Post-COVID-19 policy responses to climate change: beyond capitalism?

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Abstract

Commentators across the political spectrum have interpreted the social, political and economic consequences of the COVID-19 pandemic and invariably suggested that, along with climate change, the COVID-19 pandemic require an interventionist policy response from government. In this paper, we interpret definitions of green growth as 'mission-oriented approaches' to the "twin crises" of the COVID-19 pandemic and climate change, examining the changing role of the state in confronting environmental issues in an era of climate and health pandemic. Both events have had, and will continue to have, important implications for work and employment. Thus, we evaluate the impact of COVID-19 on climate change, asking: to what extent have mission-oriented policy responses to COVID-19 impacted climate change action? We then broadly examine the impact of COVID-19 on labour globally and more closely, the possible impacts of a range of policy response options for Australia, assessing their position on a theoretical spectrum of 'ecological modernisation' that points to further policy development that can push responses beyond capitalism.

Keywords: COVID-19 pandemic, climate change, Green New Deal, work, employment, policy, industry

Introduction

As the COVID-19 crisis unfolded in 2020, a growing range of researchers and organisations arrived at general agreement that post-COVID-19 conditions allow for, and demand, a more ambitious and interventionist policy approach to the social, political, environmental and economic crises that have continued growing amidst the pandemic. It has been generally acknowledged that ambitious and interventionist policy responses will need to build on the connections between the future of work, industrial structure, and the environment (see, for example, WWF 2020; UN 2020; ACTU 2020a, 2020b).

The fact that the pandemic warrants a strong interventionist response became clearer still when, in *The Economist* – the mouthpiece of Western economic liberalism – an editorial piece (Leaders 2020) acknowledged that the COVID-19 and climate crises are fundamentally connected. Yet the most astonishing acknowledgement from this editorial emerged where, beyond describing how COVID-19 revealed the size of the challenge ahead, it went on to argue that the pandemic had also created a "unique chance" 'to enact government policies that steer the economy away from carbon at a lower financial, social and political cost than might otherwise have been the case.' From a very different point on the political spectrum, an editorial in the *Global Labour Journal* (Cook et al. 2020: 80) argued that:

> One important theme we are likely to see in this crisis will be the struggle to control and redefine dominant institutions in economics, politics, and society. On the one hand, there is the tendency to bail out big corporations and industries, to strengthen authoritarian and nationalist tendencies, to divide the population and to exacerbate existing inequalities. On the other hand, we are also beginning to observe new possibilities for addressing climate change, new bases of support for restructuring health and education systems, new civil society initiatives and new political leadership.

In this paper, we analyse and critique the policy response in Australia to the twin crises of the COVID-19 pandemic and climate change. As *The Economist* pointed out, the two are not separate from each other, and, once COVID-19 has declined in importance, climate change will remain. Both have had, and will continue to have, important implications for work and employment. The response of governments is going to be crucial in the short and long terms to the experience and outcome of both pandemics.

We begin the paper by evaluating the evidence regarding the impact of COVID-19 on climate change, asking: to what extent has policy and practice in response to COVID-19 impacted climate change? We then broadly examine the impact of COVID-19 on labour globally and the possible impacts of a range of policy response options for Australia more closely. The following sections examine how analysts have approached the changing role of the state in confronting environmental issues in an era of pandemic. We examine in particular how the limits and possibilities of "green growth" have been explored. Next, we look at four policy responses for the Australian context: the Australian Council of Trade Unions' (ACTU) *National Jobs Plan*; the Climate Council's *Clean Jobs Plan*; Beyond Zero Emissions' *Million Jobs Plan*; and the Sydney Policy Lab's *A Real Deal*.

We examine these initiatives in the light of the framework for analysing green jobs and climate initiatives developed initially by Goods et al. (2015) and later elaborated by Heenan and Sturman (2020). The plans we consider present contrasting degrees of confrontation with the existing order, as well as differing approaches to community involvement in the approaches outlined. To interpret the scope in each plan for meaningful policy responses, we invoke Gough's (2017) argument that confronting climate change will require going beyond capitalism to argue that this will also be necessary to shape policy responses that meaningfully confront COVID-19. We then hold the plans we have examined up against a variant of the American Green New Deal, in the light of the climate challenge that faces us, before concluding by contextualising the spectrum of possible policy responses to the twin crises with sobering reference to the immense scale of these challenges for the world beyond COVID-19.

The impact of COVID-19 on climate change

Early research on the effect of the pandemic on the climate drew attention to a massive drop in human activity. Le Quéré et al. (2020) pointed out that prior to the onset of COVID-19, emissions of carbon dioxide were rising about 1 per cent per year over the previous decade. Renewable energy production was expanding rapidly amid plummeting prices, but much of renewable energy was being deployed alongside fossil energy and did not replace it, while emissions from surface transport continued to rise.

By early April 2020, driven by reaction to COVID-19, daily global CO_2 emissions decreased by 17 per cent compared to mean 2019 levels, with just under half from

changes in surface transport. But this only brought emissions back to 2006 levels. The level of annual decrease is comparable to rates of annual decrease needed year-on-year over the next decades to limit climate change to a 1.5 per cent average temperature increase. The authors concluded that most changes observed in 2020 were likely to be temporary, as they did not reflect structural changes in the economic, transport or energy systems (Le Quéré et al. 2020: 652).

Work undertaken later in the pandemic phase underlined these conclusions. Forster et al. (2020) pointed to unprecedented enforced and voluntary restrictions on travel and work which had led to a decline in both GHG emissions and air pollutants. Mobility had declined by 10 per cent or more in all but one of the 125 nations tracked. However, the authors concluded that the climate effect of the immediate COVID-19-related restrictions would be close to negligible and lasting effects, if any, would only arise from the recovery strategy adopted in the medium term:

> Our work shows that the global temperature signal due to the short-term dynamics of the pandemic is likely to be small. These results highlight that without long-term system wide decarbonization of economies, even massive shifts in behaviour only lead to modest reductions in the rate of warming. However, economic investment choices for the recovery will strongly affect the warming trajectory by mid-century. Pursuing a green stimulus recovery out of the post-COVID-19 economic crisis can set the world on track for keeping the long-term temperature goal of the Paris Agreement within sight (Forster et al. 2020: 918).

Yet, Obringer et al. (2021) have argued that the role played by increased digital usage during the pandemic, as millions of professionals worked from home and most continue to do so, was likely to be an overlooked significant contributor to high emissions, with an estimated 40 per cent increase in use, worldwide, equating to approximately 42.6 million megawatt hours of additional electricity in support of data transmission and the powering of data centres. It is argued by these researchers that the contribution this will make to emissions will only be fully accounted for in the years following the pandemic.

The role of state actors at global and national levels would therefore be crucial in determining the long run impact of COVID-19 on climate change. The pandemic provided an impetus to change but no inherent long-term solution. Of critical importance to meaningful action to address climate change is the active role played by

labour in structuring an industry policy response capable of creating quality, sustainable jobs and a renewable economy that arrests further environmental destruction that has been exacerbated by globalisation.

The impact of COVID-19 on labour

An editorial in *Economic and Labour Relations Review* (van Barneveld et al. 2020) argued that COVID-19 had exposed vulnerabilities caused by neoliberalism. In driving globalisation, neoliberal policies, it was suggested, had privileged private markets, corporate wealth, flexible labour markets and weakened community voice, even before the pandemic erupted. First Nations people and women were suffering disproportionately as the virus took hold.

The global economy was far from robust when the virus spread internationally and vulnerabilities in global value chains soon became obvious. Huw Thomas (2020) has argued that the impact of COVID-19 on employment, work and ultimately, whether food is on the table, has been uneven, unequal and unremitting. For example, in Bangladesh '52 per cent of orders in the garment industry were cancelled immediately, and more than a quarter of the 4 million workers in the sector were fired or furloughed.' An editorial in *Global Labour Studies* (Cook et al. 2020: 78) pointed to several emerging themes, which included:

(1) A reconfiguring of the global and the local: The crisis has shown the weakness and fragility of many global institutions, and at the same time has shown the degree to which the global economy relies on global networks and migrant labour. Where global and national responses have faltered, mitigating the effects of the crisis has fallen on sub-national levels of government.

(2) The further destabilising of a distinction between formal and informal sectors: Precarity is not only a characteristic of informal work but a condition experienced by even the most formal wage-dependent workers. The proportion of the labour force engaged in informal work will expand, not only in countries who historically have had large informal workforces but also in those where formal work has been the norm.

(3) That we are *not* in this together: The pandemic has amplified existing inequalities along the lines of class, race, gender and immigration status. Deep-seated prejudices, biases and societal fractures have surfaced. Ham-fisted

> lockdowns, xenophobic mob-inciting statements of national leaders, brutal enforcement of "social distancing", populist immigration policies, and the closing of national and state borders have been legitimized in the name of the pandemic.

All told, workers, especially the most vulnerable workers, have borne the brunt of the social and economic consequences of COVID-19. As an editorial in *The Lancet* (2020: 1587) summarised, frontline workers – from hospital staff to teachers, supermarket workers, factory workers and hospitality staff – have been failed by the structural inadequacies of government policy responses, which is exemplified in a lack of personal protective equipment provision by healthcare systems hollowed out and privatised, and by 'chaotic' lockdown orders confusing and angering national populations. These and other essential workers have been among those at greatest risk of infection as they have worked to keep health services functioning and other essential public services running. Amongst these groups, it is still mostly non-white workers that suffer the highest risk factors (Mutambudzi et al. 2021). At the World Trade Organizaton (WTO), the richest countries have quashed attempts to waive patent rights so the poorest countries could mass-produce generic COVID-19 vaccines. In developing countries where the pandemic continues to overwhelm health systems, this has put the lives of frontline workers (and communities at large) at continued risk (Reuters Staff 2021).

As all of this has unfolded, the wealth of the world's 10 richest men rose by $540 billion US – enough to buy vaccines for the entire world and avoid ongoing social and economic crisis (*BBC News* 2021). Simultaneously, workers' rights have been curtailed through punitive misinformation campaigns by corporate actors, such as in the highly publicised case of Amazon warehouse workers in Bessemer, Alabama attempting to organise (Sainato 2021), and in cases of gig economy workers dying on the job due to lack of industry regulation (Lane 2020).

These and other corporate efforts to stymie labour rights and avoid taxes have delivered us to scenarios that impact workers most of all. But furthermore, as an article in *National Geographic* (Berreby 2020) argued, the pandemic had been good for one type of worker: robots. Pandemic, it was suggested had reduced public fears about robots and regulations had been loosened, with Berreby (2020) arguing that the COVID-19 pandemic has launched an experiment in how, where, and why to insert robots in

daily life. IMF researchers Saadi Sedik and Yoo (2021), have highlighted the likelihood that COVID-19 will accelerate the pace of automation and risk a jobless recovery for low-skilled workers. They have found that when associated with productivity-raising automation, health-related economic downturns displace low-skilled workers, especially in countries with higher robot density and where new robot adoption has increased quicker. This suggests a compounding of inequality in advanced industrial nations, and particularly where inequality is already an intense structural problem. Yates (2020) has examined these impacts in the case of the US; here, the antecedents of the Black Lives Matter movement in structural racism have deepened as the often-overlapping issues of race and socio-economic disadvantage are supercharged by pandemic conditions, adding a material dimension to the struggle:

> Black, indigenous, people of colour (BIPOC), and women have suffered disproportionately. Black, indigenous and Latinx people have died from COVID-19 at much higher rates than whites. More than 40 per cent of frontline workers are BIPOC. As in every month, the unemployment rates for Black and Latinx workers have been higher than for whites during the months of the pandemic. Some have called the economic depression a 'shecession' because women have been its main victims.

A similar story could be told in Australia where, as Hill (2020) argued in *The Monthly* the COVID-19 pandemic has thrust many women into poverty conditions, situations of domestic violence and intensified their primary care-giving duties. As in the rest of the world, women in Australia were losing their jobs at a faster rate than men. Large numbers of women who make up most casual and part-time staff, were also seeing their hours drastically reduced. COVID-19 has not only restricted freedom for women in public life, but it has also endangered their freedoms in private as well, with rates of domestic abuse high and rising since the outset of the pandemic.

The COVID-19 impact in Australia

As van Barneveld et al. (2020) pointed out, in the decades before COVID-19, Australia had shared the shift in many countries to a neoliberal policy paradigm, including a shift away from the "standard" employment relationship towards more insecure casual, fixed term, part-time work, and, more recently, changes associated with the gig economy. However, with the rise of the pandemic, new forms of regulation returned. Certain

occupations were described as “essential” and the unemployment benefit was renamed the JobSeeker allowance and extended. As Sarah Kaine (2020) pointed out, by the end of April 1.3 million people were registered for JobSeeker, double the December 2019 figure. Furthermore, the scheme left some of the most vulnerable workers unsupported, including temporary visa holders. Foreign students were left entirely without financial support. However, the government made it clear that employment subsidies were seen as temporary and would be withdrawn as soon as was feasible. The labour market was said to be in isolation and a return to more “flexible” future, which had been on the agenda for more than a decade, was restated.

Intervention extended beyond narrow economic issues to limitations on civil liberties, including the right to assemble/protest and the growing use of surveillance technologies. Even though, as van Barneveld et al. (2020) pointed out, the pandemic had demonstrated the known failures of neoliberalism, including rising global inequality, and drawn attention to new ones:

> Yet, as in the past, with its talk of coming out of ‘hibernation’, the remedy to neo-liberalism’s failures being posited by the federal Australian government is more neoliberalism, more ‘deregulation’ and more industrial relations ‘reform’ (van Barneveld et al. 2020: 16).

Kaine (2020) suggested that the government signalled a desire to return to more “normal” Australian politics in which industrial relations was highly contested and partisan. It is worth noting that, according to Spies-Butcher (2020), much of the stimulus was already aimed at propping up Australia’s privatized welfare state. The question was whether the Australian government would seek to follow out of crisis the path of Naomi Klein’s “shock doctrine” (2007) and advance a neoliberal-driven restructuring that to date they had singularly failed to introduce (Peetz et al. 2020). This was described as “snap back”, but, according to Frank Stilwell (2020), there were many reasons that this would not readily occur. More positively, Juliet Bennett (2020) argued that:

> The twentieth century witnessed two significant shifts in economic paradigms: first to Keynesianism, then to neoliberalism. The post-coronavirus recovery is an opportunity for another paradigm shift, one that applies economics in its social and ecological context.

Bennett went on to suggest that this shift is already taking place at a community level, across NGOs and within social movements. Therefore, we now turn to analysing the implications of the COVID-19 pandemic on the possibility of state intervention in relation to climate change. We look in particular at work that has drawn on Mazzucato's (2018) notion of "the entrepreneurial state" and more recently, "the environmental state".

Defining green growth I: mission-oriented approaches of an entrepreneurial state

Writing just prior to the onset of the coronavirus pandemic, Aiginger and Rodrik (2020) argued that despite previous predictions of the death of activist industrial policy, it had been making a global comeback since the Global Financial Crisis (see Rodrik 2009). Such thinking has contributed to shaping industrial policy frameworks equipped for twenty-first century economies where the neoliberal argument of "government failure" can be questioned in the face of growing evidence of "market failure" to address climate change and the COVID-19 pandemic. Recently, Mazzucato et al. (2020: 803) have argued for a 'mission-oriented approach to creating and shaping markets'. Faced with "grand societal challenges" such as ecological crises, policy makers can determine the direction of growth by making strategic investments across many sectors and nurturing new industrial landscapes which the private sector can further develop. Mazzucato (2020: 809-810) proposes the 'ROAR' framework, which involves strategic thinking about the desired direction of travel (Routes), the structure and capacity of public sector Organisations, the way in which policy is Assessed and the incentive structure for both the public and private sectors (Risks and Rewards). Tying in with this formula, Mazzucato et al. (2020: 434) argue that

> theoretical and practical approaches to policy evaluation should be considerably enriched and diversified in order to create the capacities needed to deliver challenge-driven policies. Governments should embrace new tools and techniques from service design research that focus on user experience and co-creating practices, and from evolutionary economics and related disciplines that focus on shifting and shaping technology and innovation frontiers, and managing complex systems in contexts of uncertainty.

On one reading, this could be taken as moving beyond the entrepreneurial state towards what has been recently described as the 'environmental state'. Hausknost and

Hammond (2020: 2) suggest that this can be explained as a next step in the evolution of the state, extending the functional logic of the welfare state from the mitigation of social externalities to the mitigation of environmental externalities. However, the environmental state was never intended to overcome the basic structures of industrial capitalism; instead, it is tied to the paradigm of "Ecological Modernisation", wherein policy strategy is to increase the efficiency and effectiveness of environmental management through technological and administrative innovation. Even here, as Coenen and Morgan (2019) suggest, there are a number of challenges to this extended approach to the question of innovation. Firstly, treasuries are averse to raising taxes to provide support for necessary public investment and innovation. Secondly, it presupposes that governments are prepared to engage in radical re-regulation. Notwithstanding these issues, we now turn to institutional responses to the twin crises.

Institutional action

The range of institutional attitudes towards green growth can be gleaned by looking at three definitions (see Hickel & Kallis 2020). The Organisation for Economic Cooperation and Development (OECD) concentrates on fostering economic growth whilst ensuring natural resources which provide environmental services. The World Bank seeks to minimize the environmental impact of growth. The United Nations Environment Programme (UNEP) offers the strongest definition in calling for reducing environmental impact and rebuilding natural capital. Unsurprisingly, the UNEP also offers the strongest policy prescription, being the only institution to call for an absolute decoupling of GDP from resource use and environmental impact. The three organisations do, however, agree that the mechanism for achieving green growth is technological change and substitution (Hickel & Kallis 2020: 470).

For Koch (2020: 129), the 'growth imperative' constitutes a problem, in that the priority of providing economic growth in policy making can be read as a 'glass ceiling' of the environmental state and a structural limit to its capacity to engage in societal and ecological transformation. Koch draws a distinction between an economy oriented towards monetary growth and a post-growth steady state economy. In the former, state action is largely reduced to the provision of green growth. In the latter, state economic, social and environmental policies are aimed at minimising matter and energy

throughput and maximising sustainable welfare, specifically the provision of sufficient needs satisfiers for all people now and in the future.

Bailey (2020) points to what is described as the "trilemma of the green state": how to orchestrate degrowth and maintain the fiscal viability of the state, while also expanding its environmental functions. For Bailey, achieving all three is impossible, so long as the state remains dependant on private capital accumulation. Barry (2020) rehearses arguments concerning the critique of economic growth and the fetishization of Gross Domestic Product (GDP). For Eckersley (2020: 50), whilst agreeing with critiques of green growth, it does not follow that degrowth is the only viable ecological option:

> How then are we to analyse approaches to the environmental state? There is no reason why the positive connotations of growth cannot be harnessed, but with different adjectives and therefore different meanings. These might then provide a warrant for governments, as economic managers, to orchestrate good/healthy/desirable growth and de-orchestrate bad/unhealthy/harmful growth – in short, grow the good and degrow the bad … the selective and simultaneous orchestration of 'growing and degrowing' would entail actively encouraging the growth of industries that hasten and enable environmental protection … and overseeing the contraction and phasing out of ecologically harmful industries.

We now turn from the limits and possibilities of state intervention in the twin crises, to frameworks within which these responses have been located.

Defining green growth II: framing the environmental state

In developing a conceptual framework to analyse green jobs in the Australian auto industry, Goods et al. (2015) examined the theory of Ecological Modernisation (EM). These scholars argued that EM represents a pragmatic environmental policy response whose basic perspective is that environmental and economic aims are compatible. Ecological sustainability, it is suggested, can be achieved within the current political-economic system via technological innovation and environmental management. However, within this admittedly limited framework, there is a divergence between "weak" approaches which focus primarily on technological solutions, and "strong"

approaches which look to a transformation of existing social, political and economic institutions, alongside technological innovation. Goods et al. (2015) do acknowledge that proponents of the "strong" approach accept that it faces severe opposition from industries such as the resources sector and associated political and lobby groups. This, it is argued, requires a strong state to intervene to manage a "just transition" towards ecologically sustainable strategies.

Critics of both approaches suggest that they rely on a "black box" of hitherto un- or under-developed technologies to decouple economic growth from environmental degradation. The EM approach rejects "no growth" in favour of "green growth" and argues that this can be achieved within a capitalist economic framework. It is in this light that we now turn to a focus on the Green New Deal (GND) that has appeared in the years since Goods et al. (2015) were writing. Heenan and Sturman (2020) argue that there are five orientations to the GND: pro-market which uses green rhetoric to maintain a status-quo neoliberalism; right-wing nationalist, invoking GND to frame national sovereignty against external threats (including climate change); Keynesian, featuring technocratic managerialism approaches to state-led growth; anarchist/degrowth, placing GND within the reformist wing of the reform versus revolution debate; and eco-socialist, emphasising the class antagonisms inherent in the climate crisis. Each position exists on a spectrum of responses (see Figure 1) that we interpret as representing one of several possible positions. These positions either challenge the existing political economy from a revolutionary perspective, a reactionary perspective, a reformist perspective, or merely seek a status quo response that can augment and indeed reinforce the existing system and arguably, fail to address the political-economic and social implications of the COVID-19 pandemic and climate change.

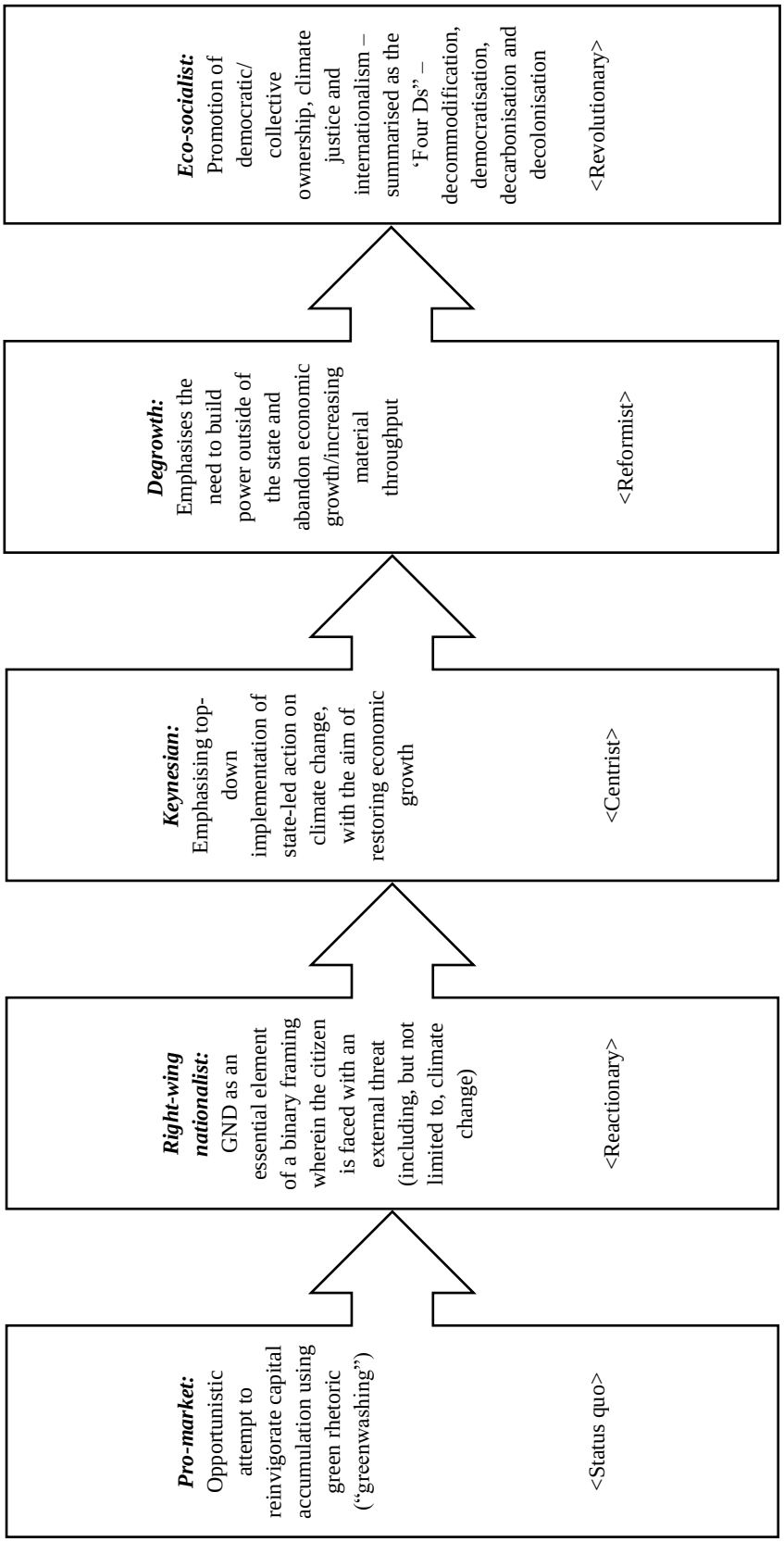

Figure 1: Five orientations to the Green New Deal

Source: Adapted from Heenan & Sturman (2020)

Australian Council of Trade Unions (ACTU)

In 2020, the ACTU published two reports concerned with jobs and the economy beyond the pandemic. The first, *Rebuilding jobs and our economy beyond the COVID-19 health crisis* (ACTU 2020a), was published in May and mapped out eight general features of a more inclusive post-pandemic economy. The second report, *Australian Economic Reconstruction after COVID-19: A National Jobs Plan, and Five Ways to Get Started* (ACTU 2020b) was released in the second half of 2020 and was more extensive, retaining a major focus on post-COVID-19 job creation but also contains a role for climate change action. For the ACTU, there is a need for an ambitious, sustained, multi-dimensional plan for full-fledged national economic reconstruction. Reconstruction should address problems that were evident before the pandemic hit. These include vast underutilisation of labour, growing prevalence of insecure and precarious jobs, widening inequality, persistent wage stagnation and finally, the impact of climate change. Pointing to the success of post-war reconstruction, which it is said achieved a prosperous and inclusive economy, the report claims that ensuring that all willing Australians should be able to work in similar conditions, is a valid and timely demand (ACTU 2020b: 5).

A "top priority" is improving the quality of jobs. Pointing again to the experience of the post-war economy, the ACTU put forward seven complementary elements of a national jobs and reconstruction plan. The ACTU then outlined five specific job-creating initiatives to start moving government policy in the direction of national reconstruction. It stated that this could be achieved by supporting Australian industry in taking advantage of breakthroughs in renewable energy technology where renewable energy, it was suggested, could become a huge competitive advantage for domestic industry. Implicit to the ACTU's package was the prioritisation of investment and employment opportunities in regions of Australia with current high concentrations of fossil fuel extraction. This would assist fair employment adjustments in the transition toward sustainable energy sources.

Furthermore, the ACTU stresses that the process of developing and implementing its plan must be democratic and participatory. This, it is suggested, should be modelled on the "constructive and task-oriented attitude" which stakeholders demonstrated in addressing the pandemic. The ACTU states that '[o]nly through a process that engages representatives of all elements of Australian society, can our

national jobs plan be sure to address everyone's needs – and hence win their full participation and support' (ACTU 2020b: 22). The ACTU plan is unpacked further in Table 1 below.

The ACTU plan contains borderline eco-socialist elements, but its approach is, in practicality, better described as containing weaker elements of Ecological Modernisation and resembling Keynesian principles of full employment, characterized by a people-centred response to technological unemployment coupled intrinsically with an environment-focused response to climate change. Similar approaches in the US have been described as 'Green Manufacturing' (Maher et al. 2020: 17). There remains a clear indication that action on climate change and economic growth would be state-led and industrial transformation to meet ecological and economic aims a process of top-down reform.

The evident caution in the ACTU approach is perhaps not surprising given the opposition of sections of the Australian labour movement and Labor Party to any action limiting coal and gas production (Murphy 2020). It does, however, raise issues that appear in all the Australian policies. The first is how accurate the democratic and participatory image of the post-war economic reconstruction is. Secondly, and related, is the *we are all in this together* image of COVID-19 government policy. At the time of writing, the Australian government is positioning to cut unemployment protection back below poverty levels whilst in parallel proposing income tax cuts that will disproportionately benefit the already wealthy.

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Table 1

Recovery Package	Recovery Package Key Elements	Job-creating Initiatives* **not correlated with list of top priorities*
Rebuilding Jobs/ A National Jobs Plan **(ACTU 2020a; 2020b)**	<u>Top priorities</u> *Improve the quality and security of jobs by creating 2 million new permanent jobs and halving the number of insecure jobs* *Lift wages and living standards / Rebuilding a more equitable labour market* *Strengthen and invest in public and community services that are our first line of defence against "shocks" like COVID-19, bushfires and drought / permanent improvements and expansions in public services* *Support nation-building projects that create decent jobs and set Australia up for a better future / Sustained and massive investments in public infrastructure* *Education and training / Rebuilding and expansion of training and education systems. Deal with the crisis of climate change / Energy and climate transitions* *Improve social, health and economic outcomes for people and communities that experience disadvantage / Investment in social infrastructure* *Embrace industry policy and "Australian Made" / Sector development strategies*	Early childhood education and care strategy Training for reconstruction Rediscover Australia – making the primary focus of back-to-work policies the consumer-facing industries including hospitality, retail, tourism and the arts – some of the hardest hit by public health-mandated lockdowns National Reconstruction Investment Plan - based on major new capital spending particularly on renewable energy assets. It would also ensure strong benchmarks for minimum Australian-made content in all funded projects, supporting the creation of 75,000 direct jobs in construction and over 100,000 additional indirect jobs in supply and consumer industries Sustainable Manufacturing Strategy (SMS) - emphasizing the need to preserve a well-rounded domestic manufacturing capability, supporting all manufacturing businesses in Australia in the transition to low-carbon technologies through a portfolio of procurement reforms, zero-interest loans, expanded Commonwealth investments in renewable energy, R&D commercialisation grants, sustainable manufacturing clusters and investment funds.

Table 1: Details of the ACTU recovery package proposal

Beyond Zero Emissions: Million Jobs Plan

Beyond Zero Emissions (BZE) is a climate change think tank, aiming to show through "independent research and innovative solutions" how Australia can achieve beyond-zero emissions. Arguing that the pandemic could cost Australians over 1 million jobs, the BZE 2020 report *The Million Jobs Plan* (BZE 2020) claims to demonstrate the enormous employment potential of investing in clean, low-carbon technologies. It is argued that over 150 global corporations have signed a public statement calling for a net-zero economic recovery and that this would create more jobs and growth than a high-carbon recovery (BZE 2020: 8). Job creation is both central and woven through BZE's policies for net-zero emissions. The report points to a number of project areas (outlined in Table 2 below), which could create 900,000 jobs over a five-year period, starting in financial year 2020-2021.

The BZE approach resembles again Green Keynesian principles, but would be better described as a stronger Ecological Modernisation. The issue of sharing the benefits and helping those who need help most is a stand-out feature of the BZE report, but a greater emphasis on the ecological elements of the plan highlight the technocratic nature of managing a green transition. Within such a strategy, there is a risk that groups such as women and Aboriginal and Torres Strait Islander (ATSI) Australians miss out on their fair share of the benefits of moving to a zero-carbon economy. Industries such as construction and manufacturing, which would benefit from the transition, tend to be male-dominated.

BZE acknowledges that its *Million Jobs Plan* would require billions of dollars of investment, reflecting the Green Keynesian position it takes. Yet despite the ecological sustainability principles inherent to BZE's plan, elements of a pro-market position, as per Heenan and Sturman's (2020) framework, are obvious in its approach to overcoming policy and regulatory barriers to guarantee deals of sufficiently large scale. This is clear where the report suggests that 'slow regulatory processes present a potential barrier to rapid job creation … [governments] should therefore focus efforts to simplify and speed up the approvals system for renewable energy projects and renewably-powered business ventures' (BZE 2020: 10). It is claimed that by pursuing the proposals in the plan, governments could remove these barriers and attract millions of dollars of private investment, but essentially this translates to lowering regulatory barriers and further unleashing market forces to direct investment decisions.

Table 2

Recovery Package	Recovery Package Key Elements	Job-creating Initiatives
***Million Jobs Plan* (BZE 2020)**	Project areas	
	Renewable Energy	90 gigawatts of solar and wind investments with new transmission infrastructure and battery storage
	Better Buildings	Deep retrofits to 2.5 million dwellings; construction of 150,000 energy efficient social housing dwellings
	Manufacturing	Decarbonising the sector and establishing new renewable energy-intensive industries, where identified opportunities could see Australia become a world leader in the production of hydrogen, ammonia steel and other metals using 100 per cent renewable energy, creating 230,000 jobs
	Land Use	Re-vegetation of 27 million hectares of land and growing this beyond 55 million hectares over 10 years. The restoration of forests and other ecosystems on just 6.5 per cent of agricultural land would create 40,000 ongoing jobs and the programme is aimed at supporting landcare workers, environmental managers, ATSI land and water rangers and community catchment
	Education, training and research	1,000 new higher education jobs to upskill the workforce plus 1,000 new researchers to support continuing technical advances in renewable energy and zero emissions technology and practices
	Zero carbon community initiatives	Source projects from local communities to lead the way on developing local solutions, emphasizing the truly geographically situated experience of the twin crises

Table 2: Details of the Beyond Zero Emissions Recovery Package Proposal

AlphaBeta/Climate Council – Clean Jobs Plan

Arguing that Australia is facing twin crises of pandemic and climate change, the *Clean Jobs Plan* claims to provide a "whole-of-economy solution", kick-starting economic growth and creating 76,000 jobs over a three-year period. Seventy per cent of jobs would be in construction and administrative services badly hit by COVID-19. A further 40 per cent would be in regional areas and a third would require minimal training (AlphaBeta 2020: 3). There are twelve policy opportunities which, as outlined in Table 3 below, point to accompanying job-creating initiatives. Each of these priorities was

selected based on their ability to create jobs at scale (high-impact), provide employment for those who most need these jobs (targeted) and can be delivered rapidly to address Australia's urgent needs for jobs (timely). AlphaBeta and Climate Council argue that these priorities will ensure the quick and effective creation of jobs while reducing emissions, lowering energy costs, protecting ecosystems and creating a healthier environment. The plan would require an investment of less than 0.5 per cent of Australian GDP, compared to the GFC stimulus of around 2 per cent of GDP and around 3.5 per cent of GDP around the pandemic by mid-2020. It is expected that every public sector dollar spent would attract $1.10 of private investment. Importantly, the proposed stimulus is designed to have an equitable impact in cities, regions, states and territories, by tailoring different policies to meet local needs. (AlphaBeta 2020: 21).

The plan proposed by AlphaBeta and the Climate Council resembles a weaker form of Ecological Modernisation, particularly where a pro-market approach championing technological fixes to achieving economic and ecological goals is evident on face value. Following along the lines of both the ACTU and BZE, the AlphaBeta and Climate Council report argues that the pandemic experience 'has shown that we can work together, follow expert advice and take decisive action' (AlphaBeta 2020: 4).

However, the detail of its plan indicates the kinds of initiatives that prioritize the creation of markets and the adoption of existing technologies without any clear whole-of-system R&D plan for innovation driven by industrial policy or via any systemic transformations of existing social, political and economic institutions. Instead, it urges supply-side policies to address employment and environmental goals, rather than set out to achieve these goals in demand-driven ways – with that demand being for ecological jobs and industries in the face of the twin crises. Short of denying that the initiatives outlined would achieve any benefits or that the AlphaBeta and the Climate Council's strategy represents a deliberate attempt at "greenwashing", the risk of the plan representing merely capital accumulation "with a green face" arguably lurks within its rhetoric.

Table 3

Recovery Package	Recovery Package Key Elements	Job-creating Initiatives
***Clean Jobs Plan* (AlphaBeta & Climate Council 2020)**	12 "policy opportunities"	
	Utility-scale renewable energy	Large-scale wind and solar generation, with transmission upgrades and battery storage infrastructure
	Community-scale grid systems	Generate, store and distribute energy through independent local grids
	Green hydrogen	Pilot projects to install and test green hydrogen technology
	Research	Into long-term carbon abatement initiatives
	Ecosystem restoration	Boost forest and wetland ecosystem carbon absorption through re-vegetation, amending irrigation systems etc.
	Organic waste management	Expand collection of food and garden waste and processing facilities to divert from landfill
	Urban and per-urban gardens	Increase tree canopy cover, usability of green spaces and urban agricultural projects
	Education and training	Create required skills for transition to zero emissions through vocational education, workplace training and adult reskilling programmes
	Public and active transport	Construction of public and active transport infrastructure including new lines, carriages and system planning along with cycleways and walkways
	Retrofitting of public buildings	Improve energy efficiency of government buildings
	Retrofitting of residential buildings	Improve energy efficiency of households by smart meters, insulation, heat pumps, glazing etc.
	Electric vehicle charging network	Install fast-charging ports in more locations

Table 3: Details of the AlphaBeta/Climate Council recovery package proposal

Sydney Policy Lab: A Real Deal

A Real Deal is the plan that has emerged from the Sydney Policy Lab at The University of Sydney, claiming to build on the idea of the Green New Deal. However, *A Real Deal* is driven also by the challenges presented by COVID-19. It is supposed to embrace the embeddedness of the economy in the environment and recognizes that the economy needs to run in a dramatically different way if climate catastrophe is to be averted. Scholars at the Sydney Policy Lab driving the plan have stated that the institute itself exists

> to forge collaborative relationships between researchers, civil society, industry, politicians and policy makers that are capable of creating new knowledge and driving change that would shape an Australia which is more equal, where power is

in the hands of everyday people and where people feel a secure sense of belonging in their own society' (Tattersall et al. 2020: 2).

The Sydney Lab adopts a Relational Method in drawing up *A Real Deal*, presenting an iterative process of exploring experience and analysis – from community partners to researchers, to other researchers, and back to partners. Its plan cites five essential benchmarks that are outlined in Table 4 below.

Table 4

Recovery Package	**Recovery Package Key Elements**	**Job-creating Initiatives**
***A Real Deal* (Sydney Policy Lab 2020)**	Five essential benchmarks	
	Major public investment attuned to the shape of the economy	Fiscal policy must be attuned to not only the size but also the shape and structure of the economy or it will not reach the people that need it most
	Addressing pre-existing inequalities/injustices	Policy must address root causes of marginalisation, not only to get through the current crisis, but also to equip the country to deal better with other equally foreseeable crisis, including climate change
	Bold community vision for an economy that serves all and a plan to make it happen	A vision is needed for who or what the economy is actually for. The Real Deal identifies six areas for thinking through this vision, across First Nation sovereignty, care, climate work, justice and citizenship, that will be essential ingredients in democratically planning for a Real Deal that delivers for people and the environment
	A Real Deal generated by active participation of people in decisions affecting them	Positive change is not handed down by appointed representatives and designed far away from communities by experts. *A Real Deal* is about generating quality connections between people that can support the development of policies informed by the full range of lived experiences
	Collaboration as the foundation to delivering long-lasting solutions	The crises that the country confronts cannot be dealt with one at a time, nor by the state, market or civil society alone. The Real Deal harnesses the power of collaboration to coordinate across issues, institutions and places

Table 4: Details of the Sydney Policy Lab recovery package proposal

A Real Deal, it is claimed, is the result of a long and unusual collaboration across a broad alliance with the aim of building an economy and government that work for people and our planet. The difference here is that, where the other reports examined are drawn up by experts, academics or policymakers and then a call is made for wide participation in implementation, *A Real Deal* involves wide collaboration in the very process of drawing up the plan. As Tattersall et al. (2020: 12) argue:

> Rather than coming up with yet another set of hypothetical policy proposals, our real solutions are drawn from the world of our community and business partners. From expanding renewable energy, to reimagining aged care, to making responsible investments, to providing community housing, to planning energy and climate justice, to practising mutual aid, to collaborating across difference, our case studies represent already existing strategies upon which a Real deal can be made (Tattersall et al. 2020: 12).

To address the COVID-19 and climate crises together, *A Real Deal* contains the strongest form of Ecological Modernisation of all plans analysed. On the issue of work, the report argues that well-paid, secure jobs are needed, tackling the scourge of precarity, supporting living wages and workplace rights, including for migrant workers and making space in the economy for small business and cooperative enterprises. Liveable incomes are needed for people whether or not they are in paid work. (Tattersall et al. 2020: 50). On matters of the climate, the report argues for a multi-pronged plan to transform energy, manufacturing, transport, and agriculture, the creation of employment-rich zero carbon industries, strategies to ensure ATSI community economic control of development projects on indigenous land, and transformative forms of adaptation and biodiversity protection (Tatttersal et al. 2020: 49). Hence, *A Real Deal* is thus far more radical – both in terms of prescription and process, and it moves beyond the previous reports, being based on a variant of the Green New Deal. But silences remain, particularly where it still does not confront what Koch (2020) describes as the "glass ceiling" of unrestrained economic growth being structurally incompatible with societal and environmental pressures for radical transformation.

Post-COVID-19 policy responses to climate change: beyond capitalism?

We have contemplated the range of green fiscal recovery packages that could variably act to decouple economic growth from GHG emissions in Australia. All take some action to reduce existing welfare inequalities that would be exacerbated by the pandemic in the short-term and climate change in the long-term. However, each plan analysed in the previous section resembles distinct orientations to tackling these twin crises. The SSEE report (Hepburn et al. 2020) concluded with five policy items that it claims would contribute most effectively to achieving economic and climate goals:

(1) Clean physical infrastructure investment;
(2) Building efficiency retrofits;
(3) Investment in education and training to address immediate unemployment from COVID-19 and structural unemployment from de-carbonisation;
(4) Natural capital investment for ecosystem resilience and regeneration; and
(5) Clean R&D investment (Hepburn et al. 2020: 16).

Each of the recovery packages proposed by institutions in Australia features initiatives that would restore economic growth imperatives whilst addressing climate change mitigation goals. All fit somewhere on the Ecological Modernisation continuum, being to a greater or lesser degree Green Keynesianism. Yet, as posited by Stillwell (2020), "Green Keynesianism" still rests on productivist assumptions. The growth imperative can act as a structural limit to the state's capacity to engage in societal and ecological transformation (Koch 2020). Hence, the question still to be resolved, as Stilwell (2020: 224) suggests, is whether 'jobs, jobs, jobs' is compatible with 'nature, nature, nature'.

More radically, eco-socialists associated with the Democratic Socialists of America put forward guiding principles for a radical Green New Deal (GND) which included:

- Fully decarbonise the economy by 2030;
- Centre the working class in a just transition to an economy of societal and ecological care;
- Decommodify survival by guaranteeing living wages, healthcare, childcare, housing, food, water, energy, public transport, healthy environment and other necessities;
- Reinvent our communities to serve people and planet, not profit

- Demilitarize, decolonize and strive for a future of international solidarity and cooperation; and
- Redistribute resources for the worst polluters with just and progressive taxes on the rich, big corporations and dirty industry.

Marxists such as Empson (2020), Foster, Clark and York (2020) and Davis (2020) argue that even the GND, on its own, would not be enough to deal with climate change and particularly within current politico-economic structures. Davis (2020) argues that the dark period approaching fast from the horizon will indict capitalism as a threat to human survival. According to Davis, a prosecutor would charge four counts:

> First, as a world system it is unable to generate incomes and social futures for a majority of humanity. Second, it can't decarbonize the economy or adapt poorer societies to endure the extreme consequences of global warming, which they played little role in creating. Third, it can't guarantee food security or sustainable water resources. Fourth, it blocks the translation of revolutionary biological advances into public health. These are convergent crises, inseparable from one another, and need to be seen in their complex ensemble, not as separate issues. To put it in more classical language, the financialized capitalism of today has become an absolute fetter on the productive forces necessary for our species' survival.

However, Ian Gough (2017) suggests that there may be a staged approach that could overcome these problems. Gough proposes a three-stage transitional strategy for sustainable wellbeing: green growth, recomposed consumption, and post growth (C1, C2 & C3 – outlined in Table 5 below).

Table 5

CI – coordinated capitalism	**C2 – reflexive capitalism**	**C3 – post-growth**
Similar to green growth; provides economic rationality for move towards environmental sustainability; facilitating concertation or integration across environmental, economic and social issues	Shifts consumption patterns in a sustainable direction; advocates cuts in high-carbon consumption but without challenging economic growth imperative	Incompatible with any form of capitalism; moves away from economic integration (free trade, capital mobility and export-led growth)
Towards the less radical end of Ecological Modernisation	Towards the more radical end of Ecological Modernisation	Towards a stationary state economy

Table 5. The three-stage transitional strategy for sustainable wellbeing

Neither C1 nor C2 will reduce emissions far enough or fast enough to avert catastrophic climate change. Therefore, post-growth is a response that exists beyond the Ecological Modernisation spectrum and represents a plan of action to address climate change which accepts mitigation efforts are not compatible with the growth imperative inherent to capitalism. Suzanne Jeffery (2019: 165) from the *One Million Climate Jobs* campaign in the UK, argues that there are a number of valid questions about the GND, but that in pulling working class organisations into the debate, it also helps to outline a route from C2 to C3:

> Calls for One Million Climate Jobs, a Green New Deal or a Just Transition are part of an offensive strategy to demand a transition from an energy system which is at the heart of a climate crisis for millions of ordinary people on the planet, to one which prioritises the needs of the majority, for a safe climate, an end to energy poverty, democratic control over the energy and transport system and good, well-paid, skilled and unionized jobs.

Gough (2017: 251) argues that failure to successfully negotiate the transition would bring about a "fortress state", which would oversee but could not effectively manage survival in a permanent state of emergency:

> The dominant political narrative would be survival and minimal national welfare. The maintenance of borders and social order would require new policing powers. There would be little scope for any kind of welfare state let alone social investment. Fir the vast majority, opportunities for human flourishing would decline.

Conclusion

The purpose of this paper was to evaluate the evidence regarding the impact of COVID-19 on climate change policy responses and determine the extent to which policy and practice in response to the pandemic has impacted climate change mitigation initiatives. We have argued that the impact of the COVID-19 crisis – already backgrounded by the impact of the ongoing climate crisis – has revealed the tensions between a neoliberal political economy that favours the wealthiest on the planet and disadvantages workers globally. Proposals for change at the global level have often emphasized the pivotal role to be played by state actors in policy intervention and we have argued that beyond well-tested notions of an "entrepreneurial state" approach to innovating our way to solutions, labour will need to feature as a significant player if responses are to capably

drive industrial transformation towards a renewable, sustainable future.

As we have delved into the detail of policy response proposals in the Australian context, our analysis has brought us to the conclusion that plans from a range of actors – the ACTU, Beyond Zero Emissions, AlphaBeta and the Climate Council and Sydney Policy Lab – are built from a base of Ecological Modernisation that accepts the compatibility of economic growth with ecologically oriented industrial and social transformation. However, none of the four reports we have examined confront the implications of resistance from business or political forces to policy development or application. To do so would imply consensus across the economy and society for moving to a post-capitalist, post-growth political economy, which is the antithesis to the state and industry within the capitalist system.

Let us finish with a nod in the direction of what should concern us. As Bill McKibben (2020) has pointed out, although the Paris climate accord apparently contained a commitment to holding global temperature increases to well below two degrees Celsius, once actual pledges, country by country, were added up, the world is headed for about a 3.5-degree rise by the end of this century. Even a two-degree rise would see 40 per cent of the permafrost region melt, releasing massive amounts of carbon and methane. Coral reefs are likely to die. Global food availability would be reduced by about 99 calories per day, of course massively unfairly distributed. Civilization would be stressed to a point approaching collapse. Although mainstream proposals on action to tackle the climate crisis have sought also to address structural political economy issues exposed by the COVID-19 crisis in the process, a response beyond capitalism is quickly becoming not simply desirable for a better world, but essential to humanity's survival.

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