DIRECTORS' DUTY TOWARDS CLIMATE RISK MITIGATION: A CRITICAL APPRAISAL OF THE LEGAL FRAMEWORK AND EMERGING TRENDS

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Abstract

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JEL Classification: K22, K29, K200 DOI: 10.22495/clgrv5i2p7 With the ever-increasing need for corporate responsibility in mitigating climate risks, this paper aims to analyse the legal duties of directors and their role in climate risk mitigation. This is done by analysing the scope of the codified director duties in the context of climate change under the company law, securities regulations, and environmental regime. However, directors face challenges in understanding the nature of their legal obligations due to the systemic nature of climate change (Breitinger & Litvak, 2018). Against this backdrop, the paper attempts to analyse the scope and interpret the emergence of director duties through judicial pronouncements. adopts doctrinal legal methodology The paper involving a comprehensive review of relevant legal frameworks, including case law and legislative provisions in India. The paper suggests that such legal interventions may aid corporates in addressing climate change, which entails that directors must consider climate risks and conduct themselves accordingly. The paper concludes by discussing what measures corporations must take to help India progress towards becoming a low-carbon economy. The significance of this paper lies in providing a reference for corporations to navigate their responsibilities and take measures to address climate change through legal intervention.

Keywords: Board of Directors, Director Duties, Climate Change, Corporate Governance, Environmental, Social and Governance Norms

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1. INTRODUCTION

Consequences of climate change, either extreme weather or slow onset events resulting in loss of lives, livelihoods, and refugees, are all realities now. The most severe risk on a global scale during the next ten years is considered to be the failure to address climate change (World Economic Forum, 2022). The Intergovernmental Panel on Climate Change, in its most recent report, "Summary for Policymakers", said the following with very high confidence, "The cumulative scientific evidence is unequivocal: Climate change is a threat to human well-being and planetary health. Any further delay in concerted anticipatory global action on adaptation and mitigation will miss a brief and rapidly closing window of opportunity to secure a liveable and sustainable future for all" (The Intergovernmental Panel on Climate Change [IPCC], 2022, p. 33). According to a 2020 Carbon Disclosure Project (CDP) report, 215 top global corporations believe climate risks might have a financial impact of nearly US\$1 trillion, including US\$250 billion in "stranded assets" that could become economically unviable (CDP, 2021).



The public and private sectors each have a significant role in coordinating greenhouse gas (GHG) reduction initiatives with science-based targets. It is clear that even if our governments were bold and forward-thinking enough, they could not adopt sustainability and combat climate change independently (Richardson & Sjåfjell, 2015). However, having more ecologically friendly businesses that consume fewer resources or less pollution concerning their operations is insufficient to advance sustainability or climate action. Companies' discourse on climate change needs to integrate environmental, social, and economic agendas. Climate action should not be an optional preference that companies adopt only when they see a financial benefit for their organisations. There is a need for investment in projects aimed at climate adaptation, restoring and enhancing ecosystems, and other projects that help address climate change. Today's management is more likely to think about how sustainability might boost their business's profitability than they are to think about how sustainability might boost business. Profiting financially from sustainable business practices is not intrinsically immoral. The problem arises when this justification takes precedence over all others, as the same logic may also be used to support environmentally destructive development (Richardson & Sjåfjell, 2015).

Businesses are now faced with both challenges and opportunities due to climate change. Climate change has evolved from being an issue that is just ethical and environmental to one that is considered a financial risk. The physical risks can result in the unavailability of resources, the creation of stranded assets, etc. The cost of inaction will likely be exponentially more than that of companies to mitigate and adapt to climate change. We have long passed the stage where climate impacts on corporations were only hypothetical. After the California wildfires in 2017 and 2018, Pacific Gas and Electric, a utility company in California, incurred losses with immense damage to its transformers and was under pressure for billions of dollars of claims. While the cause for the wildfires cannot be attributed solely to climate change, the intensity and frequency of wildfires are bound to increase even without other issues like poor fire and ecosystem management (Gutierrez et al., 2021). The company filed for bankruptcy protection, and the Wall Street Journal referred to the proceeding as the first "Climate-Change Bankruptcy" (Gold, 2019).

With the move toward an economy that pushes for low carbon emissions, businesses can and should contribute as a source of innovation and financial resources. Corporations are not necessarily incentivised to internalise sustainability strategies unless company law promotes or mandates the same. It is vital to emphasise procedures as well as outcomes. This would entail informing decisionmakers in companies not to make decisions that could potentially infringe on human or environmental rights or contribute to climate change. The legal responsibilities of top management and directors to promote economic value in their organisation exclude social and environmental considerations unless they bring financial benefits to the business (Richardson & Sjåfjell, 2015). Without a legal mandate, the directors are still inclined to prioritise the creation of wealth for the shareholders. The reason behind this is the market pressure to deliver in the short term without considering its implications in years to come.

It is now widely recognised that climate change is a corporate governance issue; the adequacy of the framework to help address climate change needs to be considered (Organisation for Economic Cooperation and Development [OECD], 2022). In such a situation, the board of directors is responsible for taking the necessary climate action (World Economic Forum, 2019) As stewards of long-term corporate performance, boards have a crucial role in helping the business navigate the dynamic climate risk landscape (Ceres, 2019). Climate change can put businesses at significant financial risk and has the potential to affect consumer choices over time. Long-term, this could damage the company's reputation and erode investor confidence, making raising financing more challenging or expensive.

Directors are uniquely positioned to ensure sustainability in the profitability and viability of the company. Studies have shown that such companies have also increased their net profitability (CDP, 2021). Directors will have to start making decisions that could include reorienting the capital investment in eco-friendly projects with a lesser carbon footprint and promoting sustainability. It can be argued that expanding the scope of company law will also assist businesses in internalising externalities or minimising the social costs of doing business. Company law also has a vast scope in its applicability, considering the definition of a "company" under Section 2(20), which states, "company means a company incorporated under this Act or any previous company law". By its incorporation under the law, the company with accrue rights and will be bound by duties.

This paper endeavours to answer the query as to how the legal duties of the board of directors under the existing framework of Indian corporate, securities, and environmental laws help corporates address climate change. In addition, the paper attempts to analyse how climate change can be addressed through legal intervention by clarifying the role of the board of directors in climate risk mitigation. The authors have employed a doctrinal legal approach as the methodology for this paper. Broadly, normative legal research tools will be used to interpret the legal provisions and critically analyse judgements that are relevant to the subject. Toward this end, we trace the emergence of director duties and analyse the scope through judicial pronouncements in India under Section 2. The paper in Section 3 further delves into a critical appraisal of directors' duties as codified under the Companies Act, 2013 in the context of climate change. Section 4 examines additional duties under other laws like securities laws and environmental laws. Section 5 examines the emerging trends in these areas and the way forward. Ultimately, this paper would hopefully serve as a document of reference to consider what measures must be taken by the corporations while India progresses toward being a low-carbon economy.



2. DIRECTOR DUTIES TOWARDS CLIMATE CHANGE: **EMERGENCE IN INDIA**

The position of director for a company is a very dynamic and evolving one. Directors serve as representatives of the company and are authorized to act on its behalf in most situations, except for those that are specifically designated for the company to undertake or manage. They are responsible for managing and safeguarding the company's assets and properties while also acting as agents for the company. However, it should be noted that even though the directors may be regarded as the company's agents for some purposes, the company cannot, in any way, including in the general meeting, direct the directors to make a specific decision about those matters for which the directors (i.e., the Board) have the authority to do so. A position as a director with such power entails duties (Kapoor & Dhamija, 2023). One of the responsibilities of the Board is to develop and define the strategy for the company and ensure shareholders receive a dividend while balancing competing demands and avoiding conflict of interests between various stakeholders. Boards must possess the independence and objectivity necessary to carry out their responsibilities effectively. Another crucial board duty is monitoring the risk management system and other systems that intend to guarantee compliance with applicable laws to the company (OECD, 2015).

While the role played by directors has been increasing in scope with new developments, particularly in the context of climate change, their specific obligatory roles can be identified (Anglo-Australasian Law Society, 2019). It includes compliance with obligations under various laws (particularly disclosures), assess financial impacts on the company by the application of the law either due to fines or use of tax incentives, and general fiduciary obligations that are owed to the company will require companies to factor in climate change into their decision-making process.

While the Companies Act, 1956, did not have any provisions that listed the duties of directors, fiduciary duties have always been applicable. "The fiduciary duty of the board is to promote the value of the corporation. In fulfilling that duty, directors must exercise their business judgement in considering and reconciling the interests of various stakeholders — including shareholders, employees, customers, suppliers, the environment and communities - and the attendant risks and opportunities for the corporation" (Cain et al., 2019). Directors are compelled to identify and assess risks posed to the company due to climate change. This is frequently due to their fiduciary obligations and the market norm of maximising shareholder wealth, not only their legal obligations. These characteristics encourage the directors to adopt a long-term rather than a short-term approach that discourages climate action (Benjamin, 2020).

The Judiciary recognised the fiduciary duties of the board of directors in various cases. Before the codification of duties of directors, the Supreme Court of India, in the case of Dale & Carrington Investment v. P K Prathapan (2004), held that:

"The fiduciary capacity within which directors have to act enjoins upon them a duty to act on behalf of the company with utmost good faith, utmost care and skill and due diligence and in the interest of the company they represent. They have a duty to make full and honest disclosure to the shareholders regarding all important matters relating to the company, even in case of private limited companies".

The fiduciary obligation to create wealth for shareholders was invoked to counter accusations that boards were not correctly examining their companies' social and environmental consequences and to defend a narrow focus on profitability (Global Compact LEAD, 2012). This changed when the parliament introduced Section 166 in the Companies Act, 2013 as proposed by the J. J. Irani (Ministry Committee Report of Corporate Affairs, 2005). Given that no general rule on the responsibilities of directors can be established, it was suggested that the law only offer an inclusive list and not an exhaustive one (Ministry of Corporate Affairs, 2005). However, the process-oriented business judgement rule should shield directors from responsibility for these choices. The rule provides a "presumption that in making a business decision, the directors of a corporation acted on an informed basis, in good faith and the honest belief that the action taken was in the best interests of the company" (Wallace, 2009, p. 765). Without such a rule, directors will be responsible for every decision that does not work in favour of the shareholders who have not made any profits.

The sheer extent of the risk posed by climate change companies prompts the application of fiduciary duties. Climate change is frequently causing legal systems and doctrines to be modified, and this trend will continue in corporation law. Corporate law has traditionally been unaffected by environmental concerns. Still, given the risks posed by climate change, directors can no longer afford to do so or forgo providing shareholders with riskbased information. Private law may aid directors and investors in making wiser and more informed choices on global warming (Benjamin, 2020).

3. DUTIES OF DIRECTORS UNDER THE COMPANIES ACT, 2013

Recognising the necessity of streamlining corporate laws to make them easy to understand and provide a framework to speed up economic growth. The new framework should promote sound corporate governance and protect investors' and other stakeholders' interests. Transparency through a higher level of disclosures and increased accountability of the board and management becomes necessary for raising compliance levels (Ministry of Corporate Affairs, 2005). With the new legislation in 2013, the law now allows corporates to continue to be profitable entities and be a part of the social development in the country.

The Companies Act, 2013, has shifted Indian company law, to a certain extent, toward accepting stakeholder theory. The Act includes several major sections that emphasise the need to look beyond a company's financial performance. One key element is a mandate for corporate social responsibility (CSR), also the adoption of a provision for director duties and protection of the interest of stakeholders. The evolving responsibility of directors toward



shareholders and stakeholders in India has been modelled after the UK's enlightened shareholder value model (Prasad, 2018). The company itself, as well as its directors or board of directors, serves as the primary agent of the company to conduct business per the Act. It outlines the situations in which the company must act as principal and agent and the situations in which the board of directors must act on the company's behalf. The directors or the board of directors serve as Trustees about the company's properties and assets. According to the specifics of each instance, the directors, therefore, have varied characteristics in connection to the organisation.

Anyone appointed as a director to the board of a company is a director under Section 2(34) of the Companies Act, 2013. The role of a director changes based on the circumstances of each case. If a company owns a property, directors are its trustees; if a company enters into a contract, they are agents who transact on its behalf. Maximising wealth is shareholder usually considered the corporation's sole purpose and directors are to make a decision that maximises wealth for the shareholder consciously. This is not only the case in India but in many other jurisdictions. It is important to note that this is merely a managerial decision, not a legal requirement or fiduciary duty (Stout, 2012). Integrating business, ethics, and societal factors through a stakeholder approach to the company are ideal. Before the Companies Act, 2013, the company's shareholders were the only ones responsible for the director's duties. The recognition of stakeholder theory came with the introduction of Section 166. A stakeholder can be defined as "any group or individual who is affected by or can affect the achievement of an organisation's objectives" (Jensen, 2001). India is one of the few countries that recognise the stakeholder theory in its law. Section 166 can be interpreted only to have an inclusive list of the duties of the directors. The common law principles that are already established will continue to apply. In the context of climate change, Clauses (2) and (3) are relevant to establishing the legal duties of directors to not contribute to climate change and also consider its risks for informed decision-making. Clause (2) of Section 166 provides for the legal duty of the directors to consider environmental issues while promoting the objects of the company. Clause (3) imposes a duty of good faith and duty of care and due diligence on directors. The markets, however, still promote shareholder primacy which acts as a key barrier in transitioning to a sustainable business. However, there is a lack of legal clarity regarding exercise of such duties. Companies directors' concerned about climate change deal with sustainability as a solution in silos, and the idea is compartmentalised as part of the business. This should be integrated across the company and as a part of its corporate governance.

Directors are obligated to detect and evaluate the risks that climate change brings to the corporation per their corporate fiduciary duties and the shareholder wealth maximisation norm that guides their application. If they embrace a long-term management approach, directors may even be encouraged to take steps to reduce these risks.

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According to new research, even the largest carbonmajor companies can profit financially by switching from fossil fuels to renewable energy sources, even though progressive climate action may still encounter difficulties from short-term commercial perspectives. Businesses also fail to address the dangers and harm caused by climate change in the short term.

3.1. Duty of good faith

The Companies Act, 2013, Section 166, Clause (2) states: "A director of a company shall act in good faith in order to promote the objects of the company for the benefit of its members as a whole, and in the best interests of the company, its employees, the shareholders, the community and for the protection of environment".

The Supreme Court, in the case *M K Ranjitsinh v. Union of India* (2021), while discussing the role of electric utility companies to mobilise finance for the protection of the Great Indian Bustard, the court held that:

"The word 'environment', though not defined in the Companies Act, has to be given the meaning assigned to it under the Environment (Protection) Act, 1986. Section 2(a) of the Environment (Protection) Act, 1986, defines the word 'environment' to include the inter- relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro- organisms and property".

The petitioners in the above case claimed that constructing new power lines in locations threatening the Great Indian Bustard would breach legal duty under Section 166 by the directors of the energy utility company. The case indicates Section 166 does not follow a hierarchy or a set structure regarding the obligations toward companies and other stakeholders. A decision that appears to be made with the company's and its shareholders' best interests in mind but has a negative environmental impact may violate Section 166. A similar choice could subject the companies to lawsuit risk, transition risk from tightening rules, and asset stranding.

Section 166(2) adopts a pluralist perspective by treating all interests (whether of shareholders or other stakeholders) equally and as genuine in their own right, without imposing any hierarchy (Naniwadekar & Varottil, 2016). The section must be interpreted to mean that directors have a responsibility to act in the company's and stakeholders' best interests to advance the objectives. An assessment of this duty should not be based on what constitutes best interests. The directors' subjective good faith assessment that they are working in the best interests of all stakeholders would be sufficient. Again, this does not render the clause worthless because directors are required to take stakeholder interests into account (Naniwadekar & Varottil, 2016).

However, a thorough review of the section shows potential problems that could occur in its implementation, significantly limiting the rights of stakeholders (Naniwadekar & Varottil, 2016). An additional perspective that needs to be considered is that Section 166, at the superficial level, reflects that the directors' duties thoroughly cover the rights of non-shareholders. Directors would be obliged to act objectively in the best interests of all stakeholders if an objective interpretation were preferred. In such a case, it would frequently be hard for directors to choose between the interests of shareholders and employees impartially.

3.2. Duty of due care and diligence

The Companies Act, 2013, Section 166, Clause (3) states: "A director of a company shall exercise his duties with due and reasonable care, skill and diligence and shall exercise independent judgment".

Directors are said to have fulfilled their obligation when they operate in the firm's best interests with good faith and reasonable care, given their knowledge and expertise (Divan et al., 2021). Directors are not liable for mere errors of judgement. Directors must be proactive in thinking and strategising in response to climate change. An overarching policy to guide directors on balancing the interest of all the stakeholders mentioned under the section and weigh it against the traditional profit-making interests (Radon, 2019). The Board must be aware of the impacts of its activities on the environment. Good environmental practices are increasingly recognised as financially prudent and result in the betterment of the company's goodwill. In the absence of legal precedence on the compliance of the duty of good and deciding the best interests faith of the community and the environment, beyond mere compliance by the company with other applicable laws (Radon, 2019).

In such a scenario, the Board will become obligated to create sustainable value for the corporation (Sjåfjell, 2020). The Board will have to develop a comprehensive sustainable strategy to avert climate risks and losses and keep the business afloat in the long term. The Board must not only build climate resilience to deal with physical and financial risks, but such activity has to become a part of the core business philosophy and strategy of the Board.

Directors will need to consider the quickly changing regulatory landscape and the potential for climate-related shareholder actions under existing issuer liability frameworks when deciding how to reduce their companies' financial exposure to climate-related financial risk (Metter & Pugh, 2019). This becomes relevant since non-consideration of risk and running a company with such ignorance is bound to adversely impact the environment and its business. If the board refuses to take action to adapt and the decision-making process keeps in mind the risks posed by climate change, sector-wise losses are a very likely consequence. This might have a ripple effect on other sectors as well. In such a situation, the large-scale impact would be on the country's economy and the stakeholders' confidence in its business is bound to plummet.

Section 135 of the Act imposes an obligation on certain companies (decided based on profits or turnover) to contribute 2% of their profits towards items mentioned in the VII Schedule, which includes ensuring sustainability. Schedule VII Para (4) refers to environmental-related areas where the CSR funds can be spent. It states the following, "ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining the quality of soil, air and water [including contribution to the Clean Ganga Fund setup by the Central Government for rejuvenation of river Ganga]". Interestingly, these are not the only environmental-related areas where the companies can spend their profits. While it is not a mandate, those companies that contribute to greenhouse gas emissions can attempt to work towards protecting the environment.

Directors must therefore have a sufficient understanding of the operations and the dangers of the company's climate. However, boards are not sufficiently prepared to handle climate change issues due to a lack of knowledge and information to ensure that decisions are founded on facts and science (INSEAD & Heidrick & Struggles, 2021). Directors must now add a fundamental level of climate competency to their governance skill set to safeguard the company's impacts of climate change. This also enables the shift to a net-zero emissions economy, as outlined in the Paris Agreement's goals. Most, if not all, directors must be climate competent; failings in governance and misleading disclosures about climate change could result in legal action being taken against individuals and businesses (Mulholland et al., 2019).

3.3. Duty of disclosure

Disclosures are essential to enhancing transparency, ultimately leading to higher trust in the companies by the stakeholders. Disclosure of climate risks and opportunities becomes crucial since shareholders and stakeholders rely on such information for informed decision-making. The absence of such disclosures regarding climate risks will impact investments and lower the confidence of institutional investors interested in providing capital for the company. For example, BlackRock has stated that they may vote against directors responsible for risk oversight in case of insufficient reporting or the company does not have a credible plan to transition its business model to a low-carbon economy (Sugarman & McDougall, 2021).

According to Section 134(3) (n) of the Act, a statement indicating the creation and implementation of a risk management policy for the company, along with the identification of any risk elements that, in the Board's opinion, pose a threat to the company's viability, must be included in the annual report. A report by the Economist Intelligence Unit on the value at risk due to climate change identifies that the impacts will not be restricted to the most vulnerable industries - since indirect impacts will affect the entire global economy, investors "cannot simply avoid climate risks by moving out of vulnerable asset classes" (Wasim, 2019). The value at risk to manageable assets from climate change calculated in 2015 is US\$4.2 trillion (Economist Impact, 2015). Strategic planning and risk management cannot be improved after the fact due to their very nature. In light of this, contemporary directors would be well to assess their governance plan to see if it could withstand the scrutiny of a Section 166 lawsuit.

The director must, therefore, direct. They have ongoing obligations within a fluid business environment, for which they are and will be held accountable. To ensure a corporation's continued prosperity, good faith actions should be performed immediately and supported by solid scientific data and realistic economic assumptions. Risk can be managed, and strategy developed using the best information. Furthermore, failing to govern the reality of a changing climate actively cannot be the optimal course of action (Economist Impact, 2015). "Where the alleged failure pertains to a material danger to the corporation's financial condition or prospects, directors and officers should be especially aware of any potential overlap between legal compliance and business risks. This is because, at least for corporations with public reporting duties, evidence of a failure to monitor such risks would imply that the organisation is in danger of failing to comply with its disclosure obligations under securities laws' (Sullivan et al., 2015).

3.4. Duty as a member of the audit committee

After the board has decided which indicators are suitable to measure, record, and report on, the audit committee should use its financial knowledge to present and report on climate risks instead of needing members with backgrounds in climate science. The board should determine whether the planning horizon is long enough and be satisfied that the company is aware of the potential financial effects of climate change on its operations and longterm strategy (Sarra, 2020). Given the significance of climate impacts on the company's financial state, the audit committee members can take the lead in becoming climate-competent directors. The audit committee is also in the greatest position to evaluate the reliability and correctness of the financial disclosures relating to climate change and to bring up any issues with the board (Sarra, 2020).

Audit committees are crucial in ensuring that the company is thorough and accountable in its financial reporting of climate-related financial risks and opportunities once the corporate board has established its strategic priorities and approved a climate action plan. Considering that it is in charge of financial reporting, the audit committee will always be involved, regardless of whether the business is privately or publicly traded. The primary responsibilities of the audit committee are to keep an eye on the company's internal control system, financial reporting procedure, audit procedure, and adherence to legal and regulatory requirements. Additionally, it urges the board to approve the financial reporting and suggests enhancements. Consistency and comparability of the financial accounts from year to year are key guiding principles for financial reporting.

3.5. Duty as an independent director

Non-executive directors can push for incorporating climate governance and sustainability inside organisation's framework, specifically, the independence, diversity, expertise and skill. character, and integrity (Clarke, 2015). These values become essential for integrating sustainability and creating long-term value for the corporation. Independent directors have additional responsibilities under Schedule IV of the Act, which provides a Code of Conduct for Independent Directors. Their duties include giving an impartial viewpoint to the Board's risk management deliberations under Para 1 and ensuring that the risk management processes are robust and defensible under Para 4.

3.6. Liability for breach of duty

The Companies Act, 2013, Section 166, Clause (7) states "If a director of the company contravenes the provisions of this section such director shall be punishable with fine which shall not be less than one lakh rupees but which may extend to five lakh rupees".

The risks to a corporation's operations will probably increase dramatically due to climate change. The government has a higher regulatory responsibility due to its efforts to stop climate change and safeguard the economy and its people from adverse impacts. Therefore, in the context of climate-related risks, "oversight liability may arise where directors and officers:

• fail to consider or oversee the implementation of climate-related legal risk controls;

• fail to monitor mission-critical regulatory compliance, either specific climate change-related regulations or existing regulations which require consideration or disclosure of climate change risks" (Cooper et al., 2021).

A potential breach of corporate governance occurs when serious climate hazards are not recognised, evaluated, addressed, or disclosed (McKenzie, 2021). Failure in such a case will not only be considered a breach of duty but also create a legal risk to the company and the directors individually. It is important to note that the duties mentioned under Section 166 are owed to the company, not the shareholders. Only a company will have the locus standi to file the suit, which would end up in the court as a derivative suit. Both businesses and their directors could potentially be subject to class actions or shareholder lawsuits for poor management under the Companies Act, 2013 despite never having done so. This litigation risk will be particularly high for those directors whose businesses are extremely vulnerable to climate risks, like energy, agriculture, fishing, forestry, etc.

There are two main causes of litigation that would be more prevalent; inattention to climate change and inaction on business matters with climate change implications. However, in this scenario of non-consideration of climate risks, the director might not necessarily make any profits. Still, the company is bound to incur losses that might be considered a breach of duty. This does not incentivise shareholders to file a case against the directors unless the share value plummets.

The Delhi High Court, in the case of *Rajeev Sumitra v. Neetu Singh* (2016), held:

"While deciding whether Section 166 stipulates 'Duties of a Director to a Company' and not 'Rights of Shareholders'. In case a Director violates the duties prescribed in Section 166, the cause of action accrues in favour of the company. The said section is akin to the common law right. It is merely repository to the Director's fiduciary duties".

Even if we consider the duty of the board to maximise shareholder value, the risks posed by climate change act as an impediment to the same. Ignoring such risks would mean violations of the duty of care owed to the company. A fundamental breach of the directors' fiduciary obligations would be for them to implement company policies that are not focused on maximising long-term shareholder value (Bradley, 2019).

An excellent defence in this scenario would be the Business Judgement Rule. The lack of successful cases against directors worldwide can be attributed to this defence. Delaware defines the business judgement rule as "a presumption that in making a business decision, the directors of a corporation acted on an informed basis, in good faith and the honest belief that the action taken was in the company's best interests". Another important reason is the existence of divergence between the standards that are considered by the directors and by the courts. This divergence is most evident in the business judgement rule (Velasco, 2015).

Romer J's formulation of directors' duties in *City Equitable Fire Insurance Company v. Maugham J. Lord Hanworth M.R., Lawrence and Romer L.JJ.* (1925) is crucial to understanding the extent of liability of directors.

"His duties will depend upon the nature of the company's business and the manner in which the work of the company is distributed between the directors and other officials of the company. In discharging these duties a director must exercise some degree of skill and diligence. But he does not owe to his company the duty to take all possible care to act with best care. Indeed, he need not exhibit in the performance of his duties a greater degree of skill than may reasonably be expected from a person of his knowledge and experience, or in other words, directors are not liable for mere errors of judgment".

Similar views were expressed in *Lagunas Nitrate Co. v. Lagunas Nitrate Syndicate* (1899), in the following words:

"If directors act within their powers, if they act with such care as is to be reasonably expected of them having regard to their knowledge and experience and if they act honestly for the benefit of the company they discharge both their equitable as well as legal duty to the company".

If a director is held accountable for a breach of duty or breach of trust, the court will absolve him of responsibility if it finds that he acted honestly, reasonably, and with due consideration for all the circumstances by Section 463 of the Act. Particularly for independent and non-executive directors under Section 149(12), they are only made liable for those "act or omission by a company which occurred with their knowledge, attributable to board processes, and with their consent, or where they have not acted diligently". The claimant may face challenges in proving

The claimant may face challenges in proving that the directors' failure to consider climate-related risks led to the loss suffered. However, if market practices and scientific literature on attribution demonstrate a causal link between the risks and the losses, the difficulty in establishing liability should not be overstated (Stuart-Smith et al., 2021). However, directors who neglect to assess climaterelated risks that have a significant impact on shareholders' financial interests may be more easily held liable for breaching their duty to act in the company's best interests rather than breaching their statutory duty to exercise reasonable care (Lim, 2021).

4. DUTIES UNDER OTHER LAWS

Considering investments by the public in listed companies, there are Regulations enacted by the Securities Exchange Board of India (SEBI) to regulate the activities of those listed companies. Listed companies must adhere to all SEBI regulations and the basic requirements outlined in the Companies Act, 2013. The following paragraph examines how various SEBI regulations requirements relate to all directors of listed firms in the context of climate change.

4.1. Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015

4.1.1. Responsibilities of the board of directors under Regulation 4(2)(f)

The regulations list down additional responsibilities of directors. Principles are listed under Chapter 2: Principles governing Disclosures and Obligations of Listed Entity. The principles listed in the chapter take precedence over applicable regulations in the event of any conflict or inconsistency. The following clauses are of relevance in the context of climate change and emphasise the arguments made previously under Chapter 3.

"(i) (2) The board of directors and senior management shall conduct themselves so as to meet the expectations of operational transparency to stakeholders while at the same time maintaining confidentiality of information in order to foster a culture of good decision-making.

(ii) (1) Reviewing and guiding corporate strategy, major plans of action, risk policy, annual budgets and business plans, setting performance objectives, monitoring implementation and corporate performance, and overseeing major capital expenditures, acquisitions and divestments.

(ii) (7) Ensuring the integrity of the listed entity's accounting and financial reporting systems, including the independent audit, and that appropriate systems of control are in place, in particular, systems for risk management, financial and operational control, and compliance with the law and relevant standards.

(iii) (3) Members of the board of directors shall act on a fully informed basis, in good faith, with due diligence and care, and in the best interest of the listed entity and the shareholders".

4.1.2. Risk management committee

An additional mandate for the top 1000 listed companies under Regulation 21(5) of the SEBI (Listing Obligations and Disclosure Requirements, LODR) is the establishment of a risk management committee (Regulation 21(1)), which must meet at least twice a year (Regulation 21(3A)). As part of the minimum information to be placed before the board of directors, dangerous occurrences could include extreme weather events due to climate change (Regulation 17(7), Schedule II, Part A, Particular G). The board should always aim for the creation of long-term value while also considering those risks which may have incentives by "eliminate



policies that promote excessive risk-taking for the sake of short-term increases in stock price performance, ..., ensure that appropriate risk management systems are in place to avoid excessive risk-taking and to this end be composed of primarily independent, diverse members, which is helpful to access an organization's risk profile" (Ministry of Corporate Affairs, 2012, p. 14).

Through its oversight role, the board may let management and staff know that comprehensive risk management does not interfere with doing business and is not just an add-on to a company's total compliance programme. Instead, it is a vital component of organisational culture, strategy, and operations (Brownstein et al., 2018). The Board should also work toward ensuring that the policies and procedures are being effectively implemented and are consistent with the vision of the company and its risk appetite. A culture of risk awareness across all departments should be included within the company, and the senior management should be fully engaged (Brownstein et al., 2018).

4.1.3. Business responsibility and sustainability reporting

The SEBI Circular supports the stakeholder theory for business responsibility reporting introduced in 2015, which asserts that businesses are exclusively responsible to their shareholders in terms of revenue and profits but also to the stakeholders, including the larger society and environment (SEBI, 2012). The circular states, "... adoption of responsible business practices in the interest of the social set and the environment are as vital as their financial and operational performance" (SEBI, 2012).

4.2. Securities Exchange Board of India (Issue and Listing of Non-Convertible Securities) Regulations, 2021

Any board of directors of a company that wishes to raise money for its climate change project can resolve to issue Green Debt Securities. Regulation 2(q) of the SEBI NCS Regulations provides for the definition of "green debt security means a debt security issued for raising funds that are to be utilised for project(s) and/or asset(s) falling under certain categories" that "Renewable include. and sustainable energy including wind, solar, bioenergy, other sources of energy which use clean technology, Climate change adaptation, Energy efficiency including efficient and green buildings, etc. and a category as may be specified by the Board, from time to time". Such an issuance is based on the condition prescribed by SEBI, which mandates.

The SEBI NCS Regulations provide for such issuance of Green Debt Securities (GDS) based on the conditions prescribed by SEBI, which include additional disclosure before and after the issuance of GDS as provided under SEBI Operational Circular No.: SEBI/HO/DDHS/P/CIR/2021/613 dated August 10, 2021. Para 1 states that the offer document should include information when a company wants to raise money from the public by issuing green debt securities. This information should include a statement of environmental objectives for issuing green debt securities, the decision-making process used to determine the eligibility of projects, the procedure used to track the deployment of funds, project specifics, and information about the appointment of an independent third-party reviewer. Para 2.3 provides for additional disclosures to be made in the company's annual reports on the list of projects in which the proceeds from GDS are invested, quantitative and quantitative performance indicators of the project's environmental impact. Para 3.3 mandates that the proceeds should always be used toward the purpose mentioned in the offer document.

This law can be read in conjunction with the duty of due care of the directors. In the presence of this law, for listed companies, directors cannot bring in arguments for the absence of funds to invest in climate-related projects, including the ones that are important for mitigating climate risk posed to the companies. Applying liberal interpretation to this section and considering that there is no restriction on how to interpret the purpose of the project for the issuance of a GDS, any project that falls under the definition but also reduces climate risk to the company can be taken up. For example, companies that have operations near the Sundarbans Wetland toward the east of India are known to protect people and property from cyclones that are becoming more frequent and intense (Ranganathan, 2020). An issuance of GDS to invest in the protection of Sundarbans will not just be a climate adaptation project but also one that reduces the impact of cyclones on the company's operations. A similar logic could be applied to any fast moving consumer goods (FMCG) company for sustainable water management projects for farmers from whom the company receives its raw materials. The resilience of farmers in the face of climate change will support the company by ensuring better access to raw materials despite the uncertainty of impacts of climate change, which would have impacted the company's sales and financial status. Therefore, directors will be expected to exercise the duty of care and not hide behind the veil of the absence of funds not to take on climate-related projects. Such an act will not just be a climatefriendly project but also a director fulfilling their duty to mitigate climate risk.

4.3. Environmental laws

Under environmental laws, companies can be made accountable through three modes of litigation. First, public interest litigation initiated by any stakeholder against the company's activities under Articles 32 and 226 of the Constitution of India. 1950. Second. any case brought before the National Green Tribunal for violation of the laws provided under Schedule I. Third, any action brought by the environmental regulator for violation of environmental law, such as the terms relating to climate change specified in environmental clearance issued under an the environmental impact assessment regulation. With the establishment of the National Green Tribunal (NGT), an environmental case that used to be brought before the Supreme Court and the High Court under Articles 32 and 226 is now handled by the NGT. The precautionary principle (AP Pollution Control Board v. M V Nayudu, 1999), absolute liability (M C Mehta v. Union of India, 1986), polluter-pays principle (Vellore Citizens Welfare Forum v. Union of India, 1996), public trust doctrine



(M C Mehta v. Kamal Nath, 1996), and sustainable development are among the tenets that the judiciary and requirements have recognised. The Supreme Court's definition of intergenerational justice is particularly pertinent to the mitigation of and adaptation to climate change.

In the cases mentioned above, company activities have been impacted by orders and directives issued by the courts. By ordering the regulator to ensure no deviation from the statutory criteria, the Supreme Court and the High Courts have ordered companies that violated pollution limits to shut down. Companies have been forced to make amends when environmental harm was proven based on the polluter pays principle. The public interest jurisdiction of the courts has also issued directives directing businesses to relocate their operations and facilities away from towns and cities, as well as technology-forcing deadlines for vehicle emissions. The courts will likelv consider cases involving sectors of the economy known to be carbon-intensive and call for adopting climate-friendly technologies. Directors of businesses participating in carbon-intensive activities may implement business strategies in anticipation of or response to such directives.

Directors can be made liable vicariously for various environmental offences committed by Companies under Section 16 of the Environment (Protection) Act, 1986. It states that,

"(1) Where any offence under this Act has been committed by a company, every person who, at the time the offence was committed, was directly in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly: Provided that nothing contained in this subsection shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence".

A similar provision has been provided under the Water (Prevention and Control of Pollution) Act, 1972 and the Air (Prevention and Control of Pollution) Act, 1984. Any director convicted under this provision will face imprisonment for seven years and six years for Water and Air Acts. India's environmental regulations, which have a commandand-control structure, use criminal penalties for violating the law or statutory approvals. Typically, a blatant breach of the law is necessary for the criminal justice system to get initiated. Most regulatory measures are imposed through conditions unique to certain projects or businesses. It is doubtful that criminal law would be invoked because no statute deals particularly with climate change (Divan et al., 2021).

5. EMERGING TRENDS

Businesses face unprecedented dangers and opportunities due to climate change. The IPCC has emphasised this point numerous times and will likely continue to do so. Companies are vulnerable to all changes in the physical environmental conditions and the state of the economy without a strategy to address the climate problem. The firms will handle losses resulting from the market's unavoidable fluctuations. Like any other issue given top priority by the board of directors, climate change should be included in the governance and stewardship responsibilities of CEOs and directors (Breitinger, 2019).

According to a report by CERES, boards, in general, are not prioritising climate risks (CERES, 2019). There is a dire need to redefine the duties of the board of directors within the context of climate change (Commonwealth Climate and Law Initiative [CCLI], 2021). Directors must include climate change in their business plans, legal decisions, oversight of the companies they manage, disclosure requirements under company law, and their duty as directors. Additionally, it offers guidance to directors to help them fulfil their organisational commitments. Nonexecutive directors can push for incorporating climate governance and sustainability inside organisation's framework, specifically, the independence, diversity, expertise and skill, and character and integrity (Clarke, 2015). These values become essential for integrating sustainability and creating long-term sustainable value for the corporation. But, one dilemma confronted by board members is how to describe their legal responsibilities against a problem of climate change's magnitude and its inherently systemic nature (Breitinger & Litvak, 2018).

While there is a complete lack of explicit recognition of climate change risks by companies in India, the introduction of National Guidelines on Responsible Business Conduct (NGRBC) is a step in the right direction. It was published in 2019 by the Ministry of Corporate Affairs and aims to promote responsible and sustainable business. The UN Guiding Principles for Business and Human Rights, UN Sustainable Development Goals, Paris Agreement, Annual Business Responsibility Reporting, and Companies Act, 2013, among others, are the key drivers of NGRBC (Ministry of Corporate Affairs, 2019). These guidelines are applicable to all companies with no exceptions, and the board is responsible for adopting NGRBC. One important drawback to this is the need for enforcement mechanisms for non-adoption.

The statement in Principle 6 that businesses should respect and make efforts to conserve and restore the environment is applicable in this situation. Businesses should begin addressing climate change by developing mitigation and adaptation measures and building climate resilience through India's Nationally Determined Contributions to the Paris climate change Agreement and the National/State Action Plans on Climate Change. Green Company Rating has also been created as a tool for upper management to track environmental performance. The Boards may be encouraged to act toward sustainability and address climate change by such ratings.

In November 2021, at the 26th UN Climate Change Conference of Parties (COP26), it was announced that India aims to achieve net-zero emissions by 2070 (National Statement by Prime Minister Shri Narendra Modi at COP26 Summit in Glasgow, 2022). Since 2020, there has been a positive trend in India where regulators like SEBI, the Insurance Regulatory and Development Authority (IRDA), and the Reserve Bank of India (RBI)

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discuss climate change. Regulators in India are now aware of climate change as a financial issue. SEBI, as mentioned, has come up with a new reporting format that includes disclosure of climate risks faced by the company, which came into effect in April 2022. IRDA, in May 2020, hosted a roundtable to consider the impacts of climate change on insurance businesses, the role of pension funds, and their contribution to sustainable finance (Asian Development Bank [ADB], 2020). As a first step, RBI published a Discussion Paper on Climate Risk and Sustainable Finance, which provided broad guidance for all Regulated Entities to have "appropriate governance, strategy to address climate change risks and risk management structure to manage them from a micro-prudential perspective effectively" (Reserve Bank of India, 2022). It would be the responsibility of the board to supervise and ensure that the risk management strategy in place is in line with the vision and promotes a culture that incorporates climate-related and environmental considerations into the decision-making process. The roles and responsibilities of the senior management will have to be defined regarding the management of environmental and climate risk management since it plays a vital role in determining the risk culture of the company (Reserve Bank of India, 2022). With an emphasis on building capacity and improving knowledge of climate risk and sustainable finance to solve the difficulties posed by climate change, it is becoming increasingly crucial to sensitise India's financial industry to the value and benefits of green money.

6. CONCLUSION

To continue maximising the value of a company for all stakeholders, the company should act on the opportunities presented and effectively manage climate risks. Climate change poses longer-term risks that extend beyond the considerations of the typical business planning cycle, a phenomenon Bank of England Governor Mark Carney coined as the Tragedy of the Horizon (Carney, 2015). Any failure to do so will mean that the directors can be held accountable. As seen throughout the paper, the law on directors' duties can be interpreted to include action regarding climate change for adaptation. This law also can act as a cause of action in pushing companies to mitigate climate change. In the absence of a climate law in India, "it simplifies the question of causation to a single board's preventable creation of foreseeable harms to their corporation" (Barker, 2013, p. 59).

The role of the law should be to create environment to facilitate higher levels of an commitment and voluntary compliance and adoption of sustainability by companies. The paper has identified that robust legislative backing exists to enforce director duties in the context of climate change. It is not enough for companies to transition to a low-carbon economy simply because of penal elements in the law. Instead, companies must recognize that they are an essential part of society and can contribute to an effective transition. In this regard, regulators must ensure that laws and other processes are accompanied by enablers within the ecosystem. This will ensure that corporations understand the importance of internalizing the issue of climate change and respond accordingly, without merely reacting to external pressures. This issue is of significant importance and requires further research to understand how regulators can facilitate the internalization of climate change concerns within corporate decision-making processes.

A more comprehensive understanding of the expanded role of the board of directors has emerged, particularly in light of the corporate social responsibility mandate outlined in the Companies Act, 2013. This has highlighted their responsibility to stakeholders and the need for further exploration in this area through research. With India moving towards effectively implementing corporate social responsibility and institutionalising environmental social and governance obligations, the obligations of directors are yet to be fully internalised, with very few instances of enforcement. Lack of awareness among shareholders and stakeholders also results in no enforcement, limiting the climate action companies take and the scope of future research as well on this topic. The central objective is to promote collaboration between corporations and the State to facilitate compliance with India's national commitments related to climate change.

The future of research on the response of boards to the climate crisis in India depends on the standardization of their duties, ensuring compliance with existing laws. Failure to standardize may result in directors experiencing compliance fatigue, thus hindering their ability to take meaningful action to address the climate crisis. This research is ongoing and the future lies in understanding how the enforcement by the courts of the duties will unfold, with the starting point being directors' duties towards stakeholders. While penal sanctions and their enforcement remain important, empowering directors to take action through company law is the way forward.

REFERENCES

- 1. Anglo-Australasian Law Society. (2019, August 27). *Directors' duties and climate change: Keeping pace with environmental challenges.* UK Supreme Court. https://www.supremecourt.uk/docs/speech-190827.pdf
- 2. AP Pollution Control Board v. M V Nayudu (1999). AIR 1999 SC 812. Indiankanoon. https://indiankanoon.org/doc/764031/
- 3. Asian Development Bank (ADB). (2020, March 16). *OECD-ADBI-IRDAI Roundtable on Insurance and Retirement Saving in Asia* [Event]. https://www.adb.org/news/events/insurance-and-retirement-saving-asia
- 4. Barker, S. (2013). *Directors' duties in the anthropocene: Liability for corporate harm due to inaction on climate change*. Responsible Investmentbanking. http://responsible-investmentbanking.com/wp-content /uploads/2014/11/Directors-Duties-in-the-Anthropocene-December-2013.pdf
- 5. Benjamin, L. (2020). The road to Paris runs through Delaware: Climate litigation and directors' duties. *Utah Law Review, 2*, 313–381. https://cssn.org/wp-content/uploads/2020/12/16741-the-road-to-paris-runs-through-delaware-climate-litigation-and-directors-duties.pdf
- 6. Bradley, G. (2019). Corporate responsibility and climate change. *Journal of International Affairs, 73*(1), 155–160. https://www.jstor.org/stable/26872785

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- Breitinger, D. (2019, September 19). A new roadmap for corporate climate governance. World Economic Forum. 7. https://www.weforum.org/agenda/2019/09/the-need-for-corporate-climate-governance/
- Breitinger, D., & Litvak, K. (2018, September 18). It's time to put the climate at the top of corporate board 8. agendas. World Economic Forum. https://www.weforum.org/agenda/2018/09/it-s-time-to-put-the-climate-atthe-top-of-corporate-board-agendas/
- Brownstein, A., Neff, D., Miller, M., Lipton, M., Niles, S., & Rosenblum, S. (2018, March 20). Risk management and 9 the board of directors. *The Harvard Law School Forum on Corpora* https://corpgov.law.harvard.edu/2018/03/20/risk-management-and-the-board-of-directors-5/ Corporate Governance.
- 10. Cain, K., Iannone, K., & Lipton, M. (2019, August 24). Stakeholder governance and the fiduciary duties of School Forum directors. The Harvard Law Corporate Governance. on https://corpgov.law.harvard.edu/2019/08/24/stakeholder-governance-and-the-fiduciary-duties-of-directors/
- Carney, M. (2015, September 29). Breaking the tragedy of the horizon Climate change and financial stability 11. [Speech]. https://www.bankofengland.co.uk/-/media/boe/files/speech/2015/breaking-the-tragedy-of-the-horizonclimate-change-and-financial-stability.pdf?la=en&hash=7C67E785651862457D99511147C7424FF5EA0C1A
- Carbon Disclosure Project (CDP). (2021). Building back greener: India Inc. demonstrates climate resilience (CDP India annual report 2020). https://cdn.cdp.net/cdp-production/cms/reports/documents/000/005/595 12. /original/CDP_India_Report_2020.pdf?1615972085
- 13. Ceres. (2019, November 20). Running the risk: How corporate boards can oversee environmental, social and governance (ESG) issues. https://www.ceres.org/resources/reports/running-risk-how-corporate-boards-canoversee-environmental-social-and-governance
- 14. City Equitable Fire Insurance Company v. Maugham J. Lord Hanworth M.R., Lawrence and Romer L.JJ. (1925). [1925] Ch. 407. Court of Appeal. Vlexjustis. https://vlex.co.uk/vid/re-city-equitable-fire-803397845
- 15. Clarke, B. (2015). The role of board directors in promoting environmental sustainability. In B. Sjåfjell & B. J. Richardson (Eds.), *Company law and sustainability: Legal barriers and opportunities* (pp. 148–174). Cambridge University Press. https://doi.org/10.1017/CBO9781107337978.006
- Commonwealth Climate and Law Initiative (CCLI). (2021). *Primer on climate change: Directors' duties and disclosure obligations*. https://ccli.ubc.ca/wp-content/uploads/2021/06/Primer-on-Climate-Change-1.pdf 16
- Cooper, A., Williams, C., Mulholland, E., Eccles, R., & Barker, S. (2021, December 8). Directors' fiduciary duties and climate change: emerging risks. *The Harvard Law School Forum on Corporate Governance*. https://corpgov.law.harvard.edu/2021/12/08/directors-fiduciary-duties-and-climate-change-emerging-risks/ 17.
- Carrington Investment v. P K Prathapan (2004). 2004 Supp(4) SCR 334. India Code. Dale & 18. https://indiankanoon.org/doc/876454/
- Divan, S., Yadav, S., & Sawhney, R. S. (2021, September 7). Legal opinion Directors' obligations to consider 19. climate change-related risk in India. Commonwealth Climate and Law Initiative. https://ccli.ubc.ca/wpcontent/uploads/2021/09/CCLI_Legal_Opinion_India_Directors_Duties.pdf
- Economist Impact. (2015, July 24). The cost of inaction: Recognising the value at risk from climate change. 20. https://impact.economist.com/sustainability/net-zero-and-energy/the-cost-of-inaction Global Compact LEAD. (2012). A new agenda for the board of directors: Adoption and oversight of corporate
- 21 sustainability. The United Nations Global Compact. https://d306pr3pise04h.cloudfront.net/docs /news_events%2F9.1_news_archives%2F2012_01_27%2FLead-board-loresR.pdf
- 22. Gold, R. (2019, January 18). PG&E: The first climate-change bankruptcy, probably not the last. The Wall Street Journal. https://www.wsj.com/articles/pg-e-wildfires-and-the-first-climate-change-bankruptcy-11547820006
- Gutierrez, A. A., Hantson, S., Langenbrunner, B., Chen, B., Jin, Y., Goulden, M. L., & Randerson, J. T. (2021). Wildfire response to changing daily temperature extremes in California's Sierra Nevada. *Science Advances,* 23. 7(47), Article eabe6417. https://doi.org/10.1126/sciadv.abe6417
- 24. INSEAD, & Heidrick & Struggles. (2021). Changing the climate in the boardroom. https://www.heidrick.com/en /insights/sustainability/changing-the-climate-in-the-boardroom?utm_source=Press&utm_medium=Press+Release &utm_campaign=Changing+the+climate+in+the+board+room
- Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. Journal of 25. *Applied Corporate Finance, 14*(3), 8-21. https://doi.org/10.1111/j.1745-6622.2001.tb00434.x
- 26. Kapoor, G. K., & Dhamija, S. (2023). Company law & practice: A comprehensive text book on Companies Act 2013 (25th ed.). Taxmann.
- 27. Lagunas Nitrate Co. v. Lagunas Nitrate Syndicate (1899). [1899] 2 Ch. 392. http://www.uniset.ca/other/css 18992Ch392.html
- Lim, E. (2021). Directors' liability and climate risk: White paper on Hong Kong. https://doi.org/10.2139/ssrn.3983447 28.
- 29 McKenzie, M. (2021, March 30). Building effective climate governance: How to manage your responses to the financial risks and opportunities of climate change. KPMG. https://web.archive.org/web/20221005161608 /https://home.kpmg/xx/en/home/insights/2019/03/building-effective-climate-governance.html
- M C Mehta v. Kamal Nath & Ors (1996). [1997] 1 SCC 388. Indiankanoon. https://indiankanoon.org/doc/1514672, 30.
- M C Mehta v. Union of India (1986). AIR 1987 SC 1086. Indiankanoon. https://indiankanoon.org/doc/1486949/
 M K Ranjitsinh v. Union of India (2021). I.A. No. 85618 of 2020 in Writ Petition (Civil) No. 838 of 2019. Indiankanoon. https://indiankanoon.org/doc/165550376/
- 33. Metter, J. H., & Pugh, C. (2019, October 28). The tipping point? Climate change and directors' duties. Freshfields Bruckhaus Deringer. https://riskandcompliance.freshfields.com/post/102ft5x/the-tipping-point-climatechange-and-directors-duties
- 34. Ministry of Corporate Affairs. (2005). Report of the expert committee on company law. https://ibbi.gov.in/May%202005,%20J.%20J.%20Irani%20Report%20of%20the%20Expert%20Committee%20on%20 Company%20Law.pdf
- 35. Ministry of Corporate Affairs. (2012). Report of the Committee constituted by MCA to formulate a policy document on corporate governance. https://www.nfcg.in/UserFiles/Guiding-Principles-of-CG.pdf
- Ministry of Corporate Affairs. (2019). *National guidelines for responsible* https://iica.nic.in/images/National-Guidelines-on-Responsible%20Business%20Conduct.pdf business conduct.
- 37. Mulholland, E., Barker, S., Williams, C. A., & Eccles, R. G. (2019). Climate change and directors' duties: Closing the gap between legal obligation and enforcement practice. In R. LeBlanc (Ed.), The handbook of board governance: A comprehensive guide for public, private, and not-for-profit board members (2nd ed.), (pp. 335–368). John Wiley & Sons, Inc.

VIRTUS

- 38. Naniwadekar, M., & Varottil, U. (2016). *The stakeholder approach towards directors' duties under Indian company law: A comparative analysis* (NUS Centre for Law & Business Working Paper No. 16/03). National University of Singapore. https://law.nus.edu.sg/wp-content/uploads/2020/04/006_2016_Umakanth.pdf
- 39. National Statement by Prime Minister Shri Narendra Modi at COP26 Summit in Glasgow. (2021, November 2). Ministry of External Affairs. https://www.mea.gov.in/Speeches-Statements.htm?dtl/34466/National+Statement +by+Prime+Minister+Shri+Narendra+Modi+at+COP26+Summit+in+Glasgow
- 40. Organisation for Economic Co-operation and Development (OECD). (2015). *G20/OECD principles of corporate governance*. https://doi.org/10.1787/9789264236882-en
- 41. Organisation for Economic Co-operation and Development (OECD). (2022). *Climate change and corporate governance*. OECD. https://doi.org/10.1787/272d85c3-en
- 42. Prasad, D. (2018). Companies Act, 2013: Incorporating stakeholder theory approach into the Indian corporate law. *Statute Law Review*, *39*(3), 292–302. https://doi.org/10.1093/slr/hmx016
- 43. Radon, J. (2019). Climate action: What does it take? Legal teeth, not just corporate words. *Journal of International Affairs*, 73(1), 145–154. https://www.jstor.org/stable/26872784
- 44. Ranganathan, P. (2020, May 28). Amphan in the Sundarbans: How mangroves protect the coast from tropical storms. *The Wire Science*. https://science.thewire.in/environment/cyclone-amphan-sundarbans-delta-mangrove-trees-climate-change/
- 45. Rajeev Sumitra v. Neetu Singh (2016). I.A. No. 17545/2015 in CS(OS) No. 2528/2015. Indiankanoon. https://indiankanoon.org/doc/88568544/
- 46. Reserve Bank of India. (2022). *Discussion paper on climate risk and sustainable finance*. https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21071
- Richardson, B. J., & Sjåfjell, B. (Eds.). (2015). Capitalism, the sustainability crisis, and the limitations of current business governance. In *Company law and sustainability: Legal barriers and opportunities* (pp. 1–34). Cambridge University Press. https://doi.org/10.1017/CB09781107337978.003
- 48. Sarra, J. (2020). Audit committees and effective climate governance: A guide for board of directors. Canada Climate Law Initiative. https://ccli.ouce.ox.ac.uk/wp-content/uploads/2020/12/CCLI-Guide-for-Audit-Committees-on-Climate-Governance-December-1-2020.pdf
- 49. Securities and Exchange Board of India (SEBI). (2012). *Circular on business responsibility reporting*. https://www.sebi.gov.in/sebi_data/attachdocs/1344915990072.pdf
- Securities Exchange Board of India (SEBI). (2015). Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015. https://www.sebi.gov.in/legal/regulations/jan-2020/securities-andexchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-onjanuary-10-2020-_37269.html
- 51. Securities Exchange Board of India (SEBI). (2021). *Operational Circular No.: SEBI/HO/DDHS/P/CIR/2021/613*. https://www.sebi.gov.in/legal/circulars/aug-2021/operational-circular-for-issue-and-listing-of-non-convertible-securities-ncs-securitised-debt-instruments-sdi-security-receipts-sr-municipal-debt-securities-and-commercial-paper-cp-_51761.html
- 52. Securities Exchange Board of India (SEBI). (2021). *Securities Exchange Board of India (Issue and Listing of Non-Convertible Securities) Regulations, 2021.* https://www.sebi.gov.in/legal/regulations/aug-2021/securities-and-exchange-board-of-india-issue-and-listing-of-non-convertible-securities-regulations-2021_51764.html
- 53. Sjåfjell, B. (2020). Sustainable value creation within planetary boundaries Reforming corporate purpose and duties of the corporate board. *Sustainability, 12*(15), Article 6245. https://doi.org/10.3390/su12156245
- 54. Stout, L. A. (2012). *The shareholder value myth: How putting shareholders first harms investors, corporations, and the public.* Berrett-Koehler Publishers.
- 55. Stuart-Smith, R. F., Otto, F. E. L., Saad, A. I., Lisi, G., Minnerop, P., Lauta, K. C., van Zwieten, K., & Wetzer, T. (2021). Filling the evidentiary gap in climate litigation. *Nature Climate Change*, *11*(8), 651–655. https://doi.org/10.1038/s41558-021-01086-7
- 56. Sugarman, D., & McDougall, J. (2021, March 2). Climate risk and the transition to a low-carbon economy. *The Harvard Law School Forum on Corporate Governance*. https://corpgov.law.harvard.edu /2021/03/02/climate-risk-and-the-transition-to-a-low-carbon-economy/
- 57. Sullivan, R., Martindale, W., Feller, F., & Bordon, A. (2015). *Fiduciary duty in the 21st century*. United Nations Environment Programme Finance Initiative (UNEP FI). https://www.unepfi.org/fileadmin/documents /fiduciary_duty_21st_century.pdf
- 58. The Companies Act, 2013. (2013). India Code. https://www.indiacode.nic.in/bitstream/123456789 /2114/1/A2013-18.pdf
- 59. The Environment (Protection) Act, 1986. (1986). India Code. https://www.indiacode.nic.in/bitstream /123456789/4316/1/ep_act_1986.pdf
- 60. The Intergovernmental Panel on Climate Change (IPCC). (2022). *Summary for policymakers*. https://www.ipcc.ch /report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf
- 61. Velasco, J. (2015). A defense of the corporate law duty of care. *The Journal of Corporate Law, 40*(3), 648–703. https://scholarship.law.nd.edu/law_faculty_scholarship/1124/
- 62. *Vellore Citizens Welfare Forum v. Union of India* (1996). AIR 1996 SC 2715. Indiankanoon. https://indiankanoon.org/doc/1934103/
- 63. Wallace, P. E. (2009). Climate change, corporate strategy, and corporate law duties. *Wake Forest Law Review*, 44, 757–776. http://wakeforestlawreview.com/wp-content/uploads/2014/10/Wallace_LawReview_07.09.pdf
- 64. Wasim, R. (2019). Corporate (non)disclosure of climate change information. *Columbia Law Review*, *119*(5), 1311–1354. https://www.jstor.org/stable/26650740
- 65. World Economic Forum. (2019). *How to set up effective climate governance on corporate boards: Guiding principles and questions.* https://www3.weforum.org/docs/WEF_Creating_effective_climate_governance_on_corporate_boards.pdf
- 66. World Economic Forum. (2022). *The global risks report 2022* (17th ed.). https://www3.weforum.org/docs /WEF_The_Global_Risks_Report_2022.pdf

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