Chapter

Corporate Strategy and Climate Change:

A nonmarket approach to environmental advantage

Thomas C. Lawton and Carl J. Kock

INTRODUCTION

In previous chapters, authors acknowledged the business case for integrating environmental sustainability with organizational principles and practices. In this chapter, we argue that such engagement must also be elevated from an operational to a strategic level, as we consider how companies can embed environmental concerns and sustainability initiatives in the design and delivery of corporate strategy. This can result in the development of environmental capabilities that underpin corporate competitiveness. We are acutely aware of the challenges that climate change presents for firms. These include stakeholder pressure to acquire a social license to operate (Demuijnck and Fasterling, 2016), and the development of a climate lens for enterprise management and leadership. But we also see business opportunities to innovate existing products and services and grow entirely new climate-oriented businesses and markets. Moreover, as firms develop such capabilities, this also opens the possibility of further strategic actions that may allow such firms to assert and consolidate an *environmental competitive advantage*.

In focusing on strategic engagement with, and management of, climate change and environmental sustainability, we are moving beyond the market focus of corporate strategy to engage what David Baron (1995a; 1995b) first labelled "nonmarket strategy". Bach and Allen (2010) emphasized that nonmarket strategy recognizes that businesses are social and political entities and not just economic agents. Therefore, nonmarket strategy "considers how managers anticipate, preempt, and respond to actors, influences, and actions emanating from the cultural, social, political, and regulatory arenas" (Lawton, Doh, and Rajwani, 2014, p. 5). Extant work on nonmarket strategy has considered but not always explicitly captured environmental and sustainability thematics. But in recognizing the social agency of firms, this inevitably legitimizes corporate engagement with climate change and related agendas. This is implicit in the fact that a foundational principle of nonmarket strategy is that it deals with externally derived, non-commercial issues, actors and events that impact on the strategic direction and corporate objectives of the business.

This chapter seeks to conceptualize corporate strategy approaches to climate change and consider the development of related environmental capabilities. We therefore look holistically, considering the business opportunities and market initiatives, as well as the strategic regulatory engagement of firms. In the latter, we consider how firms strategically engage and leverage climate change, ultimately, to gain an advantage over the competition. This includes exploring how firms can strategically adapt to stringent regulatory environments and, further, influence the regulatory environment to their advantage through nonmarket strategy, and specifically via lobbying as an instrument of corporate political activity (Hillman,

Keim, and Schuler, 2004; Lawton and Rajwani, 2011; Lawton, McGuire, and Rajwani, 2013). An example of proactive regulatory engagement is when a firm that is an environmental leader invests in lobbying to have states set regulation at or near that firm's current environmental capability level. This in turn can severely impact environmental laggards in the same industry, putting them at a competitive disadvantage. In some cases, multiple firms cooperate to advance regulation, and in other (more common) cases, numerous firms may collaborate to delay or prevent regulation through collective action. This may be coordinated via a common trade association (Rajwani, Lawton, and Phillips, 2015; Lawton, Rajwani, and Minto, 2018); or emerge through an advocacy coalition of often diverse organizations with a shared objective (Sabatier, 1988; Jenkins-Smith and Sabatier, 1994).

CORPORATE ENVIRONMENTAL STRATEGY

At a fundamental level, corporate strategy aims to deliver on strategic objectives by establishing and maintaining a competitive advantage that allows a focal firm to earn above average returns or economic rents[1]. In the most basic sense, as Porter

[1] Specifically, above average returns or economic rents are essentially the same as economic value added, i.e., firms use resources they take (away) from the rest of the economy and turn these into products or services. If customers value these at more than what the resources cost (where these costs are determined in factor markets, based on what other firms could do with them, i.e., the 'supplier opportunity cost'), then, not only firm profits but also economic value is created, as the firm was able to create a productive combination that – on average – other firms could not create with the focal resources. However, it is important to include *all* resources, including externalities such as pollution, use of clean water, and so on (think via CO2 trading schemes or other ways to internalize externalities), to determine if firms are truly adding firm and economic value. In fact, if that is not done, then investment decisions are distorted as polluting firms that do not include such externalities in their profit calculation would look better than green firms that use fewer resources or

suggested in 1980, a firm can become a cost leader by using fewer or less costly inputs, relative to rivals, to create customer value; or it can differentially combine resources in such a way that at least some customers see a distinctly higher value in the resulting products and services, compared to those of other firms. In either case, the firm attempts to widen the difference between the cost of inputs and the customer-perceived value of outputs, thereby adding unique economic value. It actually matters little if cost savings or features that are more valuable to certain customers are established in a market context, where product or process innovation may create differentiated products or more efficient production methods; or a nonmarket context where, for instance, lobbying against environmental regulation may lead to lower costs for a focal firm or higher costs for competitors (Fremeth and Richter, 2011; Capron and Chatain, 2008), or where customers increasingly sensitive to corporate social responsibility (CSR) issues develop preferences for environmentally friendly products or the products of firms with a positive CSR record (Hillman and Keim, 2001). Rather, firms must ensure and assure that the unique value they create indeed is and stays *unique*. If, for instance, a firm lobbies as part of an industry group and is afforded regulatory relief, the same benefits accrue to other firms, and therefore there is no causal effect on competitive advantage. Barney (1991) captured these considerations from a resource-based perspective in the well-known VRIN framework: resources need to be *Valuable* in the sense that they create

---

cause less pollution. This would shift economic resources to firms that are less able to create value from these resources.
In a sense, economic rent – based on accounting for all resources used – requires the most efficient use of resources and is thus a necessary precursor for sustainability.

the above mentioned added economic value; *Rare*, in the sense that competitors do not have the ability to match the value creation of the focal firm; as well as *Inimitable* and *Non-substitutable* to ensure that the rarity is maintained for some time.

These considerations make it clear that nonmarket – and for this chapter, most crucially, environmental – issues should not just be seen as a constraint or cost imposed upon firms, but also as a potential source of advantage (e.g., Porter and Kramer, 2006). In fact, while early work in the field of environmental strategic management advocated a moral imperative for firms to engage in environmentally friendly practices, a considerable literature subsequently focused on the question of *does it pay to be green?* And *which contingencies make you greener?* (e.g., King and Lenox, 2002; Cai, Jo, and Pan, 2012; Kock, Santalo and Diestre, 2012; Kurapatskie and Darnall, 2013).

By contrast, only a comparatively smaller number of researchers directly address partial aspects of how firms intentionally use environmental efforts in shaping their competitive strategies. Walsh and Dodds (2017), for instance, investigated how environmental sustainability approaches in the North American hotel industry could help firms assert cost leadership or differentiation advantages. Other authors, conversely, focus on the issue of lobbying. Matsueda (2020), for example, develops a menu-auction model of firm lobbying and explores whether collective or individual lobbying approaches lead to lower costs. Yet other researchers explore how firms can gain a unique advantage over competitors through lobbying, perhaps by even pushing for higher, not lower, regulation (Fremeth and Richter, 2011; Grey, 2018; see also Capron and Chatain, 2008).

EMBEDDING ENVIRONMENTAL ACTIVISM IN NONMARKET STRATEGY

A firm's strategic choices are to a large extent prescribed by the competitive environment within which it operates. That competitive environment is typically multidimensional, and for research purposes, is typically dichotomized into market and nonmarket. Baron's seminal definition of the nonmarket environment is that it "consists of the social, political and legal arrangements that structure interactions among companies and their public" (Baron 1995a, p. 73). For example, the law of contract is an important part of the nonmarket environment that enables companies and their public to contract for the exchange of goods, services, labor, and capital. Variations in contract law between different countries and industries impact the strategic choices of firms. These various social, political, and legal arrangements are collectively referred to as 'regulation'. In industrialized nations, regulation pervades the competitive environment within which firms select and execute their strategies (Shaffer, 1995). Trade policy, competition policy, employment policy, environmental policy, fiscal policy, monetary policy - government policies in general and the particular regulations that they give birth to - have the ability to alter the size of markets through governments purchases and regulations affecting substitute and complimentary products; to affect the structure of markets through entry and exit barriers and anti-trust legislation; to alter the cost structure of firms though various types of legislation pertaining to multiple factors, such as employment factors and pollution standards (Gale and Buchholz, 1987); to affect the demand for product and services by charging excise taxes and imposing regulations that affect consumer patterns (Wilson, 1985); to effect access to scarce resources (Boddewyn, 1998); and to impact firms' profitability by increasing costs and restricting markets (Schuler,

1996). Consequently, there is substantial interdependence between regulation and the competitive environment within which firms operate (Baron, 1995b; Porter, 1990). Firms therefore take an interest in regulation: an interest in minimizing the cost of existing and proposed regulation upon strategy and business models; an interest in lobbying for regulations which are consistent with and supportive of preferred strategy and business models; and an interest in regulation as a source of competitive advantage. Cumulatively, this constitutes nonmarket strategy: the activities and configurations through which firms strategically manage their political and social environments (Lawton, Dorobantu, Rajwani, and Sun, 2020). For our purposes, and building on the discussion around regulatory engagement, we explicitly add to nonmarket definitions around the strategic management of the environment, and related corporate engagement on climate change (Graf and Kock, 2015; Tashman, Winn, and Rivera, 2015). In doing so, we can distinguish between those firms that purposefully engage, reactively and proactively, and at various points on the spectrum in between. Graf and Kock note that, “firms following a reactive strategy do only what appears to be necessary to build or maintain environmental legitimacy in the eyes of stakeholders” (2015, p. 206). The overall goal is to avoid reputational penalties and regulatory sanctions at the lowest possible cost (Klassen and Whybark, 1999). In contrast, environmentally proactive firms go beyond regulatory rules and aim to outperform in their environmental efforts, exceeding their legal or social expectations (Russo and Fouts, 1997; Sharma and Vredenburg, 1998). Instead of implementing waste control technologies at the end of a production process, for instance, they seek to prevent the generation of new waste

from the early production stages on and throughout the whole production process (Klassen and Whybark, 1999).

The goal of this chapter is to align these piecemeal considerations into a more comprehensive overview of different *environmental strategy archetypes*. We do so by highlighting several dimensions that seem likely to systematically shape competitive environmental strategies. Specifically, how aggressive firms are in pursuing their competitive advantage; if they are already proactive in environmental terms; and whether they pursue their environmental competitive strategies alone or in concert with other firms. These key dimensions will be explored in the remainder of the chapter.

ADOPTING A STRATEGIC STANCE: PROACTIVE OR REACTIVE

So far, we have discussed the basis of competitive advantage, and emphasized the necessity to consider both the market and nonmarket context within which firms compete. But we have been silent on how firms *actually* go about creating strategies to compete. Of relevance for this chapter is how proactive or reactive companies are in attempting to establish their respective positions of advantage. Miles, Snow, Meyer, and Coleman's (1978) classic typology, which remains a relevant and often cited tool, offers pertinent insights here. Specifically, they proposed that firms fall into four strategic types:

Prospectors: firms that are at the forefront of changes, innovating new products and actively taking advantage of new market opportunities, thereby developing a broad market approach. In the terminology of March's (1991) exploitation-exploration framework, prospectors would seem to focus relatively more

resources on the exploration of new areas and less on exploitation of current market opportunities. As such, these firms are aggressively pursuing the establishment of new competitive advantages. The French energy and automation multinational, Schneider Electric, has existed since 1836 but reconstituted its competitive strategy in recent decades to position the corporation at the vanguard of green energy provision. With an explicit and overarching emphasis on efficiency and sustainability, Schneider Electric has been a leader in new market opportunities such as corporate energy efficiency training and consulting, whilst also exploring the sustainability benefits of smart homes.

Defender: these firms aim to find secure and stable product niches. Instead of pushing for new product innovations, they are focused on process innovation and cost efficiency. Accordingly, they conform closely to the notion of exploiting and protecting a current advantage (March, 1991), and will thus be much less aggressive than the previous type when it comes to assert new sources of advantage. Outdoor clothing and equipment retailer, Patagonia, may illustrate this strategic type, with a long-time focus on their corporate environmental and social footprint, rejection of fast fashion, and early emphasis on recycled fabrics. As the first mover in responsibility and sustainability within their industry, but with competitors now eagerly imitating, Patagonia strives to defend their position and to continually exploit extant markets and loyal customers through process innovation and the intent to be carbon neutral by 2025.

Analyzer: these firms share traits of both previous types. Often associated with a ‘second-but-better strategy’, they take defensive positions in some industries, while being more aggressive in product innovation and seizing opportunities in other

markets. These firms may, in fact, oscillate between sometimes being defenders and at other times focusing their resources on prospecting and thus essentially aim to balance exploitation of existing and exploration of new sources of advantage. More aggressive than defenders in establishing new sources of advantages, they also more carefully protect existing markets than prospectors, thereby coming close to what Tushman and O'Reilly (1996) call ambidextrous organizations. In the context of environmental strategy and climate change, many large and diversified conglomerates would fall into this category. For example, energy multinationals like Chevron or Shell have invested significant resources and made skillful acquisitions in exploring alternative energy operations, particularly in areas including geothermal, solar, and biofuels. But legacy investments in capital assets and managerial capabilities mean that such firms continue to invest in exploiting traditional upstream and downstream oil and gas businesses.

Reactors: in contrast with the other three types, reactors do not seem to have a consistent strategy and simply (struggle to) respond to changing environments. These companies can seem to lack a clear strategic direction and to merely respond to competitor actions or stakeholder pressures. Here we might find a disconnect between behavior in the market and nonmarket spheres, particularly for firms competing as cost/price leaders. For instance, leading budget airlines like Southwest Airlines in the U.S. or Ryanair in Europe are often prospectors in market strategy, anticipating and aggressively pursuing new market opportunities. But in nonmarket strategy, they are more typically reactors. For instance, on sustainability initiatives and climate change regulatory requirements, they – like more airlines - can lag other companies and even seek to obstruct or delay new environmental policy initiatives.

Overall, the Miles et al. typology suggests that firms systematically vary in how aggressively they pursue the establishment of competitive advantage, particularly, for our purposes, advantage based on nonmarket capabilities: prospectors lead the charge, followed by analyzers, while defenders, as the name already implies, prefer to hunker down, protect, and incrementally develop their existing area of competence. Reactors, lacking a clear strategy, are unlikely to aggressively charge in any specific direction, as that would require clear strategic intent and therefore, as their name implies, these firms will tend to react to but not initiate change.

Having established that firms differ in their active quest for building new sources of (nonmarket) competitive advantage in a general sense, we turn now to the specifics of the environmental stance of a firm where we can discern a similar, but not identical, dispersion of firms along a continuum from reactive/defensive to proactive when it comes to minimizing the environmental impact of the firms' productive processes.

ENVIRONMENTAL PROACTIVENESS

A comparatively recent phenomenon in environmental management is that some firms, rather than considering environmental efforts as pure costs to be avoided, proactively embrace environmentally friendly practices, and even go beyond compliance in their sustainability strategies. It appears that it is precisely this proactive type of firm that can optimally align corporate environmental and financial performance (King and Lenox, 2002). Hart (1995) and Russo and Fouts (1997) have laid out much of the underlying (natural-)resource-based logic of how environmental

firm actions alter capability structures to potentially enhance financial performance as well.

In any case, we take as a key point of departure for our chapter precisely this distinction between firms that are proactive - going beyond what is legally required and often developing new capabilities as a result - and firms that are more reactive, frequently approaching environmental issues through the lens of compliance and cost. Proactive engagement typically suggests a longer-term strategic perspective, with the intent to develop new products, innovate processes, and explore new market opportunities - all of which take time. A reactive mode can indicate a short-term and tactical approach to engaging with climate change. But it can also suggest a viable strategic choice, particularly for firms that are embedded and invested in businesses that run counter to the philosophy that renewables are the only answer in a complex world.

It is also worth noting that, in some instances, one does not exclude the other, i.e., firms – particularly diversified transnational corporations with divergent interests in different places – may be short-term oriented and tactical regarding green strategies in some businesses, and proactively engage sustainability strategy elsewhere. Therefore, proactively embracing sustainability is not the only strategy for a firm to pursue. But we do argue that, particularly in advanced economies with rapidly evolving climate action agendas, it makes sense for firms to approach green issues proactively to avoid public scrutiny and penalties, enhance business efficiencies, and capitalize on related customer expectations.

A variety of typologies have been proposed to classify firms' approaches to environmental management issues. Early work by Carroll (1979) and Wartick

and Cochrane (1985) on corporate social responsibility, and adaptations to an environmental focus by other authors (e.g., Roome, 1992; Hunt and Auster, 1990) suggested a continuum of firm approaches, with an increasing importance given to social issues that feel very similar in spirit to the Miles et al. typology discussed above: *reactive, defensive, accommodative,* and *proactive.* Integrating the actual environmental management approaches used, Hart (1995) proposes a similar continuum, starting with an *end-of-pipe* approach, to *pollution prevention or total quality management,* to *product stewardship*, and finally *sustainable development.* The final step is clearly the most desirable from a societal perspective as "…sustainable development aims to minimize the environmental burden of firm growth through the development of clean technologies [and] requires a long-term vision shared among all relevant stakeholders and strong moral leadership" (Buysse and Verbeke, 2003, p. 455).

However, these classifications are not just cross-sectional. Rather, they are reflective of the history of the interaction between firms on the one hand, and environmental stakeholders and regulators on the other. A short review of the evolution that has taken place in the way that companies and shareholders have approached environmental management issues will illustrate this point.

Following the U.S. environmental protection agency (U.S. EPA, 2000), we can discern three more-or-less historically successive phases of how firms have responded to environmental issues. In the U.S. context, while concerns about pollution were sparked since the early 1960s by incidents such as oil spills in California and a polluted river in Ohio literally bursting into flames, the establishment of the EPA by President Nixon on December 2, 1970, marks a watershed moment

(see 'the origins of EPA' on epa.gov) and the beginning of the first phase. Firms, until then accustomed to treating the environment as both a free source of inputs and a dumpsite for waste materials, were suddenly confronted with an emerging environmental legislation complete with regulations that sought to curb their environmental freeriding. Interpreting such regulations as a mere nuisance that was thrust upon them, firms typically took a reactive or defensive stance, attempting to minimize or avoid the costs associated with compliance. In turn, reactive solutions that usually took the form of end-of-pipe activities such as adding filters, indeed led to higher costs while creating little or no value added for firms, causing a *de facto* negative correlation between environmental investments and financial performance (e.g., Jaggi and Freedman, 1992, for evidence on the late 1970s).

A somewhat more proactive approach emerged in a second phase, as firms strove to find less costly ways to comply. Firms started to conduct internal audits and implement environmental management systems (EMS) that required the redesign of the entire production process to simultaneously comply with regulations and improve operating margins by reducing required inputs and productively using by-products that were formerly wasted. They also embraced the concept of eco-efficiency (DeSimone and Popoff, 1997) to achieve sustainable development through the reduction of production process material and energy intensity and improved durability and recyclability of products. Delmas (2001) and other authors (Melnyk, Sroufe and Calantone, 2003) delivered empirical evidence of the benefits of EMS introductions on increases in self-reported levels of competitive advantage and other measures of corporate performance, but also caution that such positive outcomes are contingent on firms undertaking substantive efforts to go beyond simple

compliance and to use the EMS implementation to form strong relationships with internal and external stakeholders (Delmas, 2001), or maximize organizational involvement by actually certifying their EMS within the ISO 14000 family of standards (Melnyk et al., 2003).

Implementing EMS, firms thus became increasingly involved with environmental issues and some started to go *beyond compliance* in what is the currently emerging third phase. Going beyond what regulations require of firms implies that the respective companies have evolved a different approach from earlier phases. Environmental activities are no longer seen as a pure cost but as potential levers for value creation. For instance, through environmentally friendly products for increasingly eco-conscious customers, or the creation of unique organizational capabilities that could lead to cost savings and an enhanced green image. Clearly, only a subset of firms has progressed to a proactive sustainable development approach but that would seem to be precisely why the firms that do are able to create unique added value from their environmental activities and to also benefit financially. Russo and Fouts (1997) explicitly highlight that actions easily imitable by competitors, such as buying off-the-shelve hardware (e.g., filters, more efficient machinery, and so on) to improve a firm's environmental performance does not lead to a sustainable competitive advantage. On the other hand, they suggest that integrating such off-the-shelve items with complex, firm idiosyncratic routines through an environmentally friendly redesign of the entire firm may in fact create rather difficult to match capabilities that can provide long lasting cost advantages vis-à-vis less environmentally proactive competitors. Empirical results indeed show that higher environmental performance is linked to higher financial performance (Russo

and Fouts, 1997; King and Lenox, 2002). Aragon-Correa and Sharma (2003), Christmann (2000), or Hart (1995) have provided additional theoretic and empirical support for this link and identified important moderators such as external contingencies or pre-existing complementary capabilities.

Altogether, the evolution in the approach of firms to environmental issues had its starting point in a reactive end-of-pipe approach that was essentially shared among practically all firms. Over time, some of these firms became more accommodative of environmental concerns and discovered higher efficiencies through preventing pollution in the first place and embracing EMS that are essentially variants of a total quality management approach. Finally, a fraction of these firms is now starting to significantly go beyond compliance to proactively seek advantages from their unique approach to sustainable development. Hence, the extant classification schemes for environmental firm behavior (Carroll, 1979; Wartick and Cochrane, 1985; Hart 1995), on the one hand, seems to reflect firms at different phases of this evolution, but, on the other hand, at the current later stage of this process, we likely also face a distribution of firms across all the proposed categories.

Several scholars have already looked at the reasons why firms would sort themselves into more-or-less proactive environmental performers. Aragón-Correa, Matías-Reche and Senise-Barrio (2004), for instance, report higher environmental commitment in firms that designate a particular manager for environmental issues,

Moreover, an emerging literature on environmental governance suggests that as various stakeholders step up their environmental demands on firms, and even sizable segments of shareholders increasingly believe in a positive link between

financial and environmental performance, corporate governance mechanisms are employed to enforce environmental performance by levying pressure on hitherto more hesitant managers (e.g., Kock et al., 2012; Berrone and Gomez-Mejia, 2009; Russo and Harrison, 2005). The stakeholder-agency model pioneered by Hill and Jones (1992) provides one formal framework to appreciate these developments; extending the well-known problem of a misalignment between principals and agents (Fama, 1980; Jensen and Meckling, 1976), and suggesting that various stakeholder groups, other than the owner of firms, also have claims on firms akin to those of principals.

In the next section, our focus is less on explaining why firms are environmentally proactive or not; rather, we will take a firm's current environmental stance – whether reactive or proactive or some blend thereof – and the associated environmental capability structure as given and aim to explore what competitive strategic options are available based on that position.

COMPETITIVE STANCE x DEGREE OF ENVIRONMENTAL PROACTIVITY

Combining strategic and environmental stances allows us to present the environmental strategic archetypes in Figure 1.

*** Insert Figure 1 here ***

On the left-hand side of the horizontal axis, we find firms with an overall defensive or reactive strategic posture – the aptly named *defenders* and *reactors* from the Miles

et al. framework – which tend to focus on exploitation of their current market positions and are not overly aggressive in attempting to find new sources of advantage. On the right-hand side of this axis, *prospectors* and *analyzers* are actively pushing to establish new advantages and will therefore aggressively pursue new ideas for creating valuable and unique positions, including significant shifts in the logic of how industries operate, as we will argue below.

The vertical axis maps the degree of environmental proactivity of a firm. On the lower end, firms are in a reactive mode, still primarily considering environmental issues and regulation as a costly imposition on their business, or as an irrelevance to their strategic priorities. These firms think of environmental management in simple end-of-pipe terms and have not built up any specific capabilities to enhance environmental performance, let alone to leverage environmental issues for market positioning (e.g., Hart, 1995; Buysse and Verbecke, 2003). On the other end of that axis, however, firms are proactive and likely have evolved environmental capabilities in a path-dependent fashion as they progressed from a formerly reactive stance through the development of an EMS and finally embracing a proactive, or what Hart (1995) calls 'sustainable development', stance. In fact, Buysse and Verbeke (2003, p. 455), drawing on Hart (1995), emphasize the importance of recognizing the interconnectedness of the different stages, wherein a proactive environmental stance is essentially "…a result of path dependencies and embeddedness. Path dependencies primarily reflect the required sequence of resource accumulation in various individual resource domains to move from one stage to the next. Embeddedness implies the coevolution of various resources and competencies instrumental to a shift in environmental strategy formation." Thus, proactive firms had

to orchestrate and build several key capabilities around their environmental management activities. Buysse and Verbeke (2003, p. 455) highlight five such areas where firms need to invest and build: "1. conventional green competencies related to green product and manufacturing technologies … 2. employee skills, as measured by resource allocation to environmental training … 3. organizational competencies, as measured by the involvement of functional areas … 4. Investments in formal (routine-based) management systems and procedures, at the input, process, and output sides. … 5. Efforts to reconfigure the strategic planning process, by explicitly considering environmental issues." Having gone through this process of investment and internal capability building, proactive firms are likely in a position where they possess valuable and unique skills that could be leveraged to build competitive advantages. Yet, it should be noted that the path dependent, cumulative build-up of such capabilities also carries the risk of environmental inertia, in that even a high level of environmental skills may become invalidated if the environmental demands, rules and requirements within the firm's organizational environment change. We will discuss some of the resulting implications below.

Reactive compliance and greenwashing

The lower left corner of Figure 1 depicts a situation where a firm that is defensive and reactive in its overall strategy is also often defensive and reactive in its environmental stance (with notable exceptions, as previously mentioned). Without access to specialized environmental capabilities and lacking the drive to build the same or use environmental issues strategically, the default behavior of such a firm is likely akin to that of firms generally in the first historical phase discussed above, i.e.,

attempt to minimize the cost of compliance with external regulation while making end-of-pipe investments that are unlikely to create an advantage – or perhaps even simply just pretending to do so. In fact, featuring Kermit the frog and his famous song line, “it’s not easy bein’ green”, a recent *Financial Times* article (Martin, 2020, among others in the business press) highlighted the practice of pretending to be green while not quite living up to these promises, commonly known as ‘greenwashing’ (see also Kim and Lyon, 2015; Delmas and Burbano, 2011). In organizational terms, the issue is that of symbolic management or decoupling (Westphal and Zajac, 1998; Zajac and Westphal, 1995), where firms signal to their stakeholders that they are engaged in practices valued by the same, while, in fact, not engaging in any substantive activities towards those ends. Prior studies have delivered evidence for such symbolic management in areas as diverse as corporate governance (Westphal and Zajac, 1998; Zajac and Westphal, 1995), or sense giving for strategic change (Fiss and Zajac, 2006; for a broader review see Schnackenberg, Bundy, Coen and Westphal, 2019), as well as environmental practices. For instance, Rodrigue, Magnan and Cho (2013) report that in many cases environmental governance mechanisms adopted by firms appear to bring few substantive changes in environmental outcomes and thus appear mostly symbolic. Aravind and Christmann (2011) report that firms receiving the environmental management system standard ISO 14001 did not always live up to the requirements of that standard, and only firms that do conform to the spirit of the standard achieve better environmental outcomes. Mature consumer goods company P&G appears to exemplify this environmental-strategy quadrant; as recently reported (Evans, 2020). The conglomerate is joining several ‘nature-based projects as a way to help combat climate change’, while at the

same time it maintains highly detrimental environmental practices in other areas, such as protecting and restoring tropical trees in the Philippines while continuing to use Canadian climate-critical boreal forest fiber for its throwaway tissue. This inconsistency between environmentally lagging behavior and attempts to portray a green image led some environmental campaign groups to label P&G's strategy as the 'ultimate greenwash' (Evans, 2020). A very established and mature firm in its markets, P&G appears to be searching for, perhaps piecemeal, ways to comply with the environmental requirements imposed by its stakeholders without attempting to go on the offensive aggressively or comprehensively on these issues.

In a similar vein, a recent lawsuit by Friends of the Earth Netherlands led to a Dutch court order forcing Shell to cut carbon emissions (McFarlane, 2021). While in the same month (May 2021), Exxon and Chevron management lost shareholder votes resulting in the installation of activist directors and mandates for more aggressive emissions management respectively (Mufson, 2021). In terms of our framework, these are illustrations of environmentally reactive firms whose management literally had to be forced by either activist shareholders or other stakeholders to ramp up their environmental activities.

The reactive-reactive match is a relatively intuitive outcome that illustrates the endogeneity between strategic and environmental stances. It seems a reasonable assumption that if a firm is a defender or strategy-less reactor in the first place, it's environmental stance would not develop far beyond reacting to immediate legal requirements. By contrast, for such a firm to muster the energy to develop environmental capabilities or even step outside the behavior of industry peers to become proactive appears rather unlikely.

Build barriers

While a defensive strategy stance likely begets a defensive environmental approach, there may be occasions where a strategically defensive firm finds itself matched with a proactive environmental approach. This could happen, for example, if a division of a larger firm is more strategically active in the environmental space than the overall company, or when a defender firm acquires an environmental leader that brings to the combination an endowment of environmental capabilities. If the defender is the dominant firm in the combination, a reasonable result would be that the default instinct to defend and consolidate will tend to channel the environmental capabilities to establish a cost leadership or differentiation position, as, for instance, Walsh and Dodds (2017) discuss. The advanced environmental capabilities would in this case be used like any other unique assets to create a defensive resource position barrier (Wernerfelt, 1984) against other firms.

Key to this strategy type is the application of environmental capabilities to strengthen a firm's market position but not to challenge the prevailing logic of that market space. The earlier mentioned French energy and automation multinational, Schneider Electric, illustrates well such a use of environmental capabilities to become best in class in its existing market context. Established in the early 19th Century, Schneider has more recently reconfigured its corporate strategy to embody and embed sustainability and strive for environmental advantage.

As this quadrant conceptualizes an uneasy match – between a strategically rather reactive but environmentally proactive focus – one might suspect that this strategy might easily become unstable. For instance, proactive environmental

activities may be hampered by an overall reactive strategy stance, pushing the firm towards a more reactive compliance state. In other cases, when a proactive unit is exceptionally strong within a firm, a more aggressive use of the advanced environmental capabilities might supplant the defensive impulses and the original defender might even mutate into an analyzer who uses proactive, and thus perhaps even best-in-class, environmental capabilities, not just to enhance current products or processes, but to shape the competition with more environmentally laggard firms in a more pronounced way as we discuss next.

Redefine industry and lobby forward

Environmentally proactive firms are still in the minority, which suggests that the complex sets of capabilities they have had to develop to be able to go beyond compliance are comparatively rare. Coupled with an aggressive strategic stance, these firms may be tempted to go beyond a simple improvement of products and processes to actively reshape the competitive landscape for themselves – and their competitors. Both this and the previous strategy-type boast proactive (and arguably industry leading) environmental capabilities. But the key difference is that firms in this quadrant are strategically aggressive and are thus likely to not just rest on being best-in-class but go further and try to change the rules of the game. As mentioned previously, environmental issues are still emerging in many industries. In economic terms, environmental approaches – and related products, services, and processes – will thus tend to be in the early stages of a lifecycle. Utterback and Abernathy (1975) suggested that those early or pre-paradigmatic stages are characterized by experimentation and ongoing changes in the product or basic characteristics to find

out what will work or sell to customers. Such experimentation typically ends with a dominant design (Utterback and Abernathy, 1975; Teece, 1986) that incorporates the key drivers of value (for customers) and engineers out most of the problematic issues, thereby creating the product or service that is widely accepted and starts driving significant growth. Looking back, the iPhone, for instance, certainly qualifies as such a dominant design in the phone market. But many environmental markets (green products, services, processes) currently appear to be in an earlier, pre-paradigmatic state where what customers want (or what stakeholders mighty decree as desirable) is still in flux. Moreover, in some cases, new environmental technologies or product markets such as in the automotive industry are subject to strong network externalities and self-reinforcing effects with complementary technologies (e.g., cars and refueling stations – neither can exist without the other) that create the possibility of multiple equilibria, as already discussed by Arthur in 1989 (see also Rochet and Tirole, 2006, Cennamo and Santalo, 2013, and others). In other words, it is not clear which of potentially several alternative technologies in the automotive industry – hybrid, electric, natural gas, or hydrogen – will carry the day and eventually come to dominate. And even small initial effects may lead to a lock-in of one technology over the others (Arthur, 1989).

In turn, such a potentially fluctuating state of the industry offers a firm with strong capabilities an opportunity to tip the industry in the direction the firm is already travelling with its path dependent capability build-up. In other words, the focal firm could try to force a dominant design around its current capability base, thereby placing itself at the forefront of the industry and at the center of the potential fast growth that tends to follow a dominant design. Other firms, by contrast, may be

handicapped if their capabilities do not fully match or are simply not applicable to the new requirements (see also Tushman and Anderson's, 1986, concept of competence destroying change). This strongly resonates with Capron and Chatain's (2008) suggestion that firms can gain advantages by improving their own input costs or resource access *or* by increasing the cost basis or worsening resource access for competitors.

Given the importance of the regulator in environmental issues, one form this could take is that of lobbying for a change in the regulation – but a change towards a tougher regulatory environment rather than regulatory relief (Grey, 2018). To the extent that the focal firm already complies with the progressive regulation it promotes, any competitor who does not yet have the same capabilities will be put at a significant disadvantage. Fremeth and Richter provide an excellent example of such a strategy in the form of Hewlett-Packard's (HP) electronic waste (e-waste) recycling initiative: "The advocating for pragmatic, progressive policy strategy allowed managers at HP to reduce delays in the adoption of specific types of progressive e-waste policies. Enactment of these policies raised rivals' costs given that the rest of the industry was initially not as environmentally responsive as HP" (Fremeth and Richter, 2011, p.150).

Another example of such a strategic redefinition of an industry is provided by Swiss energy company IWB. While IWB was a founding member of Verband der Schweizerischen Gasindustrie (VSG), the association of Swiss gas producers, as IWB's environmental capabilities began outpacing that of the industry, the interests of this firm and the association it co-founded diverged. As IWB puts it on the company website (iwb.ch, 2021), the firm and the industry association were travelling

at different speeds. In essence, the association took a more reactive stance limited to the natural gas industry and by trying to maintain and protect the structure of their existing market engaged in a form of 'lobbying down'. This caused IWB to leave the association it co-founded, to establish a leading proactive role in the Swiss energy landscape by utilizing a broader range of environmentally friendly technologies, including combined heat and power systems and hydrogen.[2]

In the IWB case, the firm did not so much attempt to lobby for a different set of regulations but rather attempted to change the logic of how the industry operates. The automobile industry offers another concurrent example of how certain actors attempt to change the rules of the game and capitalize on the aforementioned network externalities to, in the extreme, impose their own technology as dominant design for the entire industry. In particular, the actions of a clearly strategically and environmentally aggressive firm, Tesla, stand out in this regard. At the beginning of this century, it was not apparent to most industry observers which, of a number of technologies, would come to replace internal combustion engines in the global car industry. While most car makers seem to have waited for this uncertainty to resolve, Tesla charged ahead with ever increasing investments in electric and battery technologies. This arguably strongly contributed to shaping the dominant design of the environmental future of the car, focusing much of the industry as well as regulators world-wide on electric engines and batteries to the detriment of other approaches such as natural gas, hydrogen, or hybrids.

---

[2] These insights are gleaned from the IWB website and an interview conducted by one of the authors with an IWB executive.

Moreover, Tesla's give-away of their (environmental) patent portfolio can be considered a further example of such an aggressive/proactive play, with Tesla arguably hoping that others will embrace their technology – rather than for other car makers to develop their own green tech or converge to a non-Tesla standard – and thereby implicitly accepting Tesla's technology lead. This could be an excellent point of departure if Tesla were to aim for a battery/drivetrain monopoly that other car makers must accept in the mold of 'Intel inside'.

As with the reactive-reactive pairing, the aggressive-proactive combination appears intuitive. The capability building required to become proactive would clearly benefit from the aggressive exploration focus of prospectors or analyzers, making it likely that firms that are environmentally proactive today started out as competitively aggressive firms. Yet we argue that the link is not as strongly endogenous as for the defensive-defensive case, since aggressive firms could channel investments into many different areas and therefore might easily overlook environmental issues, especially when that area is not yet 'hot'. Hence, while it seems likely that most environmentally proactive firms started as aggressive firms, the opposite does not necessarily hold, i.e., many competitively aggressive firms might actually be environmental laggards, which describes the last box that we now turn to.

Lobby-down

If a strategically aggressive firm is an environmental laggard without discernible advantages in the environmental field, an obvious channel for that aggressiveness would again be to attempt to change regulations. However, in this case the push would be the more common one for regulatory relief. For instance, Grey (2018)

describes how Du Pont lobbied for decades against regulation aiming to protect the ozone layer. Similarly, many firms that compete as cost/price leaders, e.g., in air transport or food retail, tend to lobby down in efforts to delay, moderate, or prevent environmental legislation that is likely to add cost and complexity to their business models. Furthermore, showing the co-existence of lobby-forward-style proactive as well as lobby-down firms in the same industry, Walley and Whitehead provide an example from the U.S. paper industry. In the 1990s, the industry was facing high uncertainty around proposed government regulations mandating chlorine-free paper, specifically, while "…Louisiana-Pacific has started to prepare its organization for chlorine-free paper production, many other industry participants are fighting tooth and nail to undermine proposed legislation" (1994, p. 50).

As a final example, we would also locate Toyota in this box, even though that firm has attempted to aggressively build environmental competences around hybrid/hydrogen technologies in the car industry. While they were clearly proactive with respect to that envisioned future, as the prevailing logic of the industry, and with that, the regulatory interest, turns instead to electric vehicles, Toyota is no longer in the vanguard of the car-industry's green firms (Pander, 2021). This illustrates that proactiveness must be seen in the context of what is required by the actual current environment, which, in turn, is subject to change over time, as indicated with the example of Tesla in this industry. Toyota initially bet on a hybrid/hydrogen future and were proactive with respect to that envisioned future. But as so often happens in disruptive environments that are also characterized by network externalities, the environment appears to have shifted to an e-future and Toyota now finds itself on the reactive end with respect to e-tech; that is, they are lacking in capabilities and

technologies for the now dominant technology. More generally, this suggests that if a proactive firm fails to establish a dominant design around its own capabilities, it may see these capabilities literally be destroyed (Tushman and Anderson, 1986) if another firm manages to create a dominant design around a different solution.

In our model this simply means that Toyota has moved downward on their proactive environmental scale, but they are still a strategically aggressive firm that now turns its energy to lobby against e-tech, i.e., to lobby-down to prevent stronger environmental regulation and thereby turning from climate pioneer to a brake on environmental progress (Pander, 2021).

DELIVERING THROUGH INDIVIDUAL OR COLLECTIVE ACTION

In the previous section we discussed how strategically aggressive firms may undertake more pronounced actions, either individually or in concert with likeminded firms. The latter are presumably competitors at a similar level in an industry's value chain, who might share comparable concerns about environmental issues. Often these actions, given the nature of the field, might crystallize into some form of lobbying to change extant regulation for better or worse.

The key question from a competitive perspective is whether such lobbying is indeed undertaken by firms that share common interests and that therefore ought to act together, as common sense might suggest, or by individual firms attempting to decisively deviate from industry norms (Olson, 1965). This characterization partly follows Mancur Olsen's seminal work and his 1965 proposition that individuals in any group seeking collective action will have incentives to free-ride on the efforts of others if the group is working to provide public goods (those that are generally

available without the ability to restrict to some subset); but will be disincentivized to do so if the group provides benefits only to contributing participants.[3] The freeriding that Olsen describes is not joining the lobby group but partaking in the same outcomes, without the cost. The lobby forward described earlier, however, would see firms staying outside lobby groups to get stricter rules that only they can currently fulfill, thereby placing all the other firms at a disadvantage.

We strive to understand the various contingencies that explain when and why firms in nonmarket contexts – specifically the strategic management of climate change - choose to go it alone or pitch in with others. Reasons vary, including organizational scale and scope, industry type, country of origin (and associated regulations and requirements), and brand and market positioning. For instance, going it alone may be preferable if a company is trying to differentiate, or reposition, through its sustainability initiatives. Under the leadership of Paul Polman, the Anglo-Dutch consumer goods multinational Unilever sought to place sustainability at the center of corporate and business strategy. The owner of global brands such as Lipton tea and Ben Jerry's ice cream began the sustainability and responsibility journey more than 20 years ago, under Polman's predecessor as CEO, Niall FitzGerald. Unilever's stated goal of decoupling its environmental impact from its growth has seen Polman adopt a more holistic and long-term approach to performance, warning investors that climate change costs Unilever millions of dollars

[3] Pure public goods are goods that are non-excludable (that is, one person cannot reasonably prevent another from consuming the good) and have no inherent rivalry (one person's consumption of the good does not affect another's, nor vice-versa). Hence, without selective incentives to motivate participation, collective action is unlikely to occur even when large groups of people with common interests exist.

annually, striving to eliminate deforestation from supply chains, and acquiring companies with eco-friendly brands.

Collective action via trade associations can be preferred both by smaller, resource-constrained companies that cannot afford their own initiatives, and by larger corporates that are either pursuing both individual and collective channels simultaneously, or are keen to shelter behind the collective umbrella of a trade association and therefore avoid specific public scrutiny for their relative lack of engagement on issues like climate action (Rajwani, Lawton, and Phillips, 2015; Lawton, Rajwani, and Minto, 2018).

In some cases, diversified collective action coalitions can prove more appealing – and more effective – for business. These are similar in form to what Sabatier (1988) and Jenkins-Smith and Sabatier (1994) labelled advocacy coalitions in the public policy sphere, i.e., a varied alliance of actors sharing a common policy goal (such as climate change action). For instance, *Project Gigaton,* an initiative between Walmart, environmental nongovernmental organizations (NGOs) like Environmental Defense Fund, and more than 2,300 suppliers, was created to eliminate one billion metric tons (a gigaton) of greenhouse gas emissions from its supply chain by 2030.

CONCLUSIONS

This chapter has advanced a systematic framework for the competitive environmental strategies that are both feasible and already in use. Specifically, we have drawn on strategic management concepts and logic to establish the recognizable, and less familiar, strategic positions that firms occupy. This framework

can serve as a guide for firms interested in moving beyond being good environmental citizens - i.e., the question of where they fall on the reactive-proactive environmental scale - to leverage proactive environmental strategies in ways that shape their competitive rivalry with other firms.

In that context, it is important to recognize some key features of our framework. As we discussed earlier regarding Figure 1, there are a variety of internal and external mechanisms that push firms into a specific quadrant, or cause movement from one to another. For instance, if a firm does not yet have environmental capabilities, the top quadrants obviously cannot be pursued as strategic choices. But being aware of potential strategic options available once environmental capabilities are developed allows firms discretion to plot their future strategic course and potentially target a strategy that creates strong barriers or even redefines the industry landscape. Furthermore, if firms aspire to industry changing environmental strategies, they need to be aware that competitive interdependencies mean that one firm establishing a dominant design and approach might undermine the efforts of other proactive firms. These competitive interdependencies are particularly likely in the environmental domain, which is still relatively nascent and where contestation remains around structure, strategy, and intended outcomes. Conversely, some firms may even choose to be so defensive as to hide their environmental achievements. Kim and Lyon (2015) found that, under some conditions, firms even show undue modesty in not fully reporting their environmental achievements.

In concluding, a note of caution is in order. The essence of the argument underpinning the logic for a proactive corporate strategy approach to climate change and related environmental and sustainability challenges is that firms can earn

economic returns that are positive and preemptive. In other words, embrace environmental action before others to develop *valuable* and *rare* (to name the key requirements for earning economic profits according to the resource-based view of Barney, 1991, Peteraf, 1993, and others), environmental capabilities that underpin competitive advantage through facilitating more efficient organizations and/or producing environmentally beneficial goods and services that meet an existing or emerging consumer need. However, that also implies that as other firms jump on the same bandwagon, the rarity of these environmental capabilities - and thus their expected profit potential - decreases. Yet this is what normally happens in the cycle of innovation and imitation. What counts is that currently, across many industries, proactive environmental strategies promise to increase financial returns. Encouraging the discovery and exploitation of these opportunities will engender the market forces of private utility maximization to help in the development and delivery of environmental pursuits.

REFERENCES

Aragón-Correa, J. A., & Sharma, S. (2003). A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, *28*(1), 71-88.

Aragón-Correa, J. A., Matías-Reche, F., & Senise-Barrio, M. E. (2004). Managerial discretion and corporate commitment to the natural environment. *Journal of Business Research, 57*, 964-975.

Aravind, D., & Christmann, P. (2011). Decoupling of standard implementation from certification: Does quality of ISO 14001 implementation affect facilities environmental performance? *Business Ethics Quarterly*, *21*(1), 73-102.

Arthur, W.B. 1989. Competing technologies, increasing returns, and lock-in by historical events. *The Economic Journal*, *99*, 116-131.

Bach, D. & Allen, D.B. (2010). What every CEO needs to know about nonmarket strategy. *MIT Sloan Management Review, 51*(3), 41–48.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.

Baron, D.P. (1995a). The nonmarket strategy system. *Sloan Management Review*, *37*(1), 73-85.

Baron, D.P. (1995b). Integrated strategy: market and nonmarket components. *California Management Review*, *37*(2), 47–65.

Berrone, P., & Gomez-Mejia, L. R. (2009). Environmental performance and executive compensation: An integrated agency-institutional perspective. *Academy of Management Journal*, *52*(1), 103-126.

Boddewyn. J.J. (1998). Political aspects of MNE theory. *Journal of International Business Studies*, *19*(3), 341-363.

Buysse, K., & Verbeke, A. (2003). Proactive environmental strategies: A stakeholder management perspective. *Strategic Management Journal*, *24*, 453–470.

Cai, Y., Jo, H., & Pan, C. (2012). Doing well while doing bad? CSR in controversial industry sectors. *Journal of Business Ethics*, *108*(4), 467-480.

Capron, L., & Chatain, O. (2008). Competitors' resource-oriented strategies: Acting on competitors' resources through interventions in factor markets and political markets. *Academy of Management Review, 33*(1), 97-121.

Carroll A.B. (1979). A three-dimensional conceptual model of corporate social performance. *Academy of Management Review*, *4*, 497–505.

Cennamo, C., & Santalo, J. (2013). Platform competition: Strategic trade-offs in platform markets. *Strategic Management Journal, 34*, 1331–1350.

Christmann, P. (2000). Effects of “best practices” of environmental management on cost advantage: The role of complementary assets. *Academy of Management Journal*, *43*(4), 663-680.

Delmas, M. (2001). Stakeholders and competitive advantage: the case of ISO 14001. *Production and Operations Management*, *10*(3), 343-358.

Delmas M.A., & Burbano, V.C. (2011). The drivers of greenwashing. *California Management Review*, *54*(1), 64–87.

Demuijnck, G., & Fasterling, B. (2016). The social license to operate. *Journal of Business Ethics*, *136*(4), 675-685.

DeSimone, L. D., & Popoff, F. (1997). Eco-efficiency. *The Business Link to Sustainable Development*, *280*.

Evans, J. (2020). P&G urged to match best in class to avoid 'greenwash' label. *Financial Times,* July 29, 2020. Accessed only on August 22, 2021.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy*, *88*(2), 288-307.

Fiss, P. C., & Zajac, E. J. (2006). The symbolic management of strategic change: Sensegiving via framing and decoupling. *Academy of Management Journal*, *49*(6), 1173–1193.

Fremeth, A. R., & Richter, B. K. (2011). Profiting from environmental regulatory uncertainty: Integrated strategies for competitive advantage. *California Management Review*, *54*(1), 145-165.

Gale, J., & Buchholz, R. (1987). The political pursuit of competitive advantage: What business can gain from government? In Marcus, A., Kaufman. A., & Beam, D. (Eds.). *Business Strategy and Public Policy,* New York: Quorum, 231–252.

Graf, T., & Kock, C. J. (2015). Environmental performance and non-market strategy. In Lawton, T.C., & Rajwani, T.S. (Eds.) *The Routledge Companion to Non-Market Strategy*. Routledge: London.

Grey, F. (2018). Corporate lobbying for environmental protection. *Journal of Environmental Economics and Management*, *90*, 23-40.

Hart S.L. (1995). Natural-resource-based view of the firm. *Academy of Management Review,* 20(4), 986–1014.

Hill, C. W., & Jones, T. M. (1992). Stakeholder-agency theory. *Journal of Management Studies*, *29*(2), 131-154.

Hillman A. J., & Keim G. D. (2001). Shareholder value, stakeholder management, and social issues: what's the bottom line? *Strategic Management Journal*, *22*, 125-139.

Hillman, A. J., Keim, G. D., & Schuler, D. (2004). Corporate political activity: A review and research agenda. *Journal of Management*, *30*(6), 837-857.

Hunt C.B., & Auster, E.R. (1990). Proactive environmental management: avoiding the toxic trap. *Sloan Management Review, 31*, 7–18.

IWB. (2021). https://iwb.ch/Ueber-uns/Newsroom/Medienmitteilungen/IWB-verl-sst-den-VSG.html. Accessed on August 4, 2021.

Jaggi, B., & Freedman, M. (1992). An examination of the impact of pollution performance on economic and market performance: pulp and paper firms. *Journal of Business Finance & Accounting*, *19*(5), 697-713.

Jenkins-Smith, H. C., & Sabatier, P. A. (1994). Evaluating the advocacy coalition framework. *Journal of Public Policy*, *14*(2), 175-203.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305-360.

Kim, E-H., & Lyon, T. P. (2015). Greenwash vs. Brownwash: Exaggeration and undue modesty in corporate sustainability disclosure. *Organization Science*, *26*(3), 705-723.

King, A., & Lenox, M. (2002). Exploring the locus of profitable pollution reduction. *Management Science*, *48*(2), 289-299.

Klassen, R. D., & Whybark, D. C. (1999). The impact of environmental technologies on manufacturing performance. *Academy of Management Journal*, *42*(6), 599-615.

Kock, C. J., Santalo, J., & Diestre, L. (2012). Corporate governance and the environment: what type of governance creates greener companies? *Journal of Management Studies*, *49*(3), 492-514.

Kurapatskie, B., & Darnall, N. (2013). Which corporate sustainability activities are associated with greater financial payoffs? *Business Strategy and the Environment, 22*(1), 49–61.

Lawton, T., & Rajwani, T. (2011). Designing lobbying capabilities: managerial choices in unpredictable environments. *European Business Review*, *23*(2), 167-189.

Lawton, T., McGuire, S., & Rajwani, T. (2013). Corporate political activity: A literature review and research agenda. *International Journal of Management Reviews*, *15*(1), 86-105.

Lawton, T. C., Doh, J. P., & Rajwani, T. (2014). *Aligning for advantage: Competitive strategies for the political and social arenas*. Oxford: Oxford University Press.

Lawton, T. C., Rajwani, T., & Minto, A. (2018). Why trade associations matter: Exploring function, meaning, and influence. *Journal of Management Inquiry*, *27*(1), 5-9.

Lawton, T. C., Dorobantu, S., Rajwani, T. S., & Sun, P. (2020). The Implications of COVID-19 for Nonmarket Strategy Research. *Journal of Management Studies*, *57*(8), 1732-1736.

March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, *2*(1), 71-87.

Martin, M. (2020). ESG: a trend we can't afford to ignore. *Financial Times,* November 26. Accessed online on December 21, 2021.

Matsueda, N. (2020). Collective vs. individual lobbying. *European Journal of Political Economy*, *63*, 101859.

McFarlane, S. (2021). Shell ordered by Dutch court to cut carbon emissions. *Wall Street Journal*, May 26. Accessed online on June 5, 2021.

Melnyk, S. A., Sroufe, R. P., & Calantone, R. (2003). Assessing the impact of environmental management systems on corporate and environmental performance. *Journal of Operations Management*, *21*(3), 329-351.

Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman Jr, H. J. (1978). Organizational strategy, structure, and process. *Academy of Management Review*, *3*(3), 546-562.

Mufson, S. (2021). A bad day for big oil. *The Washington Post*, May 26, 2021. Accessed online on June 5, 2021.

Olson, M. (1965). *The logic of collective action: Public goods and the theory of groups*. Cambridge, MA: Harvard University Press.

Pander, J. (2021). Wie Toyota vom Klimaschutz-Pionier zum Bremser wurde. *Spiegel*, July 29, 2021. Accessed online on August 5, 2021.

Peltzman, S. (1976). Toward a more general theory of regulation. *The Journal of Law and Economics*, *19*(2), 211-240.

Peteraf, M. A. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, *14*(3), 179-191.

Porter, M.E. (1980). *Competitive Strategy*. New York: Free Press.

Porter, M. E. (2011). *Competitive advantage of nations: Creating and sustaining superior performance*. New York: Simon and Schuster.

Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, *84*(12), 78–92.

Rajwani, T., Lawton, T., & Phillips, N. (2015). The “voice of industry”: Why management researchers should pay more attention to trade associations. *Strategic Organization*, *13*(3), 224-232.

Rochet, J.-C., & Tirole, J. 2006. Two-sided markets: A progress report. *Rand Journal of Economics*, *37*, 645–667.

Rodrigue, M., Magnan, M., & Cho, C. (2013). Is environmental governance substantive or symbolic? An empirical investigation. *Journal of Business Ethics*, *114*(1), 107-129.

Roome, N. (1992). Developing environmental management systems. *Business Strategy and the Environment*, *1*, 11–24.

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, *40*(3), 534-559.

Russo, M. V., & Harrison, N. S. (2005). Organizational design and environmental performance: Clues from the electronics industry. *Academy of Management Journal*, *48*(4), 582-593.

Sabatier, P.A. (1988). Policy change and policy-oriented learning: Exploring an advocacy coalition framework. *Policy Sciences, 21*(2/3),129-168.

Schnackenberg, A.K., Bundy, J., Coen, C.A., & Westphal, J.D. (2019). Capitalizing on categories of social construction: A review and integration of

organizational research on symbolic management strategies. *Academy of Management Annals*, 13(2), 375-413.

Shaffer, B. (1995). Firm-level responses to government regulation: Theoretical and research approaches. *Journal of Management*, *21*(3), 495-514.

Sharma, S., & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, *19*(8), 729-753.

Stigler, G. J. (1971). The theory of economic regulation. *The Bell Journal of Economics and Management Science*, *April*, 3-21.

Tashman, P., Winn, M., & Rivera, J. E. (2015). Corporate climate change adaptation. In Lawton, T.C., & Rajwani, T.S. (Eds.) *The Routledge Companion to Non-Market Strategy,* London: Routledge.

Teece, David (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *Research Policy*, *15*(6), 285–305.

Thomas, H. (2021). UK business is on notice for ‘greenwashing’ claims. *Financial Times.* Accessed online on August 22, 2021.

Tushman, M. L., & Anderson. P. (1986). Technological discontinuities and organizational environments. *Administrative Science Quarterly, 31*(3), 439-465.

Tushman, M.L., & O'Reilly. C. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, *38*(4), 8–30.

Utterback, J. M., & Abernathy, W.J. (1975). A dynamic model of product and process innovation. *Omega*, *3*(6), 639-656.

Walley, N., & Whitehead, B. (1994). It's not easy being green. *Harvard Business Review*, *72*(3), 46-52.

Walsh, P. R., & Dodds, R. (2017). Measuring the choice of environmental sustainability strategies in creating a competitive advantage. *Business Strategy and the Environment*, *26*(5), 672-687.

Wartick S.L., & Cochrane, P.L. (1985). The evolution of the corporate social performance model. *Academy of Management Review, 10*(4), 758–769.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, *5*, 171-180.

Westphal, J.D., & Zajac, E.J. (1998) The symbolic management of stockholders: Corporate governance reforms and shareholder reactions. *Administrative Science Quarterly*, *43*(1),127–153.

Wilson, J.D. (1985). Optimal property taxation in the presence of interregional capital mobility. *Journal of Urban Economics, 17*, 73–89.

Zajac, E. J., & Westphal, J. D. (1995). Accounting for the explanations of CEO compensation: Substance and symbolism. *Administrative Science Quarterly*, *40*(2), 283-308.