16

The Politics of Stability and Politicization of Change

The Carbon Trap and Just Transition

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Stability per se is not a problem. It is the substance of what is locked in – the climate damage, the unjust/unequal hierarchies, the extractive system – that is the problem (see also Paterson, Tobin, and VanDeveer, Chapter 1, this volume; VanDeveer, Chapter 5, this volume). Certainly, disruption of the stable dynamics that comprise the current system of carbon lock-in (Unruh 2000) is desirable. But if a policy environment was stable that promoted and reinforced just low-carbon systems and societies, stability would be good.

The premise of this volume is that desirable disruption – unless driven by exogenous shocks – is constituted by politicization. The editors of this volume propose that even apparently desirable stability in "long-term emissions reductions pathways" or "policy design over time" – the second and third forms of stability they identify – if without politicization, will lead to ruin. For example, they worry that even stability in "long-term emissions reduction pathways" can entrench policy designs that in practice will lead to "scope expansion," that introduce "new sources of emissions or sinks into the policy and political debate." More broadly, they write that academics who promote policy stability can get "co-opted by the policymakers" who have a "deeper" commitment to stability than decarbonization and that prioritizing stability is "naïve" or "designed to avoid conflict" with entrenched interests, which has the effect of stabilizing policy regimes those interests support. The corollary is that stability is constituted by depoliticization in practice even when well-intentioned policy actors and analysts support stable policies they believe are desirable. We challenge this dichotomy, taking up the editors' challenge to add nuance to how forms of stability and politicization interact. We do so by focusing on the *political project* of achieving *both* desirable disruption *and* desirable stability.

Our central argument is that the desired relationship between policy stability and politicization changes depending on the structural and institutional conditions in place that reinforce or support the transformation of carbon lock-in (Bernstein and Hoffmann 2019). We introduce what elsewhere we have called

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the "carbon trap" as a way to contextualize changes in this relationship (Bernstein and Hoffmann 2019). The carbon trap heuristic identifies thresholds below which systems are "locked in" to carbon, prone to getting stuck in climate policy trajectories, or entrench "solutions" that prevent desirable transformative action. Below those thresholds, stability is undesirable and the relationship between stability and politicization is more dichotomous. Stability under these conditions tends to get stuck in an "improvement trap" where even policies that initially reduce emissions can build political and economic resistance to further change or are removed from political arenas (i.e. depoliticized).[1] The "trap" is that below this threshold, such policies are inadequate or contrary to required sociopolitical transformations. Above the threshold, the relationship between stability and politicization can change and be more synergistic, where the former reinforces political coalitions, norms, and capacities for transformative trajectories.

We proceed in three steps. First, we further unpack and reframe the false dichotomy between stability and politicization to show that both involve politics. Second, we introduce the carbon trap as a way to contextualize the relationship and identify desirable and undesirable stability. Third, we explore whether and how the concept and politics of just transition offer ways to understand and pursue desirable politicized disruption and catalyze stable policy and systems that enable it.

16.1 The False Dichotomy of Politicization and Stability

It is a category mistake to see stable policies as depoliticized. Attention to politics is central. As Paterson, Tobin, and VanDeveer (2022: 4) argue, "[i]t is an empirical mistake to assume that climate policy can be addressed 'outside politics'. Politics – when understood as conflicts of interest and power, and the ongoing necessity of collective decision-making – is simply intrinsic to social life."

Building coalitions and designing institutions that shape and shove politics or entrench new path dependencies entails struggle and contestation over normative change, often with incumbent interests, even when the goal is achieving a new *stable* status quo. The practical concern for climate action, however, is that too many initiatives or new institutional arrangements touted as "solutions" are not fully disruptive of carbon lock-in. The search for policy stability is thus potentially dangerous when the substance of what is stable, and thus reinforced, is insufficient to prevent or counteract the climate crisis. Especially problematic is policy stability as an end. If the policy interventions that will plausibly achieve stability now, during carbon lock-in, are unlikely to disrupt the status quo, then stability as a

[1] For the implications of removal, see Bauer and Knill's (2014: 39) discussion of "policy dismantling by arena-shifting."

goal is misguided. Worse, it may "lock in" stable but insufficient climate policies. Under such conditions, "repoliticization" of these policies or institutions – bringing them back into political arenas that open up contestation and expose power relations – is desirable.

Similarly, as scholars or policy actors, we may be tempted to identify institutional or structural conditions that lock in desired goals of just decarbonization policy trajectories toward low-carbon societies. However, doing so frequently neglects attention to the political conditions and processes required to create, maintain, and reinforce those institutions and structures. It risks producing naïve "solutions" that assume away the political struggles and processes that shape or undermine the conditions necessary for desirable stability. Normatively, we may also overestimate our ability to identify the requirements of just transformations and undervalue the importance of politicization and disruption in defining and motivating practices of just transition required to address the climate crisis.

These practices of climate action have structural and institutional consequences. In fact, that is the aim of climate action – replacing one status quo with a hopefully better one. If successful, transforming structures and institutions can tilt the system in ways that mitigate the size or strength of counter-coalitions and strategic action of incumbents or other opposing forces that aim to undermine or reverse specific policies or broader transformations. For example, there is a rich literature on institutional design, path dependency, and policy feedback that focuses on how institutions that reinforce political coalitions in favor of desirable policies, support normative change, or create material or ideational (e.g. reputational, social, or learning) incentives for ongoing policy responses in a particular direction are important for those policies to maintain or increase strength and durability (Auld et al. 2021; Levin et al. 2012; Lockwood 2022; Meckling 2019; Millar et al. 2021).

Institutions here do not replace politicization – their mere existence does not remove an item from contestation or debate (Kuzemko 2016). Analytically, this understanding of institutions recognizes that politics is not only about interest and ideas constantly battling it out; it is also about how they are shaped and channeled, recognizing the politics of design and institutional effects. Ignoring those politics gives ground analytically to existing institutional arrangements, as if they are immutable structures as opposed to themselves being the products of political struggles, power, and ideas that have become entrenched and reinforced over time.

Implicit in these debates is the volume editors' concern that overly focusing on locking in policy trajectories by attempting to create legislative or institutional firewalls will ultimately fail because either (1) it underestimates opposing or incumbent forces, especially of well-documented corporate interests and lobbying (Allan 2020; Hochstetler 2020; Levy and Newell 2005; Stokes 2020); (2) inadvertently produces stasis or undermining feedbacks (Millar et al. 2021; Patterson 2023); or

(3) limits political struggle and motivation needed for deeper transformation and system change. We are agnostic over whether these effects are as pernicious as some of the existing literature suggests but believe an analytic position that examines how such arrangements create *political* conditions for ongoing policy toward desirable ends counters the claim of such moves being depoliticizing.

Normatively and pragmatically, our argument falls into the camp of those who see the merits of long-term policy trajectories. "Stability," however, is a poor descriptor for such trajectories if it implies simple continuation, unchanging, conservative, or constant. Rather, our own work and that of others interested in entrenching, scaling, and reinforcing transformative policy trajectories is owing to a concern in building and maintaining support for transformative pathways that resist or counter tendencies of backsliding or outright oppositional coalitions and forces (Jordan and Moore 2020; Millar et al. 2021; Rosenbloom et al. 2019). This reflects our normative commitment to transformation that informs virtually all the work under discussion in this volume.

Pragmatically, transformative pathways lock in trajectories in the sense that, by definition, they must continually support and reinforce change in the direction of the transformative goal. However, they need not lock in specific institutions, policy choices, or instruments. That would be counterproductive for reasons well-articulated by those in the "politicization" camp but also by institutional scholars. Empirical work on policy feedback, for example, has found that even positive feedback mechanisms on some aspects of policy – for example a particular policy instrument – can have unintended consequences for other levels. Moore and Jordan (2020) found this exact pattern in their study of the EU's emissions trading system, where positive feedback led to the strengthening of the policy instrument (the trading scheme) but weakened support for the broader objective of reducing overall emissions.

If institutions and instruments lead to unintended or socially undesirable outcomes, politicization not only "should" occur but inevitably will occur. Systems ought to be open and encourage politicization *in order to* maintain trajectories. Here, the arguments of Auld et al. (2021) about building support and entrenching policy goals while fostering politicization over policy means are essential.

Focusing on the stability of some goals but politicization and opportunities for learning about all manner of means, participation, and accountability (see Auld et al. 2021) recognizes the political work that the editors, and scholars such as Jordan and Moore (2020), highlight as necessary for securing just transition trajectories. Conversely, permanent revolution is unlikely to produce the necessary conditions for actors to follow through with commitments, engage in long-term planning, encourage investments, or reduce uncertainty in ways that build confidence in a transformative trajectory. Nor will it help protect against reactionary reversals

or prevent the waves of apparent progress followed by backsliding that have characterized many climate policies and transformative efforts observed in many countries.

These dilemmas go to the heart of the stability/politicization friction. We need disruptive politics to challenge and unsettle the status quo *and* we need that to happen in ways that catalyze policy stability and even lock in desirable substantive policy and systems that support just decarbonization – the political goal. As scholars, we need an analytic and normative way forward that places politics at the center of analysis as opposed to ignoring or silencing it. In sum, we need a framework that neither depoliticizes stability nor fetishizes disruption.

Addressing this tension and overcoming the pattern of some progress and getting stuck or backsliding has been the central focus in our work on the "carbon trap" (Bernstein and Hoffmann 2019). To overcome this trap, politicization is exactly what comes into focus *to produce* stable trajectories toward decarbonization. A key dynamic the trap illustrates is that below a certain threshold overt politicization and disruption of the status quo is needed. As the old politics of the status quo is undermined and new institutional and structural conditions support a politics that shifts momentum toward just decarbonization, the emphasis shifts to a politics of stability.

16.2 The Carbon Trap

One reason that policy stability is such a source of handwringing and analysis is that climate policies in many places have failed to be durable (Jordan and Matt 2014; Jordan and Moore 2020; Levin et al. 2012).[2] Policy interventions (carbon pricing, renewable energy portfolios, infrastructure spending, subsidies for low carbon products, etc.) frequently manage to get started (see Bernstein and Hoffmann 2018; Bulkeley et al. 2014; Hoffmann 2011) but often get stuck and are even reversed (Breetz et al. 2018; Meckling 2019; Rabe 2018; Stokes 2013, 2020). This pattern is observable whether states, non-state, or corporate actors initiate and govern the policies or actions, and whether they are domestic or transnational. That may not be surprising in a world locked in to the use of fossil energy. Yet fully grasping the source of the *failure* of policy stability is crucial for navigating the stability/politicization divide at the heart of this volume.

Figure 16.1 shows the logic of the carbon trap graphically. The *x*-axis is the current level of decarbonization in a system, and the *y*-axis is the expectation about the future level of decarbonization given the current state. The flat parts of the trajectory (we label them carbon lock-in and decarbonization) represent relatively stable state spaces where the array of factors (political, economic, technological,

[2] This section and next one draw significantly on and reproduce parts of Bernstein and Hoffmann (2019).

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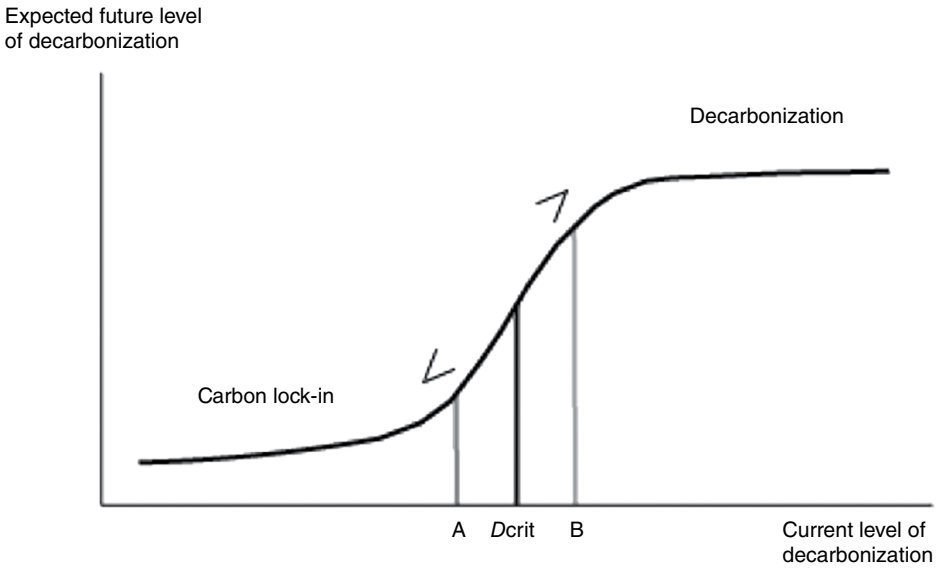

Figure 16.1 The carbon trap.

cultural) are aligned to generate reinforcing dynamics. The arrows represent the direction of expectations. If a system (city, market, nation-state) is currently below (point A) the critical threshold (*D*crit), the expectation is that the future state of the system will move toward the carbon lock-in attractor, that is, a label we borrow from complex system analysis of a relatively stable state space where the array of relevant factors (political, economic, technological, cultural) are aligned and generate reinforcing dynamics.

When a new climate policy is introduced, it has the potential to move the system along the trajectory toward greater decarbonization. The *D*crit threshold could potentially be breached either by a sudden shift such as a technological breakthrough or through the progressive accumulation of incremental changes over time. Regardless, unless a new policy helps the targeted system to breach the *D*crit threshold (B), political-economy forces in the system will tend to drive the system back toward the carbon lock-in attractor. These forces include technology and technological practices (the range of choices available and the pace of innovation); economic factors (sunk costs, investment cycles, energy markets, cost structures, risk calculations of holders of climate-vulnerable or climate-friendly assets, and so on); cultural inertia (what people want and the practices that they consider normal); and political dynamics (coalitions, norms, institutions, and interests – including those that affect calculations of risks and benefits – that promote or resist change).

Below the critical threshold, the carbon locked-in status quo is dominant and needs to be disrupted (politicized) because transformative policies and action will

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be unstable. Policy interventions must ultimately navigate counter-coalitions supported by incumbent interests and industries, campaigns that appeal to entrenched cultural norms and practices, and extant institutional arrangements that often favor existing policies in path-dependent ways that can make change difficult to sustain. These forces are not static. Interventions engage and generate politics that can create positive and negative feedback, mobilization, and backlash (e.g. Breetz et al. 2018; Jordan and Matt 2014; Patterson 2023).

Consider a municipal policy to install electric charging stations to increase decarbonization in its transportation system. This policy would move the city away from the lock-in attractor and up the decarbonization curve a modest amount (perhaps to point A in Figure 16.1). However, once in place, other political-economic factors in the city and beyond could drive the city's transportation system back toward the carbon lock-in attractor if the *D*crit threshold is not breached. These threshold-determining factors could include availability of affordable electric vehicles (EVs) determined by the actions of incumbent industries and government policies and investment decisions; cost and accessibility of charging station technology and places to put them within and outside the city, as well as battery capacity, which are intertwined technological, policy, and even psychological (range anxiety) issues; cachet or stigma of driving an EV, which could have both demographic and geographical determinants; and complementary incentives or disincentives at the sub-state or national level for purchasing EVs, which depend on interests and coalitions at other levels of government.

Policies designed to move systems toward decarbonization do not always make it over the threshold. Apropos of this hypothetical example, in 2019 in Ontario, Canada, the provincially controlled regional public transportation agency removed EV charging stations from its parking lots, citing high costs and low demand after an election shifted the political conditions for climate policy (Boisvert 2019). That same government ended a rebate program for EVs (Benzie 2018). Not surprisingly, the result in the case of EVs is that, in 2023, Ontario sales continued to lag provinces British Columbia and Quebec, which have rebates and greater infrastructure investment (Rabson 2023). The larger global pattern of EV sales shows similar patterns. On the one hand, many major auto companies worldwide appear to have reached a tipping point in their plans to transition to EV production, and the market share of EVs continues to rise, given a combination of technological change, costs and subsidies, anticipated and real regulation, and normative change. Yet consumer surveys and purchasing patterns show that in many places sales are lagging expectations precisely because of inadequate infrastructure and range anxiety that give consumers pause. Meanwhile, investors and analysts are reinforcing negative market reaction over fears of oversupply and weaker than expected consumer demand (Mullaney 2023). Thus, even when parts of the system shift,

overcoming the threshold where the decarbonization attractor takes over requires multiple changes, many of which require ongoing politicization to overcome. Examples like these, across many sectors, are, unfortunately, common, for reasons ranging from changes in government to unexpected price shifts to active opposition (Millar et al. 2021; Stokes 2013).

The key implication of the carbon trap for the politicization/stability divide is that if a system is located in the carbon lock-in equilibrium, we should not expect climate policies to be stable. We should expect that they face challenges and struggle to endure because the attractor is carbon lock-in. From this perspective, it is not surprising that a focus on policy stability has arisen. Those that care about climate change observe that many attempts to disrupt carbon lock-in and the status quo fail or get retrenched, and we are running out of time. A strong desire for durability and constraining our future selves is an understandable response (Levin et al. 2012). An analysis of the carbon trap adds to the debate on stability a focus on the political dynamics that stability generates. Climate interventions must disrupt coalitions and the normative/institutional context that supports the status quo to breach the critical threshold, while also generating the stability necessary for policies to be durable enough to contribute to the disruption of the status quo. Unfortunately, the quest for naïve stability that results in accommodation with status quo interests can go wrong in just the way that the editors explain, and the carbon trap is at work here too.

16.3 The Double Trap

One temptation in the face of the inability of climate policies to survive long enough to catalyze decarbonization is to seek policies that won't be *too disruptive* or too politically contentious. Telling examples include the fractious debate over the proposed Green New Deal *within* the Democratic Party in the United States after President Joe Biden's election in 2020, and critiques of the European Green Deal for hollowing out its more transformative substantive as well as democratic, equity, and redistributive elements (Adler and Wargan 2022; Alemany 2021). Specific policies that focus on modestly reducing emissions while avoiding disruption to the carbon locked-in status quo are often the result. Such efforts aim to improve the carbon *efficiency* of systems or offer modest reforms without generating sufficient decarbonization or challenging dependence on fossil energy. Examples include energy efficiency programs, switching to natural gas as a lower-emission "bridge fuel," and carbon market schemes with prices much too low to generate real change in demand.

Such policies may be stable, but perniciously so, precisely because they are not political enough to challenge the status quo. This pattern suggests a double

trap with the same kind of curve but with three equilibria: high carbon lock-in, more efficient carbon lock-in or improvement, and decarbonization (see Figure 16.2). Some climate policy efforts may generate emissions reductions but also generate dynamics that get systems stuck in improvement. Bridge fuel policies that promote natural gas as an alternative to coal will reduce emissions (assuming methane leakage is addressed). However, they may also entrench industrial interests that oppose moves toward deeper decarbonization, which cannot include natural gas (Betsill and Stevis 2016). Similarly, returning to our auto sector example, Toyota, once a leader in transitioning the sector with its innovation and production of hybrid technology, shifted to lobbying *against* EV mandates because it has become entrenched in hybrid production and has bet on hydrogen technology, which lags significantly compared to EV technology (Tabushi 2021). Depoliticized policy implementation strategies may yield similar patterns. For example, individual nudging efforts have been shown to decrease public support for broader policies such as carbon pricing, as people believe they have done enough (Hagman et al. 2019).

The very characteristics that allow such "improvement" policies to escape high carbon lock-in (depoliticized, technocratic, emissions-focused) contribute to their stability precisely because they do not challenge the status quo in a threatening manner. In a political context in which achieving significant climate action can be difficult, scholars have rightly focused on the necessary conditions for initiating action and building stability. However, the improvement trap indicates that we

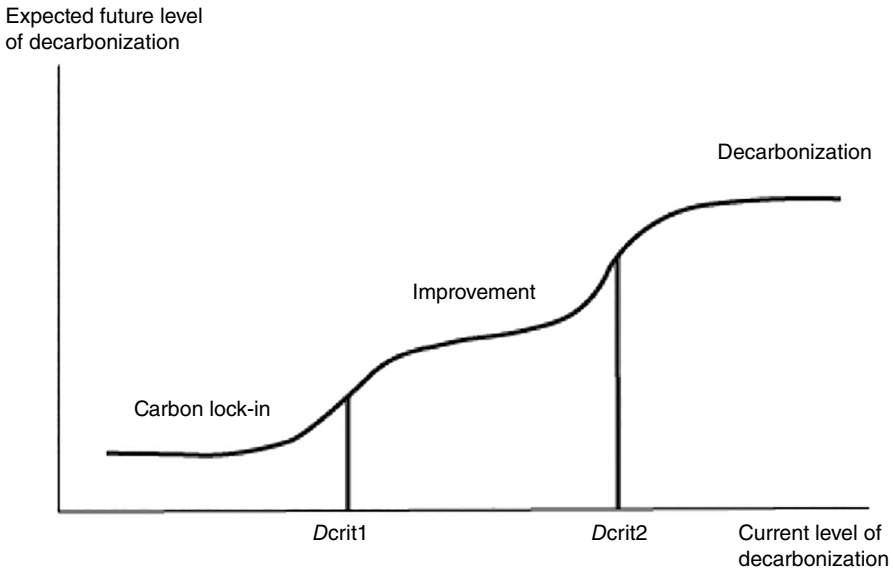

Figure 16.2 The double (improvement) trap.

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should also give thought to how and under what conditions action can be ramped up following initial action and whether and how we can overcome the policy stability of the improvement trap.

16.4 Just Transitioning Out of the Carbon Trap

So far, our argument on how to reconcile the apparent politicization/disruption and stability tension has focused on putting politics at the center of analyses of why transformative policies have been so challenging to achieve, and how such policies might generate the politics to support stable trajectories. In this section, we highlight the pragmatic requirements and normative imperatives to produce the desired directionality. Here, repoliticization as understood by the editors – keeping or bringing climate action into political arenas where power, contestation, or competition is acknowledged and engaged – takes a more central role. We argue that just transition policies (Hughes and Hoffmann 2020; Indigenous Environmental Network 2017; Jasanoff 2018; McCauley and Heffron 2018; Newell and Mulvaney 2013; Newell et al. 2023) can add the right mix of politicization/disruption to promote stable trajectories in a more or less transformative direction, necessary to overcome the improvement trap and generate momentum toward decarbonization. We have three reasons for supporting this wager.

First, the empirical findings of our "politics of decarbonization" project (Bernstein and Hoffmann 2018, 2019) suggest that decarbonization initiatives that go beyond technological deployment to integrate justice, equity, and democracy concerns have more success scaling up and entrenching. This finding supports the case for entrenching goals that are explicitly justice-based, while allowing the necessary political processes to adapt and adjust. That will require significant political and normative work, and mobilization, up front. We already see several shifts in this regard that are a cause for optimism. Examples include the rise in youth mobilization driven by movements such as Fridays for Future (Fisher 2019), mobilization around the idea of just transitions even as its meaning remains contested (Stevis 2023; Wang and Lo 2021), proliferation of just transition policies and debates at local, national, and international levels (Hughes and Hoffmann 2020; Krawchenko and Gordon 2021; Newell et al. 2023), and more general normalization of the need for climate action.

While entrenching normative goals is essential through political processes, we should not naïvely believe that the ongoing political work needed will be without struggle or that entrenching openness and accountability in policy and political processes will be simple. The ongoing contestation over and criticism of the European Union's (EU) Just Transition Mechanism – arguably the world's most extensive and comprehensive attempt to implement the idea of just transition – is

a case in point: Since its passing, social movements and academic critics have continued to press for change, arguing its social dimension is underdeveloped, it lacks stakeholder participation, and its funding is inadequate. And that is just a microcosm of ongoing contestation over the European Green Deal's broader contradictions and compromises, including its lack of consideration for distributional consequences or ecological harms (such as from mining for renewables) for countries and people outside the EU (Adler and Wargan 2022; Akgüç, Arabadjieva, and Galgóczi 2022).

Second, and following from this logic, just transition policies may provide a mix of politicized disruption and potential for stability. Efforts at improving justice and equity are inherently a political challenge to the status quo. Just transition thought and possible action are no exceptions. The concept is aimed at multiple areas of injustice related to climate change: injustice inherent to systems dominated by the extractive fossil energy sector (unequal distribution of the benefits and costs of fossil energy extraction); injustice in the distribution of the effects of climate impacts (those least responsible for causing the problem face the largest consequences); injustice in the distribution of costs/benefits of climate action itself (the very elements just transition policies are supposed to address, without which opposition is likely to grow on the left and right). Working in these areas challenges the status quo in multiple ways and underscores the inherent and multivalent injustice of the status quo.

Third, just transition is not just about disruption. It has the potential to (re)politicize the status quo in a critical way that offers a path toward new stable equilibria. Here, the reframing of the apparent paradox pays off and shifts to a pragmatic approach to transformation. If policy stability requires the generation of political/economic coalitions and underlying normative principles, just transition should have significant potential for generating stability. It identifies the "good" life in a low-carbon world. It also has the potential to activate and empower those marginalized by the carbon locked-in status quo and those potentially disrupted by decarbonization efforts, such as workers in the fossil fuel sector. More broadly, it has the potential to identify and connect winners from specific kinds of climate policies/actions in a way that could counter concentrated losers. In this way, just transition approaches could extend the kind of existential politics described by Colgan, Green, and Hale (2021) that occurs between owners of climate-vulnerable assets and climate-forcing assets. As our framework describes, the critical thresholds beyond which stability is desirable are made up not just of economic calculations but of the politics, norms, and institutions that shift perceptions of risks and benefits around these assets and expectations around the costs and benefits or societal acceptability of holding those assets in the future. Just transition policies have the potential to add a social dimension to this political conflict – for example

by highlighting and possibly internalizing social costs of inaction and creating expectations around democracy, equity, and accountability – that could tip the balance of power toward stable, just low-carbon pathways.

16.5 Conclusion

The improvement trap we have identified highlights the importance of recognizing the risks of depoliticization and premature stability prior to reaching thresholds beyond which systems move toward the just decarbonization "attractor." Even then, when stability is desirable, our framework highlights the importance of attention to politics to sustain that trajectory. We recognize that identifying those thresholds in practice may be challenging while they are unfolding, but the carbon trap heuristic can highlight patterns to look for when designing or engaging with politics in practice.

One final example nearly perfectly illustrates the challenge: the pursuit of "net zero." The goal has proliferated, spurred by the 2015 Paris Agreement Article 4's articulation of the aim, albeit with several caveats, to "achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century." The goal is arguably now the "organizing principle" (Green and Reyes 2023) of climate politics. As of 2023, 150 countries, 254 cities, and almost half of the 2,000 largest companies in the world, which together account for 88 percent of global emissions and 89 percent of the world's population, have net zero policies or targets (Net Zero Tracker 2023). However, those impressive statistics mask the improvement trap.

"Net zero" pledges "solve" a wide range of political problems by ostensibly addressing climate change while creating a political consensus across left and right, thus being highly susceptible to depoliticization in pursuit of the goal. The trap becomes quickly apparent when examining the policies and consequences of net zero framing, which attracts a broad coalition precisely because it can support ongoing fossil fuel extraction and production, as we see prominently in cases like Canada's Pathways Alliance of oil sands producers.[3] This pattern is observable in a wide range of net zero policies, from massive investments in carbon capture technologies that effectively (or explicitly) subsidize ongoing and increasing extraction to policies that support decarbonization in some locations while exporting costs and social and ecological harms elsewhere, whether unsustainable land use changes, ecologically and socially harmful extraction, or economic pressures that will exacerbate inequalities and likely ensure continued carbon lock-in. Absent politicization, net zero can easily lead to "mitigation deterrence" resulting

[3] See the Pathways Alliance website: https://pathwaysalliance.ca/.

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in significant overshoot of temperature targets and little attention to other negative sustainability impacts (Carton et al. 2023). Additionally, attempts to depoliticize can backfire, as opponents of climate action can just as easily politicize net zero as proponents, as we have seen with the mobilization of anti-climate populists against "net zero" (Paterson et al. 2023).

More generally, empirical and conceptual reviews of net zero policies and early implementation note a lack of attention to, and need for, politics (i.e. repoliticization) if net zero is to lead to just transformations toward climate goals (Carton et al. 2023; Fankhauser et al. 2021; Green and Reyes 2023). As we have argued, pragmatic and normative attention to just transitions are key elements of navigating these tensions and dilemmas.

Putting our own normative cards on the table, we are also simply not sure there is any other ethically defensible way forward than resolving the politicization/stability tension through a focus on just transitions, even as we recognize that not all good things always go together. Adler and Wargan (2022), for example, worry that the lesson so far of the EU's European Green Deal is that climate action can occur without democracy, or even undermine it. Others worry about climate authoritarianism (Mittiga 2022). Limping along with the false promise of stability in the improvement trap and low levels of climate action is also not a viable option. Fortunately, our own empirical work and the struggles we observe playing out in many places with the most active climate action suggest justice and necessary climate action are often aligned, and the politicization/stability debate suggests a normative imperative to ensure they continue to be (Patterson et al. 2018).

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