



# The Climate Leadership Council's Carbon Dividends Plan: Polanyi's Market Embeddedness, Fictitious Commodities, and Double Movement

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## Abstract

In 2017, large oil and gas companies formed the Climate Leadership Council (CLC) in response to increased social pressure to reduce their emissions to combat climate change. The CLC developed the Carbon Dividends Plan (CDP), which proposes a carbon emissions market mechanism to solve the climate change crisis. The CLC's lobbying arm, the Americans for Carbon Dividends (AFCD), is currently working to educate US congressional leaders on the importance of a carbon tax, like the one proposed in the CDP. In the paper, I address the following question: what can Polanyi's theoretical insights tell us about the CDP and its social implications? I first discuss the CDP within the context of the current climate change crisis. Then, I apply Polanyi's market embeddedness, fictitious commodities, and double movement concepts to the discussion. I illustrate four main points in this paper. First, the CDP is part of an ongoing societal double movement. Second, despite the CLC's neoliberal "free" market ideals, the self-regulated market proposed in the CDP is a social construction, embedded in social relations, itself. Third, the CDP, and carbon markets in general, comprise one specific type of unconscious countermovement that extends the self-regulated market to combat the destructive forces of the market itself. Fourth, the CDP's proposal for a carbon emissions market mechanism is an unsatisfactory solution to address the climate change crisis, as it will not address the inherent contradictions in the overall system as a whole.

**Keywords** Climate Leadership Council · Carbon Dividends Plan · Polanyi · Market embeddedness · Fictitious commodities · Double movement

## Introduction

After decades of perpetuating climate change misinformation (Dunlap and McCright 2011) and mobilizing against environmental regulations to promote their economic agendas (Prechel 2012), large oil and gas corporations face increased public, political, and investor pressure to reduce their emissions to combat climate change. Climate change concern among Americans has grown considerably since 2011 (Pew Research 2020). Political pressure is also increasing, as politicians create climate change plans to move the USA away from fossil fuels and towards renewable energy sources

(Friedman 2019; Change the Climate 2020). Investor pressure also continues to grow as an increasing number of investors continue to make fossil fuel divestment commitments (Go Fossil Free 2020). Recently, in 2017, large oil and gas companies, such as Exxon, Shell, and BP, formed the Climate Leadership Council (hereafter CLC) in order to create their own plan to deal with the climate change crisis — the Carbon Dividends Plan (hereafter CDP). This plan proposes a carbon market mechanism to reduce carbon emissions. The CLC's lobbying arm, the Americans for Carbon Dividends (hereafter AFCD), is currently working to "educate" US congressional leaders on the importance of a carbon tax, like the one proposed in the CDP.

In this paper, I address the following question: what can Karl Polanyi's theoretical insights tell us about the CDP and its social implications? I first discuss the CDP within the context of the current climate change crisis. Then, drawing from recent Polanyian scholarship, I apply Polanyi's market embeddedness, fictitious commodities, and double movement

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concepts to the discussion. I illustrate four main points in this paper. First, the CDP is part of an ongoing societal double movement. Second, despite the CLC's neoliberal “free” market ideals, the self-regulated market proposed in the CDP is a social construction, embedded in social relations, itself. Third, the CDP, and carbon markets in general, comprise one specific type of unconscious countermovement that seeks to extend the allegedly self-regulated market to combat the destructive forces of the market itself. Fourth, the CDP's proposal for a carbon emissions market mechanism is an unsatisfactory solution to address the climate change crisis. It will not overcome the inherent contradictions in the current market fundamentalist system (Alcock 2021) or address sustainability as a whole. What is needed is an alternative that transcends the logic of a self-regulating market (Alcock 2021). However, it is questionable whether a viable counter-movement can be produced fast enough to solve the climate change crisis within the existing structural constraints (Carton 2014).

## The Climate Change Crisis and the Climate Leadership Council's Carbon Dividends Plan

Anthropogenic climate change — “human-induced warming of the climate system” (Hegerl et al. 2007: 665) — is causing significant environmental alteration and the loss of billions of lives worldwide (IPCC 2007, 2013, 2014, 2018, 2019; US Government Accountability Office 2014; World Meteorological Organization 2017; Constible 2018; Leahy 2018; Amadeo 2019; Gerretsen 2019; Hickel 2019; Lindsey 2019; Yeung 2020a, b). Entire food systems are threatened (Hickel 2019), and coastal communities are relocating (Koss 2019; Welch 2019). Without massive changes in how society produces and consumes energy, climate change will worsen (IPCC 2018). While there are many contributing sources to human-induced climate change, the burning of fossil fuels is one of the largest sources of carbon dioxide (CO<sub>2</sub>) emissions — a gas that absorbs and radiates heat back towards the Earth, creating the “greenhouse effect” that causes “global warming.”

Large oil and gas companies denied climate change in the past (Dunlap and McCright 2011; The Climate Reality Project 2019). However, more recently, energy company networking organizations, such as the KPMG Global Energy Institute, have claimed that climate change is the oil and gas industry's primary concern; and it is working to reduce its CO<sub>2</sub> emissions (KPMG Global Energy Institute 2020). Some researchers now claim that oil and gas corporations are reducing their CO<sub>2</sub> emissions and transitioning to a low-carbon energy industry (Bach 2019; Pickl 2019). Others say that instead of investing capital in reducing their emissions, “many corporations continue to question the scientific evidence and the magnitude of the risks” (McCright and Dunlap 2003; Banerjee

et al. 2015; Dunlap and Brulle 2015; Stern et al. 2016: 653; Prechel 2020: 1). Purported claims to be decarbonizing are efforts to maintain legitimacy and market position (Batruch 2017).

In the meantime, public pressure on the government and the oil and gas industry to combat climate change continues to increase. As of 2020, 52% of Americans felt that dealing with climate change should be a top concern for the president and Congress. Despite partisan differences (Dunlap, McCright, and Yarosh 2016; Pew Research 2020), events such as the 2013 Forward on Climate Rally and the 2019 Global Climate Strike illustrate the increased public pressure for the oil and gas industry and government to deal with the climate change crisis. The oil and gas industry also faces increased political and investor pressure to reduce its emissions. Many politicians have created climate change plans. For example, Representative Ocasio-Cortez and Senator Markey created the Green New Deal, President Biden created the Clean Energy Revolution and Environmental Justice plan, and 2020 presidential candidates Inslee, O'Rourke, and Warren included climate change plans in their platforms. Each of these involves plans to gradually move the USA away from fossil fuels towards clean energy sources to combat climate change (Friedman 2019; Change the Climate 2020). Furthermore, an increasing number of investors continue to make fossil fuel divestment commitments. Overall, as of November 2020, 1248 institutions have committed to divest approximately \$14.48 trillion from the fossil fuel industry (Go Fossil Free 2020). Recently, in January 2020, BlackRock, which manages \$6.9 trillion in assets and has sizable shares in large oil and gas companies, committed to divest from coal and indicated that it would consider sustainability in its future divestment decisions (Partridge 2020).

In response to this increasing social pressure, large oil and gas corporations, including BP, ExxonMobil, Shell, and Total, formally launched the Climate Leadership Council (CLC) in 2017 (Climate Leadership Council 2021). The group announced its formation and plans with the publication of *The Conservative Case for Carbon Dividends*, co-authored by James A. Baker, III, Martin Feldstein, Ted Halstead, N. Gregory Mankiw, Henry M. Paulson, Jr., George P. Shultz, Thomas Stephenson, and Rob Walton (Climate Leadership Council 2021). The group's proclaimed purpose is to work on “Bipartisan Climate Roadmaps” and a “Carbon Dividends Plan” (Climate Leadership Council 2021). The AFCD political action committee was also established in 2018 as the CLC's lobbying arm (Influence Watch 2021).

The CLC developed the Baker-Schultz Carbon Dividends Plan (CDP), which it claims to be a “Pro-Environment, Pro-Growth, Pro-Jobs, Pro-Competitiveness, Pro-Business, and Pro-National Security” solution to the climate change crisis (Climate Leadership Council 2021). The CDP's central premise is to provide a carbon emissions market mechanism

based on four pillars: “I. A Gradually Rising Carbon Fee. II. Carbon Dividends for All Americans. III. Significant Regulatory Simplification. IV. Border Carbon Adjustment” (Climate Leadership Council 2021: n.p.). The AFCD is currently lobbying for the plan by working to “educate” US congressional leaders on the importance of a carbon tax (Open Secrets 2021). Given the oil and gas industry’s historical success of lobbying for or against environmental policies based on their capital accumulation goals (Prechel 2012), it is possible that it will be successful again in influencing Congress to pass the CDP.

If the CDP is passed, it will set the USA down a path of utilizing a market mechanism to deal with environmental pollution. Even if it does not pass, the CLC’s proposal to use a carbon emissions market mechanism to deal with the climate change crisis still sets a US precedent. Following the Bush Administration’s objections to the Kyoto Protocol, the international carbon market moved forward, while the USA retrenched from climate change policy (Rosenzweig 2016). Therefore, international carbon markets are nothing new, and the existing literature on the structure and performance of carbon markets is abundant (see Bohn and Dabhi 2009; Callon 2009; Gilbertson and Reyes 2009; Lane 2012; Lohmann 2006; Marcello 2011; Thornes and Randalls 2007 for examples). However, the CDP represents one of the first attempts to establish a carbon market mechanism in the USA, and even if the CDP is not passed in its current form, we will likely see future efforts to establish similar mechanisms in the USA. Therefore, the CDP represents a significant US public policy proposal that will undoubtedly have profound impacts on society and climate change, and Polanyi’s insights offer a useful, nuanced perspective from which to evaluate it.

In this paper, I aim to provide insight into the CLC’s CDP, and carbon markets more broadly, by applying Polanyi’s theoretical insights, with the overall goal of informing the broader public policy and sustainability literatures as well. The purpose of this article is not to present a scriptural interpretation of Polanyi’s *The Great Transformation* (hereafter *TGT*), but to draw from both his “body of work [which is] multilayered enough for varying elucidations” (Somers and Block 2021), as well as from the various insights of Polanyian theoretical predecessors that have sought to reevaluate and apply Polanyi’s ideas to carbon markets (see Alcock 2021; Carton 2014, 2020; Stuart et al. 2019). Specifically, I use Polanyi’s market embeddedness, fictitious commodities, and double movement concepts to answer the following questions. First, what contributed to the CLC’s development of the CDP? Second, what are the social implications of the CDP if it is passed, or of carbon market mechanisms more broadly? Towards this end, I perform a Polanyian analysis of the CDP. I start by discussing Polanyi’s general theoretical insights, with specific attention to these three central concepts. I then discuss existing theoretical insights on how Polanyi’s ideas apply to

carbon markets. Finally, I apply the key theoretical insights emerging from these discussions to the CDP specifically.

## A Polanyian Analysis of the Carbon Dividends Plan

One of Polanyi’s key arguments in *TGT* is that markets are embedded in social relationships. According to Polanyi, the market and state are not “separate and autonomous entities,” as the economy is an “instituted process — a predistributive institutional complex of rules and policies constituted by power, coercion, and government” (Somers and Block 2021: p. 420). A market fundamentalist economy that is left “free to follow its own internal, autonomous logic, rooted in the self-interested behavior of atomized individuals” (Holmes 2012: 472) is, in Polanyian terms, “disembedded.” This does not mean that such a market fundamentalist economy is not embedded in social relationships at all, as Polanyi was very clear that “man’s [sic] economy, as a rule, is submerged in his social relationships” (Polanyi 2001 [1944], p. 48 from Holmes 2012). The rise of the eighteenth-century European market system was a unique historical experience in that it broke with previous embedded market forms in which “economic activity was enmeshed in familial, kinship, religious or political obligations and regulations” (Sandbrook 2011: 418). Yet, even a self-regulated market system is necessarily embedded, as it requires specific political-legal arrangements and ideologies to create, legitimate, and maintain it (Block 2003; Holmes 2012; Prechel 2007; Sandbrook 2011; Somers and Block 2021). Therefore, market fundamentalism is best viewed as an ideology (Prechel 2007) — “a myth perhaps . . . of capitalist development . . . [with a] powerful and enduring rhetorical structure around which claims to legitimacy in matters of economic and political governance are made — a statement on the nature of the economy and its proper relationship to society” (Holmes 2012: 474). Overall, Polanyi’s central argument on the embeddedness-disembeddedness contradiction in market society is best viewed as a continuum based on ideal types. This continuum ranges from economies characterized by markets fully embedded in society, such as socialist and fascist economies, to economies characterized by a society fully embedded in market relationships, such as market fundamentalist economies (Holmes 2012; Prechel 2007; Alcock 2021). However, the continuum is not solely based on empirical economic forms, but rather on a “distinction between two different ideational structures within which economic action can take place” (Holmes 2012: p. 476).

Another central Polanyian insight is that a disembedded, self-regulated market wreaks havoc on society through the unregulated use of fictitious commodities — things that are treated as commodities but are not actually physically produced in the market, such as land, labor, and money



(Polanyi 2001 [1944]). He argued that “the idea of the self-regulating market is a ‘stark utopia,’ as the attempt to create a fully marketized society, which requires turning humans, nature, and money into fictitious commodities, would annihilate society. [Therefore,] empirically, there can be no such thing as a free market” (Somers and Block 2021: 420). Today’s market fundamentalist economy represents “a utopian attempt to apply the principle of the self-regulated market to the international economy, a project that sows the seeds of its own destruction” (Dale 2012: 3–4). The enormous environmental damage since the triumph of neoliberalism in the late 1970s to early 1980s illustrates this. Using Polanyi’s logic, the proliferation of the neoliberal ideology of a free-market with minimal government interference and increased privatization of land and natural resources assisted in shifting the market to the disembedded end of the spectrum (Prechel 2007, 2012, 2020). It did so by decreasing government regulation of corporations and increasing the enclosure of land and natural resources as fictitious commodities. Since then, the market has caused extensive harm to the environment, and in turn, to society. For example, Earth’s average global temperature has increased since 1880 and most drastically since 1975 — “two-thirds of the [global] warming has occurred since 1975” (NASA Earth Observatory 2021). Scientists argue that a global “regime shift” took place in the late 1980s that led to the largest sudden increase in climate change in over 1,000 years (Reid et al. 2015).

The destructive forces of a self-regulated market have led to a “double movement” — another key Polanyian concept. Simply put, in order to protect itself from the damage caused by the self-regulated market, an inevitable and spontaneous societal “countermovement” occurs — a “pendular” swing from, or a tension between, market fundamentalism and socially coordinated capitalism (Dale 2012; Sandbrook 2011). Acting mainly through the state, the countermovement aims to regulate the market and/or decommodify labor, land, and money to alleviate the damage and protect society (Dale 2012; Sandbrook 2011). However, this can lead to another dilemma: by undermining the self-regulated market, the countermovement can create new social and economic crises (Alcock 2021; Carton 2014, 2020; Polanyi 2001 [1944]; Sandbrook 2011).

Furthermore, existing Polanyian scholarship illustrates the complexities of the double movement in the case of today’s carbon markets. Specifically, Carton (2014, 2020), Stuart et al. (2019), and Alcock (2021) have debated the nature of countermovements, and double movements more broadly, and the implications for its theoretical application to carbon markets. Since it is not my intention to indulge in these theoretical debates directly, I instead focus on the emergent, relevant points that have been made in these ongoing discussions and apply them to the CLC’s CDP as a response to the climate change crisis.

First, the destructive forces of a self-regulating market that fictitiously commodifies land, labor, and money engender countermovements for social protection (Alcock 2021; Carton 2014, 2020; Stuart et al. 2019). However, countermovements are *not necessarily* (and perhaps *necessarily not*) progressive in nature (Carton 2014, 2020; Alcock 2021). They are constrained by and situated within the market fundamentalist system they are a part of (Carton 2014, 2020). As eloquently argued by Carton (2014): “the limits to the countermovements as a force for structural change are defined by the articulation of social relations within a market framework” (p. 1009). Second, carbon markets do not address the underlying contradiction between the market and society that must be addressed to successfully deal with the climate change crisis (Alcock 2021; Carton 2014, 2020; Stuart et al. 2019). They do not transcend, but instead extend, the logic of the self-regulated market (Alcock 2021; Carton 2014, 2020; Stuart et al. 2019). Third, countermovements can be unconscious or conscious. Unconscious countermovements can take one of two forms. They can either (1) undermine the self-regulating market logic while still preserving the market itself or (2) utilize the self-regulating market by extending its logic to deal with the destructive forces. Both forms unsuccessfully deal with the contradictions and destructive forces inherent in the system overall. On the other hand, conscious countermovements recognize the contradictions of the system overall, as well as the reality that re-embedding the market into society is the only true solution to overcome them (Alcock 2021).

In the face of the climate change crisis, environmental regulations, such as the Clean Power Plan passed under the Obama administration, represent an unconscious countermovement that undermines the logic of the self-regulating market while still *preserving* the market itself. On the other hand, carbon markets, such as the CLC’s CDP, represent an unconscious countermovement that pushes to continue “business as usual” by *expanding* the logic of the self-regulating market (Alcock 2021). Both of these types unsuccessfully deal with the contradictions and destructive forces necessary to fully deal with the climate change crisis. Environmental regulations interfere with the market, which can still have negative effects for society overall. For example, since labor is commodified, the livelihoods of many people are tied to the market; therefore, undermining the market logic can potentially threaten peoples’ survival. In this case, the fossil fuel industry provides jobs that people are wage-dependent upon. Therefore, if the fossil fuel industry is forced to lay people off or decrease wages, because it is spending more money on lowering its emissions, society still suffers overall. In other words, attempting to solve the climate change crisis can potentially lead to another economic and social crisis.

On the other hand, carbon markets, such as the CLC’s CDP, if used properly, might be capable of reducing emissions to some degree (Carton 2014, 2020). However, there



are still unresolved contradictions. One important consideration is if such a system will be able to reduce emissions enough using an appropriate pricing mechanism that doesn't cause other problems, such as layoffs, elsewhere within the system. Another important consideration is that self-regulated markets are embedded in society, and it requires certain political-legal arrangements to construct, legitimize, and maintain them. They are ongoing social constructions. If the carbon market mechanism is left in the hands of state governments, as has been the case for US environment regulations under the neoliberal ideology and federalism (Prechel 2012), then the implementation of the mechanism will likely vary across states and require certain political-legal arrangements to legitimize and maintain it at the state-level as well. Therefore, not all US citizens will receive equitable social protections. Lastly, if the established carbon emissions tax and dividend is at some point no longer suitable for large oil and gas corporations' capital accumulation goals, then corporate leaders will mobilize politically again to recreate the market environment to facilitate their goals over the goals of society at-large, as they have done throughout history (Prechel 2012). This will only lead to continued profit maximization for large oil and gas companies based on the externalization of the environmental and financial costs of carbon emissions to society.

For these primary reasons, the CDP does not address the underlying contradictions between the market and society that need to be addressed to create successful climate change solutions. It does not meet the sustainable development goals set forth by the United Nations, and therefore, falls short as a satisfactory solution to the current climate change crisis. For example, while it can be argued that the CDP aims to meet the goals of "climate action" and "decent work and economic growth," it does not address many of the other necessary sustainability goals, such as those dealing with poverty, hunger, good health and well-being, quality education, and affordable and clean energy (United Nations 2021). Therefore, it does not address sustainable development overall. Furthermore, as an effort to continue "business as usual," it does not answer the IPCC's call for massive changes in our energy and social systems to deal with the crisis (IPCC 2018).

Following Polanyi's logic, the only way to truly overcome these contradictions and to deal with the climate change crisis successfully is through a conscious countermovement that "aims to transcend the double movement contradiction within the self-regulating market system, therefore breaking the laissez-faire/countermovement dynamic" (Alcock 2021: 161). Stuart et al.'s (2019) argument for a degrowth movement is one option, and a transition to democratic socialism is another option (Alcock 2021). Simply put, a degrowth movement centers on the premise "that we do not need to 'develop' to get enough, because we already have, and in a sense always had, enough. What we need is to struggle for the institutions

that will allow us to live with enough" (Stuart et al. 2019: 96). It is a "voluntary and equitable downscaling of production and consumption that increases human well-being and enhances ecological conditions at the local and global level, in the short and long term" (Schneider et al. 2010, taken from Stuart et al. 2019: 95). A transition to democratic socialism occurs when there is a cancellation of the countermovement and the self-regulating market, "democracy is elevated to the whole of society, and the market becomes embedded in society" (Alcock 2021: 159). While a conscious countermovement is necessary to overcome the inherent contradictions between the market and society, it is flexible as to what form it takes. Therefore, consciously choosing and implementing a solution that addresses all of the United Nations' sustainable development goals (or at least many more of them) is possible. The lingering question is: is it probable? Regardless, the CDP, and carbon markets more broadly, are not the sole solution to the climate change crisis, as it does not deal with sustainability as a whole.

## Conclusion

I aimed to address two questions in this paper. What contributed to the CLC's development of the CDP? What are the social implications of the CDP, or of a carbon market mechanism more broadly, if it is passed? Drawing from Polanyi's insights discussed in the previous section, I will now answer each one in turn.

On the first question, the CLC's development of the CDP, and the development of carbon markets in general, is an unconscious countermovement in response to the destructive environmental harms of the self-regulated market, as embodied in the current climate change crisis. In opposition to other unconscious countermovements that have undermined the self-regulated market, such as the Clean Power Plan passed under the Obama administration, the CDP and other carbon markets push to continue expanding the logic of the self-regulating market to deal with the climate change crisis.

On the second question, if the CDP is passed, it will set the USA on a path of using market mechanisms to deal with climate change. While such a mechanism may be successful in reducing emissions to some degree, it will not address the underlying contradictions between the market and society that have created the climate change crisis to begin with. It could also create other crises within the social system as the "market and society are co-constituted in a market society, where too large a disruption to the market framework would itself undermine the economic foundation of society" (Carton 2014: 1014). Depending on the chosen carbon price, it could create contradictions involving the other fictitious commodities, i.e., land, labor, and money. For example, if fossil fuel companies begin to spend more money on their carbon emissions, they

may lay off workers or cut wages to make up for these financial losses. This will threaten the livelihoods of the workers that are dependent on their jobs within the fossil fuel industry for survival. Another possibility is that given the already growing fossil fuel divestment movement, the CDP may further encourage divestment from fossil fuels to low-carbon fuels, which in turn will cut into the money that fossil fuel companies have to spend on lowering their emissions, thus failing to lower their carbon emissions after all. One more example: if investors further divest from fossil fuels as a result of the CDP, fossil fuel companies have less money to pay their workers, possibly leading to lay-offs of wage-dependent workers, and they have less money to invest in reducing their emissions, leading to continued increases in carbon emissions. These economic intricacies are far from my specialty, so I will not attempt to dig further into these potential dynamics. However, I hope to have illustrated with these simple, logical examples the numerous remaining and potentially created contradictions and destructive forces that could result from the passage of the CDP, or from carbon markets more generally. I also hope to have illustrated why the CDP, or carbon markets more broadly, will not resolve the underlying contradictions between the market and society that created the climate change crisis to begin with. Even further, a carbon market mechanism will do nothing to address other sustainable development goals beyond climate action, such as poverty and inequalities (United Nations 2021). Specifically, it will do nothing to protect the most vulnerable populations in society, i.e., low-income and/or people of color, from the current negative effects of pollution or climate change they are disproportionately affected by. Simply put, the CDP falls drastically short of answering the IPCC's call for massive changes in our energy and social systems to deal with the climate change crisis (IPCC 2018).

Based on recent discussions among Polanyian scholars (see Alcock 2021; Carton 2014, 2020; Stuart et al. 2019), I also argue that the only way to truly overcome these contradictions and to deal with the climate change crisis successfully is through a conscious countermovement that overcomes the logic of the self-regulated market without supplanting democracy. In other words, the *ideal* solution is a transition from the current self-regulating capitalist system to a more democratic society that re-embeds the market in social relations. Transitioning to a society that isn't fearful of regulating or limiting markets — that has markets but which is not a market society — will provide a better opportunity to manage the climate change crisis.

We see the seeds of such a countermovement with political representatives like Bernie Sanders and Alexandria Ocasio-Cortez, and the Democratic Socialists of America. However, the US socialist movement has been largely unsuccessful in achieving its goals to date, and most Americans still view capitalism positively and socialism negatively. For example, a recent Pew Research survey conducted in 2019 found that

the majority of respondents (65%) viewed capitalism positively, while the majority (55%) viewed socialism negatively (Hartig 2019). Therefore, while always possible, this makes a transition to democratic socialism an improbable solution to dealing with the climate change crisis. If it were to occur, it likely wouldn't occur fast enough to be successful in reducing our carbon emissions to avoid the catastrophic effects of climate change.

This invites the following questions. What does a probable, desirable conscious countermovement look like? How do we get there? With our lives so dependent on the existing fossil fuel energy and social systems, how do we go about making such massive changes to create this necessary conscious countermovement? Most importantly, how do we get there fast enough? Is it even possible to get there fast enough at this point? If the answer is no, then what do we do now?

A probable, though less than desirable, solution is to maintain the existing system and do our best to counter the destructive forces caused by it. This seems to be the path we are currently on with using environmental regulations and carbon market mechanisms, and given the prior discussion on the constraints we face in the existing system and the necessity for speed in decreasing emissions, it is possibly our only viable option at this point in time. However, if the ultimate fate of humanity is to be trapped in the existing capitalist system dependent on fossil fuels, we can still do better than solely using a carbon market, and Polanyi's insight offers hope here. Specifically, as discussed in the most recent literature, countermovements are flexible in form. Not only can they be unconscious or conscious, but there are also different forms that each type can take. Therefore, a conscious countermovement can be constructed to achieve certain goals, once those goals are agreed upon. The question then becomes: what are some necessary goals that must be met by a climate change solution? First, we must recognize that a continued sole reliance on a self-regulated market, such as that proposed by the CDP and carbon markets in general, is not the best solution for the climate change crisis. We still need increased governmental regulation to protect the environment from industry and a massive ideological shift that promotes the well-being of the natural world and *all* of global society above all else. Second, we still need to prepare for the massive effects that climate change will undoubtedly bring about even if we were to meet the existing emissions targets, as well as go out of our way to ensure that we protect the most vulnerable populations in society. Short of overthrowing the existing capitalist system in its entirety, which is likely not currently feasible, reformist solutions that address such goals are absolutely necessary.

Environmental sociologists have called on social researchers to produce research with implications for public policy and sustainability (Dunlap and Catton 1979; Freudenburg et al. 2009; Dunlap and Brulle 2015). In the face of the greatest crisis humanity might ever experience, let us

now move from debating the theoretical intricacies of how Polanyi's work applies to carbon markets, and climate change more broadly, to applying his insights to find "concrete strategies to wean contemporary society from its deeply embedded dependence on continued market expansion, commodification, and the never-ending throughput of energy and natural resources" (Carton 2014: 1015). Regardless of theoretical orientation, finding such solutions should be our next major task.

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