



Inspiration for decarbonising industry and creating green jobs is within the hands of those already facing precarity in today's economically unstable times. A resilient history of workers' initiatives overcoming redundancies, alongside recent activist, trade-union, and workforce collaborations, provides concrete examples for empowered transitioning.

In 2023, when Europe was blasted by a record-breaking heatwave named after Cerberus (the three-headed hound of Hades), workers organised to demand protection from the extreme heat. In Athens, employees at the Acropolis and other historical sites went on strike for four hours each day. In Rome, refuse collectors threatened to strike if they were forced to work during periods of peak heat. Elsewhere in Italy, public transport workers demanded air-conditioned vehicles, and workers at a battery plant in Abruzzo issued a strike threat in protest at the imposition of working in “asphyxiating heat”.

One could almost say that the Ancient Greeks foretold today's climate crisis when they euphemistically referred to Hades, god of the dead, as “Plouton” (giver of wealth). The reference is to the materials – in their day, silver, in ours, fossil fuels and critical minerals – that, after extraction from the Underworld, line the pockets of plutocrats. Modern society's plutocratic structure explains the astonishingly sluggish response to climate breakdown. The much-touted green transition is barely taking place, at least if the atmospheric concentration

of greenhouse gases is taken as a yardstick. These continue to rise, even accelerate, and likewise the rate of global heating. The transition remains in the grip of powerful and wealthy institutions that – even if we leave aside motivations of avarice or greed for status – are systemically constrained to put the accumulation of capital above the habitability of the planet.

Against this backdrop, the politics of transition is class struggle beyond that of workers defending themselves and their communities against weather emergencies. That is part of the picture, of course. But class struggle is, above all, evident in the liberal establishment seeking to displace transition costs onto the masses, even as it presides over ever crasser wealth polarisation. From this, resistance inevitably flows. The question is, what form will it take?

Some takes the form of an anti-environmental backlash, instigated or colonised by conservative and far-right forces. While posing as allies of “working families”, they denigrate the most fundamental of workers’ needs: for a habitable planet. Some takes a progressive form, the classic case being the *gilets jaunes* in France. When Emmanuel Macron’s government hiked “green taxes” on fossil fuels as a signal for consumers to buy more fuel-efficient cars, the rural working poor and lower-middle classes, unable to afford the switch, donned yellow safety vests and rose in revolt. Although France’s labour-movement radicals joined the cause, they were unable to cohere into a political force capable of offering alternative solutions to the social and environmental crises.

Surveying forms of climate-class struggle, movements, and events provides a glimpse into how the green transition might be redirected along social, worker-led lines. “Class struggle” is used in broad terms here to include questions of ecology alongside social reproduction, sexuality, identity, racism, and the like – all of which concern quality of life and are of as much

interest to “labour” as are pay and conditions. Only from the vantage point of capital, or on a narrowly-drawn negotiating table, do workers’ needs appear reducible to ledgers of hours and pennies. Tony Mazzocchi, the US labour leader who coined the term “just transition”, provides a valuable counterpoint. As an activist, Mazzocchi was critical of the post-war social contract whereby union leaders surrendered input into decisions on the production process in exchange for improved wages. His red-green radicalism grew from the insistence that the health and wellbeing of workers requires transformation across the full spectrum of workplace and social life.

Workers’ resistance

Climate breakdown is increasingly making its mark on all forms of class struggle. Across the world, climate hazards become embedded within labour struggles, forming a new basis of mobilisation, and on union safety committee agendas, emergency preparedness has been climbing the priority ladder. Freya Newman and Elizabeth Humphrys’ research on construction workers in Sydney explores how workers understand heat stress as a class issue. “Our bosses never come out of their air-conditioned offices on stinking hot days,” grumbled one interviewee, even as they “make us work in horrible places with crazy high temperatures.” In regions where class consciousness is greater and unions had retained relative strength despite a general weakening trend during the neoliberal era, the researchers found that pressure from workers had secured the greatest improvements in climate-related health and safety conditions.

Protests demanding better protection against weather hazards, such as those in Athens, Rome, and Abruzzo, represent the close association of labour struggles with climate breakdown and ecological collapse. Another response is resistance against “indirect” effects.

The scope here is vast and includes the 2010- 12 revolutionary risings across the Middle East and North Africa, where meteorological volatility caused soaring food prices, and, more recently, the farmers' protests in India. It includes, too, industrial action in relation to the Covid-19 pandemic (if, as appears likely, SARS-CoV-2 entered human society as a result of environmental degradation).

Climate-related class struggle is not restricted to organising against the immediate effects of climate breakdown. As New York socialist Alyssa Battistoni states, it is present “in the rhythms of daily life”, in “nursing homes and schools, on the bus, and in the street”, affecting those in “pink-collar” jobs: teachers, care workers, and other service workers. For society to rapidly dial down emissions whilst adapting to the effects of climate chaos, social solidarity and egalitarianism will be indispensable, pivoting on the self-organisation of workers across the range of “collars”: not just pink but also blue and white, as well as black and green.

Decarbonising jobs

When we look for signs of a transition, the spotlight shines on sectors shifting work from blackto green-collar jobs: notably the automotive industry. For the transition to be experienced as even minimally just, jobs must be secure and satisfying. Yet corporations at the forefront of the decarbonisation programme – most notably Tesla – show scant regard for workers' rights. In 2023, industrial action at the Tesla plant in Gränna, Sweden, accompanied by solidarity action across Scandinavia, pushed back against the Musk company's anti-union stance and associated low pay and workplace injuries.

The transition, such as it is, is being driven by state policies. And, wherever green jobs are at stake, political demands will follow. Recall, for example, the protest at the Vestas wind turbine factory on the Isle of Wight in 2009. In response to its advertised closure,

workers occupied the facility's administrative buildings. Their action was primarily a challenge to planned redundancies, but this took on wider meaning within the context of wind power's role in the energy transition. The occupiers pointed out that a closure of the plant would contravene the British government's decarbonisation commitments. Saving jobs, they argued, was synonymous with saving the planet.

Many recent examples carry the same lesson. The alliance in Germany between ver.di, one of Europe's largest trade unions in the public transport sector, and the climate protest movement Fridays for Future (FFF) is one such instance. Under the slogan #WirFahrenZusammen (we're travelling together), ver.di took industrial action to demand better working conditions and FFF organised demonstrations in over 100 cities, collectively pressing the political case that any successful transition will need a colossal investment in public transport.

“Red” redundancies going “green”

Given that electric vehicles (EVs), renewables, and public transport are indeed critical to the green transition, where does that leave workers in the most polluting sectors? Some of the most inspirational transition stories come from the automobile and arms sectors. In the early 1970s, working-class militants and unions around the world were taking up environmental concerns: the “red” and the “green” were finding a common tongue. In the USA, for example, the United Automobile Workers union leader Walter Reuther, who was not a radical by any means, declared that “the environmental crisis has reached such catastrophic proportions that the labour movement is now obligated to raise this question at the bargaining table in any industry that is in a measurable way contributing to man's deteriorating living environment.”

In Britain, the workers at Lucas Aerospace, a British arms manufacturer, did precisely that. Citing automation and falling government orders, the company's management was laying off staff. In response, workers set up an unofficial union body, known as the Combine, representing employees from across the company's 17 factories. Their central objective was to staunch job haemorrhaging by pushing the Labour government to invest in equipment for life rather than death. In 1974 they drew up a 1200-page document that detailed ideas for redeploying their skills and equipment towards socially-useful production, including kidney dialysis machines but also wind turbines, solar panels, hybrid vehicle engines, and lightweight trains – decarbonisation technologies that were virtually unknown at the time. The plan was beaten away by the Labour government of the day and the company's management, who dismissed its authors as the "brown bread and sandals brigade". However, the Combine story remains influential.

More recent threats of fossil-fuel-sector redundancies have also prompted action. A group of workers from Maflow made headlines in 2018, for example, when they occupied the premises of the company's automotive components plant in Milan, Italy, and set up a cooperative, which they called RiMaflow, after owners began to relocate equipment to Poland. The workers developed a variety of "circular economy" projects, including the repair of electronic equipment and bicycles, as well as recycling wallpaper – all the while defending the occupied space against intrusion from police and courts.

In 2021-22, a flurry of such occupations occurred against the backdrop of a turn to state intervention in pandemic-afflicted economies. In Munich, at a Bosch engine components plant, workers were confronted with the threat of layoffs. Management blamed the decision on the shift to EVs, although in fact production was to be transferred to countries with lower wages. FFF activists teamed up with the union IG Metall (IGM) to resist the redundancies.

Together, IGM and FFF pressed for a plant-level green transition, backed by state investment.

The demand, published as a petition, was signed by a large majority of the workforce.

Following its purchase by Melrose Industries, a multinational asset-stripper, in 2021, GKN, another key player in the automotive industry, announced the closure of plants manufacturing components for automobile drivelines in Florence and Birmingham. Over 500 workers from the British factory responded with a vote for strike action. They demanded that the plant switch to producing components for EVs. In the words of the Unite union convenor Frank Duffy: “We realised that if we want to see a green future for the UK car industry and save our skilled jobs, we couldn’t leave it to our bosses and had to take matters into our own hands.” In conscious echo of the Lucas Plan, he added, “we put together a 90-page alternative plan detailing how we could reorganise production” to secure jobs and expedite the transition to electromotive transport.

At the sister plant at Campi Bisenzio in Italy, transition-from-below went further. Having previously organised themselves into a democratic factory council (*collettivo di fabbrica*), workers were already in a strong position. They occupied the factory, and security guards, who had been ordered in, were sent packing. Together with climate justice activists and academics, the workers drew up a conversion plan for sustainable public transport and pressed for its adoption.

In a sustained series of mobilisations, tens of thousands repeatedly went out onto the streets with the backing of trade unions and local communities, as well as environmental groups such as Extinction Rebellion (XR) and FFF. Now in its third year, the Campi Bisenzio occupation is Italy’s longest ever. Having failed to force Melrose to reverse the plant closure, the workers shifted tack to form a cooperative that now produces cargo bikes, maintaining a segment of

the original workforce in secure employment, providing a glimpse of how worker-led decarbonisation programmes might begin.

Aeronautic transitioning

In these automotive industry examples, the path of transition appears straightforward, at least in material terms. A plant producing, say, components for cars with internal combustion engines (ICE) can be converted to one producing EVs, public transport, or bicycles. What, though, of such industries as aviation, for which no viable alternative technologies exist? As the scale of the environmental crisis grows more daunting, even moderate voices, such as the Cambridge “FIRES” group of engineers, recognise that aviation will have to be cut to virtually zero over the next two to three decades. How should workers in these industries respond?

In Britain, at the height of the Covid-19 crisis, some small but brave proposals emerged. The Green New Deal for Leeds, for example, presented an alternative to the expansion plans for Leeds Bradford Airport. And workers at London Gatwick, Britain’s second-busiest airport, developed an important Green New Deal for Gatwick (GND). The initiative, convened by eco-socialists and union officials from the Public and Commercial Services Union (PCS), took shape early in the pandemic when aviation workers were threatened with redundancies. I asked Robert Magowan, one of the proposal’s instigators, what lay behind the deal: “We know that aviation must degrow,” he replied, “and it was degrowing during the pandemic, but this must not come at the cost of workers. The pandemic response showed what governments can do when pressure is on – especially when the Broughton manufacturing site of Airbus was retooled to produce ventilators. That gave us inspiration, much as Lucas Aerospace had done decades before.”

Magowan and the GND team mapped out the many ways in which the various categories of Gatwick workers' skills sets could be adapted to jobs elsewhere in decarbonising industries. With PCS backing, they found support among the workforce, including a pilot whose words eloquently sum up what is at stake:

It has been my lifelong dream to fly. To face up to losing this massive part of our lives is incredibly scary; to lose our job is like losing a part of ourselves. But as pilots, we use our skills to identify this existential threat to the natural world and our lives. If this was an emergency in flight, we would have diverted to a safe destination long ago. We can't just fly blindly to the planned destination as the flight deck fills with smoke. Our industry's impact on global emissions is irrefutable. The so-called solutions to 'green' the industry at its current scale are decades away and are not globally or ecologically just. With environmental consciousness rising, the aviation sector will either shrink by design, through a 'Just Transition' for workers, or by disaster. We must find a way to put workers at the forefront of the green revolution, to ensure we have the option to be retrained into the green jobs of the future.

In its first incarnation, the green revolution at Gatwick failed to take off. Yet it provided a sense of possibility. During the "emergency" phase of the pandemic, when government intervention was the order of the day, the Gatwick GND connected to other workers' initiatives such as the call by ver.di to replace short-haul aviation with ground-transport alternatives, opening up the horizons of a radical worker-led transition and reminding us of what is at stake.

Class-struggle environmentalism

The class struggles that unfold this century will define Earth's habitability for millennia to come. We can find inspiration in struggles that unite climate activists and labour unions. We find it, too, in school strikes over climate change, which have introduced a new generation to the concept of strike action.

Yet we should also heed the fact that standout examples of red-green militancy happened half a century ago. This is no accident. The 1960s and early 1970s witnessed a worldwide revolutionary conjuncture, with surging labour militancy and social movements challenging oppression, injustice, and war. This was the soil in which the alliance of environmentalism and labour radicalism could grow, exemplified in the Lucas plan and Mazzocchi's ecosocialist activism, as well as other pathbreaking initiatives such as green bans, where environmental goals were fought for through strike action.

In any renewed wave of class struggle, we can expect questions of climate breakdown and just transition to move centre stage in multiple forms. These will include reactionary backlashes but also progressive movements, as groups of workers move beyond seeing climate politics as the playground of distant elites to a field in which their collective action can be decisive.