

BUSINESS LAW AND THE TRANSITION TO A NET ZERO CARBON ECONOMY – A conference report

Keywords: Climate Change, ESG, Corporate Governance, Board of Directors

The [5th Annual Oxford Business Law Blog Conference](#) took place online in May 2021 to discuss the role of business law and the transition to a net zero carbon economy. A brief summary of all sessions and discussions is provided below. Please note that the views expressed by paper presenters, discussants and practitioners are personal and do not represent the views of any organisation.

First Session: Disclosures and Credible commitments

1. A machine learning assessment of climate risk disclosures

Professor Eric Talley (Columbia Law School) presented a study co-authored with **Professor Julian Nyarko** (Stanford Law School), that, with the help of machine learning algorithms, aims to (i) identify climate related disclosures within companies' reports, (ii) develop a 'climate factor' to identify which companies should disclose given their climate-related exposures; and (iii) assess the extent to which the ability to identify disclosures and those who should disclose could produce a shift in these companies' climate-related disclosures.

By using data from mandatory reports and machine learning, the study achieved a high level of accuracy when identifying climate-related disclosures. The authors developed a 'climate factor' or 'climate beta' by combining information on world temperature variations, major weather events and climate disclosure and litigation data. Using this factor, the study found a set of companies that, given their risks and sensitivity to climate factors, should make climate risk disclosures under the existing SEC guidance. Professor Talley then addressed the question of whether these tools—if successful—would have a positive effect in prompting companies to make better climate risk disclosures. He stated that it is uncertain whether this is going to be the case. On the one hand, the tools described above would bring greater transparency and would help detect the lack of seriousness on the part of issuers, incentivising good disclosures. On the other hand, the SEC's mandate is still centred on investor protection, which means that unless carbon reduction measures are financially material, they will not be a concern for the SEC. One way of dealing with this issue would be to widen the mandate of the SEC, but the authors are sceptical about this solution, given how broad the SEC's mandate already is. Another option would be to make climate-related disclosures financially material whether via stronger environmental regulations and penalties or by encouraging the use of green financial instruments.

The discussant, **Professor Madison Condon** (Boston University School of Law), started by noting that there are more voices now envisioning a financial stability mandate for the SEC beyond investor protection. Regarding Talley's presentation, Professor Condon pointed out that the methodology proposed by the authors relies exclusively on SEC filings, and yet many useful climate-related disclosures are made in different corporate disclosures, such as sustainability reports and energy outlooks. Concerning the climate factor, she added that the disclosures rarely contain an asset-level analysis, making it difficult to construct a precise climate factor. Finally, Professor Condon pointed out that there are several ways of informing the market about climate change which need not rely on terms such as climate, raising concerns about the accuracy of the authors' methodology for the purpose of identifying climate-related disclosures.

2. Making corporate carbon commitments credible

Professor John Armour (University of Oxford) presented a joint project with **Professor Luca Enriques** (University of Oxford), and **Professor Thom Wetzler** (University of Oxford), titled [Corporate Carbon](#)

[Reduction Pledges: Beyond Greenwashing](#), which addresses a relatively small number of corporate and state entities dubbed 'systemically important carbon emitters' (SICEs) and the credibility of their climate pledges. The authors describe three potential motivations for making carbon-reduction pledges in these companies. Firstly, there can be a business case, as the costs of continuing to emit are higher than a transition to renewable energy or the expected returns from shifting their business model from fossil fuels to renewables and other forms of green energy are higher than those associated with remaining on their original path. Notably, this crucially depends on the cost of carbon emissions. Secondly, there may be pressures from shareholders due to wider preferences of investors that might support initiatives designed to reduce carbon emissions even if it is not clearly profit-maximising for the firm, successfully pushing for change even where a purely financial business case is lacking. Finally, a third motivation may be greenwashing, that is, the idea that SICEs may try to achieve reputational gains by claiming to do something the company is in fact doing only partially or not at all.

The carbon-reduction pledges raise the question of their credibility, that is, how easily firms might renege upon them. This problem arises because firms are likely to have a time inconsistency problem regarding their pursuit of their green objectives. Firstly, the business case motivation depends on the price of carbon: if this is not high enough, the maximization of profit would push the company to abandon its pledges. Secondly, in the case of wider investor motivations, the carbon-reduction pledges will only be honoured so long as the coalitions supporting them have control over the shareholder meeting. In other words, to the extent that making a climate pledge is driven by a desire to meet the preferences of ESG investors, the firm's commitment will be conditional on the shifting sands of its shareholder register.

To achieve a credible commitment by the firm, the authors propose a 'Green Pill', a debt instrument issued by the firm that includes a penalty (in terms, eg, of a higher interest rate) should the firm breach its carbon-reduction pledges. The authors note that the penalty payment may create incentives for the security holders to push for abandoning the pledges and trigger the penalty payments. Nonetheless, it is possible to mitigate this risk if the Green Pill is structured in such a way that the additional payment is made not to the holders of the instrument, but to a third party with no ability to influence the firm's behaviour (like an environmental charity or an NGO). In this manner, the firm could credibly commit itself to climate targets up to the cost of the undertaking.

The discussant, **Professor Jill Fisch** (University of Pennsylvania Law School), pointed out that the green pill functions as a type of [voluntary carbon tax](#) by requiring a company to pay a penalty if it fails to live up to its climate-related commitments. Professor Fisch indicated that the adoption of a Green Pill requires corporate decisionmakers to set climate goals, a subject the authors do not address but that she views as critical because these goals will be embedded in the terms of the Green Pill. Professor Fisch also observed that the paper frames company behaviour as either green or brown when in reality characterizing that behaviour is more nuanced. A company's strategies must be assessed in relation to the impact of the company on society through the goods and services it provides, the people it employs, as well as the degree to which the company contributes to climate change, both in absolute terms and in relation to other market participants. Finally, Professor Fisch observed that individualised commitment devices, such as Green Pills, might increase incentives for corporations to provide more reliable input into the regulatory process.

Second Session. Climate Change: Exit or Voice

The second day's session focused on the role of ESG investors in achieving net-zero goals. As stressed by the discussion chair, **Professor Andreas Engert** (Freie Universität Berlin and ECGI), although ESG investing has recently risen in prominence, there is still a concern that climate-conscious investors will

divest from brown business targets, letting less climate-conscious investors seize profitable 'brown' investment opportunities. The principal issue is therefore how ESG investors can best promote a transition to a non-carbon economy.

3. *Exit vs Voice*

This, amongst other issues, was addressed in the core presentation based on the paper ['Exit vs Voice'](#) by Eleonora Broccardo, Oliver Hart and Luigi Zingales. The presenter and co-author, **Professor Oliver Hart** (Harvard University and ECGI) suggested as a point of departure a divergence in the motives of ESG-minded investors and consumers—whilst some act for moral reasons through divestment or boycotts, others aim to achieve a particular effect (so-called 'consequentialists'). The strategies available to consequentialist socially responsible agents (CSR investors) may be split into two categories: 'exit' (divesting from polluting companies, refusing their products, refusing to work for them) and 'voice' (engaging with management, e.g. by voting). The core conclusion of the research is that exit and voice may respectively be less and more effective than initially anticipated.

To demonstrate the logic of this conclusion, the authors used a model under which a company is established at time t_0 , production decision is made at t_1 , while t_2 is when production and consumption take place. The model works on the assumption that consumers and investors act in a 'replica economy' competitive environment, in which investors are constantly risk averse and hold fully diversified portfolios, by way of holding marginal stakes in all companies *pro rata*. Pollution becomes relevant at t_1 (production decision) where a firm discovers a climate change problem and the concomitant fixed costs it may incur to mitigate or eliminate the problem and become 'clean'. Although government strategies may prescribe investor behaviour in such a scenario, the paper analyses what happens when choices regarding social action are left to individual investors or consumers.

Divesting and boycotting options available to investors would have similar outcomes in the model. In an interior equilibrium, 'dirty' and 'clean' firms have the same market value but different profitability forecasts, because clean firms must incur the cost of becoming 'clean'. Accordingly, by divesting from a brown asset and buying a clean one a CSR investor faces a loss. An investor, it is argued, can justify such loss if it is offset and exceeded by the 'gain' *that investor* may reap from any positive effect the divestiture will have on parties external to it (such as other investors, consumers, or the environment at large). Whilst divesting may benefit the price of shares in 'clean' firms, increasing such firms market capitalisation and thus persuading investors to divest in order to optimise their portfolios, the authors argue that this effect is negligible in determining the likelihood of investor decisions. Thus, an investor is only likely to divest its holdings in brown firms in instances where, notwithstanding the monetary loss it will incur, it derives value from the benefits divestiture has on the environment which are equal to or greater than the losses incurred, such that divesting has a net positive effect for *that investor*. Accordingly, if investors are not altruistic and pollution is not overly inefficient (so that the benefits of divesting are less than the monetary losses faced by an investor), the only equilibrium is one where CSR investors do not divest from brown firms.

An alternative to divesting and boycotting is investors engagement, primarily through voting. Before a CSR investor takes a decision to convert the firm into a clean one, the economic effects of the decision will be considered, including the effects on (1) investors, (2) other shareholders, (3) consumers, and (4) the environment. The effect on investors, represented by their respective capital losses, is negligible as investors are well-diversified (per the founding assumption of the paper). However, the majority shareholders as a whole will incur a loss via the payment of a fixed cost by the firm in order to become 'clean'. Consumers' condition will not change, since the price for a unit of product is fixed. The effect of the decision to divest on the environment is positive. Accordingly, the

investor would vote in favour of converting the firm to 'clean' if the positive effect thereof on the environment is greater than the fixed cost of conversion which it bears in its capacity as shareholder. Unlike divesting and boycotting cases, this conclusion remains correct for any investors whose degree of social responsibility is greater than zero.

Professor Hart concluded that although the model may (i) omit some important benefits of exit or boycotting campaigns, (ii) disregard scenarios where voice is not an option, and (iii) ignore the possibility of voice limitation due to regulation, it nevertheless shows that engagement may be more efficient than exit or boycotting campaigns. Thus, opportunities for engagement should be sought and enhanced.

The discussant, **Professor Laura T. Starks** (McCombs School of Business and ECGI) highlighted some key take-aways from the paper, including the importance of the distinction between socially responsible, consequentialist investors and traditional, moral investors, a distinction that explains the preference for voice, rather than exit strategies. She then focused her discussion on a number of questions that, according to her, would require further elaboration, such as: what are the costs of exit for climate change reasons? Outside of the US are governments more efficient at dealing with externalities than investors? What is the effect of worker boycotts versus recruitment, retention and consumer boycotts? Professor Starks also raised the issue of the cost of divesting from an entire industry compared to that of divesting from a single firm and questioned the role of mutual funds in the model as being the primary submitters of shareholder proposals, suggesting that such funds usually play rather a reactive than a proactive role. Finally, Professor Starks pointed out the need to take social issues into account, in addition to climate change problems, and suggested to elaborate on the notion of socially responsible consequentialists.

The discussion continued with questions and comments from the audience, raising various issues, including (i) how to reduce voting costs (through decision-making delegation, technologies etc.) so that shareholders are incentivised to vote on climate issues, and (ii) an imperfect competition scenario where large shareholders bear increased costs and are less incentivised to vote in favour of loss-making 'clean' decisions. The participants also pointed out that firms' workers may have an important role in incentivising the firm's conversion to cleanliness.

4. *Panel Discussion*

A **panel discussion** led by **Professor Georg Ringe** (Hamburg University and ECGI) followed the paper presentation, with contributions from **Professor Ann-Kristin Achleitner** (TUM School of Management), **Professor Clemens Fuest** (Ifo Institute for Economic Research), **Professor Rajna Gibson** (University of Geneva and ECGI) and **Professor Jeffrey N. Gordon** (Columbia Law School, University of Oxford, and ECGI).

Rajna Gibson addressed the question of whether institutional investors actually implement ESG strategies which they pledge to. She referred to the paper '[Do responsible investors invest responsibly?](#)', co-authored by herself, Simon Glossner, Philipp Krueger, Pedro Matos and Tom Steffen. The paper analyses the UN-sponsored Principles for Responsible Investment (PRI) signatories' commitment to implement ESG goals. The researchers computed ESG scores for investors' equity portfolios and used the PRI Reporting Framework to identify the intensity of investors' commitment to ESG principles. PRI signatories were divided into 3 groups: the fully committed, the partially committed, and the non-committed (or non-reporting). One of the main findings of the paper is that in the US, unlike in Europe, non-signatories have better ESG results than non-committed signatories (which indicates greenwashing), consistent with another paper finding, namely that the main driver for signing and compliance for some (namely, the non-committed) US signatories is commercial.

Clemens Fuest switched the focus of the discussion to the question of the role of public policy. As he illustrated with reference to CO₂ pricing regulation in the US, public policy may be designed such that self-serving investors may still 'do the right thing'. The main concern is that private investors may search for their own, distinct ESG policies, raising two questions: if private investors do care about the consequences of their investments, does this mean that the current public policy economic approach is wrong? And if so, how should public policy be designed?

Ann-Kristin Achleitner reverted to the discussion on voice and exit strategies. Importantly, as she highlighted, in Germany the two-tier board system (with the supervisory board including representatives of workers) may ensure the exercise of a voice strategy without the need to apply boycotting. This is important as the 'S' (social) element of ESG gains further significance alongside the 'E', as ESG strategies work best if they are combined with employees' engagement. As different industries face different challenges, voice strategies may be more suitable to understanding those challenges, by providing a means by which the challenges can be effectively discussed. In addition, there is a flip side of each 'exit' strategy, which is 'entry'. Currently, traditional investors are much quicker to exit companies than ESG investors are to enter, which signals that 'net exit' issues should receive more attention.

Jeff Gordon offered a different take on the 'portfolio diversification' that was pivotal in the 'Exit vs. Voice' paper. What drives much of the result is that diversified investors do not face serious costs from a shareholder vote to force a firm to internalize externalities, for a polluting firm to become 'clean'. But such a firm-specific approach will not succeed in addressing an issue like climate change, because the necessary measures to mitigate climate change risk will result in disruptions at many firms and will require costly adjustments throughout various industrial sectors represented in the portfolio. Investors cannot escape those costs through diversification. Thus the 'Exit v. Voice' paper does not offer guidance in addressing the questions that matter most. Gordon's view, based on his theory of [Systematic Stewardship](#), is that a diversified investor should break down portfolio risk into its two components, expected return and systematic risk, appreciating that the investor's objective is to maximize risk-adjusted returns. In addressing a risk like climate change, which can result in losses across the entire portfolio, a self-interested investor should see the private value of risk-reduction even in circumstances where firm-specific returns might be lower. The 'altruism' that animates the 'Exit vs. Voice' paper is necessarily bounded; that's why diversification is important to the story. But addressing a systematic risk like climate change—which cannot be escaped by diversification—requires a different story, said Gordon, in arguing for a Systematic Stewardship framework.

The panel then discussed the role of minority shareholders in using voice tools and the hurdles they need to overcome to do so (including the absence of a platform to air their concerns, in addition to technical and cost issues). The panellists also agreed that non-structured and non-standardised databases, criteria, and metrics overcomplicate the assessment of outcomes and effects of ESG principles implementation. Thus, despite the criticism levelled at the [EU Taxonomy](#) arising from the impossibility of classifying all types of business activity ESG criteria, it was acknowledged that some level of standardisation is needed with respect to climate change issues. A further conclusion was that the role of governments ought not to be excluded from the assessment, although the actions of shareholders do have a role and an impact.

While the main focus of the discussion was necessarily the panellists' contributions, a number of interesting questions and observations were raised in the conference chat platform. The attendees discussed, amongst other things, whether ESG criteria may impact the value of a clean company regardless of Hart et al's model's assumption of equal value for both 'clean' and 'dirty' firms, as well as how mutual funds whose investors have differing preferences should exercise such investors'

individual 'voice'. Some participants noted that the model should be further elaborated to clarify its application to different ownership structures.

Third Session. Climate Change in the Boardroom

The final session was devoted to how climate change should be handled at the level of the board of directors. The session was moderated by **Professor Luh Luh Lan** (National University of Singapore and ECGI) who started the discussion by framing the primary question: how effective are corporate and securities laws in shaping corporate behaviour regarding climate change?

5. Green Boardrooms?

The discussion began with the [presentation](#) by **Professor Brett McDonnell** (University of Minnesota Law School) of the paper '[Green Boardrooms?](#)' co-authored with Hari Osofsky, Jacqueline Peel, and Anita Foerster. The premise of the paper is to draw attention to the corporate and securities law tools available in Australia and the US respectively to induce companies to better manage climate-related risks, namely disclosure shareholder engagement and fiduciary duties. The paper highlights the outcomes of interviews with corporate governance representatives and investors regarding the effectiveness of these tools.

Disclosure appears to be a universal tool, as it may be used by investors, employees and consumers alike. The paper shows that in both the US and Australia, mandatory climate-related disclosures are currently insufficient. Moreover, as noted by the interviewees, overly voluminous and varying disclosure standards are presently implemented. Thus, it is suggested that a unified standard would make the disclosure framework more effective. Although the quality of disclosure has improved, none of the interviewees were able to conclude that disclosure brought significant changes into companies' lives.

The second tool is shareholder engagement, mainly through the submission of shareholder proposals. According to respondents, a range of shareholder proposals, including those relating to director nominations, disclosure proposals, and tying directors' compensation to the achievement of climate change targets, may potentially change a company's behaviour. The interviews showed that shareholder engagement (both formal, through proposals, and informal, through private meetings) grew, but its effects have been limited. Australia has a longer history of informal shareholder engagement than the US and can showcase recent examples of successful formal engagement, while in the US Rule 14a-8 under the Securities Exchange Act introduced limits on shareholder proposals, making it easier for companies to filter out proposals.

Fiduciary duties, and in particular litigation for breach of fiduciary duties pertaining to addressing climate change risks, represent the third tool in enabling more effective management of climate-related risks. The likelihood of success for plaintiffs from such litigation, however, remains small and, as the interviews showed, company management remained uncertain as to what such duties require from them in relation to climate change concerns.

Professor McDonnell concluded that these tools cannot replace environmental regulation. That said, the interviews suggest that strong reforms of corporate and securities law are possible and may include a shareholder value reform and a focus on stakeholder rather than shareholder value. Other ideas included the introduction of a list of suggested shareholder proposals to better align ESG objectives and a duty to avoid environmental harm.

[Discussing the paper](#), **Professor Martin Gelter** (Fordham University School of Law and ECGI) argued that the focus on stakeholders rather than shareholders must be carefully considered, as the stakeholders' interests are neither necessarily homogenous nor aligned with environmental goals. He also suggested that an increase in the complexity of board structures (for instance, following the appointment of environmentalists as directors) would complicate the decision-making process. From this standpoint, the introduction of advisory boards may be a better solution for large companies. He also pointed out the importance of corporate law and shareholder litigation, which can shape the scope of managerial discretion and how it is exercised. However, he further noted that the bargaining power of certain stakeholder groups may be a more important factor.

6. *Panel Discussion*

The discussion of directors' duties as a potential mechanism to align companies' behaviour with a net-zero target continued in the panel discussion.

Sarah Barker (*Minter Ellison*) presented the Australian context of fiduciary duties in relation to climate change risks. In Australia, extraction as well as commodity industries, which are exposed to the risk of stranded assets, play a significant role. Climate change is a highly politicised issue (an example being the introduction and subsequent repeal of the carbon tax law) and there is no stable political leadership regarding climate change regulation. Nevertheless, the country is in the process of acknowledging not only a positive obligation to consider climate change in the discharging of directors' duties of care and diligence, but also an obligation to consider the achievement of net zero goals. This was confirmed in an influential series of legal opinions provided by a high-profile, senior lawyer in 2016, 2019 and 2021 in Australia—the most recent stating that if a director in high risk industries does not consider how the achievement of those goals affects the company's strategy and business, they are likely to breach their duties of care and diligence.

Professor Ernest Lim (National University of Singapore) summarised the legal position on climate change from Singapore, referring to [the Singapore Legal Opinion](#) and the experience of Temasek Holdings (Private) Limited—Singapore's largest controlling shareholder of state-owned enterprises. According to the Legal Opinion, directors should take into consideration climate change risks in their decision-making process. Failure to do so may entail directors' liability for breach of their duties. The Legal Opinion further states that it is impossible for the director to claim that the consideration of climate change is unnecessary. In addition, disclosures under the Singapore listing rules may include information pertaining to climate issues.

Finally, Professor Lim stressed that in concentrated ownership countries like Singapore (where controlling shareholders ultimately decide on a company's strategy and where large companies are often controlled by the state or families), the state plays a decisive role in setting rules for combating climate change, and it is important to hold the state accountable for both its actions and lack thereof.

Ellie Mulholland (*Commonwealth Climate and Law Initiative*) [discussed](#) UK directors' duties most relevant to climate change. She referred to two obligations under the UK Companies Act: the duty to promote the success of the company for the benefit of its members as a whole (a fiduciary duty), and the duty to exercise reasonable care, skill and diligence. As follows from the understanding of climate change as a financial risk issue, as evidenced by the Bank of England [PRA report](#), climate change risks should be considered in the fulfilment of both duties. Although there is no public enforcement of directors' duties and there are procedural hurdles in the UK for shareholders suits, some recent developments heighten the standards of directors' care: (i) TCFD disclosures requiring directors to sign off on disclosure reports are mandatory across the UK and will be extended; (ii) educational materials on how IFRS accounting standards apply to climate issues [were issued](#) by the International Financial

Reporting Standards Foundation; (iii) a net zero carbon target is now set in the statutes so that companies operating in the UK should consider it; (iv) escalating regulatory and shareholders expectations encourage directors to have regard to net-zero scenario; (v) climate litigation (including the recent landmark [ruling](#) against Shell) have urged courts to acknowledge significant impact of emission reduction on companies' strategies and plans. Citing a speech by UK Supreme Court Justice Lord Sales, the panellist suggested that directors must take into account climate change in their decision-making and 'accord significant weight' to it or even to strive to reduce emissions.

The panel [concluded](#) that the main problem in changing corporate behaviour in furtherance of achieving net zero goals is not the absence of duties and corresponding rights (thus, the legal basis for directors' duties may go beyond company law to, for example, human rights legislation etc) but their enforcement. The question, therefore, is whether private means of enforcement may compensate for the absence of public enforcement. Another problem discussed by participants is the lack of 'attribution' and 'causation' links between environmental harm and failure to discharge duties, which is the main reason why litigation related to climate change damages usually fails.

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This post is part of the series '[Business Law and the Transition to a Net Zero Carbon Economy](#)'. This series consists mainly of posts summarizing papers presented and presentations made at the 5th Annual Oxford Business Law Blog conference on 'Business Law and the Transition to a Net Zero Carbon Economy' which took place online on 25 to 27 May 2021. The recordings are available [here](#).