International Labour Organization | Open Library of Humanities

Crawford, Ben, and David Whyte. 2025. "Workers on the Front Line of Climate Change: Re-politicizing Trade Union Climate Action". *International Labour Review* 164 (1): 1–15. https://doi.org/10.16995/ilr.18838.

International Labour Review

Workers on the front line of climate change: Re-politicizing trade union climate action

Ben Crawford, Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science, b.j.crawford@lse.ac.uk

David Whyte, Centre for Climate Crime and Climate Justice, Queen Mary University of London, david.whyte@qmul.ac.uk (corresponding author)

Abstract. *Considering that the transition to a low-carbon economy will not be secured by mutual agreement but requires coordinated industrial organizing, this article builds upon eco-socialist critiques to identify the concrete dimensions of the underlying solidarity between workers and the rest of nature as reflected in workers' struggles. Specifically, we argue that industrial organization in opposition to labour precarity and work intensification is fundamental to both achieving sustainable work and mitigating environmental harms to workers' bodies. This argument presents a basis for a common response to the transition to a low-carbon economy across the labour movement and for cross-sectoral climate demands in bargaining.*

Keywords: *climate change, just transition, trade unions, climate organizing, climate bargaining, collective bargaining.*

This article is also available in French, in *Revue internationale du Travail* 164 (1), and Spanish, in *Revista Internacional del Trabajo* 144 (1).

1. Introduction

The central role that workers and trade unions have to play in climate policy and climate decisions is not discussed much in public debates. These have been dominated by a "consumer choice" framing, which individualizes responsibility for climate and environmental damage, foregrounding individual responsibility and behaviour change (Huber 2022). In doing so, responsibility for climate change is depoliticized and disassociated from collective responses through the workplace and the State. Where workers are recognized, they are frequently positioned as victims of climate policy, facing risks of job loss because of decarbonization.

In response to this individualized framing, and to capture the exposure that workers face as a result of economic and industrial restructuring driven by climate change, various formulations of the concepts of "just transition" and "green new deal" have been proposed, debated and adopted by trade unions and left-wing political parties in many countries (Boyle et al. 2021). We can also find acknowledgement of the critical role of workers in some high-level policy debates on decarbonization and renewable energy. For example, both the Paris Agreement adopted by the United Nations (UN) Climate Change Conference (COP21) in 2015 and the UN Sustainable Development Goals (SDGs) recognize that the promotion of labour rights is a necessary feature of the transition to low-carbon economies. The Paris Agreement notes the centrality of "a just transition of the workforce and the creation of decent work and quality jobs".[1] The paper implementing this aspect of the Paris Agreement foregrounds the work of the ILO as the means of achieving this, indicating that the *ILO Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All* (ILO 2015a) provide "a policy guiding framework" for the relevant section of the Paris Agreement (UNFCCC 2016, 20). The ILO guidelines note that "the transition to environmentally sustainable economies and societies" depends upon the realization of "fundamental principles and rights at work" (ILO 2015a, 6). Significantly, the guidelines state that workers must be "agents of change" (ibid., 4), able to develop new ways of working that safeguard the environment.

The role of work and workers in the transition to a low-carbon economy is also covered by SDG 8: "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (UN 2017, 11). Trade union rights are central to this goal. Thus, SDG target 8.8 requires Member States to: "Protect labour rights and promote safe and secure working environments for all workers" (ibid., 12). Indeed, the indicator for this requirement is the level of national compliance with ILO standards on freedom of association and collective bargaining (ibid.). However, the connection between labour rights and transition to a low-carbon economy is always couched in terms of climate *justice* – as something that *should* happen, or as something that UN Member States and employers have the moral obligation to ensure. The "greening of economies" is understood to present "opportunities to achieve social objectives" (ILO 2015b, 6). This positioning suggests both that the transition is something that could, in principle, happen without workers' involvement and, implicitly, that workers' interests are separable from the aims of decarbonization and a sustainable economy.

Perhaps surprisingly, the above view is also found in many trade union responses to the climate crisis, which have treated climate and sustainability as issues that fall outside core industrial relations and collective bargaining. In the global North, trade unions have not yet made climate change a major area of bargaining and industrial action on behalf of their members. Many have argued, less ambitiously, for the "inclusion" of workers in just transition and climate justice strategies. This lack of ambition may be partly understood as the outcome of national labour law frameworks and labour market institutions that are not supportive of climate bargaining approaches (Bugada et al. 2020). Others have argued that

[1] UN, Paris Agreement to the United Nations Framework Convention on Climate Change, adopted 12 December 2015.

the problem is that the conditions of workers in the global North are, for the most part, abstracted from the direct impacts of climate change, being impacted only in a secondary sense through the market itself (Huber 2022).

In this article, we argue that this connection between workers' rights and the transition to a sustainable economy must be understood differently. Workers and their organizations should not merely argue for involvement in a just transition, but demand recognition of their *existing involvement*, since workers are already being affected by those strategies and their cooperation is needed to develop new industries and restructure old ones. Moreover, the realization of workers' rights is fundamentally tied to the sustainability of production precisely because those rights attempt to place limits on commodification and exploitation of human labour, which is itself ultimately indivisible from nature (Marx [1875] 2019, 1025). This argument builds upon perspectives in environmental labour studies that have rejected the "nature–labour divide" (Räthzel, Cock and Uzzell 2018). They understand human labour both as the principal force through which nature is transformed in the process of production of the means of human life and as being fundamentally dependent upon the life system of the planet (Stevis, Uzzell and Räthzel 2018). The historical development of capitalist industrialization is understood to have "torn the relationship between labour and nature apart" (ibid., 440).

The remainder of this article is organized as follows. The second section sets out the ways in which worker and union climate action has been positioned, on the one hand, by business unionism (effectively placing it outside the adversarial space of industrial relations) and, on the other, by the eco-socialist literature (which directs its focus away from the workplace to the "big politics" of transition and green new deals). We then turn, in the third section, to consider how harms to workers' bodies and the environment are produced by a "political economy of speed", which underpins capitalist production. The fourth section situates this dynamic within a broader analysis of employment precarity, suggesting that sustainability cannot be achieved under precarious labour conditions. The fifth section describes some of the emergent industrial responses to the twin logics of precarity and environmental harm. We analyse these responses as examples of a *necessary* move beyond traditional union models and the depoliticized model of climate action in order to respond to the climate crisis, reflecting the limitations of existing legal and institutional structures in this context. The article concludes in the sixth section, with reflections on the practical implications and limitations of our argument for union climate action.

2. Climate industrial relations

One relatively widespread climate-related demand in bargaining has been for improved transport and workplace facilities and operations that coincide with a green agenda. In addition, energy audits have given trade union reps leverage to demand better waste policies, energy-efficient procurement policies, energy-saving measures and even on-site wind turbines. Agreements between workers and management on greening travel to work have also been developed. They include subsidized public transport, subsidized cycling schemes and car-sharing schemes that provide workers with free breakfasts as an incentive (ETUC 2012).

These types of schemes all seek to reduce the carbon footprint of a particular employer or workplace. They are valuable in that they put workers at the centre of a drive for more sustainable ways of working. Yet they tend not to deal with the most fundamental issues of sustainability: the sustainability of the things that workers produce and the way that they are produced, or the services that workers provide, the purpose of those services and the conditions under which workers are expected to provide them. This reflects a relatively easy, consensual approach to climate action, focused on achievable "tweaks" to business practices to improve alignment with the sustainability agenda, but falling outside the adversarial space of industrial relations. As such, this approach has developed based upon the idea that workers and employers have a "common interest" in achieving environmental sustainability.

While we recognize that such approaches to climate bargaining are an important starting point, they do not tackle the fundamentals of providing sustainable jobs within sustainable economies. The "common interest" approach rejects the idea that environmental quality and climate change can or should be a subject for *dispute* in the workplace. For example, the UK Trades Union Congress (TUC) has promoted a model agreement for climate bargaining that completely separates climate and environmental issues from employment issues (TUC 2021). While the model strongly promotes employee engagement, there is little connection to issues relating to working conditions or job status, for example. The potential employment impacts of climate change and the energy transition, the question of precarious work, or company plans for investment and capital development are thus conspicuously absent as bargaining points. This framing emphasizes "co-benefits" and the value to employers (based upon the lack of statutory support) of the climate bargaining model, and a "genuine belief" that climate and environmental issues are universal (Hampton 2015). This approach has characterized TUC climate policy since the early 1990s, arguing that "the traditional adversarial approach" to industrial relations is "not sufficient and may undermine environmental protection".[2] Similarly, Barca's (2015, 394) analysis of the International Trade Union Confederation's approach to the promotion of a just transition shows how this organization has fully adopted a "common interest" perspective that is based on consultation and social dialogue, good governance and enhanced communication in forms that "seek to hide lingering tensions and conflicts" (ibid.). In other words, business unionism par excellence.

The business unionism tradition privileges good relations with employers and seeks non-confrontational resolutions to workplace problems (Moody 1988). Climate change tends to be dealt with using a similar paradigm, in which good environmental practice and outcomes are a matter of common interest (Crawford and Whyte 2023). As such, union responses have been heavily shaped by a model that places climate and environmental issues outside the arena of industrial contestation.

Just as a business unionism approach sees climate bargaining and negotiation as a matter for small, incremental changes that can be adopted consensually, the bigger, more significant aspects of the organization of work, production and distribution are seen – in classic business unionism terms – as matters that are beyond the scope of negotiation (Crawford and Whyte 2023). From this perspective, organized labour cannot and should not be involved in greater political engagement with climate change and indeed system change. Business unionism thus gives trade unions a bargaining role that creates an artificial separation of labour and nature.

Counterposed to the common interest/business union perspective is the view that workers' control of their workplaces and sectors is necessary in order for a transition to have the necessary effect. Perhaps the most widely cited proponent of this perspective is Huber (2022), who privileges one solution above others: he argues that the most significant single contribution to climate sustainability would be for workers in the US electricity industry to take control and bring this industry into public ownership. He also cites a number of examples of "bargaining for the common good" in which unions demand green new deal policies at sectoral and national levels (ibid., 278). The problem with this account is that it fails to fully recognize the extent to which those struggles are *already* embedded in workers' routine workplace experiences. Of course, political struggles are necessary in order to achieve long-term sustainable ways of working, and collective action beyond the workplace will be needed to secure a transition away from a carbon economy at the pace and intensity needed for the survival of humanity. Yet our argument is that workers' struggles inside the workplace – in industrial relations and industrial confrontation – are also going to be decisive in the battle for sustainability. It will also be necessary to change the workplace conditions of labour/nature exploitation.

[2] Memorandum sent by the TUC to the National Economic Development Council in 1991, cited in Hampton (2015).

This is an argument that is largely absent from the eco-socialist literature. This literature *is* concerned with labour relations, but it rarely addresses the concrete features of workplace struggle. Thus, for example, Saito (2017, 100–102) revisits the labour process through a reading of Marx that reveals it as a process of transhistorical metabolism; and Moore (2015, 221–240) argues that cheap labour power coupled to an expansion of the "zone of unpaid work" is crucial for the reproduction of an ever-decreasing ecological surplus. Yet neither of these authors seems to be particularly interested in exploring how everyday workplace struggles are *already* climate struggles. There are two points to make here. First, this literature is largely interested in the "big" political and economic solutions, urging workers' organizations to demand structural changes at the sectoral or industrial level – as in Huber (2022). Second, this literature does not adequately account for how workers concretely confront the accumulation of surplus at the "front line" of nature on a routine basis and not only when struggles are explicitly focused on climate demands. As Barca (2012) notes in relation to the Italian labour movement:

> The awareness of environmental health connections as a shared bodily experience among factory workers and local people – the many women who experience breast cancer and those who are faced with fetal malformations, the parents of children with asthma, the fishermen and farmers who become aware of unusual death and illness in the non-human living world – is a common feature of Italian working-class communities, and a leading thread throughout the period 1970s–2000s. (Barca 2012, 72)

Foster's (2020, 172–215) reprise of Engels' notion of "social murder" – as environmental murder – is perhaps one exception in the eco-socialist canon. Yet, beyond the recital of Engels' work, we do not learn much about how significant those everyday workplace struggles were to the development of capitalism, and how significant they remain. Foster's text is about the history of ideas – specifically the history of socialism's dialogue with ecology – but it does translate into action in the ways we might expect. After all, as we note elsewhere, one of the things that the labour movement forgets too easily about its own history is the continued intensity of environmental struggles, whether this is organizing in Lancashire's chemical industry or the long struggle of the Hazards Campaign[3] in the nineteenth- and late-twentieth-century United Kingdom, respectively (Crawford and Whyte 2023).

Workers' struggles against chemical exposure may not be focused on climate change per se, but they do reveal an ever-present underlying solidarity between labour and the rest of nature. This solidarity has also been an enduring feature of anti-colonial and anti-imperialist workers' struggles. To pick just a few examples of those struggles from the Indian subcontinent, we might point to the campaign for justice in the aftermath of the massive loss of life and injury resulting from the 1984 gas leak in Union Carbide's Bhopal pesticide plant; the intermittent struggles of Indian and Bangladeshi farmers against agri-corporations like Monsanto over the use of seeds; and particularly the work of the Asian Network for the Rights of Occupational and Environmental Victims, which organizes across workplace and community environmental campaigns to build trade union organization capacity. Similarly, union-organized struggles against workers' exposure to asbestos in Bangladesh have explicitly linked environmental sustainability to a violent assault on workers' bodies (Uddin, Nobi and Islam 2024). Those are but a fraction of examples of struggles that have developed hugely diverse industrial responses – led by workers – to environmental sustainability. And yet this enduring and ever-present diversity of worker-led struggles is at best peripheral in the analysis of even some of the main accounts of class struggle.

In sum, while the business union perspective stresses that climate and system solutions are not the legitimate concerns of trade unions, there is a tendency in the socialist critique to overlook the fact that environmental confrontations in the workplace and in the labour

[3] The Hazards Campaign is a British network of trade union campaigners and workplace health and safety representatives with its origins in the movement to ban asbestos in the 1970s.

market have been ever-present throughout the history of capitalism. Some of the core problems facing workers and their trade unions in the labour market and the labour process help us elucidate this underlying solidarity between labour and the rest of nature. Addressing the links between work intensification, precarity and sustainability allows us to see the climate context of labour in concrete rather than abstracted terms. It is to a fuller discussion of those features of the labour market and the labour process that we now turn.

3. The political economy of speed

As a number of eco-socialist writers have argued, exhaustion of the soil/seas/forests/air by capital's self-propelling logic is the same process as the exhaustion of workers (Foster, Clark and York 2010; Moore 2015; Barca 2020). In capitalism, it is impossible to separate the exploitation of labour from the exploitation of nature: the extraction of surplus value from work is a process that *almost always* simultaneously exploits workers and their environment.

In his classic study of oil exploration in the North Sea, Carson (1981) identified the "political economy of speed" that dominated the labour process and ensured workers paid "the other price of Britain's oil". He argued that the political context had shaped the degree to which the oil companies were able to take risks. The British Government, facing an acute balance of payments crisis and desperate to get the oil out from under the North Sea, had deliberately ensured lax regulatory conditions and provided commercial incentives and tax breaks to the oil companies. Although the chances of being killed on an oil rig or platform were many times those for an equivalent onshore worker (11 times the fatality rate in the construction industry and nearly 9 times the rate in mining), the British Government effectively exempted offshore platforms from labour standards and turned a blind eye to union busting. This political economy of speed created unbearable tensions that pushed production rates beyond safe limits.

This drive was accelerated by events in the geo-political system. The collapse of the Organization of the Petroleum Exporting Countries' (OPEC) cartel quota in 1985 saw the average price of a barrel of oil plummet from more than US$30 in November 1985 to around US$10 in April 1986. The implosion of the oil market had a dramatic effect on the industry. In order to defend profit levels, oil companies slashed their operational budgets by between 30 and 40 per cent. Wage levels fell dramatically and 1986 saw up to 22,000 jobs lost in the industry (Whyte 2006). The oil companies' response to the collapse in the oil price had far-reaching implications for workplace safety and the regular maintenance of plant equipment was a major casualty of operational cost-cutting. The collapse of the market price can affect the balance of power between shareholders, managers and workers. When the oil price is low, the demand to make more profit for less investment intensifies. Workers' ability to respond and defend themselves is reduced as exposure to lay-offs and production cuts increases. The same political and organizational conditions described above were repeated, almost exactly, when British Petroleum's Deepwater Horizon rig exploded in the Gulf of Mexico in 2010 (Woolfson 2013). Similar factors (lax regulation, market instability, aggressive management cost-cutting and a workforce whose warnings are too easily ignored) are present in countless industrial disasters (Tombs and Whyte 2007), including the major incidents at Bhopal (Pearce and Tombs 1998), the Rana Plaza factory in Bangladesh (Crinis and Vickers 2017) and the Brumadinho dam in Brazil (Rose, Mugi and Saleh 2023), to name but three. All these disasters can be explained as corollaries of an intensification of the political economy of speed.

The process of capital accumulation is always framed by a political economy of speed. The result is twofold: (i) it means that workers generally have the power to slow the impact of their work on the environment as they protect themselves; (ii) this reveals an underlying solidarity between workers and the rest of nature: it is in the interests of both to challenge the ways in which the political economy of speed generates environmental and social harms, including, in some cases, by slowing down production. This underlying solidarity says a

great deal about the relationship between the conditions of labour and the rest of nature in capitalist labour processes. This same relationship is revealed when we analyse labour market conditions.

4. Precarity and sustainability

Precarity and the broader market conditions within which particular jobs are positioned shape the political economy of speed in any industry. Carson (1981), for example, found that up to 90 per cent of workers were on casualized contracts in the North Sea oil industry. For its part, the global textiles industry is dominated by long supply chains, making precarious workers vulnerable at every stage (Crinis and Vickers 2017). This dynamic is crucial in terms of the argument outlined above, precisely because it exposes a relationship between the position workers hold in the labour market and their ability to challenge the working conditions that arise from the labour process.

The connection between eradicating precarious work and achieving economic, social and environmental sustainability, as made in SDG 8 (see introduction), rarely figures in public debates on the challenges of climate change. Yet it is not possible to achieve environmental sustainability when economies are built upon the foundations of precarious labour. We cannot develop new ways of working and organizing energy, food, water, clothing and essential services in ways that protect the natural world if they remain based on a system of labour that forces costs and working conditions down, moves to where both labour and nature can be exploited the most and encourages the deployment of both labour and capital in ways that accelerate climate change. This is not merely a moral but also a practical issue, with three core aspects.

First, workers who are less able to challenge employers in any significant way are less empowered to push back against *anything*. For this reason, the most significant factor in the occupational and environmental health of workers is their job status, with trade union membership being closely related and considerably reducing, more than any other factor, the chances of a worker being killed or injured at work (Walters and Quinlan 2019). Job security becomes crucially important in achieving environmental sustainability for exactly the same reason. When workers are on permanent contracts and enjoy better pay and conditions, they are better able to push for environmental improvements in their daily lives: chemical workers are better able to demand shorter times for hazardous tasks or demand controls on air pollution; agricultural workers are better able to limit their exposure to the chemicals they are forced to use; and workers on meat processing production lines are better able to fight for slower line speeds. The same goes for transport workers, factory workers and so on (e.g. Gouveia and Juska 2002; Gordon 1999).

Second, precarious work undermines the democratic and participatory dimensions inherent in any planned just transition. An externalized, vulnerable and transitory workforce enjoying few rights is unlikely to be able to develop skills and apply them towards the transition to genuinely sustainable production models. Precarious work directly undermines the central mechanisms for greater economic democracy – trade union organizing and representation of workers. It follows that it is harder to organize workplaces and sectors characterized by a high level of casualized forms of labour contracting (Shamir 2016). Casualized workers also face much higher barriers to participation in union and employer structures of representation. For example, the McDonald's European Works Council – a statutory mechanism designed to mitigate the harmful impacts of the economic decision-making of multinational corporations across the European Union – has been subject to "management capture" since its inception, precisely because of the high proportion of McDonald's workers who are on temporary, zero-hours or part-time contracts (Royle 1999). Huge numbers of precariously or informally employed workers worldwide are excluded from mechanisms that allow them to exercise their voice and shape the transition (Novitz 2023). Many of these workers

are exposed to environmental hazards in their work, such as street pollution or toxic substances on waste dumps, but they have no means of challenging or changing their situation (ibid., 6). The basic possibility of contesting harmful decision-making is eroded by the employment model. When we consider the types of engaged, deliberative and strategic worker-led processes that must underpin any just transition, it is clear that such processes will fail where the most vulnerable and precarious workers are excluded.

Third, precarious labour conditions also oblige workers and unions to defend "dirty" jobs and industries. In the absence of a planned, clear pathway to sustainable industries, workers and communities face an existential threat and must resist change. In economies based upon dirty jobs, workers may not be in a strong enough position to demand clean jobs, even if they are organized in ways that allow them to do so. In a recent survey of UK oil workers, 81.7 per cent responded positively to the question. "Would you consider moving to a job outside of the oil and gas industry?" (Jeliazkov, Morrison and Evans 2020, 7). The follow-up questions were even more revealing. Of those that answered no, a majority said that "job security" was the most important consideration in this decision (ibid., 21). On the one hand, this response reinforces the link we make above between precarity and sustainability of the economy; on the other, it draws attention to the lack of control that workers have over the transition of their jobs away from carbon economies. Later in the survey, workers were asked whether they had heard of the term "just transition". A full 91 per cent said that they had not (ibid., 9). This speaks volumes about the lack of discussion, let alone involvement, in the transition. Workers cannot be involved in a just transition when they have no agency in the process and are shunted from job to job, based solely upon employers' decisions.

The countless examples of trade unions defending unsustainable jobs have to be understood in the context of a capitalist labour market that forces people to make choices they do not want to make. If people had a real choice over where they could work, it is hardly likely that they would choose to work in the oil or chemicals industries. People do not choose a job or a career seeking out acute occupational or environmental hazards or high risks of death. Workers make decisions to accept jobs under conditions that they do not choose. This basic insight suggests that workers' precarity in the labour market is a fundamental dimension of climate bargaining.

Precarity is the reason why some of the dirtiest jobs and jobs carried out in the most dangerous places are those presented as "just transition jobs". The construction of wind farms in the North Sea is based on almost identical conditions as those experienced in the early days of the North Sea oil and gas industry. Indeed, similar vessels are being used to construct the wind turbines – with the same stories emerging of a lack of occupational safety on board – similar work patterns are applied and workers face similar levels of precarity (Jeliazkov, Morrison and Evans 2020). In another example, the death, injury and illness rates in the waste industry, which is crucial for reducing the environmental impact of industrial by-products and for recycling, are among the worst in any sector. For example, in the United Kingdom, the fatal injury rate in the waste and recycling industry is, by some estimations, around 11 times the national average (*Circular* 2022). One academic review of the UK waste industry found:

> [A]n increased prevalence of respiratory, gastro-intestinal and skin complaints in workers exposed to compost relative to controls. They may also be at increased risk of extrinsic allergic alveolitis, allergic bronchopulmonary aspergillosis, occupational asthma and abnormalities of lung function. Workers involved with the recycling of batteries and cables may be at risk of lead poisoning and exposure to other heavy metals. (Poole and Basu 2017, 626)

Workers are currently absorbing the considerable health costs of many so-called "green jobs". Levels of risk and exploitation associated with just transition jobs in the global South are on a different scale. An epidemic of health problems related to asbestos exposure is expected to unfold in Bangladesh as a result of the ship breaking industry (Muralidhar, Ahasan and Khan 2017), which is increasingly positioned as a "recycling" industry. Workers

in this sector are also exposed to persistent organic pollutants and heavy metals (Ruhan Rabbi and Rahman 2017). Electronic waste recycling in major hubs like Accra in Ghana and Lagos in Nigeria is based on informal economies in which children and the poorest workers are exposed to heavy metals and other highly dangerous toxins over long periods. China is now also a major centre for an informal economy in electric recycling (Chi et al. 2011). These economies rely on cheap labour, reproducing the same old colonial inequalities and transferring toxic economies from North to South (see also Zbyszewska and Maximo 2025 – this Issue). At the same time, these industries further enable wealth to be transferred from South to North (Fevrier 2022). To this we can add the appalling conditions of workers mining the metals needed for batteries (Arvidsson, Chordia and Nordelöf 2022). Indeed, the intensification of the political economy of speed combined with the extreme precarity that structures these industries means that this "just" transition will inevitably mean an even steeper rise in the rates of death, injury and illness in this sector (McKie 2021).

This is a crucial lesson that the trade union movement has been slow to learn: precarity and casualization create conditions that prevent the development of "clean jobs" and more environmentally sustainable ways of working. There is an umbilical relationship between the precarity of jobs – unsustainable labour practices – and the unsustainable environmental practices that stand at the foundations of our economy. For this reason, worker and trade union campaigns against precarity in the labour market are indivisible from worker and trade union climate campaigns. Such campaigns must take account of the way that relationships of precarity across the entire supply chain are implicated in the export of hazards to workers and communities in the global South.

The demand that just transition be based on secure jobs is too often couched in terms of what is "desirable" for workers, or in moral terms. Yet we are not simply arguing that this is something that trade unions *should* demand. As we indicate above, the underlying solidarity between labour and the rest of nature at the front line of production has another, crucial, dimension. We thus argue that it is *essential* for organized labour to challenge *precarity* for the development of environmentally sustainable economies. This connection between precarity, work intensity and sustainability is also linked to wider issues of working time and socially reproductive labour, most obviously in efforts to achieve working patterns that enable workers to *live sustainably* (Barca 2020).

This brings us directly back to the question of "common interests" raised in the previous section. Challenging precarity and slowing down production as part of the labour process are, by definition, confrontational. They require collective power, expressed as industrial action. Slowing production is rarely agreed consensually between employers and employees. This level of interference in the labour process generally requires a strike or another form of industrial action. Moreover, employers, especially if they are profit-making enterprises, operate in a competitive environment and generally cannot afford to lose control of the rate of work. If one employer's workers slow down the labour process, it can allow other employers to strengthen their market position. In many circumstances, this may mean that they are able to increase productivity, capture more profit and extend their control over more workers and supply chains. In capitalist economies, no matter how secure jobs are, job security is dependent upon a combination of decisions made by employers and policymakers to protect particular jobs or subsidize particular sectors. Ultimately, the viability of jobs depends upon the viability of firms.

The above provides an outline of the absolute limits of climate bargaining. Workers seeking a more sustainable work rate may instead find themselves out of a job. Accordingly, workers and their organizations need to work as *collectively* as possible within and beyond their sector. In other words, they need to think about climate organizing at the workplace, supply chain and sectoral levels precisely because the power of employers to simultaneously exploit workers and nature lies at those multiple sites simultaneously. We now turn to discuss some examples of industrial responses to climate change that demonstrate that it is possible to challenge these dynamics.

5. Transformative industrial action

In September 2019, corporate Amazon workers in the United States engaged in a lunchtime walkout to protest against the corporation's lack of action to reduce its environmental impact, corporate donations to climate change deniers and links to the fossil fuel industry (Ghaffary 2019). This action was followed up in May 2023 with further walkouts by workers organized by the employee advocacy group "Amazon Employees for Climate Justice". This time the action was not only a protest against the lack of progress towards reducing Amazon's climate impacts but was also linked to its environmental impact on employment models, including through job cuts and reduced worker autonomy over home working. The workers argued that the top-down approach to home working contradicted Amazon's positions on diversity and inclusion, affordable housing and sustainability (Palmer 2023). One month later, a group of over 60 Amazon contract drivers picketed outside Amazon's San Bernardino warehouse, blocking trucks from entering or leaving the facility (Duran 2023). In 2022, the drivers had signed the first ever union contract with an Amazon delivery service provider (DSP) (Asher-Schapiro 2023). The drivers had mobilized in response to the risks of heat exposure as a result of worsening heatwaves driven by climate change. They cited examples of drivers passing out during the 2022 heatwave, which was so severe that a state of emergency was declared. The 2022 heatwave also saw walkouts by Amazon warehouse workers over excessive heat and UPS drivers making cool-down breaks and air conditioning a key part of their contract negotiations (ibid.). Despite signing the collective agreement, the DSP owner emphasized their lack of control over health and safety issues, given that working time and schedules are decided by Amazon's algorithm, and that Amazon has control over the replacement and repair of vans and the associated problem of poor or broken air conditioning units (ibid.). Organizers within the Amazon division of the International Brotherhood of Teamsters and workers in other DSPs highlighted the huge challenges facing the wider drive to unionize the 2,500 Amazon DSPs in the United States, citing the "restrictive" relationship between Amazon and its contracting companies and the risk of contract termination (Duran 2023; Asher-Schapiro 2023).

Together, these responses capture the multifaceted challenges for sustainable work and production, linking precarious work, work intensification, workers' autonomy, health and safety, carbon emissions and climate change adaptation. The fragmented positioning of these groups of workers highlights the barriers posed by precarity to climate organizing. These responses also indicate the latent solidarity across the supply chain, suggesting that there is scope for more integrated approaches to political, if not industrial, mobilization.

In the cases described above, union climate change action remained at the workplace level. However, the idea of developing latent cross-sectoral supply chain solidarity as a coordinated industrial response to climate change has featured in some other strategic responses. It was articulated by the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (IUF) in a recent research paper on climate organizing in intensive livestock production (IUF 2022). The report sets out a template for building trade union power along the livestock supply chain as an imperative for transforming the global food system. This links the fundamental demands of workers in the food system – for a living wage, stable employment and a safe working environment – to the models of agricultural production that are generating huge environmental impacts. Alternative production models, such as agroecological methods, and models to support better local democratic control over production are explored in terms of their direct correlation to more effective workers' rights.

A recent research and strategy document by the Unite (the Union) Research Department calls for a new approach to collective bargaining that coordinates workplace reps across industries and sectors in recognition "that industries are now organised so that all workplaces exist within supply chains" (Unite Research Department 2021). The strategy was developed to counter UK employers' responses to the shocks to the globalized production and trade model caused by the withdrawal of the United Kingdom from the European Union and

the impacts of the COVID-19 pandemic. While climate change is not the direct focus of the report, the increasingly disruptive effects of extreme weather as a result of global warming have already driven employers and governments to begin reassessing risks within supply chains (Woetzel et al. 2020). These strategies have been overwhelmingly at the expense of workers, as employers cut costs and seek "flexibility of supply". In reaction, Unite aims to turn the very characteristics that make fragmented supply chains harmful for workers into a source of strength by understanding and organizing the whole production chain. Reps are encouraged to develop an understanding of the vulnerabilities to trade impacts and employer strategies (such as relocation or mothballing of sites) and then to build a picture of how their direct employer is situated in the supply chain or corporate structure (for example, by identifying the top ten suppliers and top ten customers). Strategic choke points, including both structural vulnerabilities and the strength of union organizing, at each stage can then be used as a guide to build power across the chain by establishing relationships with reps and supporting organizing efforts. This supply chain mapping method has also been brought into the Unite climate education and research training sessions in the food, drink and agriculture sector (Unite the Union 2022).

In the context of climate bargaining, this kind of mapping can be used to identify the upstream and downstream environmental impacts of the production model, the exposure of workers across the supply chain to the impacts of climate change and the potential for building workers' power to challenge these harms by driving change in both the employment and production models simultaneously. In contrast to the "business unionism" approach to climate change described above, a focus on workers' structural and associational power is the *first step* in building an industrial response to the social and environmental harms generated by contemporary systems of production.

6. Conclusion

The great contribution of the eco-socialist literature is its consistency in showing how it is impossible to separate the exploitation of labour from the exploitation of nature in capitalism: it is one and the same process. Accordingly, concepts of "sustainable work" need to start by articulating workers' material interests in resisting the core dynamics of the labour process we have identified. Resisting the political economy of speed and endemic precarity thus becomes a fundamental form of climate action. We have argued that it is precisely because there is an underlying solidarity between workers and the rest of nature that it is in the general interests of both to slow down the speed of production processes. At the same time, challenging labour precarity is a prerequisite for building *sustainable* economic alternatives.

It does not of course follow that all forms of industrial action will stand in alignment with environmental interests. However, this article has highlighted a latent alignment that the labour movement can strategically engage in developing bargaining strategies that are de facto *climate* bargaining strategies. It needs to find a basis for a common response to transition and build cross-sectoral demands for a reversal of precarious work and casualization in bargaining as a *climate* demand.

Although coordination is not a guarantee of victory in workplace struggles, in the absence of any serious proposals for a transformative industrial strategy in the political mainstream, the trade union movement needs to contemplate how it will use its political space. How can workers' organizations develop a new industrial strategy? Is the trade union movement capable of developing its own industrial strategy by making sectors and different trade unions work together to set out the industrial change that is necessary?

There is not enough time to leave this to volunteerism or to a vague hope that employers will realize that they do indeed have a "common interest" with their workers on this issue. Class conflict at the workplace level is not stopped but is actually intensified by climate change. Although strategic cooperation on transition initiatives may be necessary,

partnership approaches and business unionism are not a sufficient basis for achieving a sustainable economic system. This article has pointed to forms of resistance and action that are not often labelled as climate action but are the bread and butter of industrial struggle. This is the kind of struggle that is needed to sustain and build the foundations of a sustainable world.

Acknowledgements

Thanks to Hilary Wainwright for her comments on an earlier version of this article. This article is partially based on research for a larger project conducted in collaboration with the Institute of Employment Rights, the Bakers, Food and Allied Workers Union, the Public and Commercial Services Union and the University and College Union and draws upon the pamphlet "Working for Climate Justice: Trade Unions on the Front Line of Climate Change" (Crawford and Whyte 2023).

References

Arvidsson, Rickard, Mudit Chordia, and Anders Nordelöf. 2022. "Quantifying the Life-Cycle Health Impacts of a Cobalt-Containing Lithium-Ion Battery". *International Journal of Life Cycle Assessment* 27 (8): 1106–1118. https://doi.org/10.1007/s11367-022-02084-3.

Asher-Schapiro, Avi. 2023 "Amazon Delivery Drivers Join U.S. Union Over Heatwave Safety". *Context*, 1 June 2023. https://www.context.news/climate-risks/amazon-delivery-drivers-join-us-union-over-heatwave-safety.

Barca, Stefania. 2012. "On Working-Class Environmentalism: A Historical and Transnational Overview". *Interface* 4 (2): 61–80.

———. 2015. "Greening the Job: Trade Unions, Climate Change and the Political Ecology of Labour". In *The International Handbook of Political Ecology*, edited by Raymond L. Bryant, 387–400. Cheltenham: Edward Elgar.

———. 2020. *Forces of Reproduction: Notes for a Counter-Hegemonic Anthropocene*. Cambridge: Cambridge University Press.

Boyle, Alaina D., Graham Leggat, Larissa Morikawa, Yanni Pappas, and Jennie C. Stephens. 2021. "Green New Deal Proposals: Comparing Emerging Transformational Climate Policies at Multiple Scales". *Energy Research & Social Science* 81 (November): Article No. 102259. https://doi.org/10.1016/j.erss.2021.102259.

Bugada, Alexis, Balázs Rossu, Paolo Tomassetti, Miriam Kullmann, Consuelo Chacartegui, Sergio Canalda Criado, Ania Zbyszewska, and Marie Pillon. 2020. *Agreenment: Labour and Environmental Sustainability (A Green Mentality for Collective Bargaining)*. ADAPT University Press.

Carson, W.G. 1981. *The Other Price of Britain's Oil: Safety and Control in the North Sea*. Oxford: Martin Robertson.

Chi, Xinwen, Martin Streicher-Porte, Mark Y.L. Wang, and Markus A. Reuter. 2011. "Informal Electronic Waste Recycling: A Sector Review with Special Focus on China". *Waste Management* 31 (4): 731–742. https://doi.org/10.1016/j.wasman.2010.11.006.

Circular. 2022. "Waste Industry Fatal Injury Rate 11 Times the All Industry Rate, New Figures Show". 28 November 2022. https://www.circularonline.co.uk/news/waste-industry-fatal-injury-rate-11-times-the-all-industry-rate-new-figures-show/.

Crawford, Ben, and David Whyte. 2023. *Working for Climate Justice: Trade Unions in the Front Line against Climate Change*. Liverpool: Institute of Employment Rights.

Crinis, Vicki, and Adrian Vickers, eds. 2017. *Labour in the Clothing Industry in the Asia Pacific*. Abingdon: Routledge.

Duran, Mariana. 2023. "Three Months Ago They Unionized. Now a Strike by Amazon Contract Drivers is Heating Up". *Los Angeles Times,* 28 July 2023. https://www.latimes.com/california/story/2023-07-28/a-strike-by-amazon-contract-drivers-is-heating-up.

ETUC (European Trade Union Confederation). 2012. *Green Workplaces: A Guide for Union Representatives*. Brussels.

Fevrier, Kesha. 2022. "Informal Waste Recycling Economies in the Global South and the Chimera of Green Capitalism". *Antipode* 54 (5): 1585–1606. https://doi.org/10.1111/anti.12841.

Foster, John Bellamy. 2020. *The Return of Nature: Socialism and Ecology*. New York, NY: Monthly Review Press.

Foster, John Bellamy, Brett Clark, and Richard York. 2010. *The Ecological Rift: Capitalism's War on Earth*. New York, NY: Monthly Review Press.

Ghaffary, Shirin. 2019. "Here's Why the Amazon Climate Walkout is a Big Deal". *Vox,* 20 September 2019. https://www.vox.com/recode/2019/9/20/20874497/amazon-climate-change-walkout-google-microsoft-strike-tech-activism.

Gordon, Robert. 1999. "Poisons in the Fields: The United Farm Workers, Pesticides, and Environmental Politics". *Pacific Historical Review* 68 (1): 51–77. https://doi.org/10.2307/3641869.

Gouveia, Lourdes, and Arunas Juska. 2002. "Taming Nature, Taming Workers: Constructing the Separation between Meat Consumption and Meat Production in the U.S.". *Sociologia Ruralis* 42 (4): 370–390. https://doi.org/10.1111/1467-9523.00222.

Hampton, Paul. 2015. *Workers and Trade Unions for Climate Solidarity: Tackling Climate Change in a Neoliberal World*. Abingdon: Routledge.

Huber, Matthew T. 2022. *Climate Change as Class War: Building Socialism on a Warming Planet*. London: Verso.

ILO. 2015a. *Guidelines for a Just Transition towards Environmentally Sustainable Economies and Societies for All*. Geneva.

———. 2015b. *Outcome of the Tripartite Meeting of Experts on Sustainable Development, Decent Work and Green Jobs (Geneva, 5–9 October 2015)*. GB.325/POL/3, Governing Body, 325th Session, 2015. Geneva.

IUF (International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations). 2022. *Fighting for Our Future: An IUF Guide on Tackling the Climate Crisis in Intensive Livestock Production*. Petit-Lancy.

Jeliazkov, Gabrielle, Ryan Morrison, and Mel Evans. 2020. *Offshore Oil and Gas Workers' Views on Industry Conditions and the Energy Transition*. London: Platform, Friends of the Earth Scotland and Greenpeace.

Marx, Karl. (1875) 2019. "Critique of the Gotha Programme". Translated by Joris de Bres. In *Karl Marx: The Political Writings*, 1023–1043. London: Verso.

McKie, Robin. 2021. "Child Labour, Toxic Leaks: The Price We Could Pay for a Greener Future". *The Guardian*, 3 January 2021. https://www.theguardian.com/environment/2021/jan/03/child-labour-toxic-leaks-the-price-we-could-pay-for-a-greener-future.

Moody, Kim. 1988. *An Injury to All: The Decline of American Unionism*. London: Verso.

Moore, Jason W. 2015. *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso.

Muralidhar, Venkiteswaran, Md Faizul Ahasan, and Ahad Mahmud Khan. 2017. "Parenchymal Asbestosis due to Primary Asbestos Exposure among Ship-Breaking Workers: Report of the First Cases from Bangladesh". *BMJ Case Reports* 2017 (Nov): bcr-2017-222154. https://doi.org/10.1136/bcr-2017-222154

Novitz, Tonia. 2023. "A Just Transition for Labour: How to Enable Collective Voice from the World of Work". *Giornale di diritto del lavoro e di relazioni industriali* 177–178: 55–73. https://doi.org/10.3280/gdl2023-177005.

Palmer, Annie. 2023. "Amazon Workers Walk Out over 'Lack of Trust' in Leadership". *CNBC,* 31 May 2023. https://www.cnbc.com/2023/05/31/amazon-workers-plan-to-walk-out-over-lack-of-trust-in-leadership.html.

Pearce, Frank, and Steve Tombs. 1998. *Toxic Capitalism: Corporate Crime and the Chemical Industry*. Aldershot: Ashgate.

Poole, C.J.M., and S. Basu. 2017. "Systematic Review: Occupational Illness in the Waste and Recycling Sector". *Occupational Medicine* 67 (8): 626–636. https://doi.org/10.1093/occmed/kqx153.

Räthzel, Nora, Jacklyn Cock, and David Uzzell. 2018. "Beyond the Nature–Labour Divide: Trade Union Responses to Climate Change in South Africa". *Globalizations* 15 (4): 504–519. https://doi.org/10.1080/14747731.2018.1454678.

Rose, Rodrigo L., Sohan R. Mugi, and Joseph Homer Saleh. 2023. "Accident Investigation and Lessons Not Learned: AcciMap Analysis of Successive Tailings Dam Collapses in Brazil". *Reliability Engineering & System Safety* 236 (August): Article No. 109308. https://doi.org/10.1016/j.ress.2023.109308.

Royle, Tony. 1999. "Where's the Beef? McDonald's and its European Works Council". *European Journal of Industrial Relations* 5 (3): 327–347. https://doi.org/10.1177/095968019953006.

Ruhan Rabbi, Hasan, and Aevelina Rahman. 2017. "Ship Breaking and Recycling Industry of Bangladesh: Issues and Challenges". *Procedia Engineering* 194: 254–259. https://doi.org/10.1016/j.proeng.2017.08.143.

Saito, Kohei. 2017. *Karl Marx's Ecosocialism: Capital, Nature, and the Unfinished Critique of Political Economy*. New York, NY: Monthly Review Press.

Shamir, Hila. 2016. "Unionizing Subcontracted Labor". *Theoretical Enquiries in Law* 17 (1): 229–256. https://doi.org/10.1515/til-2016-0009.

Stevis, Dimitris, David Uzzell, and Nora Räthzel. 2018. "The Labour–Nature Relationship: Varieties of Labour Environmentalism". *Globalizations* 15 (4): 439–453. https://doi.org/10.1080/14747731.2018.1454675.

Tombs, Steve, and Dave Whyte. 2007. *Safety Crimes*. Cullompton: Willan Publishing.

TUC (Trades Union Congress). 2021. "Go Green at Work: The Union Effect". In *The TUC Workplace Manual: A Practical Handbook for Union Reps*, 4th ed., 125–131. London.

Uddin, Md. Kamal, Mohammad Nur Nobi, and A.N.M. Moinul Islam. 2024. "Environmental Hazards and Health Rights of Workers in Shipbreaking in Bangladesh". *International Journal of Human Rights in Healthcare* 17 (3): 300–314. https://doi.org/10.1108/IJHRH-03-2022-0014.

UN (United Nations). 2017. General Assembly resolution 71/313, Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development, A/RES/71/313. New York, NY.

UNFCCC (United Nations Framework Convention on Climate Change). 2016. "Just Transition of the Workforce, and the Creation of Decent Work and Quality Jobs", UNFCCC Technical Paper. Bonn.

Unite Research Department. 2021. *A Collective Bargaining Strategy for Trade*. London: Unite the Union.

Unite the Union. 2022. *Unite Environment Quarterly*, No 5 (June).

Walters, David, and Michael Quinlan. 2019. "Representing Workers on Occupational Safety and Health: Some Lessons from a Largely Ignored History". *Industrial Relations Journal* 50 (4): 399–414. https://doi.org/10.1111/irj.12268.

Whyte, David. 2006. "Regulating Safety, Regulating Profit: Cost-Cutting, Injury and Death in the British North Sea after Piper Alpha". In *Working Disasters: The Politics of Recognition and Response*, edited by Eric Tucker, 181–199. Amityville, NY: Baywood.

Woetzel, Lola, Dickon Pinner, Hamid Samandari, Hauke Engel, Mekala Krishnan, Claudia Kampel, and Jakob Graabak. 2020. "Could Climate Become the Weak Link in your Supply Chain?". *McKinsey Sustainability*, 6 August 2020. https://www.mckinsey.com/capabilities/sustainability/our-insights/could-climate-become-the-weak-link-in-your-supply-chain.

Woolfson, Charles. 2013. "Preventable Disasters in the Offshore Oil Industry: From Piper Alpha to Deepwater Horizon". *New Solutions* 22 (4): 497–524. https://doi.org/10.2190/NS.22.4.h.

Zbyszewska, Ania, and Flavia Maximo. 2025. "Narratives of Sustainable Work in Mining-Affected Communities: Gleaning a Decolonial Concept". *International Labour Review* 164 (1). https://doi.org/10.16995/ilr.18835.