

“DISORGANIZED HYPOCRISY”: CLIMATE-RELATED FINANCIAL DISCLOSURE AND NET-ZERO COMMITMENTS AMONG FINANCIAL CORPORATIONS IN SINGAPORE

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**“DISORGANIZED HYPOCRISY”:
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ABSTRACT

The years since the Paris Agreement have seen intensifying efforts to decarbonize the financial system. Disclosure frameworks, notably the Taskforce for Climate-related Financial Disclosure (TCFD), and Net-Zero targets, are fast becoming institutionalized globally to incentivize financial institutions to divert capital into low-carbon activities and away from carbon-heavy ones. I examine the implementation of these frameworks among financial corporations (FCs) in Singapore. 15 semi-structured interviews with professionals in the industry at the forefront of TCFD and Net-Zero suggest that FCs’ “talk” often does not match with their “actions”. Organizations ceremonially comply with new global standards as well as local regulations on TCFD and Net-Zero while they continue to finance carbon-intensive economic activities. Yet this apparent “hypocrisy” may not be so much a result of coordinated efforts for organizational buffering, as it is a consequence of disorganization and discoordination. Informants suggest that different parts within FCs independently perceived and responded differently, at a different pace, to the novel challenges that climate change has brought. I contribute to the environmental

sociology literature on “organized hypocrisy” by examining how commonly perceived “hypocrisy” *is* or *is not*, in fact, “organized”. In doing so, I suggest that we should not assume “hypocrisy” to be an intentional organizational project. Furthermore, rather than seeing “hypocrisy” as effort to keep an organization “stable”, I argue that hypocrisy may be indicative of slow and potentially discordant organizational change, with ongoing internal efforts by insiders to match “actions” with “talk”.

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
ASEAN	Association of Southeast Asian Nations
BAU	Business as Usual
CDP	Carbon Disclosure Project
CSR	Corporate Social Responsibility
FCs	Financial Corporations
FSB	Financial Stability Board
GFANZ	Glasgow Financial Alliance for Net-Zero
GHG	Green House Gas
IFRS	International Financial Reporting Standards
IPCC	Intergovernmental Panel on Climate Change
MAS	Monetary Authority of Singapore
NGOs	Non-Governmental Organizations
SGX	Singapore Exchange
TCFD	Taskforce on Climate-related Financial Disclosure
UNFCCC	United Nations Framework Convention on Climate Change

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Figure 1: Growth of TFCD support from 2018 to February 2022

1. INTRODUCTION

In August 2021, Tariq Fancy, the former Chief Investment Officer of sustainable investing for BlackRock, penned a long and scathing essay on what he considers the undue hype surrounding sustainable investing and the financial industry's response to climate change. Offering us a glimpse into the oft hidden world of high finance, Fancy suggested that sustainable investing is trying to “figure out how much purpose and profits truly overlap” (Fancy 2021). He concluded that they seldom do: Financial behemoths like Black Rock continue to make empty platitudes towards redirecting capital towards green causes while not following through. A bold indictment of hypocrisy by an insider, Fancy's essay caused significant stir in the industry, sparking debates on how the financial industry should approach climate change and what the rules around it should be (Tett 2022).

The years since the Paris Agreement have seen intensifying efforts to scrutinize the financial system and steer it towards decarbonization, coinciding with the rapid establishment of global voluntary financial frameworks, standards, and alliances. Among the most prominent of these “soft regulations” (cf. Djelic and Quack 2018) have been the Taskforce for Climate-related Financial Disclosure (TCFD) in 2015, and the more recent Glasgow Financial Alliance for Net-Zero (GFANZ) in April 2021 (Furness 2022; Reuters 2021). The proliferation of these global climate-related financial frameworks reflects a

broader discourse focusing on an economic transition from our current carbon-heavy economy to a low-carbon one as a response to the growing climate crisis, driven in significant part by the market (Colgan, Green, and Hale 2021; Gomez-Echeverri 2013; Janković and Bowman 2014; Zamarioli et al. 2021). Such a transition would require the generation, distribution, and arbitration of a tremendous amount of capital. In this process, financial corporations (FCs), especially transnational FCs, would become critical conduits of capital flow. The importance of the financial industry in facilitating the transition to a low-carbon economy appears clear. What is not clear, however, is whether emerging climate-related financial frameworks like TCFD and GFANZ will be effective in decarbonization. The charge of hypocrisy, per Fancy's essay, looms large.

As scrutiny mounts while global corporate governance frameworks on climate-related financial risks proliferate and consolidate, global environmental governance compliance and effectiveness continue to be a central area of interest to environmental sociologists. Adding to this literature, in this paper, I ask: How are global financial initiatives such as the TCFD and Net-Zero targets pursued at the organizational level? To answer this question, I examined the ongoing implementation of the TCFD and Net-Zero initiatives pursued by FCs in Singapore. I conducted a total of 15 formal semi-structured interviews with 13 key informants from the industry, alongside additional informal conversations, to understand how global frameworks are being taken up on the ground.

Recent research in environmental sociology have productively deployed the concept of "organized hypocrisy" to describe the way organizations, both international and national, pursue different and often contradicting agendas in response to pressure from different interest groups (CoatarPeter and Gareau 2022; Shandra, Rademacher, and Coburn 2016a;

Sommer, Shandra, and Restivo 2017). In line with this literature, my data suggests that there is evidence of significant hypocrisy – where the “talk” does not match up with “action” – within the sector. While organizations have sought to abide by global scripts and have been trying to implement climate-related financial disclosures and Net-Zero initiatives, they are also looking to meet revenue and profit targets. Consequently, many pursue these initiatives only ceremonially, focusing their efforts on reporting rather than pursuing meaningful actions for decarbonization. Even where significant resources are devoted to climate-related initiatives, how effective they are in driven decarbonization and transition to low-carbon economic activities remains opaque.

At the same time, my data also suggests that “organized hypocrisy” as a concept is unable to capture the complexity of organizational life among FCs attempting to respond to climate change. Existing usages of “organized hypocrisy” in this literature invokes an image of hypocrisy as an intentional and coherent organizational project, with core organizational activities largely unchanging. In contrast, informants characterized the implementation of the TCFD and Net-Zero targets as a significantly less coordinated endeavor. Different departments view and react differently, at a different pace, to climate change and new climate-related initiatives. Professionals also described implementation as a painstaking process in which more climate conscious parts of the organization, such as the sustainability office and the risk department, attempt to integrate climate change as a business-as-usual concern in other departments, particularly the revenue generating functions. Rather than an “organized” project of institutional buffering against new regulations and standards, I argued that climate-related initiatives in FCs in Singapore are marked, instead, with disorganization, uncoordinated-ness, and non-linear changes.

Hypocrisy, in turn, should not only be considered as a “stable state” of an organization, but also an indicator of slow and potentially discordant change.

Borrowing insights from Catherine Weaver’s (2008) work on the “hypocrisy trap” in the World Bank, I contribute to existing work in environmental sociology focusing on global governance by extending the concept of “organized hypocrisy”. Rather than focusing on why hypocrisy happens, or its consequences, as have been explored in extant literature, I focus instead on how hypocrisy is, or is not, organized. Firstly, I stress the difference between “individual hypocrisy” and “organizational hypocrisy”. Rather than “organized”, hypocrisy can also be a signifier of disorganization within complex organizations. Secondly, such hypocrisy is not always an effort of buffering and status quo preservation. Rather, it can also be emblematic of organizational changes as they try to resolve hypocrisy, i.e., to close the gap between “talk” and “action”. In the conclusion of this paper, I also call to attention the possible unintended consequences of these efforts to resolve hypocrisy. Given the influence that the financial industry holds on governments’ project of low-carbon transition, it is important that we understand more clearly how these highly influential organizations are responding to climate change and the potential implications of such response. Furthermore, a deeper understanding of how FCs are changing can also be beneficial to activists and regulators seeking ways to effectively steer these companies towards meaningful action on climate change.

2. LITERATURE REVIEW

Below I survey three bodies of literature on corporate response to climate change relevant to the TCFD and Net-Zero targets. I first surveyed macro and meso level studies and works that drew a connection between these two levels of analysis in environmental sociology. Next, I review the literature on corporate disclosure related to environmental and climate issues to suggest that while these works tend to appear elsewhere in organizational studies, they nevertheless mirror central areas of interest in environmental sociology. I highlight the potential of bringing insights from organizational studies into environmental sociology to expand our set of questions, specifically zooming in on the “organized hypocrisy” literature. Leveraging insights from Weaver’s (2008) work on the World Bank, I suggest that the concept of “hypocrisy” can be expanded when we challenge the implicit assumptions of organizational hypocrisy as always “organized”, and that such an expanded concept would be a promising framework for both the present study and future research.

2.1 CORPORATIONS, ENVIRONMENTAL GOVERNANCE, AND CLIMATE CHANGE

The role of corporations in climate change and their relationship to global and national environmental governance has been a major area of research for environmental sociologists. The extant literature has focused on three questions: Firstly, what is the role of corporate behaviors vis-à-vis climate change; secondly, how do corporations respond to broader institutional environmental, including emerging systems of international and national environmental governance; and thirdly, the implications of the previous questions on environmental outcomes.

A central debate in the field has focused on whether corporations can pursue meaningful reforms, or if a systemic transformation is required to ameliorate the current climate crisis (cf. Dietz, Shwom, and Whitley 2020). On the one hand, sociologists have dedicated much energy to investigating the political actions pursued by the energy industry, particularly oil and gas players, across different national, political, and cultural contexts. For example, scholars have documented corporate efforts to foster climate change denialism from the oil and gas industry in the United States (Brulle 2014, 2018; Dunlap and McCright 2011; McCright and Dunlap 2011). On the other hand, others have noted changes in corporate practices and governance towards reducing their carbon footprint (Gilligan and Vandenberg 2020; Vandenberg and Gilligan 2017). In between these poles, some works have specifically looked at the “hybrid” areas of emerging industries and how corporates in this space mediate between economic and environmental concerns (York, Hargrave, and Pacheco 2016). Others have explored the limits of corporate actions. In his influential book, Vogel (2005) persuasively argued that

while there is a “market for virtue”, where corporations engaged in corporate social responsibility (CSR), this market is also limited. In effect, corporations seriously engaged in CSR when there are financial or reputational benefits to said activities, or when the cost of socially responsible behavior remains low (i.e., “low-hanging fruits”). Similarly, a more recent review of corporate efforts to reduce carbon emissions by firms in carbon-intensive industries in three countries in the EU revealed that the most common response is emissions trading schemes to appear “legitimate” rather than more direct pathways of reducing carbon emissions (Cadez and Czerny 2016).

How corporations respond to global and national environmental governance, both in the forms of public regulations and private standards – as well as the efficacy of these frameworks – constitute another major area of research. On the macro level, these questions have provided the empirical foundation for a long and productive debate between world society and world system scholars. Focusing on longer term trends, world society scholars highlighted the development of a global environmental regime and the importance of durable, legitimizing global environmental norms and institutions. This durable institutional context has contributed significantly to the gradual improvement of environmental protection policies and outcomes (Frank et al. 2000; Hironaka 2014; Meyer et al. 1997; Schofer and Hironaka 2005; Shorette et al. 2017). In contrast, world systems scholars have produced political economy accounts of global climate governance, stressing how powerful actors such as corporations or states can have outsized influence on the content, direction, and distribution of outcomes of global agreements (Ciplet and Roberts 2017; Gareau 2012; Gareau and Lucier 2018; Givens, Huang, and Jorgenson 2019). More recently, an emerging literature has attempted to

combine the insights from both world system and world polity to provide a more comprehensive account of global environmental governance. Researchers, for example, has pointed to the contradictory impacts of global economic and geopolitical positionality and adherence to global environmental norms to national environmental outcomes (Henderson 2019, 2021; Jorgenson, Dick, and Shandra 2011; Shandra and Shor 2009; Tester 2020).

Meso-level analyses of global and national environmental governance have also highlighted the constitutive role of corporations in the genesis and implementation of these governance frameworks. Corporations are not “takers” of regulations and frameworks but can also actively shape this landscape, as recent reviews of research on the relationship of transnational corporations and global governance have also shown (cf. Bartley 2018; Djelic and Quack 2018). Fisher (2004), for example, argued how domestic interests can shape the outcomes of international policymaking through complex networks of civil society, the market, the state, and the scientific community. Concurrently, scholars have also shown how powerful domestic private industries can blunt the efficacy of global governance at the national level both in industrial nations and developing countries (CoatarPeter and Gareau 2022; Gareau 2013). With respect to climate change, research has shown that while large corporations tend to inhibit intergovernmental response to climate change, their position can evolve over time and differ based on their industries or market positions (cf. Bartley 2018). For example, Grant et al. (2020) showed in their book that the ability of “super polluters” to discharge greenhouse gases (GHG) is enabled by different combinations of the global positionality of the country they are in, civil society and regulatory environment, their age, and how

dominant their position is in the market. Other research has shown that the same firm can establish ties to both climate denialist and low-carbon positions (Peetz et al. 2017).

2.2 CORPORATE DISCLOSURE ON ENVIRONMENTAL IMPACTS AND CLIMATE CHANGE

As demands for transparency around environmental and climate issues mounted, scholars have dedicated increasing efforts to study corporate disclosure, its effectiveness, and the reasons behind its successes and failures. While this body of research has appeared more in organizational studies, key questions in this literature also reflect the central themes of sociological inquiries into the relationship between corporate response to climate change and corporates' broader institutional context. Mirroring key debates in environmental sociology, a major concern in the literature on disclosure has centered around whether such initiatives, often voluntary, are reflective of actual corporate activities (such as level of emissions) and if disclosure is an effective tool for decarbonization. Put in a different way, is disclosure an effective tool for addressing climate change, or simply a buffering strategy deployed by corporations in response to increasing public scrutiny and regulation?

Quantitative evidence in this area of research has been mixed. Some research has suggested that recent carbon emissions disclosure by firms reporting to the Carbon Disclosure Project (CDP) have been representative of their actual performance (Luo and Tang 2014). More recently, Flammer et al. (2021) also provide evidence that disclosure of a firm's climate-related risks can improve firms' valuation post-disclosure, suggesting

that corporate interest can align with transparency on environmental issues. On the other hand, other works have suggested that “right-to-know” laws had no significant impact on toxic emissions by manufacturing plants (Grant and Jones 2004). Using the data from the CDP, others have shown how the transparency from voluntary non-financial disclosure on companies’ environmental, social, and governance activities can lead to non-linear reactions from market and non-market actors based on the information’s completely, clarity, and accuracy (Andrus, Callery, and Grandy 2023). With the same CDP data, Callery (2023) has shown how firms can deploy “strategic disclosure” – where companies obfuscate, complicate, and manipulate data for disclosure – to attain higher ratings.

As scholars in this literature have also stressed, regulations, shareholder pressure, market structure, and activism influence if and how corporate disclose. The mixed evidence on disclosure effectiveness has probably been a function of the complex interactions of these different macro-meso factors. Shareholders have been consistently found to play an important motivational role for disclosure (Flammer et al. 2021; Kraft 2018; Marquis, Toffel, and Zhou 2016; Reid and Toffel 2009). Moreover, scholars have also suggested that there is a spill-over effect: pressure against one company to disclose can motivate field-wide compliance (Reid and Toffel 2009). Concurrently, regulations can play an important role in improving the substantiveness of disclosure, particularly in discouraging “greenwashing”, where a company misleadingly creates a positive impression through selective the selective disclosure of the firm’s positive environmental actions while eliding negative information. Evidence suggests that more climate-related regulations, higher levels of scrutiny, and exposure to global norms can dissuade

companies from engaging in greenwashing, including firms that are more environmentally damaging (Marquis et al. 2016; Mateo-Márquez, González-González, and Zamora-Ramírez 2022). Other works provided a more complicated picture of regulatory effects. Kraft (2018), for example, suggested that US utility companies' stronger ties to legislative bodies at the state and national levels can shield firms from regulatory pressure, leading to less substantive disclosure.

2.3 ORGANIZED HYPOCRISY AND THE ENVIRONMENT

A common thread across the broader environmental sociology literature on corporate behavior and climate change and organizational studies that tackle the more specific topic of disclosure has been the question of corporate compliance to governance frameworks at different levels. Both sets of literature have been inspired by and drawn from a common intellectual tradition of new institutionalism (Bromley and Powell 2012; DiMaggio and Powell 1983; Meyer and Rowan 1977). As Meyer and Rowan persuasively argued in their foundational 1977 paper, organizations adhere to formal institutional structures to appear legitimate, even when underlying activities do not follow said structures (Meyer and Rowan 1977). Correspondingly, corporate response on climate change in general and disclosure more specifically have been marked with varied levels of contradiction between what corporations say and what they do, and similarly varied levels of “ceremonial” or “symbolic” compliance without substantive actions.

Environmental sociologists have continued to bring insights from new institutionalism to study specific organizations/states and their response to climate change

(CoatarPeter and Gareau 2022; Shandra et al. 2016a; Sommer et al. 2017). Scholars highlighted the contradictory environmental policies and practices deployed by these organizations to suggest how such contradictions have been a result of “organized hypocrisy” (Brunsson 2002; Weaver 2008). Here, sociologists start with the observation that organizations face a plethora of competing demands from different interest groups on whom they are dependent for resources and legitimacy. To abide by these demands, organizations make commitments but do not follow through (“window dressing”, “symbolic compliance”, or “ceremonial compliance”) or pursue different and sometimes contradictory actions with contradictory consequences.

Across different papers, Shandra and colleagues have provided evidence for the “organized hypocrisy” thesis by examining the lending practices of the World Bank. These scholars have shown how the Bank’s lending agenda is Janus-faced, leading to higher rates of forest loss through agricultural and forest loans on the one hand, while facilitating lower forest loss rates with loans in the environmental sector on the other (Shandra et al. 2016a; Sommer et al. 2017). More recently, CoatarPeter and Gareau (2022) analysis of the Chilean state’s forest conservation initiatives showed that while state agencies worked hard to follow global environmental norms, they remained under the sway of the powerful domestic forestry industry. The state thus established programs that closely adhered to the global environmental code; yet it remains unclear whether they have been effective in reducing emissions from the forestry sector.

The “organized hypocrisy” literature in environmental sociology has productively contributed to the scholarship on organizational response to climate change in two ways. Firstly, it recentered the conversation back to organizations, their institutional context,

commitments, and subsequent actions. In doing so, these works further clarified the complex macro-meso dynamics that large-N quantitative works have uncovered. Secondly, “organized hypocrisy” as a concept has also been useful in elaborating the different forms of “buffering” that organizations engaged in aside from mere symbolic or ceremonial compliance without any underlying actions. Works in this area have shown, rather, that organizations do act, but they can take simultaneous and contradictory lines of actions.

2.4 TRACING THE ORGANIZATION OF HYPOCRISY

While the scholarship has shed light on how “organized hypocrisy” has been a common organizational response to institutional pressure on environmental and climate issues, we still know little about how exactly this “hypocrisy” is organized.

Extant research in environmental sociology into the inner workings of organizations, and more specifically corporations, remains scant. Several existing works in organizational studies, however, can provide useful insights. For example, in their widely cited paper, Delmas and Toffel (2008) showed how institutional pressure on environmental issues were dealt in different ways across different departments. Broadly, marketing departments often assume responsibility in responding to demands from market constituents (such as customers or suppliers), leading organizations to adopt voluntary industry environmental standards. In contrast, demands from nonmarket constituents are often direct to corporate legal affairs, resulting in the firm’s participation in governmental voluntary environmental programs. Similarly looking into what happens

“under the hood”, Wright and Nyberg (2017) have also uncovered how the “grand challenge” of climate change became absorbed, over time, into a firm’s normal operations (“business-as-usual”, or “BAU”). Corporations achieve this translation by reframing, localizing, and normalizing climate change, and in the process hollow out or walk back prior commitments for action into ceremonial “talk”. The same scholars have also elaborated on how sustainability concerns and intra-organizational criticism on a firm’s own practices became a chain of “compromise” that ultimately subsume substantive demands for changes in actions under a capitalist logic (Nyberg and Wright 2013).

Research that looked closer into the “organizational black box” has shown a more complex picture of organizational life and complements past studies at the macro-meso level. The goal of this paper is to bring these insights into environmental sociology and the literature on “organized hypocrisy” to enrich our understanding of how hypocrisy around climate change works in corporations, and more specifically financial organizations, given the ongoing emergence of new global and national governance frameworks.

I borrow insights from Catherine Weaver’s influential book, *The Hypocrisy Trap* (2008), an ethnography of how hypocrisy functions at the World Bank, to challenge core assumptions of “organized hypocrisy”. In her work, Weaver (2008) followed the thread of new institutionalism to identify the many institutional/structural pressures the Bank was under, as well as the many stakeholders it was beholden to. As a result of these different pulls, even when the Bank strive for reforms, it continues with normal operations that contradict these reforms in other areas, resulting what other scholars have

identified as “organized hypocrisy” (Shandra et al. 2016a; Sommer et al. 2017). However, Weaver (2008) also stressed two important organizational realities. Firstly, organizations are complicated entities where the “talkers” are often different people or departments than the ones taking “actions”, a fact that should caution researchers not to confuse hypocrisies in organizations with “individual hypocrisy” (Weaver 2008:34–35). Secondly, that “[organizational] culture is not immutable, and organizational change does happen”, albeit slowly, and usually requires substantial effort for “internal policy advocacy” or “norm entrepreneurship” (Weaver 2008:39). These two arguments challenge researchers to not take for granted that hypocrisy is “organized”. Rather than an intentional and coordinated project, hypocrisy may very well be “disorganized”, a result of incoordination. Weaver’s arguments also encourage us to consider internal organizational dynamics that can close, widen, or create the new gap between “talk” and “action” in unexpected ways.

“Hypocrisy”, defined simply in this paper as the discrepancies between corporate “talk” and “action”, provides a productive organizing framework. As a still largely voluntary corporate governance framework, the TCFD and Net-Zero implementation among FCs constitute an emerging field rife with potential gaps between what a corporation says and what it does. Past research in environmental sociology has used “organized hypocrisy” as a starting point and gone on to investigate the drivers of said hypocrisy (CoatarPeter and Gareau 2022) and its consequences (Shandra et al. 2016a; Sommer et al. 2017). In contrast, this paper contributes to the literature by peering deeper into how hypocrisy is (or is not) organized. By doing so, I also seek to gain insight into

how hypocrisy can be resolved and the difficulties facing successful organizational reform in response to the ongoing climate crisis.

3. METHODOLOGY

I gathered my data from interviews with professionals who were at the time working in the financial sectors in Singapore implementing TCFD, Net-Zero, as well as sustainability reporting and climate disclosure more generally at their own or their client organizations. In total, I conducted 15 formal semi-structured interviews, 13 of which were done during the summer of 2022, and two follow-ups one year later in the summer of 2023, each ranging from 30 to 120 minutes. All formal interviews are recorded. Where possible, I also asked informants for additional formal coffee chats for additional context and clarification, for which I took notes. To supplement and triangulate interview data, I examined key official documents related to the TCFD. This includes the original report that laid out key recommendations, supplemental guides for different industries that the TCFD published, progress reports, and official public presentations. In addition, I consulted sustainability reports published by major financial institutions in Singapore.

Across interviews, I maintained a set of core questions covering my informants' background, their understanding of TCFD and Net-Zero, their daily work, and modified the rest as the interview progressed based on my informants' specific expertise and subject familiarity. In accordance, I made use of some broad questions to get a better handle of the institutional context, followed by more specific questions on expert subject

matters. While some comments are focused on non-TCFD (for example, on the industry-academia relationship in climate research, or on process of risk assessment in project financing at banks), they are nevertheless retained as important contextual information. Thematic questions within interviews are tweaked or changed when information is saturated or if I suspect how the questions had been phrased was ineffective in drawing out relevant information.

Two important points should be stressed regarding the sampling strategy. Firstly, Singapore is chosen primarily for its position in the global financial market. A highly financialized economy, the country serves as an important base for a significant number of transnational financial corporations. Singapore has deep ties to the global financial system and has generally been regarded as a “global city”. Past studies have suggested a high degree of global connectedness both in terms of economic as well as business governance norms, including the adoption of global corporate responsibility frameworks (Lim 2017). At the same time, the country is also an important financial hub linking global financial markets to Asia, which consist of mostly “peripheral” and “semi-peripheral” countries in a world system sense. As will be discussed in the findings section, Singapore’ embeddedness to “world society” while also being a financial conduit to the peripheral and semi-peripheral was important to make sense of what some informants suggesting.

Secondly, I made use of convenience/snowball sampling, leveraging existing industry contacts and expanded my network from there. Aside from four cases, all my informants are either at director level in charge of large institutional divisions, or managerial level heading specific projects. While accounts from higher level

professionals are not necessarily “truer” or more objective, seniority confers informants with substantial institutional knowledge and field-wide perspective. This aids my objective to construct and triangulate an overall understanding of the field and its institutional logic – “how actors collectively interpret rules and translate them into action” (Rasche 2012) – rather than to examine specific organizations and their practices. The accounts from working-level personnel both confirm and complement accounts from higher-level informants.

My goals are further supported by the wide variety in my sample in two other aspects. Firstly, my informants work for a diverse set of sub-industries in the financial world. In effect, consultants across different areas (sustainable, risk, or management consulting) brought insights that offers “breadth”, as these informants have had a wide variety of different companies as their clients; while others who are deploying TCFD and Net-Zero initiatives in their own organization offers “depth” (see table one). Additionally, some of my informants have been consultants to another’s organization, or vice versa, helping with triangulation of my findings.

More importantly, informants are also representative of the many different parts of an organization. Colloquially, corporations tend to be separated into the “back/mid offices” and the “front office”. While people from the mid and back offices handle the corporation’s necessary everyday operations such as information system, accounting, human resources and payroll, marketing, and risk management, the front office is responsible for revenue generation. The front office therefore tends to have more say in an organization, receive higher remuneration, with various incentives structures tied to how much money they bring in (such as year-end bonuses based on sales numbers). This

distinction between the different parts in a complex organization is a crucial one, which I will elaborate at length in the finding section. Table one provides a summary of the “office” that informants work for. In the case of consultants, this denotes the clients’ offices that they directly interface with to clarify if they provided advisory for clients’ “front office” or “back/mid office”. Alongside informants’ jobs, seniority, sub-industry, and whether this positionality afforded me a breadth or depth of information on the financial industry, table one offers a comprehensive view of the sample.

Table 1: List of informants, names are pseudonyms

Name	Current job/seniority	Sub-industry	Breadth/Depth	“Office”
Natalie	Sustainability reporting/ manager	Banking	Depth	Back/mid
John	Project finance/ analyst	Hedge fund	Depth	Front
Keaton	Risk consulting/ consultant	Management consulting	Breadth	Front
Robert	Sustainability/ consultant	Energy provider	Breadth	Back/mid
Hannah	Risk/ manager	Banking	Depth	Back/mid
Theo	Climate sustainability/ regional consulting lead	Insurance	Breadth	All
Julie	Risk consulting/ partner	Management consulting	Breadth	All
Jerry	Sustainability/ senior consultant	Sustainability consulting	Breadth	Back/mid
Melvin	Research/ manager	Management consulting	Breadth	Back/mid
David	Sustainability/ director	Banking	Depth	Front
Jim	Regulator/ vice president	Private regulation	Not applicable	Not applicable
Sarah	ESG/ director	Credit rating	Breadth	Back/mid
Lana	ESG/ vice president	Sustainable investment fund	Depth	Front

I did two major rounds of coding with the help of NVivo 12. In the first, I used broader, thematic codes to construct a general understanding of the field. I conducted this round of coding in tandem with consulting literature and concurrent to data collection. This abductive process allowed me to identify new or surprising aspects in my empirical work as well as under-examined areas in the literature (Tavory and Timmermans 2014). Subsequently, this process enabled adjustment of my data collection strategy, such as focusing more on specific questions or phrasing questions in different ways. I did a second, more detailed and structured round of coding after all the data had been collected

to delve deeper into specific findings, establish a better connection with the literature, and sharpen my argument. Before presenting my findings, in the immediate next section, I provide a brief background of the TCFD and Net-Zero initiative, their purported aims, recent history, and how they have been taken up in Singapore.

4. BACKGROUND

4.1 THE TASKFORCE FOR CLIMATE-RELATED FINANCIAL DISCLOSURE (TCFD)

The Financial Stability Board (FSB), then chaired by Mark Carney, who had been the governor for the Bank of England until 2020, announced the TCFD in the aftermath of COP21 in Paris in 2015. The formation of the TCFD was in response to explicit inquiries into the potential destabilizing effects of climate change to global finance in the G20 meetings in April and November of 2015 between these countries' finance ministers, central bank governors, and state leaders (FSB 2015). The taskforce, which consisted mainly of representatives from major banks, insurance companies, institutional investors, and accounting and consulting firms, published their recommendations in 2017 (FSB 2017).

The objective of the TCFD is four-fold. The first goal of the recommendations is to help organizations recognize or identify climate-related financial risks and opportunities relevant to their business. To this end, the TCFD provides a taxonomy of climate-related risks, separated into financial impacts from the physical impacts of climate change ("physical risks") and financial risk stemming from the political, legal, technological, reputational and market shifts from the ongoing transition to a low-carbon

economy (“transition risks”). Secondly, it provides a blueprint for organizations to quantify these risks, effectively translating climate risks to financial information that the organization and other financial market participants can understand and, more importantly, act upon. Thirdly, it provides a framework for organizations to manage the risks and opportunities that were identified and quantified. To wit, proper risk management entails moving away from the source of risk and capitalizing on the new low-carbon economy. The TCFD’s 2021 guidance on metrics, targets, and transition plans, for example, stresses the need for transition plans that “lay out a set of targets and actions supporting its transition toward a low-carbon economy, including actions such as reducing its GHG emissions” (FSB 2021:39). Finally, the organization is to document and disclose these processes, enabling participants in the financial market to accurately assess and “price” the organization’s risks and opportunities. As the market will ostensibly penalize poor risk management and reward good practices, it can allocate capital towards more “sustainable and resilient solutions, opportunities, and business models” (TCFD website – “About”).

The TCFD thus connects two mandates. The first is the financial mandate of risk management and profit maximization, and the second is an environmental goal articulated in the language of an economic “transition” achievable through market mechanisms. The TCFD conceptualized “economic transition to a lower-carbon economy” as, simultaneously, a risk, an opportunity, and a goal – all of which are important to the financial industry. In the context of a bank, for example, one facet of this transition is a marked increase in future carbon tax, which threatens the ability of clients in carbon-heavy industries to repay loans. At the same time, it also opens opportunities

for profitable loans into low-carbon spaces such as solar energy. As the bank reallocates its capital from one category to another, it lowers its risks, capitalizes on the opportunity, and at the same time facilitates the transition to a low-carbon economy at the macro-economic level. Most commonly, organizations pursue this transition through their Net-Zero initiatives.

4.2 THE FINANCIAL INDUSTRY’S COMMITMENTS TO NET-ZERO AND THE ROLE OF TCFD

In a recent comprehensive review of Net-Zero commitments, Hale et al. (2022) suggested that Net-Zero has become “the defining frame of climate action” underpinning the Paris Agreement, with Net-Zero initiatives at both the national and corporate level proliferating from 2014-15. The United Nations Framework Convention on Climate Change (UNFCCC) has started a “Race to Zero Campaign” for non-state actors including companies, financial institutions, health, and educational institutions as well as cities, and states and regions (UNFCCC 2021). These sub-groups have their own network or alliances. In the case of investors, for example, there is the Net-Zero Asset Owners Alliance. Crucially, the UNFCCC set a minimum standard for participation, which entails having a publicly disclosed plan for action, interim targets, and progress reports (UNFCCC 2021).

It is in this context that the Glasgow Financial Alliance for Net-Zero (GFANZ) convened in 2021, led by Mark Carney who had previously spearheaded TCFD efforts. The combined assets of GFANZ members total USD 130 trillion, or 40 percent of total

global financial assets (Bloomberg 2021). At the beginning, GFANZ required its members to abide by standards set by “Race to Zero”. This would require FCs under GFANZ to formulate a transition plan with clear targets and progress reporting – goals that are in line with, and more importantly, enabled by TCFD requirements. As UNFCCC toughened their requirements on joining, however, GFANZ has experienced dissent among its ranks as large US financial firms such as JPMorgan Chase walked back on its prior rhetoric (Binnie and Kerber 2022; Jessop and Wilks 2022; Scott 2022). Still, while GFANZ has changed the requirement to follow “Race to Zero” rules into a “recommendation”, it remains the case that the global diffusion of the TCFD and the creation of Net-Zero alliances have happened in lockstep, involving the same key leaders, with the TCFD designed to enable the Net-Zero initiatives.

These developments have been consistent with what some critical scholars have termed “an emergence of climate change as an axiomatic framework of long-term economic strategy” (Janković and Bowman 2014). Under this framework, the rationale for climate action becomes self-contained within the market economy, with climate ontology becoming irrelevant to business decision-making. The argument is no longer “doing well while doing good”, in which “doing good” would inevitably come against the barrier of market logic, as Vogel showed in “The Market for Virtue” (Vogel 2005). Instead, the architects and practitioners of the TCFD and Net-Zero, in effect, argued that “doing good” has become necessary for “doing well”, especially for financial firms in the face of climate change. In keeping with this broader narrative, climate change matters to the financial industry insofar as they can potentially affect the bottom line, both

positively and negatively. In other words, aside from being explicit environmental goals, Net-Zero commitments also make financial sense.

The lynchpin of the TCFD and Net-Zero is the production of a body of knowledge that can effectively translate climate variables into meaningful inputs for business. Recently, some economic sociologists have argued that there is a new field emerging, which focuses on science-based tools to measure emissions at the corporate level, pushed by financial institutions (Fligstein and Huang, forthcoming). In the case of the TCFD and Net-Zero, transparency and carbon accounting are indeed major planks that enable comparison and differentiation between “good” and “bad” practices. However, an explicit goal of the TCFD is also to provide guidance for corporations to quantify the risks and opportunities posed by climate change. This financial information, expressed in actionable numbers, helps the organization understand what its position at the present means for its financial future with respect to the various physical, social, and political impacts of climate change. This information also informs the organization on what it needs to do to avoid, minimize, or capitalize on that position going forward. To this end, the TCFD recommends a key tool: “scenario analysis” (FSB 2017). In this exercise, management uses different established climate scenarios (such as those published by the Intergovernmental Panel on Climate Change [IPCC]) to identify key changes to their operations due to the physical impacts of climate as well as changes in policies, legislations, and consumer attitudes, and attempts to quantify how these changes impact the business’ bottom line. This process is particularly relevant for the financial sector, which operates at the portfolio level, as a financial corporation can have stakes in many companies across multiple sectors.

In short, the TCFD and Net-Zero initiatives construct a conceptual bridge between environmental goals and financial mandates. To do so, these initiatives rely on increasingly transparent emissions data from all corporations and the quantification of these data into financial metrics for risks and opportunities. Participants in the financial market can then leverage these data to accurately “price” potential risks and investment, leading to more capital being allocated into low-carbon activities.

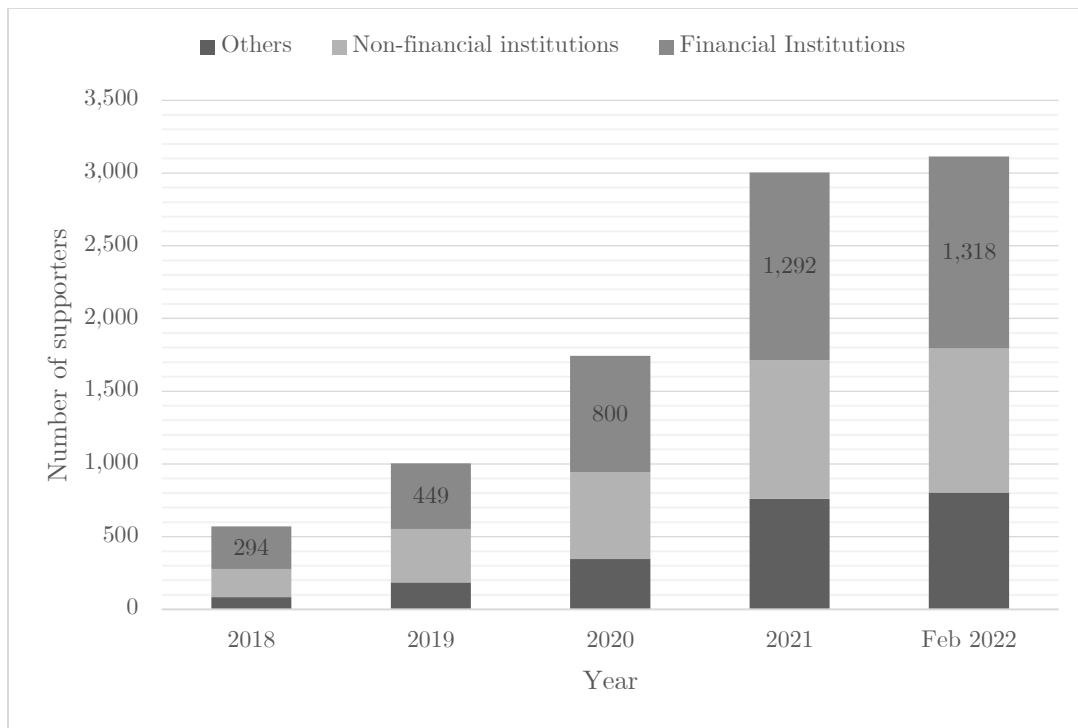
4.3 TCFD AND NET-ZERO IMPLEMENTATION IN SINGAPORE

The push for TCFD and Net-Zero in Singapore occurred in a milieu of rapid broader developments in global governance on the issue of climate change. The framework received widespread support globally (Financial Stability Board 2022, see figure one): A rapidly increasing number of organizations has supported and signaled their willingness to adopt the framework, viewing it as a helpful tool in managing climate-related risks and opportunities, as well as in enhancing transparency. Concurrently, governments of G7 countries have announced plans or already taken steps to make the framework mandatory (Reuters 2021).

Across Asia, the TCFD has received similarly broad support. For example, the Asian Development Bank (ADB) voiced its backing for the framework and has also started implementing TCFD itself (ADB 2021). Regulators and central banks in major markets in ASEAN other than Singapore, such as Thailand, Malaysia, and the Philippines have released guidelines on climate disclosure financial institutions that encourage TCFD implementation (Bank Negara Malaysia 2022; Banko Sentral NG Pilipinas 2022; The

Securities and Exchange Commission of Thailand 2023). In Singapore, the TCFD was adopted by the Singapore Exchange (SGX), effective from January 2022. The exchange requires listed companies under it to follow TCFD recommendations on a comply-or-explain basis. Concurrently, the Monetary Authority of Singapore (MAS) introduced its own guidelines on climate-related financial disclosure for banks, insurers, and asset managers, explicitly referencing TCFD as a recommended international standard for alignment (MAS 2022).

Figure 1: Growth of TCFD support from 2018 to February 2022 (FSB, 2022)



Singapore also made clear its commitment to decarbonization in 2021 when Mrs. Ho Ching, wife to Prime Minister Lee Hsien Loong and then Chief Executive Officer (CEO)

of Temasek Holdings, one of Singapore’s largest state investors, delivered the closing speech of the Ecosperity 2021 conference, in which she stressed the need to take action to address the climate crisis and Temasek’s plan to become Net-Zero by 2050 (M. Z. Lim 2021). Interestingly, in the same speech, Mrs. Ho suggested that divesting from emitters “does nothing to help the world decarbonize and [...] not the right thing to do” (V. Lim 2021). Instead, the intention was to work with emitters to help them commit to a transition plan to decrease their carbon footprint. These remarks endorsed a pragmatist and “balanced” approach towards decarbonization, which becomes more understandable when we consider the fact that Singapore remains a major hub for coal, oil products, and natural gas with close financial ties to these industries (The Straits Times 2021). As we will see in the finding section, this stance is also reflected in conversations with professionals, who recounted the same balancing act among other financial corporations in their investment activities.

5. FINDINGS

The literature on “organized hypocrisy” in environmental sociology have argued that contradictory environmental policies and practices pursued by non-governmental organizations and states is a product of these organizations trying to appease different demands from various stakeholders on whom they depend for resource and legitimacy (Brunsson 2002; CoatarPeter and Gareau 2022; Shandra, Rademacher, and Coburn 2016b; Weaver 2008). My interviews suggest that a similar tension resides with TCFD and Net-Zero implementation among FCs in Singapore. On the one hand, these corporations are under increasing regulatory and normative pressures to take seriously the financial impacts of climate change and to signal their commitment to contribute to building a low-carbon economy. On the other hand, they need to meet their core objective: profit. Consequently, ceremonial compliance with TCFD and Net-Zero appears to have been common practice, with many FCs choosing to focus on reporting to meet minimum regulatory requirements rather than the substantial organizational change recommended. In some instances, corporations aim to meet their Net-Zero targets by investing more into “green” deals without cutting down on financing carbon-heavy activities, thus exhibiting the same contradiction in organizational actions examined in the literature.

At the same time, my interviews also suggested that the gaps between a corporation's "talk" and "action" on TCFD and Net-Zero should not be assumed as a case of "organized hypocrisy". For informants, these gaps are potentially a product of uncoordinated-ness and disorganization in the context of rapid changes rather than a coordinated project of organizational buffering. My interviews also suggest that this disorganization itself may not be deliberate, but rather, indicative of ongoing change. In other words, in contrast to viewing hypocrisy as an organizational "state", I contend that it may be more useful to think of hypocrisy as a process. These findings do not suggest that hypocrisy does not happen in an organized, coordinated way, or that organizational buffering is inherently unstable. Rather, they suggest that we should not take "organized" for granted, and that the concept of "organized hypocrisy" may not always be able to capture the complexity of organizational life.

5.1 ENVIRONMENTAL DEMANDS AND BUSINESS IMPERATIVES FOR FCS IN SINGAPORE

FCs in Singapore have become under increasing pressure to meet both environmental demands and business-as-usual imperatives. On the one hand, they need to take climate change and its impacts seriously and act accordingly both to minimize risks and facilitate decarbonization in the economy. On the other hand, they need to continue bringing in revenue.

As discussed in the background section of this paper, TCFD and Net-Zero have quickly become institutionalized in Singapore. The adoption of these frameworks was

arguably a classic case of global norm diffusion, in which Singapore, an advanced and financialized economy with strong links to the global financial markets, followed closely global developments. As Jim, a regulator at the SGX, explained:

“The adoption rate for TCFD amongst developed nations or developed economies, has been rather high since the FSB came up with this [...] there’s been very much support for TCFD. So, what this then means is that as the developed economies adopt TCFD, Singapore, being also a developed market should also adopt TCFD reporting, to be in line with that of other developed markets.”

Other interviewees also reflected on the spread of TCFD and Net-Zero in broader Asia, recounting their work with clients/partners that face increasing pressure from regulators in Thailand, Malaysia, and the Philippines.

In addition to regulatory pressure, FCs in Singapore are also under increasing scrutiny from their peers and investors to take a more proactive role in climate finance. In some cases, this pressure played out as explicit questions from individual shareholders during annual meetings. Most significant among these shareholders are institutional investors, who informants told me have often moved faster than regulators in making demands for their portfolio companies to disclose. Pressures to adopt the TCFD recommendations and Net-Zero targets have also come from large international investment firms such as Blackrock as well as global alliances like GFANZ. In Singapore, informants largely reflect on the role of Temasek a major investor into

domestic companies and its considerable influence to get corporations to start taking TCFD and Net-Zero seriously.

The required actions FCs are supposed to take when adopting the TCFD and Net-Zero commitments – namely, decarbonization and reducing financing activities towards carbon-intensive assets and clients – however, can run counter to their ability to generate profit. Informants are quick to point out that TCFD and Net-Zero ambitions are always considered in tandem with how these initiatives would affect businesses. Natalie, who manages sustainability reporting for a major bank expressed these constant considerations in clear terms:

“Remember, we also need to balance with the overall revenue that we bring in from the business. We are still a bank; we are not a charity organization, so there are a lot of levers to balance out.”

This tenuous balancing act is most clearly presented during my interviews when discussing coal, which is supposed to be a straightforward case of an asset whose price has already been in decline and widely considered to be potentially “stranded” in the future. Dropping coal financing means revenue loss, which needs to be made up with businesses from other activities, such as renewables, that may be less lucrative. Keaton, a risk consultant, explains the consideration around coal and the resistance from “Relationship Managers”, who handle the relationship between the bank and clients and are also responsible for bringing in new business (such as new loans):

“Even the coal policy is not a very easy thing to do, you know [...] Apparently, there was pushback from Relationship Managers – it is literally revenue lost. [...] It is black and white, yes, for European or American banks. It’s easy for them to say. But it’s so different over here [Southeast Asia] – We can’t say that.”

Other informants emphasized that these difficulties in decarbonization are industry-level problems: Dropping a client or a project does not help decarbonization because another FC will finance the project in question. Such observations also hint at a broader tension between global environmental norms and local realities: the nature of the regional economy that the banks find themselves in. Jim, the SGX regulator, reflected this global-local dynamics as he describes the stance of Singapore regulatory approach around TCFD: a preference to use “the carrot” over “the stick”, and to balance necessary regulations on climate change with economic growth. It bears recalling here the remarks of Mrs. Ho Ching, then CEO of Temasek Holdings, on the investor’s approach to decarbonization as not divesting from emitters, but instead working with and advising these companies. These public pronouncements have been remarkably consistent with the overall approach of the financial industry.

In short, FCs in Singapore face simultaneous demands from various stakeholders to start addressing climate change while also meeting their core profit-maximizing activities. Past research on Chilean forestry governance showed a similar dynamic: While state agencies worked hard to follow global environmental norms, they remained under the sway of the powerful domestic forestry industry (CoatarPeter and Gareau 2022). In

the case of forestry in Chile, these divergent demands have led to programs that closely adhered to global environmental code, but whose effectiveness on emissions reduction remains opaque. In the following discussion I consider the evidence for similar observed “hypocrisy” in the financial sector in Singapore.

5.2 HYPOCRISY: CEREMONIAL COMPLIANCE WITH TCFD AND NET-ZERO

“TCFD is like pride month, if you don’t do it, something is wrong.”

(Robert, sustainability consultant)

“When you look at the emissions, it is still on the steep curve up [...] The talk and the communication side of the house is now slightly exceeding concrete actions.”

(Sarah, ESG director at a major credit rating agency)

The picture painted by professionals at the forefront of TCFD and Net-Zero in FCs presents one of “hypocrisy”, in the sense that what organizations say do not match their actions. In general, FCs in Singapore respond to new standards and regulations on climate change by complying with new rules only ceremonially, and material changes in how FCs conduct business remain elusive. The specific manifestations “hypocrisy” can vary. In some cases, FCs make the barest gesture towards aligning with TCFD recommendations, offering only an elementary report that checks all the boxes for

regulators. This reporting exercise often remains disconnected with business practices. In other cases, TCFD and Net-Zero implementation spurred some changes, leading to FCs devoting significant resources trying to gauge the risk posed by climate change, but financing practices remain largely unchanged. Informants suggest that there is a nominal increase in lending activities aimed to meet Net-Zero targets, but these activities have not necessarily meant a decrease in the financing of emitters.

The reporting of the TCFD across different FCs is emblematic of the current gap between proposed policies and actual practice. While conceived by its architects as a broad framework covering corporate governance, strategy, risk management, and metrics and target setting, in practice, the TCFD has more often been relegated to a reporting exercise to meet superficial regulatory compliance. Informants suggested that for many FCs, the TCFD is “reporting for the sake of reporting” or a “check-the-box” exercise. The quality of these reports was at best inconsistent, and at worst, they are useless. In some cases, the report is only a one pager listing whether the organization has complied with different aspects of the TCFD recommendations. Sometimes, “yes” or “no” answers to questions on whether the organization had implemented certain steps according to the recommendation are stuck into a broader sustainability report, with little or no useful information to investors. The impetus to minimize cost and hassle together with an unclear understanding of what is being required for TCFD reporting have also led to companies relying on compliance vendors or consultants, who help their clients meet the minimum regulatory requirements. Theo, who leads the regional climate consulting practice for an insurance broker firm, explains:

“So, the SGX says, do your sustainability report, someone does a sustainability report, no one picks that up. No one challenges it, the investors that this information is supposedly for aren’t necessarily interested in it either, so what’s the incentive to do it properly? [...] How do I get to answer SGX’s questions in the cheapest way possible, that’s what a lot of sustainability consultancies have been focusing on.”

Informants also alluded to the ceremonial nature of TCFD reporting more specifically by describing the work of other “sustainability professionals”, citing their background and lack of knowledge or limited perspective on climate change to suggest that what is being implemented is only ceremonial reporting without any substance or leading to any meaningful actions. In a complaint that was common among professionals critical of how sustainability offices in FCs are often populated with people previously from “marketing, communications, and public relations” functions, David, the sustainability director at a major bank, lamented: “When you hire a sustainability professional whose job is to do reporting, that’s all it becomes – a pure reporting piece.”

The lack of action runs counter to the intention of the TCFD, which seeks to intimately connect climate-related financial risk analysis with Net-Zero transition as an appropriate response to these risks. In contrast to the integrated processes described in the framework, informants invoke an image of disconnection between the people doing the TCFD with the rest of the organization that do not take this exercise seriously. For instance, Julie, now partner at a management consulting firm specializing in risk management described that in some cases, TCFD implementation was simply “some

people in the risk team sitting in a corner doing [the] analysis, submitting something to the regulator”.

In other cases, the lack of action persisted even when financial risks from climate change are taken seriously. Informants suggested that the results from scenario analysis for banks need to inform and be implemented in tandem with Net-Zero targets to be truly effective, or they would only be a “theoretical exercise”. In these instances, interviewees contended that while risk analysis was indeed taken seriously with significant resources put into understanding the potential impacts of climate change to the firms’ portfolio, FCs can be slow in turning this understanding into action, i.e., reducing their financing into carbon-heavy activities. Instead, what ended up happening has been an increase in efforts to get more “green” financing in low-carbon projects and sectors, such as solar energy, to offset existing lending activities into carbon-heavy sectors to meet Net-Zero targets. Julie observed, for example, that smoother rollouts of Net-Zero initiatives in banks often came with an assurance that it would not be accompanied by a cut in traditional carbon-heavy sectors. Such assurances were necessary to hedge against potential resistance across different parts of the businesses; they also reflected the same pragmatic approach observed at different levels of the Singaporean economy. Compliance with TCFD and Net-Zero is therefore at risk of simply meaning that FCs successfully meet a target they have committed to, rather than effectively decarbonize, i.e., diverting financing away from emitters. As Melvin, a research manager at a consulting firm told me: “It can become a compliance exercise in which you think about achieving certain decarbonization goals, but you’re not really decarbonizing.”

5.3 HYPOCRISY AS DISORGANIZATION

“It is not easy to work across departments... working across teams is challenging enough [...] You have different bosses, you have different working styles, you have different mandates within the departments.”

(Natalie)

While the extant literature on “organized hypocrisy” in environmental sociology has productively pointed out the hypocrisy and the source of hypocrisy, how such hypocrisy is “organized” remains unclear. As Catherine Weaver reminds us, it is important not to conflate the hypocrisy observed in organizations, where those who “talk” is not necessarily the same as those who “act”, as is the case with individual hypocrisy (Weaver 2008:33–35). Rather, organizations are complex entities with sprawling organs that do not necessarily collude to create buffers against external pressures.

Even as professionals working in FCs in Singapore on TCFD and Net-Zero described a field with ample instances of hypocrisy where talk does not match action, they were also quick to emphasize that such gaps are usually not intended. In contrast to an “organized” project of buffering against regulations, my informants described these instances more as “disorganization” rather than coordination. This is not to say that “organized hypocrisy” does not happen: Julie’s description of professionals confined to a corner producing a risk report solely for the regulator, which holds no real significance to the rest of the organization, suggests that in these cases, intentional buffering does occur. However, a more complex image emerged when informants recounted their experiences in FCs where the TCFD and Net-Zero have become an enterprise-wide concern, or where

company leadership has decided that climate change is a “cross-cutting” issue. In these contexts, uncoordinated-ness became more visible, especially when informants talked about the relationship between different offices. Three departments were often referenced. First, there is the sustainability office in charge of TCFD and more general sustainability reporting. Separately, the risk department is responsible for managing risks, including climate-related ones. Finally, what is colloquially called the “front office” oversees revenue generation activities. Each department has its own mandate and conception of climate change, and of the risks that climate change poses to the organization, leading to different priorities and actions, often at a different pace, leveraging different information. To extend Weaver’s (2008) language into this context, the people who “talk” are often risk and sustainability professionals, while those who “act” are usually on the business side of the organization. These two groups frequently do not move in tandem.

In my re-interview in May 2023, one year later from our first conversation, when asked to reflect on the state of changes among FCs, Julie suggested that it is a matter of different pace of change, which in turn likely stemmed from a lack of capabilities and vision on climate change at the front office:

“The two businesses are moving at a different pace. The risk management guys are already establishing the risk infrastructure, but the business guys are only now starting to set their Net-Zero targets. One unit is slightly ahead of the other, and they are not necessarily coordinated [...] It's less

intention, it's more capabilities, you know, lack of vision, not able to see the big picture, and so on.”

Mismatches in capabilities and visions are in fact a common source of challenges for TCFD and Net-Zero implementation. We have already, for example, gleaned the frustration over a lack of capability to do “proper” climate-related work through informants’ critique of some “sustainability professionals”, who are not adequately equipped with the necessary skills and knowledge given their background as entrenched in the financial industry or adjacent non-climate areas like marketing or CSR. Lack of capabilities is also closely related to the different ways in which the different departments see climate change. A frequent complaint by those working in the sustainability office and risk department is the lack of appreciation for climate-related risks by the front office. This lack of appreciation may come as a complete lack of understanding on climate change and why climate-related risks, leading to what some informants considered ignorant questions, such as, “How is this relevant to my business? Is it important? What is ESG?”. Lack of concern for climate change can also manifest as a dismissal of climate-related risks as improbable and a refusal to act: “This is a scenario that probably has a 0.5% chance of ever coming true, I’m not going to set my business strategy on such a scenario”. Divergent structural incentives in the different departments, emblematic of different mandates, presented a key problem in my informants’ view. Keaton provided a succinct summary:

“There’s a divide between the organization, the front office’s mindset is [that] they don’t care. Their Key Performance Indicators are not tied to climate, why should they care? For the risk side, obviously they care, because it is real. For the sustainability team, of course they care. But [...] what the back-office thinks does not necessarily translate to voluntary actions for the money-making segments of the business.”

The differences in mandate between the front office and the other department, and the way incentives for front office workers are structured also help explain the pragmatism and concession surrounding Net-Zero, where the emphasis is on sourcing new low-carbon deals rather than on divestment from emitters. Because their mandate and remuneration are based on the business they bring the organization, front office workers rarely considered climate-related risks when bringing in new clients, as David remarked: “Not many Relationship Managers of any bank would look at the climate risks”.

Where climate-related risks play a more important role in business decisions, the communication and coordination between risk, sustainability, and front office across different organizations have varied. Julie, for example, described the use of questionnaires among banks to assess their client’s exposure to the effects of climate change:

“In banks where it's working well, [designing the questionnaire] is a joint exercise, [...] it has input from risk, from sustainability, from business and together they design these questions. [...] In some banks, there is no

coordination, the risk [team] just decides to create a questionnaire which is just focusing on the risk side.”

While climate change can become such an enterprise-wide concern that has prompted bank to incorporate the risk into their multiple “lines of defense” when assessing the risk of a new client or project at both the front office and the risk team, communication between the different teams is not a given. Each department can also independently hire external consultancy to aid with this new climate work, of which they have little expertise, making coordination more complicated.

The disjointedness by which different sections of an organization deal with climate-related risk is also apparent in they handle climate-related data. Exacerbated by an overall lack of quality company-level data from clients and a rapidly evolving institutional context where rules, regulations, and standards are still being developed and consolidated, frictions can occur across a variety of issues, from how and where to source the data, the methodology of quantifying emissions, to the translation of emissions to risks. Hannah, a risk manager at a major bank reflected on the challenges in her work and what she called a “data architecture problem”:

“Internally, within the bank, there isn’t a single climate risk platform that collects and stores data that is then used for various purposes within the bank. [...] There is the risk team that [...] evaluates clients at the individual client level, [...] data is also being used by the stress testing team to stress-test the portfolio, and then there’s also the reporting team,

that takes certain data for disclosure. There's just so many different parties within the bank, trying to do different kinds of climate risk related work, yet there isn't a single source of truth. There isn't a single data source for everyone [...] The challenge is, [inter-department communication] is not an automated process."

Theo echoed this organizational reality in remarkably similar language:

"[Quantification/data gathering] is done at different levels and it doesn't necessarily get joined up internally [...] There's not necessarily any sense that those are linked up, they are for different processes within the bank. There's not necessarily one single source of truth."

In short, there is evidence to suggest that hypocrisy among FCs in Singapore with regards to TCFD and Net-Zero is not always a product of coordinated buffering: Disorganization and discoordination between the different parts of an organization seem to be equally prevalent. While past research on "organized hypocrisy" in environmental sociology have stressed organizations' contradictory policies and actions and explained the source of these contradictions (CoatarPeter and Gareau 2022; Shandra et al. 2016a), my evidence suggests that hypocrisy may also be a consequence of organizational complexity dealing with a novel challenge – in this case, climate change and its related social, political, and market implications. This imagery of "disorganization" also presents a different story to Delmas and Toffel's (2008) influential paper, which presented an image of corporations

as well-attuned apparatus. Here, environmental demands from different sources – market-related or non-market – get funneled into different departments, leading to different and distinct organizational responses. In the case of TCFD and Net-Zero, such deliberate patterns do not appear to be the standard. Pressure from all sides with regards to climate change and a fast-moving regulatory environment meant that climate-related risks sometimes escaped the confinements of one single department or activity (such as reporting) and became a company-wide concern. Faced with this challenge, different departments in FCs have not necessarily acted in unison, nor have they necessarily shared the same mandates, visions, or culture. Some units espousing to do more, others much less, resulting in apparent hypocrisy, where “talk” does not match “action”.

5.4 CHANGE AND REFORM AS “RESOLVING” HYPOCRISY

Conversations with professionals implementing or advising FCs on the TCFD and Net-Zero suggest that the gap between organizations’ “talk” and “action” can be a consequence of disorganization. However, since structural factors and formal organizational policies such as Key Performance Indices, or KPIs, play a significant role in steering the actions of personnel in different departments, such disorganization can arguably be intentional. In this scenario, corporate leadership might acknowledge genuine climate advocacy and may even institutionalize climate change as a concern, but this advocacy is sequestered from core business functions as old policies, incentives, and ultimately business practices remain unchanged. To put it in another way, TCFD and

Net-Zero implementation can be considered as a form of organized or intentional disorganization, in other words, a form of tolerated dissent.

Rather than deliberate disorganization, my interviews suggest that there have been significant efforts by those working to implement TCFD and Net-Zero in FCs to change business practices in their respective organizations. Spurred by evolving external pressure and sometimes leveraging these very sources, these professionals articulated an ambitious vision that goes beyond formal structural changes to “integrate” climate change into FCs’ business-as-usual. Given this context, “hypocrisy” is not necessarily an attempt to preserve the status quo or an indicator of an organization in a “stable state”. Rather, hypocrisy may be a sign of slow and discordant organizational change. Disorganization, in this case, represents internal efforts to close the gap between talk and action, in other words, to resolve hypocrisy.

To start, there is growing scrutiny of FCs’ implementation of TCFD and Net-Zero from not only regulators but also third-party organizations. Informants familiar with credit risk rating such as Sarah and Theo, for example, suggested that credit rating agencies have been actively looking at TCFD implementation and climate risk management more broadly as contributing to credit worthiness, while other non-governmental organizations (NGOs), including academia, are also examining Net-Zero commitments more closely. Hale et al. (2022), for example, has scrutinized Net-Zero targets across different countries, companies, and subnational government, concluding that only about one in five of the entities reviewed meet the minimum criteria for robustness. On the NGO side, Theo mentioned the Carbon Tracker Initiative as one in

several potential sources of leverage he used to consult clients and nudge them to implement TCFD and Net-Zero seriously:

“What I found interesting, having worked in academia, multilateral development banks, and now in consulting, is how each can use the other's stuff for leverage. I really like academics who slam clients because it gives me an ‘in’, to say: ‘Guys, somebody independently looked at what you did, and they don’t think it was very good.’ The insurer is picking up on that; the credit rating agency is picking up on that, we need to fix this.”

Consistent with what Catherine Weaver (2008) observed in the World Bank, exposed hypocrisy in a context of increasing transparency can incur significant costs: FCs can get flak for not doing enough, setting unrealistic goals, or not following through their public commitments. Regulatory threats are trending in the same direction. Natalie suggested that litigation from activist shareholders has been a growing concern:

“In Europe, in Australia, [there are already] legal cases against companies that either claim that they are doing something but not doing enough, or not disclosing climate-related risks [...] It's not just the reports, it's also how we classify products, how we represent ourselves, and how we align our ambitions and Net-Zero plans with the activities that we do. As the public becomes more aware, litigation cases will be on the rise. And then of course, regulations will come in.”

For professionals working to implement TCFD and Net-Zero within organizations, ceremonial compliance or superficial commitment can therefore become a significant source of risk. Consequently, these professionals spend significant efforts to close the gap between talk and action. Their ambitious vision is to integrate climate risk considerations across all organizational activities, making these considerations “business-as-usual” (BAU) and an integral part of decision-making, including, for example, which project to finance, or how the organization relates to clients. These professionals, like Natalie, see themselves as critics, advocates, as well as educators to other parts of the organization and look to change not just formal policies but also the assumptions and outlooks of their colleagues on climate change. As Natalie put it, the aim of sustainability professionals like her is to “work themselves out of a job”, since there would no longer be any need for anyone to persuade or hector other parts of the organization on climate change and why it matters to the business.

While striving to instill more impactful change, professionals serious about TCFD and Net-Zero still must contend with the reality that they are operating in a for-profit business. As such, their internal entrepreneurship is bound. For example, as discussed earlier in the findings, the approach for many FCs in the region is a pragmatic one that eschews divesting from emitters; and professionals must push for change within this accepted boundary. An example of how these dynamics come to the fore is where some informants opined on the change in KPI, and how this change, while a step in the right direction, has not been enough. It is important for front office workers to have not only an incentive to look for low-carbon projects, but also the capability to influence and advise

their clients to reduce emissions. Natalie and David, for example, both argued that without a deeper understanding of climate change and its impacts, it is hard for bankers to engage with their more carbon-intensive clients. To David, this lack of perspective and knowledge on climate change can easily turn KPIs on the bankers into a target chasing practice; he suggested that at present, these bankers can only offer their clients platitudes that do not lead to meaningful change:

On KPIs:

“Every relationship manager here has a green target; a certain percentage of the revenue that they bring into the bank must be a green project or a sustainable length loan [...] [When they] realize that they haven’t hit the green target, they go ‘David, can you help me get [new deals]? I can hit my green deal, because we’re going to give them the money to buy that green property’. Okay, fine, that’s a start. At least you’re thinking about it, at least you encourage them to get this property over another. Well done, you. It’s a start, but it’s not much.”

On banker’s inability to advise clients:

“When you ask ‘what do you mean by environment? How would you then reduce emissions?’ Bankers don’t know. They can say, oh, you just switch to renewables. Okay, well, how is that possible for this [particular] company? They don’t know.”

While remaining well within acceptable bounds of FCs' stance on engagement and not divestment, professionals implementing TCFD and Net-Zero do exert substantial efforts for organizational change to prevent charges of hypocrisy and remain, in general, critical of the status quo. Whether these initiatives will result in meaningful decarbonization is a separate question not in scope of this paper. What is at stake here, however, is evidence of organizational changes in the forms of new policies (such as green targets), practices (such as climate-related risk accounting), the potential for perspectival shift on climate change, and a segment of organizational entrepreneurs pushing for these changes. Like the sustainability managers in Nyberg and Wright's (2013) study, those working to implement TCFD and Net-Zero in FCs in Singapore are sincere in "connecting ideas of sustainability with the market", and "taking part in developing new practices, products and services that made money for their companies" (p.419). In Nyberg and Wright's case, the authors concluded that sustainability ended up becoming subsumed under capitalism's logic. As TCFD and Net-Zero are relatively new institutional movements, however, conclusions on their broader effects should be reached with caution.

6. DISCUSSION AND CONCLUSION

One year after Tariq Fancy published his critique of sustainable investment, Stuart Kirk, the former head of HSBC's global asset management, appeared to all but confirmed the industry's hypocrisy on climate change when he delivered a controversial presentation, titled "Why investors need not worry about climate risk" at a Financial Times event. In this event, after Kirk was suspended, the banker suggested that risks from climate change are too long-term to matter for investors, even while acknowledging that carbon tax can be a possible threat (Agnew, Mundy, and Morris 2022; Walker 2022).

As it turns out, the charge of hypocrisy also holds water when it comes to the implementation of the TCFD recommendations and Net-Zero targets in the Singaporean context. Interviews with professionals at the forefront of these initiatives suggest that ceremonial compliance is relatively common: FCs can focus solely on reporting to meeting regulatory requirements; they can also make Net-Zero commitments that center around meeting a goal through carbon offsetting and new business in low-carbon sectors without decoupling from carbon-heavy ones. Such findings reaffirm existing observations from the scholarship on "organized hypocrisy" in environmental sociology (CoatarPeter and Gareau 2022; Shandra et al. 2016a; Sommer et al. 2017), which borrowed insights from organizational studies to explain contradictions in environmental policies and outcomes among international organizations or state agency.

“Organized hypocrisy”, however, does not tell us the whole story. While talk and actions can differ greatly, neither is this gap always a product of deliberate buffering, nor do different departments in an organization share a common understanding of what climate change and what it means to the health of the business. As Weaver (2008) cautioned, in “organizational hypocrisy”, unlike “individual hypocrisy”, talk is separated from action because those that act are different from those that talk. For TCFD and Net-Zero in Singapore, despite earnest efforts from professionals working to bring about transformation in both in policy and perspective – in effect, to close the gap between talk and action – changes have come slowly and incongruously. In this light, hypocrisy is not always an attempt to maintain a status quo where FCs pay lip service to regulators and a concerned public while continuing to finance carbon intensive economic activities. Hypocrisy can also be a sign of organizations in flux as they try to respond to a novel threat.

While past research has focused on demonstrating hypocrisy as well as its sources, in this paper, I contribute the literature first by focusing on how hypocrisy is “organized” to suggest that we should not take for granted this “organization”. A second contribution is to suggest that hypocrisy can be thought of as signifying “process”, rather than “state”. It is important to acknowledge that corporate practices on climate change will likely change and continue to change even if we suspect that the outcomes or effectiveness of decarbonization remain largely the same. Consolidations of standards across the industry are ongoing. In early 2022, the TCFD recommendations were integrated into the International Financial Reporting Standards, or IFRS, which is currently mandatory in more than 100 countries (Mundy and O’Dwyer 2022; Pavoni

2022). Informants have also suggested that regulators in Singapore are not very far behind private standards and practices – My interview suggest that across the board, professionals implementing TCFD and Net-Zero are expecting significant changes in their institutional environment, and subsequently corporate practices among FCs. Their work, in some regards, is to prepare, and to set their corporations up for these changes so they are not caught off guard.

The financial industry's response to climate change might certainly be emblematic of the old saying: "The more things change, the more they stay the same". Climate change may be but the latest obstacle for capitalism, the solution to which would continue to propagate the system. This may have been Nyberg and Wright's (2013) conclusion on sustainability in corporations when they suggested that sustainability is "subsumed" under the capitalist logic. Other scholars, likewise, have focused on the financialization of climate change as a fundamental process under capitalism. For example, Sullivan (2013) suggested that the conservation of nature has become a new frontier for capital investment and how conservation practices have been "rewritten in terms of banking and financial categories". Critical macro-finance scholars have similarly pointed to a "Wall Street Consensus" on climate change (Dafermos, Gabor, and Michell 2021; Gabor 2021). In this view, solutions for mitigation or adaptation to the effects of climate change are simply the next profitable destination for capital, where "sustainable infrastructure" has become a new "asset class" to be invested in, while multilateral development banks work to insulate institutional investors and asset managers from political, climate, and demand risks (Gabor 2021). This forgone conclusion seemed to also have occurred to David, who was particularly critical of current implementation of

the TCFD, when he made a comparison, between why the weekend was invented, with current efforts to address climate change from the financial industry:

“The weekend was created so that Henry Ford could sell more of his cars because no one was buying his cars. Workers were working Monday to Saturday and going to church on Sunday; they didn’t have time to go and drive around and experience the freedom that the car has to offer [...] The industrialists of our time must [similarly] work out a way of maintaining a balance or reversing or limiting the damage, to maintain their ability to extract value and capital. That’s why they called it a ‘transition to a low carbon economy’. The key word is ‘economy’ [...] I suppose that’s the analogy that I would draw to our transition. It was how businesses maintained this healthy, happy, and recreational-driven workforce to enjoy the products which they’re selling. [Now], it will be ensuring there is a planet left for people to enjoy what they’re selling, or financing.”

But while things may indeed remain the same, as David suggested, there are still many circles that need be squared by “the industrialists of our time” before we can arrive at any conclusion with confidence about a still rapidly shifting landscape. Changes may also be non-linear. “Hypocrisy”, as Catherine Weaver reminds us, is a “trap”: It is essential for organizational survival, but efforts to reform it can beget further hypocrisies and yet further changes, in attempts to make the actions match the talk.

A change-centric research program for environmental sociologists can focus on further understanding how organizational changes vis-à-vis the climate crisis happen, in what way changes can continue to sustain the status quo or lead to potential systemic changes, and how individuals, corporations, states, and other organizations can impact these processes. There are at least three productive lines of inquiries.

Firstly, as Fligstein and Huang (forthcoming) have suggested, transnational financial institutions and corporates are already pushing for a new field of knowledge and governance to measure carbon emissions as part of capitalism's response to climate change. As discussed in the background section of this paper, this body of knowledge is crucial in effectively translating climate change variables into meaningful financial information. Scholars of economic sociology have long noted that this process of "commensuration" produces and enables some information while obscuring others (cf. Espeland and Stevens 1998, 2008). Some of my informants, for example, suggested that this key process of commensuration in banks entails the translation of climate variables into more familiar metrics, notably the "probability of default" of a portfolio company and the "loss given default" for the bank. Why this metric? What does it measure? How do risk professionals calculate this number? What goes into this number and what does it leave out? These are important questions to answer if we are to gain a more complete understanding of how the financial industry is responding to climate change. More broadly, at the field level, who is heading the construction of this new body of knowledge that bridges climate scientists at the IPCC and the world of high finance? What does this knowledge enable, and what does it obscure?

Relatedly, sociologists can examine how financial institutions are changing the contours of climate politics by construing climate change as a market transition (Janković and Bowman 2014), and more specifically, a financial problem. Underlying TCFD and Net-Zero is the assumption that the invisible hand of the market will correctly price “assets” and “risks” (Ameli et al. 2020). Whether this assumption holds true is an important debate. At the same time, we should also pay attention to its implications and (un)intended consequences. Colgan et al. (2021), for example, has compellingly argued that climate politics will now play out between holders of assets that contributes to climate change (such as oil and gas) and holders of asset made vulnerable by climate change (such as agriculture). If organizations act as “asset holders” in the context of asset revaluation due to the impact of climate change, then who would be the winners and losers of this reevaluation process? Who are the ones that will play the role of asset valuator? Rather than a vertical analysis of individual-corporation-national-global levels, conceptualizing institutions as “asset holders” can shift our focus to more cross-level interactions, including intra-state and intra-industry contestations.

Finally, research that focuses on professionals and their role vis-à-vis their institutions can be a fruitful direction to complement existing sociological literature on consumer behavior and on beliefs and attitudes (cf. Dietz et al. 2020). Organizations are not monoliths, nor are the people who work for them. Reviewing insights from organizational research that focus on the micro level, Hallett (2010; but see also Hallett and Hawbaker 2021) has argued persuasively that institutions are “inhabited” by individuals, and that their interactions and on-the-ground practices “give life” to what may be previously hollowed formal structures and rules, making policy and practices

“recouple”. Within the broader context of climate change and society, professionals and experts are creators and disseminators of knowledge. They can normalize and legitimize corporate approaches to climate change; they can also be part of climate social movements within organizations. Ball (2007), for instance, showed how employees at Canadian City Council leveraged environmental accounting as a form of “workplace activism”. At present, the role and agency of loosely collectively termed “sustainability professionals constitute a productive area of research that has yet to be extensively examined. How do these professionals advocate for their cause? How do they organize support to bring about changes? What are the challenges they face and how do they overcome them? On a practical note, understanding the actions and motivations of these professionals in their institutional context may also aid climate activists in exploring new channels for affecting change.

To conclude, in this paper, I have examined the implementation of TCFD and Net-Zero among FCs in Singapore and found evidence of not only hypocrisy, broadly defined as the gap between “talk” and “action”, but also that such hypocrisy may be less a product of coordinated buffering and more of disorganization between different parts of FCs. I suggest that “organized hypocrisy”, while a productive concept in environmental sociology so far, may not be able to capture this complexity, and that hypocrisy may be more productively thought of as a sign of change rather than of a status quo. Future research that benefited from this perspective, focusing more on ongoing “processes” in the financial industry includes (1) research on commensuration, particularly the translation of climate change scenarios to financial risks, and its impacts; (2) studies on the implications of climate change financialization to climate politics at and across

different governance levels; and (3) examinations of professionals and climate activism within financial corporations and all corporations more broadly.

For better or worse, the financial industry and financial markets will continue to be an integral part of climate-related issues, regardless of whether they are, or indeed, should be the leader in solving this crisis. In examining the TCFD and Net-Zero implementations, my aim is not to provide evidence for one side or the other in the reform versus systemic change debate within environmental sociology on corporate response to climate change. Rather, it is to say that if, in Gramscian terms, there is a “war of position” to be fought in the trenches, we should know what those trenches look like and what the positions we should take are.

7. BIBLIOGRAPHY

- Agnew, Harriet, Simon Mundy, and Stephen Morris. 2022. "HSBC Banker Draws Fire after Accusing Policymakers of Climate Change Hyperbole." *Financial Times*, May 20.
- Ameli, Nadia, Paul Drummond, Alexander Bisaro, Michael Grubb, and Hugues Chenet. 2020. "Climate Finance and Disclosure for Institutional Investors: Why Transparency Is Not Enough." *Climatic Change* 160(4):565–89. doi: 10.1007/s10584-019-02542-2.
- Andrus, Joel L., Patrick J. Callery, and Jake B. Grandy. 2023. "The Uneven Returns of Transparency in Voluntary Nonfinancial Disclosures." *Organization & Environment* 36(1):39–68. doi: 10.1177/10860266221083338.
- Asian Development Bank. 2021. "ADB Announces Support for Task Force on Climate-Related Financial Disclosures." Asian Development Bank. Retrieved June 18, 2023 (<https://www.adb.org/news/adb-announces-support-task-force-climate-related-financial-disclosures>).
- Ball, Amanda. 2007. "Environmental Accounting as Workplace Activism." *Critical Perspectives on Accounting* 18(7):759–78. doi: 10.1016/j.cpa.2006.04.005.
- Bank Negara Malaysia. 2022. "JC3 Issues the TCFD Application Guide for Malaysian Financial Institutions." Retrieved June 18, 2023 (<https://www.bnm.gov.my/-/jc3-issues-tcfd-application-guide>).
- Banko Sentral NG Pilipinas. 2022. "Circular Letter No. CL-2022-011 on Philippine Sustainable Finance Roadmap and Guiding Principles." Retrieved June 18, 2023 (<https://www.bsp.gov.ph/Regulations/Issuances/2022/CL-2022-011.pdf>).
- Bartley, Tim. 2018. "Transnational Corporations and Global Governance." *Annual Review of Sociology* 44(1):145–65. doi: 10.1146/annurev-soc-060116-053540.
- Binnie, Isla, and Ross Kerber. 2022. "Mark Carney-Led Grouping Drops U.N. Climate Initiative Requirement." *Reuters*, October 28.
- Bromley, Patricia, and Walter W. Powell. 2012. "From Smoke and Mirrors to Walking the Talk: Decoupling in the Contemporary World." *Academy of Management Annals* 6(1):483–530. doi: 10.5465/19416520.2012.684462.
- Brulle, Robert J. 2014. "Institutionalizing Delay: Foundation Funding and the Creation of U.S. Climate Change Counter-Movement Organizations." *Climatic Change* 122(4):681–94. doi: 10.1007/s10584-013-1018-7.
- Brulle, Robert J. 2018. "The Climate Lobby: A Sectoral Analysis of Lobbying Spending on Climate Change in the USA, 2000 to 2016." *Climatic Change* 149(3):289–303. doi: 10.1007/s10584-018-2241-z.

- Brunsson, Nils. 2002. *The Organization of Hypocrisy: Talk, Decisions, and Actions in Organizations*. 2nd ed. Oslo, Malmö, Sweden, Herndon, VA: Abstrakt ; Liber ; [distributor] Copenhagen Business School Press.
- Cadez, Simon, and Albert Czerny. 2016. "Climate Change Mitigation Strategies in Carbon-Intensive Firms." *Journal of Cleaner Production* 112:4132–43. doi: 10.1016/j.jclepro.2015.07.099.
- Callery, Patrick J. 2023. "The Influence of Strategic Disclosure on Corporate Climate Performance Ratings." *Business & Society* 62(5):950–88. doi: 10.1177/00076503221115715.
- Ciplet, David, and J. Timmons Roberts. 2017. "Splintering South: Ecologically Unequal Exchange Theory in a Fragmented Global Climate." *Journal of World-Systems Research* 23(2):372–98. doi: 10.5195/jwsr.2017.669.
- CoatarPeter, Patrick, and Brian J. Gareau. 2022. "Combining World-System and World Polity Approaches to Analyze International Environmental Governance: A Case Study of Forest Governance in Chile." *Environmental Sociology* 1–13. doi: 10.1080/23251042.2022.2115660.
- Colgan, Jeff D., Jessica F. Green, and Thomas N. Hale. 2021. "Asset Revaluation and the Existential Politics of Climate Change." *International Organization* 75(2):586–610. doi: 10.1017/S0020818320000296.
- Delmas, Magali A., and Michael W. Toffel. 2008. "Organizational Responses to Environmental Demands: Opening the Black Box." *Strategic Management Journal* 29(10):1027–55. doi: 10.1002/smj.701.
- Dietz, Thomas, Rachael L. Shwom, and Cameron T. Whitley. 2020. "Climate Change and Society." *Annual Review of Sociology* 46(1):135–58. doi: 10.1146/annurev-soc-121919-054614.
- DiMaggio, Paul J., and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48(2):147–60. doi: 10.2307/2095101.
- Djelic, Marie-Laure, and Sigrid Quack. 2018. "Globalization and Business Regulation." *Annual Review of Sociology* 44(1):123–43. doi: 10.1146/annurev-soc-060116-053532.
- Dunlap, Riley, and Aaron M. McCright. 2011. "Organized Climate Change Denial." P. 0 in *The Oxford Handbook of Climate Change and Society*, edited by J. S. Dryzek, R. B. Norgaard, and D. Schlosberg. Oxford University Press.
- Espeland, Wendy Nelson, and Mitchell L. Stevens. 1998. "Commensuration as a Social Process." *Annual Review of Sociology* 24(1):313–43. doi: 10.1146/annurev.soc.24.1.313.
- Espeland, Wendy Nelson, and Mitchell L. Stevens. 2008. "A Sociology of Quantification." *European Journal of Sociology* 49(3):401–36. doi: 10.1017/S0003975609000150.
- Fancy, Tariq. 2021. "The Secret Diary of a 'Sustainable Investor.'" Medium. Retrieved April 5, 2023 (<https://medium.com/@sosofancy/the-secret-diary-of-a-sustainable-investor-part-1-70b6987fa139>).
- Financial Stability Board. 2015. "Press Release: FSB to Establish Task Force on Climate-Related Financial Disclosures."

- Financial Stability Board. 2017. "Recommendations of the Task Force on Climate-Related Financial Disclosures."
- Financial Stability Board. 2021. "Task Force on Climate-Related Financial Disclosures: Guidance on Metrics, Targets, and Transition Plans."
- Financial Stability Board. 2022. "Task Force on Climate-Related Financial Disclosures Workshop: Session 1 - Fundamentals and Overview of TCFD," February.
- Fisher, Dana. 2004. *National Governance and the Global Climate Change Regime*. Lanham, MD: Rowman & Littlefield Publishers.
- Flammer, Caroline, Michael W. Toffel, and Kala Viswanathan. 2021. "Shareholder Activism and Firms' Voluntary Disclosure of Climate Change Risks." *Strategic Management Journal* 42(10):1850–79. doi: 10.1002/smj.3313.
- Furness, Virginia. 2022. "Carney-Led Finance Group Calls for More G20 Climate Plan Details." Reuters, November 1.
- Gareau, Brian. 2013. *From Precaution to Profit: Contemporary Challenges to Environmental Protection in the Montreal Protocol*. New Haven: Yale University Press.
- Gareau, Brian J. 2012. "Theorizing Environmental Governance of the World System: Global Political Economy Theory and Some Applications to Stratospheric Ozone Politics." *Journal of World-Systems Research* 187–210. doi: 10.5195/jwsr.2012.480.
- Gareau, Brian J., and Cristina A. Lucier. 2018. "Neoliberal Restructuring of the World Polity: The Weakening of the Montreal Protocol and Basel Convention in Historical Perspective." *Environmental Sociology* 4(3):325–42. doi: 10.1080/23251042.2018.1436893.
- Gilligan, Jonathan M., and Michael P. Vandenbergh. 2020. "A Framework for Assessing the Impact of Private Climate Governance." *Energy Research & Social Science* 60:101400. doi: 10.1016/j.erss.2019.101400.
- Givens, Jennifer E., Xiaorui Huang, and Andrew K. Jorgenson. 2019. "Ecologically Unequal Exchange: A Theory of Global Environmental Injustice." *Sociology Compass* 13(5). doi: 10.1111/soc4.12693.
- Gomez-Echeverri, Luis. 2013. "The Changing Geopolitics of Climate Change Finance." *Climate Policy* 13(5):632–48. doi: 10.1080/14693062.2013.822690.
- Grant, Don, and Andrew W. Jones. 2004. "Do Manufacturers Pollute Less Under the Regulation-Through-Information Regime?" *The Sociological Quarterly* 45(3):471–86. doi: 10.1111/j.1533-8525.2004.tb02299.x.
- Grant, Don, Andrew Jorgenson, and Wesley Longhofer. 2020. *Super Polluters: Tackling the World's Largest Sites of Climate-Disrupting Emissions*. Columbia University Press.
- Hale, Thomas, Stephen M. Smith, Richard Black, Kate Cullen, Byron Fay, John Lang, and Saba Mahmood. 2022. "Assessing the Rapidly Emerging Landscape of Net Zero Targets." *Climate Policy* 22(1):18–29. doi: 10.1080/14693062.2021.2013155.
- Henderson, Kent E. 2019. "Contradictory Governance Norms within World Society: Energy Development Strategies, Environmental Protection, and Carbon Dioxide Emissions." *Environmental Sociology* 5(4):393–404. doi: 10.1080/23251042.2019.1613031.

- Henderson, Kent E. 2021. "Economic Incentive to Ignore the Environment: The World Environmental Regime, Foreign Direct Investment, and Decoupling of Development Aid." *Sociology of Development* 7(1):77–97. doi: 10.1525/sod.2021.7.1.77.
- Janković, Vladimir, and Andrew Bowman. 2014. "After the Green Gold Rush: The Construction of Climate Change as a Market Transition." *Economy and Society* 43(2):233–59. doi: 10.1080/03085147.2013.791511.
- Jessop, Simon, and Tommy Wilks. 2022. "U.N. Campaign Toughens Standards for Company Net-Zero Plans." *Reuters*, June 15.
- Jorgenson, Andrew K., Christopher Dick, and John M. Shandra. 2011. "World Economy, World Society, and Environmental Harms in Less-Developed Countries*." *Sociological Inquiry* 81(1):53–87. doi: 10.1111/j.1475-682X.2010.00354.x.
- Kraft, Brandon. 2018. "Shedding Light on Stakeholder Power in a Regulated Market: A Study of Variation in Electric Utilities' Climate Change Disclosures." *Organization & Environment* 31(4):314–38. doi: 10.1177/1086026617718429.
- Lim, Alwyn. 2017. "Global Corporate Responsibility in Domestic Context: Lateral Decoupling and Organizational Responses to Globalization." *Economy and Society* 46(2):229–54. doi: 10.1080/03085147.2017.1359439.
- Lim, Min Zhang. 2021. "Climate Action Not a Cost, but an Investment Opportunity: Ho Ching." *The Straits Times*, September 30.
- Lim, Vanessa. 2021. "Temasek Will Work with, Invest in Emitters Who Commit to Clear Transition Plan for Carbon Reduction." *Channel News Asia*, September 30.
- Luo, Le, and Qingliang Tang. 2014. "Does Voluntary Carbon Disclosure Reflect Underlying Carbon Performance?" *Journal of Contemporary Accounting & Economics* 10(3):191–205. doi: 10.1016/j.jcae.2014.08.003.
- Marquis, Christopher, Michael W. Toffel, and Yanhua Zhou. 2016. "Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing." *Organization Science* 27(2):483–504. doi: 10.1287/orsc.2015.1039.
- Mateo-Márquez, Antonio J., José M. González-González, and Constancio Zamora-Ramírez. 2022. "An International Empirical Study of Greenwashing and Voluntary Carbon Disclosure." *Journal of Cleaner Production* 363:132567. doi: 10.1016/j.jclepro.2022.132567.
- McCright, Aaron M., and Riley E. Dunlap. 2011. "Cool Dudes: The Denial of Climate Change among Conservative White Males in the United States." *Global Environmental Change* 21(4):1163–72. doi: 10.1016/j.gloenvcha.2011.06.003.
- Metcalf, Tom, and Alex Morales. 2021. "Carney Unveils \$130 Trillion in Climate Finance Commitments." *Bloomberg.Com*, November 2.
- Meyer, John W., and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83(2):340–63.
- Monetary Authority of Singapore. 2022. "Regulatory and Supervisory Approach." Retrieved June 18, 2023 (<https://www.mas.gov.sg/development/sustainable-finance/regulatory-and-supervisory-approach>).
- Mundy, Simon, and Michael O'Dwyer. 2022. "Banks Face New Standards on Carbon Emissions Disclosure." *Financial Times*, March 31.

- Nyberg, Daniel, and Christopher Wright. 2013. "Corporate Corruption of the Environment: Sustainability as a Process of Compromise." *The British Journal of Sociology* 64(3):405–24. doi: 10.1111/1468-4446.12025.
- Pavoni, Silvia. 2022. "ISSB Sets out to Tighten up Climate Reporting." *Financial Times*, May 5.
- Peetz, David, Georgina Murray, Ian Lowe, and Christopher Wright. 2017. "Corporations, Their Associations and Climate Action."
- Rasche, Andreas. 2012. "Global Policies and Local Practice: Loose and Tight Couplings in Multi-Stakeholder Initiatives." *Business Ethics Quarterly* 22(4):679–708. doi: 10.5840/beq201222444.
- Reid, Erin M., and Michael W. Toffel. 2009. "Responding to Public and Private Politics: Corporate Disclosure of Climate Change Strategies." *Strategic Management Journal* 30(11):1157–78. doi: 10.1002/smj.796.
- Reuters. 2021. "G7 Backs Making Climate Risk Disclosure Mandatory." Reuters, June 5.
- Scott, Mike. 2022. "Reality Bites as Finance Firms Row Back on Their Climate Pledges." Reuters, December 20.
- Shandra, John M., Heidi Rademacher, and Carolyn Coburn. 2016a. "The World Bank and Organized Hypocrisy? A Cross-National Analysis of Structural Adjustment and Forest Loss." *Environmental Sociology* 2(2):192–207. doi: 10.1080/23251042.2016.1160471.
- Shandra, John M., Heidi Rademacher, and Carolyn Coburn. 2016b. "The World Bank and Organized Hypocrisy? A Cross-National Analysis of Structural Adjustment and Forest Loss." *Environmental Sociology* 2(2):192–207. doi: 10.1080/23251042.2016.1160471.
- Shandra, John M., and Eran Shor. 2009. "World Polity, Unequal Ecological Exchange, and Organic Water Pollution: A Cross-National Analysis of Developing Nations." *Human Ecology Review* 16(1).
- Sommer, Jamie M., John M. Shandra, and Michael Restivo. 2017. "The World Bank, Contradictory Lending, and Forests: A Cross-National Analysis of Organized Hypocrisy." *International Sociology* 32(6):707–30. doi: 10.1177/0268580917722893.
- Sullivan, Sian. 2013. "Banking Nature? The Spectacular Financialization of Environmental Conservation." *Antipode* 45(1):198–217. doi: 10.1111/j.1467-8330.2012.00989.x.
- Tavory, Iddo, and Stefan Timmermans. 2014. *Abductive Analysis: Theorizing Qualitative Research*. Illustrated edition. Chicago: University of Chicago Press.
- Tester, Aaron William. 2020. "Deforestation in the Global South: Assessing Uneven Environmental Improvements 1993–2013." *Sociological Perspectives* 63(5):764–85. doi: 10.1177/0731121420908900.
- Tett, Gillian. 2022. "ESG Exposed in a World of Changing Priorities." *Financial Times*, June 3.
- The Securities and Exchange Commission of Thailand. 2023. "SEC Launches Guidelines on Management and Disclosure of Climate-Related Risk by Asset Managers." Retrieved June 18, 2023 (https://www.sec.or.th/EN/Pages/News_Detail.aspx?SECID=9817).

- The Straits Times. 2021. "Singapore Prepares to Swop Its Oil Hub Status for Greener Future." The Straits Times, July 19.
- UNFCCC. 2021. "Race to Zero Campaign." Retrieved April 2, 2023 (<https://unfccc.int/climate-action/race-to-zero-campaign>).
- Vandenbergh, Michael P., and Jonathan M. Gilligan. 2017. *Beyond Politics: The Private Governance Response to Climate Change*. Cambridge: Cambridge University Press.
- Vogel, David. 2005. *The Market for Virtue: The Potential and Limits of Corporate Social Responsibility*. Washington, D.C: Brookings Institution Press.
- Walker, Owen. 2022. "HSBC Suspends Banker over Climate Change Comments." Financial Times, May 22.
- Weaver, Catherine. 2008. *Hypocrisy Trap: The World Bank and the Poverty of Reform*. Princeton University Press.
- Wright, Christopher, and Daniel Nyberg. 2017. "An Inconvenient Truth: How Organizations Translate Climate Change into Business as Usual." *Academy of Management Journal* 60(5):1633–61. doi: 10.5465/amj.2015.0718.
- York, Jeffrey G., Timothy J. Hargrave, and Desirée F. Pacheco. 2016. "Converging Winds: Logic Hybridization in the Colorado Wind Energy Field." *Academy of Management Journal* 59(2):579–610. doi: 10.5465/amj.2013.0657.
- Zamarioli, Luis H., Pieter Pauw, Michael König, and Hugues Chenet. 2021. "The Climate Consistency Goal and the Transformation of Global Finance." *Nature Climate Change* 11(7):578–83. doi: 10.1038/s41558-021-01083-w.