FUTURE ON FIRE

CAPITALISM *and the* POLITICS *of* CLIMATE CHANGE

DAVID CAMFIELD

Foreword by Dharna Noor

Praise for *Future on Fire*

"At last, a book that can be shared with anyone awakening to the urgency of climate justice. In clear and accessible prose, *Future on Fire* shows us why we are in an ecological crisis—and what it will take to move beyond it. With meticulous care, David Camfield lays out sharp and compelling arguments for building mass movements that set their sights on ecosocialism. Spread the word!"
—David McNally, Cullen Distinguished Professor of History and Business, University of Houston, and author of *Global Slump* and *Monsters of the Market*

"Naomi Klein says only mass movements can save us from climate catastrophe. In this clear, concise, and absolutely convincing book, David Camfield shows why that is, and how we can build an effective movement to stop capitalism's deadly assault on our planet. Essential reading for every climate activist."
—Ian Angus, author of *Facing the Anthropocene* and editor of climateandcapitalism.com

"In these times of rising oceans and constant bruising of the natural world it is easy to feel hopeless and alone. David Camfield's fine-grained study shows precisely where the resources for hope lie: in collective mass movements that threaten capitalism's power and its planet-destroying drive for profit. It is essential reading for all those seeking to put the brakes on accumulation, but especially for those who dare to imagine a world of beauty and justice."
—Tithi Bhattacharya, coauthor of *Feminism for the 99%*

"Facing up to the climate crisis means building mass movements, but what does this entail? David Camfield has given activists an indispensable guide to the key issues and the practical implications."
—Gareth Dale, coeditor of *Green Growth: Ideology, Political Economy and the Alternatives*

"This book is a powerfully concise and brilliant primer on the connections between climate change and capitalism, and the potential of social movements. Camfield weaves in lessons from history, dispels false solutions to the crisis, and lays out clear opportunities. Perfect for climate justice organizers and climate strikers thinking through strategy and what it will take to win the world we so urgently need."
—James Hutt, labour and climate organizer, digital campaign strategist

"We know what the solutions are—David Camfield asks the question we should all be focusing on now: what is stopping policymakers from acting? Camfield argues that we—the workers, students, and caregivers of civil society—have a critical role to play—not as consumers or even primarily as voters, but as builders of mass movements. It is a compelling argument for the power we hold when we organize collectively. This book is illuminating, empowering, and hopeful."
—Hannah Muhajarine, organizer with Manitoba Energy Justice Coalition

Future on Fire

Capitalism and the Politics of Climate Change

David Camfield

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"Only mass social movements can save us now."
—Naomi Klein

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Foreword

Dharna Noor

In summer 2021, amid a record-breaking heat wave, a wildfire burned down the entire village of Lytton, British Columbia. In just fifteen minutes' time, the first few wisps of smoke turned to a ravaging inferno.[1] Harrowing footage showed residents jumping into their cars in an attempt to escape, but some found that the town was so surrounded by flames that there was nowhere to go. One man watched in panic as his family home went up in flames, killing his parents. "There was nothing we could do. It came in so fast, we had nowhere to go," he told a local news station.[2]

The implications of climate inaction aren't waiting for us in some far-off future; they're here right now. Extreme temperatures, fires, floods, storms, and droughts are becoming commonplace and all the more deadly. The world is losing some 150 species to extinction every single day, many of them to climate change.[3] Famine, war, and poverty are becoming increasingly common, and the climate crisis is fueling all of them. If emissions continue apace, things will get far, far worse. But as David Camfield explains in this urgent book, if we harness the power of mass movements, that doesn't have to be our fate.

The stakes couldn't be higher, especially for poor and working-class people who face the gravest danger. Due to webs of economic oppression, the largest polluters on the planet tend to suffer less, while those who contribute the least—low-income populations, working-class people, the

Global South—are tragically the most affected. Yet no one is safe, for no region will be untouched by climate change.[4] Typhoons, after all, can topple even the tallest penthouses. Still, somehow, leaders refuse to act.

Is it a lack of scientific research that's responsible for this deadly stubbornness? Are powerful people misguided or confused? In this important book, David Camfield skillfully shows that the issue isn't a lack of information or understanding. Rather, it's our cancerous economic system of extractive, fossil-fueled capitalism that values the short-term growth of profits above all else.

People are demanding decisive climate policy. Public concern about the climate crisis is growing, and scientists' call for action has reached a fever pitch. Due to their decades of pushing the world toward catastrophe, energy giants face not only protests and lawsuits from environmentalists but also campaigns from their own shareholders who say reducing emissions will keep their investments safe. Even the International Energy Agency—an organization founded by Henry Kissinger—says the world must immediately ramp down fossil fuel production.

In this atmosphere, corporate executives have started to talk like climate activists. Google says it's working to "confront climate change head-on."[5] Facebook professes its desire for a "just and equitable transition to a zero-carbon economy."[6] Amazon claims it's "committed to building a sustainable business for our customers and the planet."[7] Even the companies most responsible for causing the climate crisis say they'll play a central role in solving it. ExxonMobil, Shell, BP, and Chevron—the most carbon-polluting corporations of all time—have all announced plans to achieve carbon neutrality. So have meat purveyors, car manufacturers, airlines, for-profit utilities, and other major emitters.

At first blush, this new rhetoric seems to indicate a seismic shift, a sign that amid public pressure, the global elite

have all come to their senses. But beneath the shiny veneer of climate pledges are the same old destructive business plans. Energy companies' proposals, which are full of accounting tricks and faith in unproven technologies, don't come close to meeting even the most conservative goals set by international climate policy.[8] Tech firms wax poetic about climate justice while continually signing contracts with top polluting sectors to mutually boost their profits. Planet-warming emissions are still on the rise.[9]

Corporations aren't the only ones responsible for these useless charades. Government actors have also failed to take these companies to account. Despite decades of evidence that companies are blatantly unwilling to compromise their business models for the sake of planetary survival, state actors have largely avoided imposing even moderate regulations. Moreover, they continually reward ruinous corporate behavior with multibillion-dollar tax breaks and subsidies.[10]

Some things have changed. Due to the shifting tides of the energy market and the demands of climate activists, politicians are putting forth more comprehensive environmental policies than ever before. Some frameworks, like the Green New Deal, could be transformative if passed. But so far, enacted plans amount to tinkering hopelessly around the edges of the radical changes we need.

Without profound cuts to greenhouse gas emissions, the death toll from heat waves alone may eclipse that of all infectious diseases combined.[11] The world's ice sheets will continue to melt and pour into the oceans, swallowing coastal communities.[12] Insect plagues will spawn food shortages.[13] All the while, the already-chasmic global wealth gap will grow wider, leaving those without means little chance of survival.[14]

Scientifically speaking, we know what we must do: We must phase out of coal, oil, and gas at once, reshape our transit systems and housing plans, design a more humane and sustainable food system, decarbonize every sector of the

economy. Politically, though, this can seem like an impossible undertaking.

Future on Fire is essential reading for those looking for a way to make these shifts and build a more just world. Camfield illuminates the uncharted territory before us with lessons gleaned from past political projects. He also gives readers a north star: achieving ecosocialism.

1.

The Path We're On

Since you're reading this book, you won't need to be convinced that Earth's climate is changing rapidly because of human activity. It's widely known that greenhouse gas (GHG) emissions have caused the global average surface temperature to rise by over 1°C above the preindustrial levels measured during the second half of the 1800s.[1] What's less well understood is that current government policies for reducing emissions still set Earth on a path toward between 2.5 and 2.9° warming above preindustrial levels by 2100. That kind of heating is far above the maximum of 2° and the preferred limit of 1.5° agreed to in the United Nations (UN) Paris Accord of 2015.[2] Worse, that estimate of disastrous warming by the end of the century assumes that future GHG pollution levels will actually reflect today's government policies for lowering emissions, in spite of the record of emissions often exceeding targets.

To put those numbers in perspective, we should heed ecological researcher Andreas Malm: "Consider the 2 degrees target, not as a threshold to dangerous global warming—we are well within its field of force—but rather as a demarcation between the dangerous and the extremely dangerous, beyond which positive feedback mechanisms might run amok. To have at least a reasonable chance of maintaining an orderly civilization, we should the keep the rise in average temperature below that line."[3]

We can't be certain that 2° is the line between dangerous and extremely dangerous warming; that figure comes from

the UN's Intergovernmental Panel on Climate Change (IPCC), whose "gold-standard" scientific reports are "conservative, integrating only new research that passes the threshold of inarguability."[4] Some scientists argue that the climate science models on which the IPCC relies may underestimate what will happen if emissions continue to grow a lot in the coming decades, and that they may also be inaccurate beyond 2100. There is a risk that even 2° of warming could set off feedback processes—such as the large-scale thawing of permafrost, which stores enormous quantities of GHGs, or the loss of ice sheets in Greenland or the Arctic—that would lead to global temperatures rising faster than those models predict. Such feedbacks would lock Earth into runaway warming, with temperatures continuing to rise no matter how much emissions from human activity were slashed.[5] As writer Richard Seymour points out, "The problem with ecological feedbacks and tipping points is that, while their existence is well established thanks to the work of paleoclimatologists, it would be impossible to say when and how they would appear. You wouldn't know it was coming until it had happened already."[6] It's probably still possible to avoid extremely dangerous levels of climate change and runaway warming, but it will take drastic cuts in GHG emissions that start soon.

Heating is already having negative effects on the Earth System (a term that reflects many scientists' understanding of how different natural processes are part of a complex integrated whole). The more the planet warms, the worse these will get. People are beginning to experience these effects all over the world. It's not just that average temperatures are rising; extreme weather is also becoming more common. Extreme events like heat waves, high winds, and downpours of rain are happening more often. As the atmosphere changes, severe cold spells are becoming more common in some places. Periods of hot, dry weather are becoming longer and more common. These, in turn, are fueling more and larger wildfires.

Some land is becoming drier, while dry land is becoming desert. Sea levels are rising and will continue to rise. Flooding will grow, along with more landslides. Glaciers will melt, leading to river flows shrinking and changing the timing of those flows. We have only just begun to see how all this is altering ecosystems globally.

Sadly, climate change is not the end of the story of how human society is changing the Earth System. Many processes are being affected. What some scientists call "change in biosphere integrity"—the extinction of many animal and plant species—is being driven by climate change and other consequences of human activity. This mass extinction is a serious problem for humans because of how we depend on the rest of nature for life. Some people's ways of life are being undermined by the disappearance of animal populations, whether in water or on land. We are all threatened by the decline of insect populations that pesticides and the destruction of habitats have caused; without pollinators, agriculture would collapse. In addition, oceans are becoming more acidic; flows of phosphorous and nitrogen from industrial agriculture into water and soils are swelling; forest cover is shrinking; freshwater is being depleted; there are higher levels of aerosols (fine particles) in the air; and many harmful or potentially harmful chemicals and other substances are being spewed into the environment. In sum, "The relatively stable, 11,700-year-long Holocene epoch, the only state of the planet that we know for certain can support contemporary human societies, is now being destabilized."[7] Some scientists conclude we are now living in a new epoch in the long history of the Earth System, the Anthropocene.[8] Others prefer to describe what is happening as a global ecological crisis.

Deadly Consequences

Whatever we call it, what we are doing to the rest of nature is having deadly consequences for humans that will definitely

get much worse. In the memorable words of researcher Eddie Yuen, "The question is no longer whether there will be environmental catastrophes, but for whom."[9] A vast and growing torrent of studies attempts to predict what climate change and, to a lesser extent, other human-driven changes to the Earth System will mean for people. For example, one team of researchers reports:

> We found traceable evidence for 467 pathways by which human health, water, food, economy, infrastructure and security have been recently impacted by climate hazards such as warming, heatwaves, precipitation, drought, floods, fires, storms, sea-level rise and changes in natural land cover and ocean chemistry. . . . Ongoing climate change will pose a heightened threat to humanity that will be greatly aggravated if substantial and timely reductions of GHG emissions are not achieved.[10]

Hotter temperatures alone will kill many people. The heat waves that took the lives of fifty-five thousand people in Russia in 2010 and thirty-five thousand across Europe in 2003 give us some sense of what this will look like.[11] More frequent extremely hot weather will also kill through the spread of disease and by making it harder for people to get enough food and clean water. People in several regions of the Global South will be most severely affected by global warming. The threat is, however, not limited to those regions. Internationally, it is poor people and elderly people who are most vulnerable. The direct effects of heat alone are not the only threat. Other kinds of extreme weather can also be lethal. Rising waters will displace many people. In some cases, ocean levels swelled by the changing climate will be the immediate culprit. This is the case for many coastal areas. The Miami metropolitan area of Florida, where some six million people live, is one region in a rich country where rising seas will displace people. As

the author Ashley Dawson has pointed out, "Given the highly vulnerable infrastructure that weaves through cities, once one part of the metropolis has to be abandoned because of the rising tides, the city will for all practical purposes cease to function. How, for example, would elevated portions of Miami continue to function without access to clean water or sewage?"[12] Yet the problems facing Miami are dwarfed by those facing many coastal cities in the Global South. For example, Jakarta, with ten million people in a larger urban region in Indonesia of over thirty million, is sinking because of how groundwater is being used at an unsustainable rate. There are thirteen rivers in the city but they are terribly polluted. At the same time the city faces rising sea levels.[13]

Why Social Arrangements Matter

The example of how heat waves kill helps us to understand why it's wrong to think of "climate change" affecting "people" in a simple and straightforward way. There is no doubt that it has far-reaching effects, but it always affects people in the context of the specific society in which they live. How a society is organized is fundamental to how climate change affects people. Poverty makes this obvious: if during a heat wave you can't get enough drinkable water and access to a cool space because you can't afford to pay for them, your chances of survival are generally much lower. Similarly, people who are compelled to work for pay in dangerously hot conditions, because they need the money to survive and they won't get paid if they don't work, are suffering because of how their society is organized.

The same is true when it comes to climate change and migration. As rising waters, drought, and other effects of climate change drive more people to move, the impact on people will vary depending on their wealth and power. Who can get to safety before the storm hits the city and who must remain behind; who can move from the countryside into the

city and find decent housing and who can only build a shack; who can get a visa to cross a border legally and who must risk entry without papers; who can buy a plane ticket and who can only board an overcrowded ship—such things are decided by how societies are organized, not by the climate.

As the climate changes, social arrangements will determine how many people will die and who they will be. They will also determine what adaptation to climate change will look like and who will pay for it. The impact on people will reflect the degree to which the sanctity of profit-making and the power of corporate owners reign supreme in a society. How racism, sexism, and other forms of oppression shape societies will also influence how climate change affects people.

We can clearly see how the organization of society makes all the difference by comparing how Haiti and Cuba have been affected by storms. The two countries are in the same region of the Caribbean. In the three decades after 1980 Haiti was hit by twenty-three hurricanes and thirty-five floods. In Cuba there were twenty-seven hurricanes and twenty floods over those years. Cuba and Haiti have similar population sizes, but the death toll in Haiti—between 6,666 and 8,608 people—was vastly larger than the 193–203 killed in Cuba. Why the stark difference? Haiti has long suffered at the hands of imperialism, from the debt burden and diplomatic isolation imposed by France and the US in the early 1800s as punishment for the overthrow of slavery to the neoliberal policies of the International Monetary Fund and World Bank.[14] As a result, dire poverty is rampant and public services are extremely weak. In contrast, Cuba's civil defense, early warning and public health systems, along with its level of infrastructure development—all consequences of the Cuban Revolution of 1959—provide its citizens with much greater protection from extreme weather.[15]

The basic point that social arrangements shape how climate change affects people is usually either missed entirely

or barely considered by research studies that attempt to predict its impacts. Yet it is absolutely crucial. Such research generally constructs simple models. For example, "rapid climate change → resource conflict → social breakdown → violence." But, as researchers Joel Wainwright and Geoff Mann argue:

> notwithstanding an impressive body of literature that draws correlations between discrete effects of climate change (such as more or less rain) and social conflict (more or less fighting), social scientists are a long way from being able to establish the "truth" of any of these simple causal models. Certainly these models cannot be scaled up from empirical cases to support meaningful claims about the future of the entire planet. There are simply too many analytical problems involved.[16]

As Ashley Dawson suggests, "efforts to conjure up future worlds based on unknowable contingencies and discontinuous ramifications" are unreliable. Visions of climate apocalypse often reflect the "present-day investments and bugaboos" of our rulers and those who see the world through their eyes.[17]

However, as Wainwright and Mann contend, "The impossibility of accurate prediction does not mean we should throw up our hands and give up trying to anticipate a range of futures. Instead, the challenge of all climate futures centers on the question of the political. How the world will respond *politically* to climate change and its effects"[18] is the critical question. To be clear, the issue here is not just what governments and other state institutions do, although what states do is extremely important. The essence of politics is power in society. Political responses to climate change are about how groups of people wield power to organize society.

This means we are not all in it together. Malm explains: "Witness [Hurricane] Katrina in black and in white neighborhoods of New Orleans, [Hurricane] Sandy in Haiti

and in Manhattan, sea level rise in Bangladesh and in the Netherlands. . . . For the foreseeable future—indeed, as long as there are class [meaning class-divided] societies on earth—there *will* be lifeboats for the rich and privileged, and there will *not* be any shared sense of catastrophe."[19]

There is no better clue of what this may look like than Eko Atlantic. This is a city being built on a newly constructed island just off the coast of Africa's biggest city, Lagos. Its developers bill it as "reversing coastal erosion," protected from the rising Atlantic ocean by "a sea wall built to last 1,000 years" that will allow it to be "a solution to the chronic shortage of prime real estate in Lagos, and the need for a new financial headquarters for Nigeria—the largest economy in Africa."[20] When finished, it is expected to have 250,000 residents. But what will this new city mean for the very poor people, struggling to get by in the informal economy, who make up most of the multimillion residents of Lagos? They will not be living in Eko Atlantic's well-serviced apartment towers. Journalist Martin Lukacs suggests that "Eko Atlantic is where you can begin to see a possible future—a vision of privatized green enclaves for the ultra rich ringed by slums lacking water or electricity, in which a surplus population scramble for depleting resources and shelter to fend off the coming floods and storms."[21]

Why Are We on This Path?

We can't avoid asking the question "why are we on this path?" In spite of everything that has been known for decades about climate change and its consequences, why have governments failed to take decisive action to reduce emissions? Why are we headed toward close to 3° of warming by the end of this century along with a broader ecological crisis? As historian Simon Pirani suggests, "In a century's time, when the impacts of global warming will be much more ruinous than they are today, people may look back at this failure as collective

madness. There may be an analogy with the way people today view Europe's descent in to the barbaric slaughter of the First World War, a century ago, as collective madness. It *was* madness, but it had definite political, social and economic causes."[22] The same is true for the path we're on to extremely dangerous climate change and a worsening ecological crisis.

One common explanation is that global population growth is responsible for the ongoing rise in GHG emissions and for other kinds of environmental destruction.[23] However, there is no direct connection between the number of people on the planet and the emissions that are changing Earth's climate or other ways in which the Earth System is being disrupted. Individuals don't spew GHGs into the environment or consume resources except as part of the society to which they belong. As Pirani notes, "fossil fuels are consumed by and through technological systems, which are in turn situated in social and economic systems."[24] Rich, advanced countries of the North burn much more fossil fuel than the much larger and faster-growing populations of the South. When it comes to the pollution of the atmosphere by carbon dioxide (CO_2), methane, and other GHGs, it's not the absolute number of people that's causing the problem. What counts above all else is how societies burn fossil fuels to generate energy.[25] To a lesser extent, other drivers of GHG pollution also matter: the scale of industrial agriculture and the destruction of forests. Population growth is also not the cause of other dimensions of the ecological crisis.

Another common explanation is economic growth. But simply looking at gross domestic product (GDP) statistics and emissions levels or other ecological effects ignores the question of what's going on behind the GDP numbers. It "exclude[s] analysis of energy flows through technological systems."[26] It fails to ask what it is about how society is organized to produce goods and services that leads to GHG emissions, mass extinction, ocean acidification and other problems. Researcher

Gareth Dale points out that "growth is not its own cause." He adds, "The relentless increase in global resource throughput and environmental despoliation is not principally the result of states aspiring to a metric—higher GDP—but of industrial and financial firms, driven by market competition to expand turnover, develop new products, and increase profits."[27]

This points us to the answer to why we're headed toward extremely dangerous warming as part of a deepening ecological crisis. We live in a world in which most goods and services, from food to electricity to entertainment, are produced as commodities; they must be bought. Most commodities are produced by privately owned firms (some are state-owned). The goal of production is profit, not providing people with useful things. The goods and services produced are just a means to that end. Whether large or small, companies are caught up in competition with each other; a company that doesn't bring in enough money can be swallowed up by another firm or driven out of business altogether. Competition compels firms to increase productivity or go under. To make and distribute products, firms hire people, who are forced to sell their ability to work to employers for lack of viable alternative ways of supporting themselves and their dependents. People are able to work for capitalists (the people who control firms and employ most of the rest of us) in large part because of the unpaid labor that's done at home, mostly by women, to raise children and keep today's wageworkers functioning. These are capitalism's defining characteristics.

Capitalism is not a mental paradigm. Nor is it just an economic system. It's a way of organizing society, an "institutionalized social order."[28] Its historical emergence and spread involved violently depriving people of access to the land or water on which they had been able to rely for subsistence and also undermining the independence of artisans. These processes of dispossession continue today. They have created an enormous global working class. This encompasses

everyone who sells their ability to work in exchange for pay and has little or no management authority, regardless of whether they are employed full-time or part-time, regularly or irregularly, for high pay or low. It also includes unwaged people who rely on the wages of others. The mental and manual labor of this working class produces the commodities that are the source of business profits; because the value of what workers produce is vastly greater than the wages and benefits they're paid, the working class as a whole is exploited by capital.[29]

Although wood, water, and peat were important sources of energy in the earliest phase of capitalism in Europe, capitalism was powered by fossil fuels as it developed and spread around the world in the 1800s. Coal-fueled steam power came first. Capitalists in Britain, where capitalism first emerged, opted for steam, "laying the foundation of the fossil economy," "because it augmented the power of some over others," as Malm's pathbreaking research has uncovered. "The succession of fossil-fuelled technologies following steam—electricity, the internal combustion engine, the petroleum complex: cars, tankers, refineries, petrochemicals, aviation . . . —have all been introduced through investment decisions, sometimes with crucial input from certain governments but rarely through democratic deliberation."[30] Fossil fuels became "embedded in every aspect" of capitalism, putting society on the path to disastrous climate change.[31]

Capitalism is also the underlying cause of the other dimensions of the global ecological crisis. Capitalist competition drives the scale of commodity production to expand without limits. Yet nature is not infinite. The cancer-like growth of profit-driven production is disrupting ecosystems, killing species, and depleting finite resources. The pace of capitalist production is also ever-increasing. The faster capital can move through cycles of investment, production, sale, profit, and reinvestment, the more money firms can make. The speed

of capital accumulation races far beyond the speeds at which nature replenishes—think of forests cut down faster than new trees can be grown, or soil depleted of nutrients because it isn't left fallow.[32]

Capitalism is ultimately responsible for the obstacles that are keeping us on the path to extremely dangerous climate change. Most oil, natural gas, and coal are extracted by profit-driven companies. Most electricity is generated by for-profit firms too. The companies that build vehicles and make machinery and everything else that is part of society's energy system are in it for profit. Three environmental studies researchers state the truth when they write that "the existing investments made by fossil fuel interests are simply too great, their profits too astronomical . . . and the diversity of their product too limited for them to undermine their own ability to hold on to this status quo . . . perhaps never before has there been an industry with so much power and so much to lose through domestic and international policymaking."[33]

Outside the fossil fuel industry itself, many other companies oppose a transition away from fossil energy because it would hurt their profits. This includes banks and other firms with investments in fossil fuels as well as investment funds with a stake in the industry. For example, in Canada there are eight large companies involved in the Alberta tar sands. They are "at the heart of the system of large, monopolistic corporations that shape the Canadian economy . . . [and] Canadian banks . . . are deeply linked to the extraction corporations. . . . The portfolios of most of the large retirement funds or mutual funds in Canada also rely on the value of the securities of extraction companies."[34] The companies with the most to lose from a transition from fossil fuels put a lot of effort into influencing government policy. What's more, the far-reaching public investment in transportation, energy generation, construction, and other spheres that's needed for such a transition is anathema to neoliberal ideology, which

still influences governments.[35] Governments also know that making a serious move away from fossil fuels would provoke enormous resistance from at least some major capitalists. Firms could decide to suspend operations or shift investments elsewhere to punish a government that threatened their profits. This could have a ripple effect on other firms and lead financial capital to drive down the value of the country's bonds and currency in international markets. It's capitalism that put us on the road to extremely dangerous warming, and it's capitalism that keeps us from turning in a different direction.

That's Not All Capitalism Has in Store for Us

The focus so far has been on climate change and the ecological crisis. Unfortunately, that's *far* from all that matters about where capitalism is taking us. There are *many* ways in which capitalism, which is inextricably interwoven with many forms of oppression, is harming people today. There are many ways in which it's making people's lives worse. For one, the share of the world's population that eats fewer calories than they need has grown in recent years.[36] There is more than enough food produced, but some people can't afford it. Even in the rich countries, life was getting harder for many people even before the COVID-19 pandemic triggered the worst economic crisis since the Great Depression of the 1930s. A growing share of jobs are worsening as employers make work more intense and less secure. More jobs have nonstandard and often irregular hours. People are taking on more debt and often spending more on making payments even with very low interest rates. Access to services like health care and public transit is often shrinking, and quality is declining. All the while we're bombarded with the message that we must be happy and that unhappiness is pathological. Add in saturation by electronically delivered images and information, factor in spreading awareness of climate change, and is it any wonder that mental

distress was spreading even before COVID-19 and the latest economic crisis hit?[37]

These trends aren't new. However, they've been made worse by how, since the Great Recession of 2008–9, capitalism has been mired in what economist Michael Roberts calls "a long depression similar to 1873–97 or 1929–42 . . . an economic environment where investment in productive capital is way below previous average levels, with little sign of pick-up."[38] The COVID-19 pandemic triggered a deep recession, but it was the condition capitalism was in when the pandemic hit that explains why it has been so deep. We can expect the long depression to last until profits from investment revive. That won't happen until economic slumps drive down the cost of labor, get rid of many less-competitive firms, and eliminate a lot of debt—all of which will hurt many people. The long depression has brought with it austerity—"not simply spending cuts" but "a shift in the entire civilisational edifice of capitalism, deepening an equivalent shift that began in the mid-1970s."[39]

"Women have been disproportionately affected by the dismantling and privatisation of public services, in particular the provision of care for children, the disabled, the sick and the elderly, areas in which women perform the majority of the labour, paid and unpaid."[40] In these conditions, racism has been given a boost as some members of dominant racial groups, egged on by some politicians and corporate media outlets, look for scapegoats and seek comfort in nationalist ideas about who "really" belongs. Political forces of the hard right (think of the Republican Party in the US, the Conservative Party in the UK, and the right wing of the Conservatives in Canada) and the far right (fascists and others like Donald Trump who aim to get rid of even the minimal form of democracy that exists in some countries today) have grown stronger. These forces don't only fan the flames of racism; they also target trans people, cis women, and other people who face

oppression. In the US and UK, hit hard by the Great Recession and austerity, life expectancy had fallen even before 2020 when the pandemic and the latest recession hit.[41]

It was capitalism that created the ecological and social conditions in which the SARS-CoV-2 virus that causes COVID-19 could become a terrible pandemic. This virus, like most new pathogens (organisms that cause disease), was transmitted from an animal host to humans and then spread rapidly among people. Deforestation, the loss of biodiversity, the expansion of agribusiness—especially capitalist industrial livestock production—and the growth of what were once rural towns into large cities have paved the way for pathogenic organisms like SARS-Co-V-2 to spread from animals to humans. Once that happens, diseases that can spread from human to human are now able to do so as never before because of the forms of interconnectedness built by capitalism: "What were once local spillovers are now epidemics trawling their way through global webs of travel and trade."[42] As long as the ecological and social conditions that promote the transmission of new pathogens from other animals to humans and then between humans persist, we should not expect COVID-19 to be the last global pandemic of a new deadly disease.

This is the path we're speeding along thanks to capitalism. How can we apply an emergency brake and then head in a different direction? At a *minimum*, we need action that slashes GHG emissions *and* does so in ways that address social injustice on a global scale, leaving no one behind. This is what many supporters of climate justice—by which I mean a vision of social change that aims at least to prevent an extremely dangerous level of climate change and at the same time reduce social injustice—call a *just transition*.[43] The IPCC reported in 2018 that to limit warming to 1.5° over preindustrial temperatures global net CO_2 emissions need to drop by some 45 percent below 2010 levels by 2030 and reach net zero around 2050. To have a two-thirds probability of keeping warming

below 2° will take a drop of some 25 percent by 2030 and net zero by around 2070. Emissions of other GHGs also need to plunge. This will require "rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems" on an "unprecedented" scale.[44]

Fossil fuels will have to be phased out; simply producing more energy from renewable sources will not get us where we need to go. The goal for CO_2 emissions needs to be real zero (no emissions), not net zero (some combination of ongoing CO_2 pollution coupled with schemes for removing it from the atmosphere). As three climate scientists who admit to having been misled by the net zero approach put it, net zero policies "were and still are driven by a need to protect business as usual, not the climate. If we want to keep people safe, then large and sustained cuts to carbon emissions need to happen now."[45] Rich countries will need to reduce their total energy demand at the same time as they slash their GHG emissions. This is because of how quickly fossil fuels have to be phased out, the need for countries in the Global South to use more energy in order to improve people's living standards, and challenges involved in building new nonfossil energy systems. As scientist Stan Cox puts it, in rich countries "it is now necessary to do three things simultaneously: drive emissions down to zero; adapt society to a smaller energy supply while still producing as much nonfossil energy as is required for sustenance and good quality of life; and ensure fair, equitable access to resources and economic security."[46] The technologies needed for such a historic shift already exist; the obstacles lie in how society is organized.[47]

The goal of rapidly slashing emissions in socially just ways is central to some of the various packages of reforms that go under the name of a Green New Deal (GND). In the US, the best-known GNDs are the congressional resolution proposed by Alexandria Ocasio-Cortez and Ed Markey in 2018

and the stronger plan that Bernie Sanders proposed during his bid to become the Democratic Party presidential candidate in 2020. It's important to pay attention to the details of GND plans, since the popularity of these calls for bold action has led some supporters of much less ambitious measures to use GND language. A case in point comes from the Australian state of Victoria. In 2020 the parliament voted in favor of a "GND," but what the Labor Party government delivered will not expand public ownership of energy generation and storage and will probably end up reducing the total public housing stock. This demonstrates why "it's a mistake to think of the GND as a single political project, economic program, or set of policy prescriptions. Rather, there are many competing GNDs, reflecting the array of political and economic actors now participating in debates about climate and ecological crisis."[48] It's with this confusion in mind that the authors of the imaginative and expectations-raising book *A Planet to Win: Why We Need a Green New Deal* call what they are arguing for a "radical GND," in contrast to "faux GND" packages.[49]

To reiterate: drastic and rapid GHG emissions cuts coupled with reforms that reduce injustice—what we can call a radical GND—represent a minimum emergency program. In the rich countries, where most readers of this book live, this needs to include measures to reduce the brutal squeeze global capitalism puts on countries of the South and assist the majority of people in the world to both use more energy and reduce GHG emissions.[50] Winning such a GND in many countries would still not resolve the global ecological crisis. It would not by itself uproot capitalism.[51] Nor would it put an end to the many forms of oppression that are part of the existing social order. In the US, Canada, and other settler-colonial societies these include the oppression of Indigenous peoples, which is rooted in dispossession from "land in all its forms" and involves a "genocidal structure that systemically erases" their "relationships and responsibilities to their ancestral places."[52]

However, winning a genuinely just transition would still be an extraordinary victory that would weaken those sources of harm and open up possibilities for more far-reaching change. Who can get us there?