GW by 2030, supporting up to 60,000 jobs.
2. Hydrogen: Working with industry aiming to generate 5GW of low carbon hydrogen production capacity by 2030 for industry, transport, power and homes, and aiming to develop the first town heated entirely by hydrogen by the end of the decade.
3. Nuclear: Advancing nuclear as a clean energy source, across large scale nuclear and developing the next generation of small and advanced reactors, which could support 10,000 jobs.
4. Electric vehicles: Backing the UK's car manufacturing bases including in the West Midlands, North East and North Wales to accelerate the transition to electric vehicles, and transforming the national infrastructure to better support electric vehicles.
5. Public transport, cycling and walking: Making cycling and walking more attractive ways to travel and investing in zero-emission public transport of the future.
6. Jet Zero and greener maritime: Supporting difficult-to-decarbonise industries to become greener through research projects for zero-emission planes and ships.
7. Homes and public buildings: Making homes, schools and hospitals greener, warmer and more energy efficient, whilst creating 50,000 jobs by 2030, with a target to install 600,000 heat pumps every year by 2028.
8. Carbon capture: Becoming a world-leader in technology to capture and store harmful emissions away from the atmosphere, with a target to remove 10MT of carbon dioxide by 2030, equivalent to all emissions of the industrial Humber today.
9. Nature: Protecting and restoring the natural environment, planting 30,000 hectares of trees every year, whilst creating and retaining thousands of jobs.
10. Innovation and finance: Developing the cutting-edge technologies needed to reach these new energy ambitions and make the City of London the global centre of green finance.

Source: <https://www.gov.uk/government/news/pm-outlines-his-ten-point-plan-for-a-green-industrial-revolution-for-250000-jobs>

Most striking, perhaps, is the government's generally optimistic tone. There is no reference to the likely costs to workers, no understanding that change might be seen as disruptive (and potentially regressive for the individuals and households affected) and no reference at all to the principles of a just transition that have been widely adopted by other countries. The UK government may have achieved

much greater clarity in describing *what* it plans to do, but has been largely silent about *how* these policies will be implemented. In particular, insufficient attention is given to the process through which change takes place and there is no clarity at all about how the government plans to enlist public support for a policy prospectus that is self-evidently necessary but carries with it risks as well as opportunities, especially for communities that have been most adversely affected by industrial change over the last forty years.

Shortly after the announcement of the ten-point plan, the government appointed a *Green Jobs Taskforce*, which is intended to ensure that the UK has a workforce with the necessary skills to sustain growth in a net zero carbon economy (Box 6). Again, the tone offers a rosy prospect for the future and there is at least some reference to the impact on those sectors that are likely to experience negative impacts resulting from a move away from fossil fuels. But this hardly constitutes a fulsome declaration of support for social dialogue or the involvement of citizens and workers in the process of change that we have seen in the Canadian and German cases. Moreover, the likely impact on *workplaces* is, at this stage, conspicuously absent and there is, apparently, no appreciation of the reality that most British workers cannot speak up, be heard and influence their employers' decisions (Coats 2020). By way of contrast, in the Austrian and Swedish examples described above, trade unions and works councils have extensive opportunities for day-to-day involvement in the process of change and a guaranteed seat at the table when strategic choices are being made. The lesson should be clear; a well-developed climate policy has to consider the implications for industrial relations policies and institutions, nationally, sectorally and in the workplace – that is why social dialogue and worker participation sit at the centre of the ILO's approach to delivering a just transition.

Box 6. Objectives of the Green Jobs Taskforce

1. Ensuring the UK has the immediate skills needed for building back greener, such as in offshore wind and home retrofitting.
2. Developing a long-term plan that charts out the skills needed to help deliver a net zero economy.
3. Ensuring good quality green jobs and a diverse workforce.
4. Supporting workers in high carbon transitioning sectors, like oil and gas, to retrain in new green technologies.

Source: <https://www.gov.uk/government/news/uk-government-launches-taskforce-to-support-drive-for-2-million-green-jobs-by-2030>

No doubt some of the recent activity is designed to ensure that the UK is well-positioned for the UN Climate Change 26th Conference of the Parties (COP26), scheduled to be held in Glasgow in November 2021. The government would be well advised, however, to learn from the experiences of others as much as they trumpet the UK's progress towards a net zero-carbon world.

That more remains to be done, beyond the recent announcements, is clear from the report to Parliament of the Climate Change Committee (CCC 2020a). Established under the Climate Change Act 2008, the CCC is a permanent,

statutory body, the purpose of which is to advise the UK and devolved governments on emissions targets and report to Parliament on progress made in reducing greenhouse gas emissions. It also offers periodic assessments of the government's preparations for climate change along with adaptations to minimise negative effects. The most recent report is critical of the government's progress to date, recalling that in 2019 the CCC concluded "the UK government has placed insufficient priority on the need to prepare for a changing climate". Their current assessment is that most of the areas where action is needed have elicited either low or medium quality responses – although that judgement predated the government's most recent announcements.

For our purposes, the question is whether the CCC, as currently constituted, can play a bigger role in ensuring a just transition? Certainly, the Committee has placed fairness at the heart of its deliberations, and their 2020 report is peppered with references to the importance of a just transition, calling on government to incorporate the notion into the climate change policy framework – although to date these pleas seem to have fallen on deaf ears. Moreover, the CCC specifically identifies the Scottish *Just Transition Commission* as a valuable initiative that will entrench equity concerns in the process of climate adaptation and progress to net zero. It is notable, however, that no members of the CCC are experts in industrial relations, none appears to have a sophisticated knowledge of the notion of social partnership and there must be some doubt whether, acting alone, the CCC can take full responsibility for securing a just transition. Indeed, that would almost certainly be to ask too much of a committee that already has a very wide brief, reviewing all government climate initiatives, offering advice and making recommendations about how the pace of progress might be accelerated.

The case for some innovation to plug an obvious institutional gap is very strong. Most importantly, perhaps, there must be new machinery at national, sectoral and workplace level to ensure that the CCC's concern with fairness is implemented in practice by all actors with the power to do so. Initially, the government must bring together representatives of employers, unions and others in a dialogue that makes the notion of a just transition more than just soothing rhetoric²⁶. Taking account of the CCC's critique and the experiences of other countries, we might therefore identify five institutional gaps in the UK's framework, all of which need to be filled if a just transition is to be secured:

- National dialogue on the principles of just transition and practical implementation measures.
- Sectoral dialogue to develop a shared approach to just transition, engaging employers, unions and other parties with an interest.
- The devolution of power and resources to decision makers at regional and local level, consistent with a national framework for the delivery of policy.
- A comprehensive framework for the involvement of workers and their representatives in processes of workplace change.
- Obligations on listed companies to report their performance on a number of environmental indicators alongside a comprehensive account of the management of the workforce to secure a just transition.

²⁶ This, of course, was the inspiration for the German Coal Commission.

Lessons from coal fired electricity generation and steel

Before we begin to sketch out the possibilities for the future it is worth returning to the international case studies and their UK counterparts, not least because they suggest how an economy wide approach to managing all industrial transitions might be developed. Climate change is somewhat different from the disruption resulting from global competitive markets and technology, principally because the goal (net zero by 2050) is mandated by public policy. But the case remains that disruption, as experienced by workers, is disruption, whatever its source happens to be. If the climate imperative can be used to develop new models of dialogue in the UK between employers, workers and their trade unions, then those approaches may prove equally applicable to all forms of industrial adaptation. It might be possible, after much trial and error, to develop practical and effective responses to the creative destruction that, according to Joseph Schumpeter, is the essential characteristic of capitalism (Schumpeter 1943).

Lessons from coal fired electricity generation

Our consideration of the closure of four coal fired power stations has highlighted a number of obvious contrasts with international experiences. At no point were issues of just transition explicitly considered, beyond ensuring that workers were compensated for job loss. There was no dialogue between government, employers, and unions about a strategy for closure as an essential element of energy policy, no framework for managing the closure process at company level, and a wide diversity of approaches applied at individual sites. The overwhelming impression is of a policy vacuum, with nothing beyond a commitment to achieve the closures by 2025 within the constraints of a regulated energy market. Of course, there was some consultation with Prospect and other trade unions on individual sites, but the focus was almost exclusively on redundancy payments, early retirement and the protection of pensions.

The Canadian and German case studies demonstrate that a very different approach could have been adopted. There could have been a national effort to develop a proper closure plan. A Commission could have been appointed with terms of reference similar to the Canadian taskforce (focused on the implications for workers and affected communities) or the German Coal Commission (with a remit to consider regional development and the creation of new jobs), which might also have been invited to offer guidance on the principles for dialogue between employers, unions and other workers' representatives at company and workplace level. Of course, this would have required the government to act very differently and accept that a just transition requires the participation of those who may otherwise be adversely affected. It would have demanded an acceptance of the principle that listening to trade unions, workers and communities is indispensable in any process of industrial change.

A further clear lesson from the German experience is the need for integration across several domains. In that case the regional impact was given detailed attention, with extensive reference to the inter-dependency of skills policy, industrial policy, innovation policy and industrial relations policy. Most importantly,

perhaps, the social dialogue institutions in Germany guarantee that workers' voices are heard at all levels as the closure plan unfolds. The DGB played an important national role in the Coal Commission; implementation depends on the action of state governments (länder) as well as the federal government; the collective bargaining system gives trade unions real influence at sectoral level (both federally and regionally); and the codetermination system (worker representation in the boardroom and the workplace) will ensure that workers' interests are weighed in the balance at company and workplace level too.

Similar conclusions can be derived from the Canadian experience – the Taskforce has developed a national framework, with a clear delineation of responsibilities between the federal and provincial governments; social dialogue is integral to the model; and offering ample opportunities for worker involvement is seen as essential in securing a just transition. Of course, the institutional arrangements in the two countries are very different — Canada has no board level worker participation; collective bargaining coverage is lower than in Germany and there are no guaranteed voice rights in the workplace that stand comparison to the system of codetermination. Nonetheless, in both cases, the government has accepted responsibility for ensuring a just transition, has engaged in a sophisticated dialogue with the social partners and has developed a strategy, setting the stage on which the actors can play their roles in detailed implementation. The contrast with the British experience is obvious; here, the transition process has been left to individual employers at workplace level and the operation of the market. That countries as different as Canada and Germany have adopted similar approaches suggests that the UK faces no cultural barrier in applying the same values; the obstacles appear to be political and ideological, reflecting the antipathy to social partnership displayed by British governments over a prolonged period.

Lessons from steel

The lessons from steel can be described in similar terms. By allowing the Redcar plant to close the UK government disavowed some of the principles that underpin the arguments presented in this report – that steel is an essential commodity, that maintaining a secure supply of steel is a public good for which the government is responsible and that being entirely dependent on overseas producers can put economic and national security at risk²⁷. Whatever may have been said by ministers at the steel summit in October 2015, the challenges identified at that time have yet to be addressed and have been amplified by subsequent developments – notably Brexit, the continued growth of Chinese steel production and the economic uncertainty engendered by Covid-19. There are still concerns about the business rate regime, electricity prices, the support available from government as the decarbonisation process proceeds and the procurement of domestically produced steel in the public sector supply chain. Just as in 2015, it is hard to sustain the argument that the government has a clear strategy for the industry.

The relative lack of progress in establishing the Clean Steel Fund serves to emphasise the point. It may well be the UK government's intention to support the development of hydrogen reduction as an alternative to conventional blast

²⁷ It is difficult to envisage a situation where the UK could make adequate provision for national defence if the country was entirely dependent on imported steel. In time of war defence industries will need access to a secure domestic supply of commodities to ensure that output can be sustained.

furnaces, but the Swedish employers' association published their strategy for clean steel in 2013 and experimental plants are expected to be operational in the next three to five years. Our Austrian case confirms that other countries are making more rapid progress – voestalpine AG has mapped out a clear path to 2050, with well-developed arrangements in operation to ensure that the workforce are involved at every stage in that process.

Our observations about the need for a national strategy and for policy integration are equally applicable to steel. Most important, for these purposes, is the link between industrial policy and energy policy. Hydrogen reduction depends on a supply of the gas being available at a competitive price and the hydrogen price will depend on the price of the electricity used in the process of electrolysis; if electricity is expensive then hydrogen will be expensive. A plan for green or clean steel is only practical if a transition to green energy can be successfully executed, which neatly links the subjects of our two case studies.

Two additional points are worth noting, emerging from the SSI experience and the international case studies. The first is the importance of devolving power and resources from the centre to regions and localities that are better placed than national government to understand the realities on the ground. We have already observed that the drivers of industrial change have a highly differentiated impact on sectors and regions. One-size-fits-all policies devised in Whitehall may have the advantage of simplicity, but they may also have the perverse effect of depriving people of the support they need when confronted with a crisis in their working lives. Ensuring that Jobcentre Plus staff have a clear understanding of workers' needs, their skills and experience is essential if the job search process is to lead to worthwhile, sustainable employment. Training should be much more closely matched to an individual's existing capabilities and local/regional labour market needs than the generic training offered to redundant SSI workers. Too many people were encouraged to take too many standard training courses that had no effect on employability. Devolving budgets should also accelerate the speed of decision making, which is important if workers have already lost their jobs and need immediate support.

Returning to our observations about the importance of *anticipating* change, the voestalpine case shows that employers, trade unions and (in this instance) works councillors are in regular dialogue with policy makers and skills institutions at the local/regional level. They all have a clear sense of the destination even if the precise route to zero-carbon steel production is not yet determined. Perhaps the most important lesson here is that each actor understands they have a distinct role, they all have important elements of dialogue and they all understand the importance of communicating with each other throughout the transition. Again, the contrast with the UK is striking; here there is no clarity about the government's commitment to the industry, a fragmented employer community, an absence of national dialogue involving all parties, no clear strategy for skills and an improvised response to crises when they arise. This is a weak foundation for a just transition and leaves a major national asset exposed to the vagaries of the global marketplace. It must also be a priority for the UK government, post-Brexit, to devise a trade defence regime that protects the domestic production of green steel. Relying on cheaper imports from producers using conventional blast furnace technologies is simply inconsistent with the spirit of the Paris agreement.

Policy agenda for the future

A Just Transition Commission

We have observed throughout that the UK suffers from a number of institutional gaps that need to be filled if the ILO's principles for a just transition are to be implemented effectively. Certainly, the CCC has placed equity concerns at the heart of their work, but the Committee offers no opportunities for government, employers and trade unions to meet and devise a shared approach to the challenge of climate change. Moreover, as we have observed, the achievement of a just transition is not only about climate change. The integration of markets, new sources of competition and technological change can all create disruption, with negative consequences for communities that are already relatively disadvantaged. A necessary first step, therefore, must be for the government to establish a Just Transition Commission, bringing all interested parties into a dialogue that considers how the ILO's principles can to be applied in practice in the UK. The task would be to develop a framework within which change can be managed, but at the level of the whole economy rather than an individual sector, as was the case with the Canadian Taskforce and the German Coal Commission.

Inevitably, this initiative will be challenged as nothing more than a talking shop, but the intention is to devise principles that can be applied to sectors and regions as appropriate. Once the first phase of the exercise has been completed, the Commission could be placed on a permanent footing and charged with the responsibility of reviewing progress sector by sector, making recommendations to government for changes in the policy framework as necessary. This approach will allow for a high level of learning by doing and experimentation. Uniform solutions are inappropriate given the diversity of the economy. It is essential, however, for some fundamental principles to be observed, not least to ensure that all citizens have a set of clear expectations about their opportunities to participate in the transition process at their workplace.

The Just Transition Commission could also be responsible for monitoring the full range of government policies relevant to processes of industrial change – notably, industrial policy, regional policy, labour market policy, skills policy and the industrial relations architecture. One possible objection is that the Commission will be replicating the work of the CCC, but the Commission will be solely focused on the *equity* concerns raised by all forms of industrial change, not on whether every aspect of the policy framework is operating effectively. Levelling up is obviously relevant in this context, not least because the Just Transition Commission will be able to make judgements about whether particular communities are making progress or sliding backwards. The task can be expressed as a simple question: is levelling up benefiting all communities in a region or are national inequalities simply being replicated at the regional level?

These matters are all directly relevant to the review of the government's industrial strategy currently being undertaken by BEIS. Even if the proposal for a Just Transition Commission is rejected, it should not be too difficult for the ILO's principles to be incorporated into the UK's policy framework – after all, this is an international standard with which all developed countries should comply.

Sectoral Dialogue

Another obvious gap in the UK is the absence of sectoral dialogue between unions, employers and, where necessary, government. This is a clear finding from all the British case studies where, in electricity generation all practical decisions were devolved to site managers, and where, in steel, there was no more than a slightly inadequate government sponsored summit. The proposal, therefore is that a number of sector forums should be established, sitting beneath the umbrella of the Just Transition Commission, with terms of reference deliberately focused on the management of industrial transitions.

Implementing a comprehensive set of institutions covering the whole economy would be a little presumptuous. Initially, it might be sensible to start with those sectors that are most immediately affected by climate change – essentially either energy producing or energy intensive industries. Adopting a step-by-step model could allow for a variety of approaches to be developed, tailored to the needs of each sector. There would also be scope for experimentation and mutual learning – allowing a decent number of flowers to bloom could enable participants to share information across sectoral boundaries.

The objective of these sectoral bodies might be summarised as follows - to secure sustained dialogue between unions, employers and other actors on the following issues:

- The medium to long term outlook for the sector.
- Specific measures to achieve net zero by 2050.
- Necessary technological adaptations.
- The impact of technological change on employment.
- The skill needs of the industry and the responses required from training providers.
- The impact of change on the communities where the industry is clustered.
- The support needed from central government and other public authorities.
- A framework for dialogue at workplace level for the implementation of practical responses.

This is only an outline proposal, which requires significant development before implementation can begin. An obvious objection is that it trespasses on the territory of institutions that already exist – the alphabet soup of bodies responsible for skills policy, for example. Nonetheless, while it is obviously important to avoid a duplication of effort and a waste of resources, the critical point is to ensure that *some* dialogue takes place in the terms envisaged by the ILO. To allow the status quo to continue will, as we have already seen, lead to an inevitably unjust transition, simply because there is no dialogue at all.

Regional Devolution

Our assessment of the work of the SSI Taskforce highlighted the importance of devolving power and resources to the lowest possible level so that public action can be deliberately designed to respond to problems on the ground. An absence of power and authority at the regional and local level both slowed down decision making and made the Taskforce's interventions less effective than might otherwise have been the case.

It is well beyond the scope of this report to recommend a new constitutional settlement for the UK and all that can be done at this stage is to record that, in England at least, decision making remains unnecessarily centralised, with a patchwork of devolved powers and budgets across the country. City-region mayors have varying degrees of executive authority, some city-regions do not have mayors at all and the tensions that exist between national government, the devolved administrations and city-regions (which have been exposed by the Covid-19 pandemic) are more often resolved in the darker recesses of Whitehall corridors than under the gaze of public scrutiny.

“decision making remains unnecessarily centralised, with a patchwork of devolved powers and budgets across the country.”

In all of our international case studies there is a much higher degree of regional devolution than exists in the UK. Moreover, both the Canadian Taskforce and the German Coal Commission were clear about the delineation of responsibilities between different levels of government. It is true that both countries are federal states, which draws a notional distinction from the UK. But it is equally arguable that the UK is now living in a condition of incoherent quasi-federalism that creates obstacles to successful policy implementation – as the SSI case suggests. It does not seem too controversial to assert that the UK's institutions of governance are unfit for purpose if their task is to execute a just transition, taking full account of the equity concerns identified by the CCC.

Industrial Relations Policy

At the heart of the ILO's notion of a just transition is the idea of decent work, which depends on respect for the organisation's core conventions – no child labour, no forced labour, respect for the rights to organise and to establish collective bargaining. In other words, it is assumed that workers are able to speak up, individually and collectively, convey their views to their employer and receive a reasoned response. The same is true for the public policy architecture and for employers' sectoral or corporate strategies; in all cases it is envisaged that the trade unions have a seat at the table so that the voice of organised labour cannot be ignored.

We have already observed the absence of national, sectoral and workplace dialogue in the UK, and there is a serious question whether a just transition can be secured if this institutional gap is not filled. As the industrial relations researcher Neil Millward observed almost thirty years ago:

Britain is approaching the position where few employees have any mechanism through which they can contribute to the operation of their workplace in a broader context than that of their own job. There is no sign that the shrinkage in the extent of trade union representation is being offset by a growth in other methods of representing non-managerial employees' views. There has been no spontaneous emergence of an alternative model of employee representation that could channel and attenuate conflicts between employers and employees (Millward 1994)

Nothing has changed since that time, if anything, the situation has got slightly worse (Coats 2020), which suggests that decisive action is needed if workplace collectivism (and the possibility of genuine dialogue between workers and their employer) is to be rebuilt.

Again, offering a comprehensive account of the necessary measures is beyond the scope of this paper. At the very least, however, some consideration might be given to reducing the burdens on trade unions seeking to establish recognition for collective bargaining through the Central Arbitration Committee (essentially the labour court for Great Britain) and to developing a British model of the codetermination arrangements that are well established in Germany. As we have seen, the residual strengths of the German collective bargaining and codetermination systems are essential to the successful implementation of the Coal Commission's recommendations.

Corporate Governance and Reporting

The final institutional gap concerns corporate governance and corporate reporting. When she assumed the office of prime minister, Theresa May referred to the burning injustices that she believed the government had a responsibility to address. In her view, too many people felt left out, left behind and unable to control important aspects of their lives – particularly their working lives. It was this belief that tentatively reopened the question of industrial democracy and worker involvement in corporate decision making, which had been locked in a box marked “do not open” since the Bullock report in the 1970s (Bullock 1977). To date, progress has been limited, with the principal initiative being a change to the Corporate Governance Code, which now requires listed companies to ensure that workers interests are reflected in boardroom discussions through one of the following mechanisms:

- A director appointed from the workforce.
- A formal workforce advisory panel.
- A designated non-executive director with responsibility for workforce issues.

If none of these options has been applied then the board must explain why, must indicate what alternative methods are being used and must explain why they believe these methods are effective (FRC 2018).

On a generous reading this change represents a step forward from the previous arrangements, but it falls short of the well-established practices in Germany, Austria and Sweden where a third of board members are workers' representatives. Again, a comprehensive account of the case for corporate governance reform is beyond the scope of this report, but it is strongly arguable that a more ambitious intervention is required. Securing a just transition in a post-Brexit UK may require a more powerful boardroom voice for workers and more than the token of a single seat on the board.

In addition to changes in board composition, there is a strong case for more rigorous disclosure of corporate environmental performance. For example, the *Taskforce on Climate Related Financial Disclosures* (TCFD, sponsored by the Financial Stability Board of the Bank for International Settlements) has suggested that a much higher level of transparency is necessary so that investors are in possession of "clear, comparable and consistent information about the risks and opportunities presented by climate change" (TCFD 2017). Inevitably, some companies are more exposed than others to climate related risk (most obviously those in the fossil fuels business), but the decarbonisation process will create investment opportunities too – on the scale of \$1 trillion each year for the foreseeable future. The TCFD has framed its recommendations in conventional terms – the objective is to ensure that investors have all the information they need to measure a corporation's exposure to climate risk. Reporting on these dimensions is obviously important in measuring the progress a business has made towards the net zero in 2050 target, but these are disclosures of *financial risks* - nothing is said about the management of the workforce at all²⁸.

Inevitably, adaptation to the climate imperative has radical implications for workers – at worst they may find their jobs disappearing or, more positively, they may find themselves having to learn new skills for very different jobs, albeit with the same employer. Whether an employer is managing an industrial transition well or badly is a matter of interest to investors – and other stakeholders too. If there is to be more openness about climate related financial risks then there should be an equal level of openness about employment related risks. This means that the Corporate Governance Code must be amended to require all listed companies to report annually on the following:

- The implications of the net zero in 2050 target for the management of the workforce.
- The discussions that have taken place with unions or other workers representatives to develop a climate adaptation plan.
- The contents of that plan and the progress made with implementation.
- The effects on employment levels over the short, medium and long-term.

²⁸ The UK government is in the process of implementing the TCFD's recommendation. A roadmap was published in November 2020 "setting out an indicative path over the next five years" to make the necessary changes in reporting requirements (HM Treasury 2020).

- Measures that will be taken to upskill workers for continued employment or train displaced workers for alternative employment in the local economy.
- A narrative account of relationships with training providers and policymakers at local/regional level regarding the implementation of the plan.
- The arrangements for continued dialogue with workers and their representatives as the climate adaptation plan is implemented.

No doubt some employers will describe these obligations as either burdensome or unnecessary, but the ILO's just transition framework and the CCC's self-evident concern with fairness both imply that businesses must be accountable for the impact of climate change on the workforce. In the absence of transparent information, the fairness of a transition is simply beyond judgement. Responsible employers have nothing to fear from more systematic reporting of the management of their workforce. Indeed, maintaining public confidence that a company is acting responsibly is hardly an innovation – it simply reflects the reality that limited liability is a privilege not a right and companies must make a serious effort to sustain their licence to operate. Pursuing an obviously unjust transition is an outcome that all employers will wish to avoid, not least because it carries serious reputational risks with potential negative effects on value and performance.

It should be recalled, perhaps, that rather more ambition has been displayed by policymakers in the past. The *Accounting for People Taskforce*, which reported to the UK's Department of Trade and Industry in 2003, recommended that listed companies should be under an obligation to disclose much more information in their annual reports about the management of the workforce (Kingsmill 2003). Corporate performance was, on this view, said to depend to some degree on the commitment of employees, which depended in turn on workers being managed fairly and effectively. Investors therefore had a legitimate interest in people management practices because the value of their investments could be positively or adversely affected by employers' policies, style and culture. It is here that the concerns about business performance and just transition converge – not least because badly managed transitions may have a negative impact on commitment and motivation. More comprehensive reporting on this model is relevant not just to climate change, but to all industrial transitions, especially those resulting from technological innovation, market integration and intensifying competition.

The importance of democracy and citizen participation

We should conclude, perhaps, where we began, with the IPCC's observation that successful adaptation to climate change and the achievement of the net zero target in 2050 will "require unprecedented transitions in all aspects of society". This is unlikely to be an easy process; most citizens are not yet fully aware of the changes that may be required and the upheaval to established patterns of private and working life are some distance from being fully realised. Conversely, it could also be said that disruption is a fundamental characteristic of capitalism, with which the developed world has been living for more than 250 years. Rapid technological development, the intensification of global trade and the entry of new competitors to the marketplace have all been ubiquitous since at least 1750. What makes the current situation different, of course, is that all these

well-established drivers of industrial change have been supplemented by the imperative to decarbonise the economy if human life is to flourish in the future.

The examples in this report serve to highlight the risks and opportunities created by decarbonisation, technology and the integration of markets. Some jobs may be lost, new jobs will be created, some businesses will die, new businesses will be born, some policies will fail and others will succeed. What policymakers, indeed all social actors, including employers and trade unions, must do is be honest about the scale of the disruption, recognise the threat to the security of households and communities (made explicit by the Canadian Taskforce, for example), present a sophisticated account of the support that will be made available and offer a practical, realistic and optimistic prospect for the future.

The ILO's just transition model emphasises the importance of communication, dialogue and involvement alongside commitments to full employment and decent work. This report has suggested that the UK is not yet on the path to a just transition, whether in response to globalisation, technological change or the climate imperative. Significant changes to policy and practice are needed so that institutional gaps can be filled and the foundations laid for a long-term consensus that enables a radical shift to a net zero carbon world. All citizens need to be involved; all have a right to be heard, all have a right to be treated with respect and all have a right to receive a reasoned response from government and employers. Focusing on the role of institutions can sometimes appear prosaic, technocratic or dull – but the prize for the taking is much more exciting, a genuinely just transition that protects the planet and ensures decent work for all.

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