



NEGOTIATING CLIMATE CHANGE IN CRISIS

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9. The Mobilisation of Extractivism: The Social and Political Influence of the Fossil Fuel Industry

Christopher Wright and Daniel Nyberg

The worsening climate crisis has led to growing social and political demands for meaningful climate action and the decarbonisation of economies. And yet, the modern global economy is defined by fossil fuel energy which has shaped the last two centuries of economic growth and development. In this chapter, we outline how the fossil fuel industry has defined the global economy and defended its position as the most powerful industry in the world. We examine how assumptions of corporate self-regulation as the logical response to the climate crisis allow for the continuation of a 'business as usual' approach in which fossil fuel energy is maintained. We argue that this approach deliberately ignores the urgent need for government regulation of carbon emissions, and that current corporate responses to the climate crisis rely on the politics of 'predatory delay'.

Introduction

A new wave of activism has emerged in response to the worsening climate crisis. Following popular environmental protest movements such as Extinction Rebellion and the School Strike for Climate, a growing range of lawsuits are now targeting governments and fossil fuel

corporations for their contributions to the climate crisis. Moreover, there is now active discussion amongst governments and global organisations about the need for urgent reductions in greenhouse gas emissions, with even fossil fuel corporations committing to carbon neutrality by 2050. However, there have been similar commitments before (e.g. BP's Beyond Petroleum rebranding) and since the 1970s the fossil fuel industry has actively misled societies about the impact of its activities, using its innovative capacities to open up new carbon frontiers such as deep-water and Arctic oil drilling, tar sands processing and shale gas fracking (Wright and Nyberg 2015). The domination of the fossil fuel industry is based on its political tactics and this needs to be laid bare in order to be effectively resisted.

In this chapter, we outline how the fossil fuel industry has defined the global economy and defended its position as the most powerful industry in the world. We examine how assumptions of corporate self-regulation as the logical response to the climate crisis allow for the continuation of a 'business as usual' approach in which fossil fuel energy is maintained. We argue that this deliberately ignores the urgent need for government regulation of carbon emissions and that current corporate responses to the climate crisis rely on the politics of 'predatory delay'.

Fossil Energy and the Climate Crisis

The origins of the global fossil-fuelled economy date back to the beginnings of the industrial revolution in Britain in the late-eighteenth century and the development of the coal-fired steam engine. Coal power provided the basis for rapid industrialisation across manufacturing and expanded global markets through the transformation of transport (Malm 2016). With the growth of the railway, steel and chemical industries during the late-nineteenth and early-twentieth centuries, oil emerged as a further fossil fuel underpinning economic expansion. In the post-World War II decades, the power of the fossil fuel industry grew dramatically, driving economic expansion and the emergence of Western consumer lifestyles requiring a growing energy demand (Mitchell 2013). In recent decades, the globalisation of the economy and continued economic growth have relied upon the ever-increasing consumption of the world's fossil fuel

reserves. Global distribution networks of pipelines, tankers, refineries, ports and rail systems have further reinforced fossil fuel investments and path dependency (as also highlighted in Bigger et al.'s chapter, this volume). The emergence of Asian economic powerhouses, such as Japan, South Korea and, most recently, China and India, has broadened the scale of fossil fuel consumption.

The pervasive impact of fossil fuels across energy, resource extraction, manufacturing, transport, agriculture, and food production make it hard to imagine how our society could be organised differently. National governments are key supporters of the expansion of fossil fuel energy through public financing of infrastructure, financial subsidies, discounted royalties and favourable tax regimes; a system critics have labelled "fossil fuel welfare" (Lenferna 2019). Fossil fuels provide over 80% of the world's total primary energy supply and underpin the global financial system not only as the most heavily capitalised sector but also a dominant source of finance and investment for the world's banks, insurance companies and pension funds (RAN 2020). The global market economy is thus fundamentally defined by fossil fuels; we live within what some have termed a "petro-market civilization" (DiMuzio 2012).

Fossil fuel energy provided the basis for the expansion of global capitalism, but has also incurred an existential environmental cost. The extraction and combustion of coal, oil and gas has over the last two centuries resulted in the release of huge quantities of greenhouse gases (GHGs) (principally carbon dioxide CO_2 and methane CH_4), resulting in an unprecedented human perturbation of the Earth's carbon cycle and energy balance (Mann and Kump 2015). From a pre-industrial level of around 280 parts per million (ppm), the combustion of fossil fuels and the diminution of forests and other carbon sinks has led to a rapid increase in the atmospheric concentration of carbon dioxide. In 2018, atmospheric CO_2 concentrations exceeded 410ppm, a level not seen on this planet for several million years (Mooney 2018). Moreover, research has found that close to two-thirds of cumulative worldwide emissions of industrial GHGs between 1751 and 2010 are the result of just ninety 'carbon major entities' (large fossil fuel corporations and state-owned entities), with half of these emissions released since 1986 (Heede 2014).

Organising a Climate Change Denial Industry

In 1966, the US coal industry publication *Mining Congress Journal* published an article which identified with surprising candour the link between coal as an energy source and the disruptive effects of the resulting carbon emissions upon the Earth's climate (Young 2019). This article, along with similar documents produced within the oil industry during the 1970s, highlighted the fact that major fossil fuel companies have long known of the terrible impact that their products were having on the planet's climate system (Supran and Oreskes 2017). Rather than developing adaptive strategies to transition to a low-carbon economy, however, the fossil fuel industry created a politically organised climate denial movement, which has proven remarkably successful in preventing any meaningful form of emissions mitigation (Oreskes and Conway 2010).

In the United States (US), corporations from the fossil fuel, energy and manufacturing sectors came together during the early 1990s to form the Global Climate Coalition (GCC) in order to push back against proposals for the regulation of carbon emissions (Levy and Egan 1998). Wider corporate resistance included financial contributions to political parties, funding for major advertising campaigns and appeals to broader conservative ideological values. Fossil fuel interests played a key role in swaying conservative politicians against carbon regulation, stressing 'uncertainty' and 'doubts' over climate science, highlighting the economic costs of cutting emissions, and promoting the views of climate 'sceptics' in government representations, media and publications (Dunlap and McCright 2011; Oreskes and Conway 2010). This vehement opposition to emissions reductions by the global fossil fuel industry not only hobbled national governments' attempts to respond to climate change, but also undermined international collaboration.

From Denial to Delay

While the fossil fuel industry has proven remarkably successful over the last thirty years in limiting carbon regulation through a strategy of organised climate denial, the growing social and political discourse around climate change now appears to fundamentally threaten the industry. Following the release of catastrophic scientific projections of

the world's climate future (IPCC 2018), a new wave of climate activism has erupted around the world through groups such as Extinction Rebellion (Blackall 2019), and the school climate strikes initiated by Swedish teenage climate activist Greta Thunberg (Watts 2019) (see chapters by Gardham, North and Paterson, this volume). Combined with social movements for fossil fuel divestment (Mangat et al. 2018), legal actions against governments and fossil fuel corporations (Powers 2018), and growing concerns amongst regulators and institutional investors over the financial implications of climate change (Carney 2015), a tipping point may well have been reached. Indicative of recent shifts in the political and legal context have been: a growing procession of nations publicly proclaiming a commitment to achieve 'net zero' carbon emissions (Black et al. 2021; on the complexities of achieving net zero, however, see Dyke et al., this volume); a recent report by the International Energy Agency which declared no new coal, oil or gas extraction can occur if the world is to reach a net zero emission goal by 2050 (IEA, 2021); and the recent decision by a Dutch court that oil giant Shell is liable for its contributions to climate change which undermine basic human rights and require dramatic reductions in its global carbon dioxide emissions by the end of the decade (Juhasz 2021). This accelerating social and political critique of the fossil fuel industry has forced the industry to develop new justifications to defend its position.

The first step in this changed industry response has been public statements accepting the reality of climate change and a desire for 'climate action' broadly defined. This progressive stance was first highlighted by the European oil majors BP and Shell which developed a more engaged public stance on climate change than their conservative US counterparts (Levy and Egan 2003). Most famously, in 2000 BP rebranded itself as 'beyond petroleum' which promoted the oil giant as an environmentally aware energy company. While this marketing pivot soon faltered under a change of CEO and the infamous 2010 Deepwater Horizon oil disaster, more recently BP has returned to its focus on climate change, emphasising reductions in operational emissions and commitments to climate science (Ferns and Amaeshi 2019; Ferns et al. 2019).

Indeed in 2020, with an unprecedented downturn in oil demand following the outbreak of the global coronavirus pandemic, oil companies unleashed a bevy of public announcements about their

climate ambitions. First out of the gate was new BP CEO Bernard Looney who, in February 2020, announced to stunned media and analysts that he intended to make the company a net zero carbon emitter by 2050 through reductions in direct and embedded emissions. This goal involved a projected ten-fold increase in green energy investment and development, an approximately 40% reduction of oil and gas production, an end to new oil exploration, and the selling-off of its petrochemicals business. Within months, Shell and Total also announced 2050 net zero emissions goals and even American oil giants ExxonMobil and Chevron made announcements signalling an intention to reduce their contribution to carbon emissions (Kusnetz 2020).

Fossil fuel corporations have also sought to promote the moral worthiness of their activities through marketing and public relations activities, which stress the benefits of fossil energy. For instance, US coal giant Peabody Energy's 'Advanced Energy for Life' campaign (developed by New York public relations firm Burson-Marsteller) has proclaimed the benefits of coal-based electricity for citizens in developing countries as a way in which the industry is contributing to solving global energy poverty (Sheppard 2014). In a similar manner, oil companies promoting the exploitation of the Canadian Alberta tar sands, developed an extensive public relations campaign promoting what they have termed "ethical oil", which promotes Canada's liberal democratic political system as a more morally worthy context for fossil fuel extraction (Hickman 2011).

In acknowledging the reality of climate change, coal, oil and gas companies have also marketed possible technological 'solutions' while maintaining fossil fuel extraction and use. Key amongst these has been the discourse of 'clean coal' which argues that more efficient coal-fired electricity production can dramatically reduce the industry's climate impacts. Examples include the promotion of 'high efficiency low emissions' (HELE) coal-fired power plants and carbon capture and storage (CCS) technologies (Hudson 2017). The declining competitiveness of coal-fired electricity has also led to the promotion of rival fossil fuels such as methane (promoted by the industry as 'natural gas') as a 'transition fuel' in the move towards future decarbonisation.

However, rather than reducing the world's carbon emissions, these industry responses can be seen more as a process of 'predatory delay' in

which the fossil fuel industry seeks to slow the process of decarbonisation to maximise their financial returns in the short term while appearing as concerned corporate citizens (Nyberg et al. 2013; Steffen 2016). For instance, the rush by different companies to declare a goal of net zero emissions by mid-century is also a way to placate the growing social criticism of corporate climate denial. More specifically, the details of these commitments and future responses are reliant on technologies that have yet to be developed (e.g. bioenergy with carbon capture and storage (BECCS) and direct air capture) (Anderson and Peters 2016) (for more detail regarding BECCS, see Dyke et al.'s chapter, this volume). Despite the discourses of 'natural gas' and 'clean coal', researchers note that when fugitive emissions are accounted for, methane has a similar climate impact to coal, and, despite billions of dollars of government funding worldwide, only two large-scale Carbon Capture and Storage (CCS) plants have ever been completed with limited emissions capture, and these have turned out to be far more expensive than renewable solar and wind energy. Indeed, a recent analysis of the practice of the major oil corporations over the last fifteen years found no evidence of operational decarbonisation and that, while the public discourse had shifted towards a more climate-focused stance, the most progressive European-based oil companies were simply hedging their bets through limited diversification and risk mitigation (Green et al. 2020). Viewed from this perspective, the oil majors' recent apparent conversion on the issue of climate change appears more part of a longer-term pattern of skilful marketing and defensive justification in the face of growing social and political critique (Brulle et al. 2020).

A Turning Point for Fossil Energy?

Since February 2020, the world has been plunged into the greatest energy shock since World War II as a result of the coronavirus pandemic. As the International Energy Agency has outlined, the economic contraction resulting from the pandemic led to the biggest fall in global energy investment in history, with plunging demand for coal, oil and gas resulting in dramatic reductions in the value of fossil fuel stocks, and the likelihood of fossil fuel reserves becoming 'stranded assets' while renewable energy costs continue to fall (IEA 2020). This rapid decline in

the value of fossil fuel corporations was vividly demonstrated in August 2020 when one of the biggest of the oil majors, ExxonMobil, ended its ninety-two-year run on the Dow Jones industrial average as its market value collapsed to about a third of its 2008 high-point of US\$500 billion. Oil and gas companies now make up only 2.3% of the Standard and Poor's (S&P) 500, compared with 15% in 2008 (Grandoni 2020). At the time of writing, the COVID-19 pandemic shows no sign of abating and the severity of the global economic impacts have yet to fully play out. Together with the market, technological and political challenges to hydrocarbon energy, the fossil fuel sector is now facing its greatest challenge since the beginning of industrialisation.

Despite growing awareness of a worsening climate crisis, however, tangible action in terms of mitigating carbon emissions, let alone reining in fossil fuel production and use, has been limited. Proposals for carbon emissions reductions have continued to rely upon market-based measures that have failed to dent the steady increase in global emissions. Up until the 2020 pandemic, the global fossil fuel burn continued to increase year by year, hitting an all-time high in 2019 of 11.7 Gtoe (billion tonnes of oil equivalent), up from 7.1 Gtoe in 1990 (Saxifrage, 2020). While the pandemic has resulted in a short-term contraction in global carbon emissions during 2020 of 6% on 2019 levels (Tollefson 2021), atmospheric concentrations of greenhouse gases continue to increase (World Meteorological Organization 2020).

In carbon-intensive economies, such as the US, China, Canada, Australia and Saudi Arabia, the fossil fuel industry continues to expand, assisted by government subsidies and financial incentives (Lenferna 2019). In the US, the so-called 'fracking revolution' has led to the country becoming the world's largest producer of oil and gas (Downie 2019). China is now the world's largest producer and consumer of coal (constituting over half of the world's total consumption), with significant foreign investments in new fossil fuel developments in developing economies through its 'Belt and Road' initiative (Umbach and Yu 2016). In Canada and Australia, expansion of fossil fuel extraction has led to dramatic growth in energy exports, with Canada's Alberta tar sands delivering oil to the US and China (Bloomberg 2019), and Australia is now the world's largest exporter of

coal and gas (Kilvert 2019). Moreover, the election of Donald Trump in 2016 as President of the US provided a huge boost for the fossil fuel industry, as evidenced by the US withdrawal from the Paris Climate Agreement, the removal of environmental regulations dating back to the 1970s, and the promotion of prominent fossil fuel executives and climate deniers to key government positions (De Pryck and Gemenne 2017)—and discussed further in the chapter by Hannis, this volume. While the recent election of Democrat President Joe Biden in late 2020 has led to far more progressive announcements from the US on climate change and growing international momentum for reductions in carbon emissions, it is unclear whether this will be sufficient to overcome the profound political divisions that still exist in many countries over climate change, let alone lead to the decarbonisation and reinvention of a global economy defined by and reliant upon fossil energy.

Conclusion

The unprecedented decline in the demand for fossil fuel energy resulting from the current worldwide pandemic offers a unique opportunity for the global economy to break free of its carbon addiction and commit to a genuine and far-reaching energy transition. As we have pointed out, however, global capitalism and the assumptions of compound economic growth have to date been constructed upon the extracted energy of fossil fuels such as coal, oil and gas. This structural dynamic has in turn made the fossil fuel industry amongst the most powerful actors in the world, able to draw on political capital in determining the policy decisions which shape the future of human civilisation. While the recent social demands for meaningful climate action and growing political commitments to avoid dangerous climate change are heartening, it remains to be seen whether we are at a watershed moment in confronting the climate crisis, or whether the fossil fuel industry will succeed in its strategy of ‘predatory delay’, such that this decade becomes another missed opportunity to reduce the harm of a rapidly worsening climate crisis.

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