

The Climate Change Business: How is Climate Change and its policies shaping the adaptation of North-American Corporations?

Joana de Almeida e Paiva Vilas Boas

Masters in International Management

Supervisor:

PhD, Carla Sofia Lopes Leal Mouro, Invited Assistant Professor, Iscte-Iul

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Department of Marketing, Strategy and Operations

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## Resumo

Com a constante afirmação do impacto devastador que as alterações climáticas podem ter no nosso bem-estar coletivo, as empresas estão a ser cada vez mais pressionadas a agir. Esta tese tem como objetivo propor um quadro concetual para compreender os impactos das alterações climáticas na definição de políticas das empresas norte-americanas, considerando o contexto de neoliberalismo económico e político onde estas operam. A investigação baseouse em três estudos de caso: ExxonMobil, McDonald's e Levi's, com o objetivo de representar diferentes lados das respetivas indústrias. O estudo examina a forma como estas empresas respondem positiva ou negativamente ao compromisso ambiental e às motivações económicas. Para tal, foi utilizada uma combinação de métodos de investigação secundários e qualitativos, recolhendo dados para análise. Esta investigação ilustra se, e como, cada empresa foi forçada a redefinir a sua posição relativamente à questão climática através da pressão pública e de medidas regulamentares e, por conseguinte, a alterar a sua política. Até certo ponto, a posição negativa dos Estados Unidos em relação às alterações climáticas pode ter tido um impacto negativo na adaptação das empresas norte-americanas às alterações climáticas ao longo do tempo. Isto significa que a quebra de interesse por parte do governo levou a uma diminuição do investimento das empresas na redução das suas emissões de gases com efeito de estufa. No entanto, esta dissertação conclui que as empresas norte-americanas estão a mostrar lentamente o seu esforço de avançar para um futuro mais sustentável, embora isso seja mais visível em determinadas indústrias.

Palavras-chave: Alterações Climáticas, Corporações, Estados Unidos, Políticas, Neoliberalismo.

JEL Classification: F5, F6, F23

## Abstract

Through the constant assertation of the devastating impact climate change can have on our collective wellbeing, corporations are coming under increasing pressure to act. This thesis aims to propose a conceptual framework for understanding the impacts of climate change on the policy-making of North-American corporations considering the neoliberal political and economic context where these operate. The research was based on three case studies: ExxonMobil, McDonald's and Levi's, aiming to represent different sides of their respective industries. The study examines how these corporations have a positive or negative response to the environmental commitment and economic motivations. For this, a combination of secondary and qualitative research methods was employed, gathering data for analysis. This research illustrates whether and how each company was forced to redefine its position towards the climate issue through public pressure and regulatory measures and therefore, to change its policy. To an extent, the negative stance of the United States in acting on climate change may have had a negative impact on North-American corporations' adaptation to climate change throughout time. This means that the downturn of interest by the government led to adecrease in investment of corporations in reducing their greenhouse gas emissions. However, this paper concludes that American businesses are slowly showing their effort to move towards a more sustainable future, although this is more visible in some industries than in others.

Keywords: Climate Change, Corporations, Policies, United States, Neoliberalism.

JEL Classification: F5, F6, F23.

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# **List of Acronyms**

AGW- Anthropogenic Global Warming

**BP-** Beyond Petroleum

**CEO-** Chief Executive Officer

CH4- Methane

CO2- Carbon Dioxide

CSR- Corporate Social Responsibility

GCC- Global Climate Coalition

GHG- Greenhouse Gas

**EU-** European Union

IPCC- Intergovernmental Panel on Climate Change

MEP- Member of the European

NGO- Non-governmental Organisation

**SDG-** Sustainable Development Goals

**UN-** United Nations

**US-** United States

## **CHAPTER 1. Introduction**

Climate change is considered one of the most important environmental challenges the 21<sup>st</sup> century will face. As global warming arises, so does the evidence that targets human action and international business as the cause of the problem (Wright & Nyberg, 2015). Despite the economic damages and the extreme weather shifts, the levels of greenhouse gas emissions (GHG) keep getting higher and the corporate discourse has increasingly emphasized the notion of risk portraying climate change (Jaworska, 2018). This has led to demands for businesses to take action, with many now aligning their strategies to address environmental concerns through corporate strategy—defined as the long-term framework guiding a company's decision-making to achieve goals while ensuring competitive advantage. Corporate strategy now increasingly incorporates sustainability, recognizing that integrating economic, environmental, and social considerations not only mitigates climate risks but fosters innovation and resilience (Falkner, 2008).

As the ecological crises unfold, political and corporate responses remain unsuccessful – making business cooperation essential in order to make sustainable and conscious decisions to fight climate change. As sea levels rise and glaciers melt, the increasing temperatures affect wildlife and forests, leading to higher annual costs of climate change due to more frequent wildfires, floods, and droughts. Carbon dioxide emissions (CO2) have doubled their numbers since 1990 (Ritchie & Roser, 2017), demonstrating its impacts around the world. The impacts are, however, associated with large uncertainties (Bremer et al, 2021).

When speaking of climate change, modern businesses are often at the root of environmental problems, as large national and multinational corporations are among the key actors in this respect (Averchenkova et al, 2016). However, many critics also refer to capitalism, neoliberalism or industrialism as the economic forces that block environmental policies and see corporations' power as the support market that enables environmental agreements to expand. According to Averchenkova et al. (2016), support markets permit the expansion of environmental agreements by providing financial incentives and encouraging technological innovation through fostering international collaboration and promoting a broader societal engagement in sustainable practices. As Mouro and Duarte (2021) emphasize, nowadays organizations are strongly encouraged to adopt responsible production patterns in line with the United Nations' Sustainable Development Goals (SDGs), where these initiatives are part of broader efforts to fulfil social responsibility and sustainability objectives.

The growing demand for corporate action on climate change is particularly evident in the United States, where leading business groups have both supported international agreements like the Paris Agreement and resisted strict carbon reduction targets (Riley, 2017). Characterised by the Intergovernmental Panel on Climate Change (IPCC, 2007) as a "farreaching and severe change", the need for climate action demands commitment from all countries in the world – with a special connotation to the United States – and all sectors of different industries. There is however a great variability in how different corporations react to climate change. In the United States, leading business groups have, for example, supported the Paris Agreement and the Kyoto Protocol, but at the same time opposed the targets of carbon reduction. Such an approach is often justified by the barrier between the possible shortterm profitability versus the need to reduce GHG emissions (Riley, 2017). For this purpose, this thesis advances the idea that analyses of the role of corporations in climate policy adaptation must take into account the different factors that shape the business strategy. Considering not only the specific interests of business actors (Falkner, 2008), but also the way these are translated into lobbying plans and political strategies, this research project will provide a broad overview of the approach of three North-American corporations on climate change, with the aim of answering the primary research question: "How is Climate Change and its policies shaping the adaptation of North-American Corporations to Climate Change?"

In this way, the thesis examines the evolution of climate adaptation by NorthAmerican Corporations, highlighting the growth of policies that have been implemented amidst the increasing extreme climate (Mcdonald & McCormack, 2021). Key trends included the rise in adaptation laws, as well as their intersection with other policy the need for better funding structures, and the significance of strategic litigation.

In sum, this paper examines how U.S. Companies' adaptation policy-making is quickly expanding nationwide, characterized as policy experimentation in the early stages of addressing climate change impacts. Nevertheless, these efforts are expected to evolve significantly in the coming years since policymakers at all levels have been encountering numerous opportunities and challenges along (Averchenkova et al, 2016).

The *Literature Review Chapter* will provide a deeper understanding of the literature surrounding the role of corporations in climate change. The main focus of the review will be to provide a background perspective on the business engagement with the climate change agenda since the 1980s. This section will also introduce the idea that companies base their decision of adapting, or not, to climate change on diverse causes. Over time, as climate change became one of the biggest environmental challenges, corporations have developed distinct strategies and interests regarding the regulation of sustainable measures.

The *Methodology Chapter* will present the research design and how it will be implemented to answer the objectives displayed. A combination of secondary data and qualitative research will be applied. The use of secondary data will focus on examining accurate and credible pre-existing data, and the qualitative research will facilitate different paths of exploration, by enriching the evidence of some of the potentials and limitations of the topic.

The *Analytical chapter* will then present three different case studies: ExxonMobil, McDonald's and Levi's. Three case studies on different companies, that represent well-known businesses of each industry in the USA, will provide a historical overview of the adverse position of businesses in tackling climate change in this country. Given the fact that Companies have recently been more engaged in international debates on the environment and climate negotiations, the study about the three corporations will seek to provide a research-based theory on why corporations have contributed differently to the climate issue. In the end, a comparative perspective will be adopted of the different policy outcomes of each company, and overall conclusions will be advanced on the adaptation of North-American Corporations to climate change and its business strategies.

## **CHAPTER 2. Literature Review**

#### 2.1. The Role of Corporations in the Adaptation to Climate Change

Climate change refers to long-term shifts in weather patterns and average temperatures on Earth. It's primarily driven by human activities, such as burning fossil fuels (like coal, oil, and gas), deforestation, and industrial processes, which release greenhouse gases into the atmosphere (National Oceanic and Atmospheric Administration, 2023). These gases, including carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O), trap heat from the sun, leading to the warming of the planet. This phenomenon is often referred to as the greenhouse effect.

Climate change presents perhaps the most controversial challenge in the 21<sup>st</sup> century, primarily due to the conflict between economic growth and environmental sustainability. As a direct effect, there has been an increase reshaping in companies' business strategies across various aspects of their operations, from regulatory compliance and Corporate Social Responsibility (CSR) to supply chain management. As we know, most business activities consume natural resources and emit pollutants, leading many to hold companies responsible for global warming and the environmental crisis. In response, organizations have been showing bigger environmental concerns into CSR strategies by addressing social, environmental, and economic issues concurrently to create shared value forall stakeholders while mitigating negative impacts (Duarte & Mouro, 2022).

Embracing climate action not only helps companies mitigate environmental impacts but also enhances their competitiveness, resilience, and long-term value creation (IPCC, 2021). According to the Intergovernmental Panel on Climate Change (2017) there is worldwide consensus that climate change is actually happening, and that several sectors of the economy will be affected by its impacts. However, like with any other external event, climate change's impacts are uncertain and constantly changing, making it hard to assess with exactitude the future costs of increased greenhouse gas emissions (GHG). Llewellyn (2018) highlights that in recent decades there has been a sharp upturn in Earth's temperature (an increase of 0.8° Celsius), with increasingly visible consequences, which may explain the "amount of attention" that has been recently drawn to the issue. Thus, considering this magnitude of global warming issues, the interest has increased and culminated in the growth of a 'Climate change vs Companies' view, which will be examined in this paper.

Working towards this global sustainability requires a futuristic mindset that encourages seven billion people to think of water, energy and food in a sustainable way. For corporations, the question remains on how to allow the world's economy to grow without draining the Earth's natural resources and damaging the next generation's future. At the core, Berkhout and Hertin's (2006) model contributes to the view that by enhancing the understanding of dynamics between corporations, climate change influences and shapes the adaptation and integration of new policies and business strategies in businesses – which focuses on the adaptive responses of businesses to climate through operational, strategic and institutional adaptions. In this way, these different dimensions represent a way that businesses can respond to the challenges posed by climate change:

- Operational Adaptations: refer to changes that businesses make to their day-today activities, processes, and practices to respond to immediate environmental impacts or regulatory requirements.
- Strategic Adaptations: involve long-term planning and decision-making to align a company's overall Corporate Strategy with the risks and opportunities presented by climate change. These adaptations are about rethinking the core direction of the business to ensure it remains viable and competitive in a changing climate.
- **Institutional Adaptations:** refer to changes in the organizational structures, governance, and policies within a company to better integrate climate considerations into its corporate framework. This dimension emphasizes the role of institutions, rules, norms, and governance mechanisms in shaping how businesses respond to climate change.

In summary, these three dimensions - operational, strategic, and institutional - represent different levels at which businesses can adapt to climate change, ranging from immediate, practical changes in operations to broader shifts in strategy and governance structures. Together, they help businesses not only mitigate the risks associated with climate change but also capitalize on new opportunities that arise in a more sustainable global economy.

Sabin (2013) describes the issue as a 'debate between optimists and pessimists'. The different approaches companies take towards the costs of climate change are evident, with pessimists often overlooking the role of businesses in reducing GHG emissions (Diamond, 2005). On one hand, companies can approach climate change just as any other business issue, which means that they have to invest in it with the same financial criteria they would on any other issue. On the other hand, the company's approach can be to pursue climate-related actions without necessarily having to make a profit from it (Berger, Cunningham & Drumwright, 2017). Here is where stakeholders' interests and other factors come into play, hence why Pulver (2013) claims that one company's challenge can be another company's business opportunity. Corporations should commit to applying strategic changes for the emerging challenges that climate change can bring. Yet, can these strategies be economically profitable, socially liable, ethically feasible and ecologically sustainable?

Business sustainability is described by McIntyre and Ivanaj (2018) as one of the biggest challenges' corporations face nowadays. According to McIntyre, economic development needs to meet the requirements of the global population - without threatening the future of our generations - while also balancing the decisions of stakeholders and the achievement of business goals. Contextual factors also include a worldwide perspective that by changing their consumption and production patterns, corporations can have a significant impact on the worldwide reduction of GHG emissions.

A research by the Grantham Research Institute, "Multinational corporations and climate adaptation - Are we asking the right questions" (2015), was undertaken in order to understand how corporations are responding, or adapting, to the risks from climate change. The results demonstrated there are different outcomes for different companies. While some companies seem to understand the need for adaptation to the future climate impacts, others are resistant to the changes it can bring to their business strategies, investment decisions and economic turnout. According to Crick (2015), adaptation seems to be motivated by two different factors - external and internal. Internally, the CEO's and leaders of the companies are prone to want to maintain profitability and reduce production costs, and climate change is not likely to be

the main source of profitability and growth, even if they may gain legitimacy if they act visibly on the issue (Kolk & Pinkse, 2005).

Externally, the company's adaptation may also be connected to partners and investors pressure, negative experience of weather events, the firm's reputation or even legal aspects. In contrast, adaptation to climate change may also represent an additional challenge for business beyond adapting to economic changes, as it also involves its adaptation to doubtful impacts of possibly and irreversible environmentalchanges (Linnenluecke & Griffiths, 2010). Indeed Verra (2022), when analysing the corporations' responsibility, argues that if the business sector is responsible for most of the economic and investment decisions, it is the business sector that will also determine if we reduce our carbon footprint or stay along the existing one. In addition, as pointed outby Ihlen (2009), he also follows Verra's principle by asserting that if corporations are oftenseen as a part of the problem, they should be willing, and not reluctant, to adapt.

Corporations early responses to climate change were noticeably blocked by the fear of pessimistic economic turnouts. However, Michael Brune - executive director of the US environmental organisation "Sierra Club" (Rosemberg, 2016) - argued that over the past few years, assumptions and ideas have been refined by the current growing wave of companies that are acting to combat climate change. According to Simaens and Peters (2020), this shift reflects a broader recognition among businesses of their role in contributing to greenhouse gas emissions and the urgent need for sustainable practices. As a result, the importance of corporations acting on climate change has grown among the community due to the increasing global awareness of environmental degradation, rising public and regulatory pressures, and the acknowledgment that businesses are significant contributors to greenhouse gas emissions.

Also, in other studies, countries such as India, Russia and China are now recognizing and studying the increased risk of GHG emissions in their futures, since the influence of the Paris Agreement and Kyoto Protocol also raised pressure on several countries to do so. Following this argument, Mark Kenber, the CEO of The Climate Group, uses Dubai as an example: "The country is investing a lot in becoming energetically efficient. Even though it is economically dependent on fossil fuels, the oil companies are starting to recognise the importance of

adapting to climate change." (COP28, 2023). However, this adaptation to the issue is not a generalised process.

Kolk and Levy (2014) agree that more corporations have started to consider how climate change affects markets in which they operate, yet Watson (2023) provides a different perspective, by defending the only reason companies have been more focused on staying afloat rather than confronting the issue of climate change, is due to the global recession. However, this can also mean that the downturn of interest has the capacity to either decrease interest in GHG reduction as firms concentrate more on financial survival, or to increase interest, as companies seek to save money through energy efficiency projects. There is little evidence suggesting that companies can develop new green products not out of weather-related concerns, but rather because they are looking for new profitable products to sell in the market - firms are normally found to be more focused on protective measures towards their own businesses than on reducing their carbon footprint.

In fact, modern corporations have been successful in generating enormous wealth through "maximising shareholder value and operating within free capital markets" (McIntyre and Ivanaj, 2018). Nonetheless, the findings also suggest that this way of making profit has been creating irreversible damages in the natural environment over the past few years, due to businesses complying with minimum regulations and standards regarding climate change.

Returning to the consideration of the growing wave of nations and corporations which are acting to combat climate change; the Paris Agreement - an agreement negotiated by 196 countries in December 2015 - and the Sustainable Development Goals (September 2015) fully reflect the worldwide consensus on why, and how, we can achieve a sustainable type of living. However, not all countries have formally adopted these deals. The United States, despite accounting for 82 per cent (in 2002) of the GHG emissions - primarily from burning fossil fuels - decided to withdraw from the Paris Agreement in 2017. Such a decision was later explained by the past United States President Donald Trump, who stated: "the agreement was imposing draconian financial and economic burdens on the country" (Washington Post, 2022).

According to Kolk and Pinkse (2005), it was normal companies displayed signs of opposition to the idea of climate change until the late 1990s – businesses were more focused on political, non-market strategies –; however, in recent years, a range of positive responses have been rising to address reduced emissions and global warming. Nevertheless, when analysing the Kyoto Protocol – adopted in 1997 with the goal of committing countries to reduce GHG emissions – we can perceive United States' resistance since the country has not signed the protocol. When rejecting Kyoto in February 2002, President Bush reasoned with the following: "I oppose the Kyoto Protocol because it exempts 80 percent of the world, including major population centres such as China and India, from compliance, and would cause serious harm to the US economy." (Hovi et al., 2012).

Additionally, it is also important to mention that, for the United States, Corporate Social Responsibility (CSR) is often closely aligned with legal compliance, as suggested by Kolk (2016). Companies tend to view CSR primarily as adhering to laws and regulations rather than taking proactive steps beyond legal requirements. This approach stems from a relatively permissive regulatory environment, where limited governmental policies and regulations result in less external pressure for corporations to adopt broader CSR practices. Without the robust frameworks, U.S. companies might end up by prioritizing short-term profits over long-term social and environmental considerations, as they aren't compelled by law to do otherwise.

Similarly, in Joseph Romm's (2010) "Climate Change: What Everyone Needs to Know", the author makes remarks on the United States' heated position about "how scientifically relevant" the climate issue really is. This suggests that the negative stance of the United States governments towards climate change has had a negative impact on how some American companies responded to calls for adaptation, where only a small percentage has shown commitment to tackling the issue.

This resistance to change is a characteristic of organisational adaptation in general, and can have diverse causes. Nonetheless, regarding adaptation measures, the conflict between companies that approach climate change as a business opportunity and companies that approach it as a liability, is presented by Pulver (2013) as one of the reasons why the industries of food, oil and clothing – all known for theirhuge generation of GHG emissions through

manufacturing processes - have been lesssuccessful in developing and implementing internal arrangements on the climate issue. Hencethe general objectives of the present research are to examine to what extent climate change is changing, or impacting, the policy of North-American corporations, more specifically developing case studies on companies considered amongst the most pollutant industries, food,oil and clothing.

However, the increasing influence of international agreements and global standards, such as those driven by the United Nations or the European Union, has started to create additional pressure. These external forces push U.S. corporations to embrace more comprehensive CSR strategies, aligning them with global expectations even in the absence of domestic regulatory pressures. The next section will analyse the intersection between neoliberalism and corporate power within the context of climate change politics. Since the 1960s, neoliberalism has reshaped theglobal political-economic landscape by prioritizing free markets, competition, and minimal government intervention, making it increasingly difficult for states to regulate and coordinatepublic policies effectively. The chapter explores how neoliberalism, in the United States, hasinfluenced the environmental strategies of corporations and empowered non-state actors, lobbyists, and businesses to shape climate change policy.

#### 2.2. The Politics of Climate Change: Neoliberalism and Corporations

Since 1960, the neoliberal transformation of the global political-economic system has led to the inability of states to regulate, tax and coordinate a wide range of supportive public policies. Neoliberalism has its roots in classical liberalism (Sewpaul, 2015), and sees competition as a characteristic of human relations. Articulated by theorists such as Adam Smith, John Locke and David Ricardo, neoliberalism redefines citizens solely as consumers, whose actions are to buy and sell - a process that is made to reward merit and punish inefficiency. At its core, the ideology stands for a preference for markets over the government; economic incentives over cultural norms; and private business over collective action (Rodrik, 2017).

Neoliberalism has been used by a wide range of acknowledged figures - from Margaret Thatcher to Ronald Reagan and Augusto Pinochet, and the Clintons to the New Labour Party in the UK - which according to Glassman (2007), all sought to implement pro-market values, strategies and ideas designed to improve their country's international competitiveness. A neopluralist view of business power demonstrates that, to a large extent, non-state actors, lobbyists and interest groups are deeply rooted in the framework of environmental politics (Falkner, 2008). American politics in particular, with the wide sphere of organized interests in policy-making, have demonstrated to be a solid ground for the economic interpretation of politics. This Chapter will approach economic Neoliberalism as a foundation on which business organisations in the US develop their environmental policies. Since neoliberalism, as an economic policy, is used to analyse how the gains and losses are distributed between different business sectors, Rogowski (1989) defends that the policy can influence the corporations' preferences in policymaking decisions.

On a visit to Chile - one of the first countries in the world to extensively apply Neoliberalism (Hayek, 1944), made a remark on how "the freedom that neoliberalism offers are completely deceived, since it only turns out to mean freedom for the pike, not for the minnows". This follows the work of Robert McChesney, who argues Neoliberalism simply became "capitalism with the gloves off" when it entered the US political mainstream - during the reshaping of its economy (1979 to 1989)

- by providing an economic advantage to the wealthiest people. To that end, the effects were clear, as the poor grew poorer and the rich grew richer.



Figure 1. US wealth inequality over time, Quarterly Journal of Economics,

Over the past few decades that a neoliberal ideology has been influencing several American business strategies – driving complications to political, economic, and social problems. Its emergence impacted the political culture of the United States (Lapham, 2004), by leading corporations and wealthy donors to foster conservatism (see Figure 1)– arguing that "unhindered markets are best able to generate economic growth and social welfare" (Bockman, 2013). This has also led to neoliberalism destroying welfare programs since its supporters strongly work to deny protection to women, children, youth and the planet itself. By following this thought, there are clear signs that theAmerican neoliberal-based market is increasing pressure on the environment (Krauss, 2012).

Given as an example, the failure of Kyoto (1997) - the United States did not ratify the reduction of greenhouse gases of the Protocol (Amundsen and Lie 2010) - which confirms that despite the numerous international climate talks, the economically powerful (e.g. multinational corporations, lobbyists, stakeholders), are being allowed to monopolise and control the path of environmental change. In fact, it is believed that ExxonMobil – an Oil company known for its engagement in lobbying - played a big role in President George W. Bush's decision to drop out of the Kyoto Protocol in 2001. As such, it is demonstrated throughout this paper, the importance of understanding who is claiming ownership, and why, of the politics and discourse surrounding climate change. Nonetheless, since climate negotiations always tend to be driven by economic considerations, the questioning of environmental priorities seems long overdue. The implementation of a neoliberalist theory in the US produced structural changes by lowering the government's regulations on companies and facilitating their accumulation of capital - resulting in a considerable cultural shift.

During the 1960s, the environmental attention to the negative results of the excessive economic grew, especially to the side effects of pesticide, air, and water pollution. Similarly, to this situation, Argent (2002) argues that neoliberal settings also encourage the intense growth of productive farming, which is deemed to be the most appropriate way of generating extreme production - even if creating environmental destruction (Lawrence & Gray, 2001) and delivering one of the biggest shares (nine percent) of GHG emissions of the United States.



Figure 2. Total U.S Greenhouse Gas Emissions by Economic Sector, United States Environmental Protection Agency, 2016.

Interestingly, politicians who claim to "hate liberals" - the political type - have no problem with neoliberalism. This may explain why, in a world where political benefits and financial advantages are hands in hand, climate change occupies a weak position in the arena of neoliberalism, where some people, through the high position they wield, have stood in the way of combating the environmental issues. Contextual factors also show that the freedom of corporations to pollute is no accident (Lukacs, 2017): collective actions are extremely successful in America, where tax cuts, free trade deals and policies of privatisation have liberated corporations to collect enormous amounts of profit, while at the same time damaging the atmosphere. As such, it seems hard to work towards a positive collective response from corporations towards climate change, when business conflict if at the heart of the neoliberalist perspective.

A few further key examples can also explain why. In order to achieve such a goal, the US needs to undertake measures that do not seem politically possible e.g. taxing fossil fuels and carbon emissions and forcing energy companies to invest in renewable energy through governmental legislation. Nonetheless, the results suggest that these actions would have been possible a few decades ago - when the American government was not living under a neoliberal

era. In the early political literature of the United States, state policies were viewed as the primary site for underlying the balance of power between different groups.

When applied to climate change, neoliberalism – with the primary focus on winning, profiting and corporate narcissism - makes no space for the planet, other than the use of it (Hunziker, 2014). Notably, Sydee and Beder (2006) show their concerns on American neoconservatives promoting neoliberalism as a formula that can be applied to climate change while, along with big firms, promoting property rights and individualism, and attempting to defuse attention from environmental debates and discussions. In this way, the environmental sociologists Brett Clark and John Foster (2011) discuss that the source of our ecological crisis lies in the paradox of wealth in capitalist society, which expands individual riches at the expense of public wealth, including the wealth of nature.

In the process, a huge ecological rift is driven between human beings and nature, undermining the conditions of sustainable existence." The Global Climate Coalition, an international lobbyist group of businesses that opposes to emissions limits, employed the statement that climate change moderation would create significant economic damage in several American businesses (Begg, Woerd and Levy, 2005). As argued by Parr (2012), underpinning the massive environmental changes happening around us - of which neoliberalism is a huge controlling factor - is a socioeconomic condition. With this in mind, Switzer (1994) suggests that almost every sector of the economy relies upon a stable of federal and state lobbyists to review legislation – which could possibly explain its impact on the operations. He also makes another point, by addressing how hard it can be to decarbonise the economy in the US, while also addressing the global economic disparities.

In light of this consideration, the question remains of how to adapt correctly to climate change without having the economically powerful corporations blocking the way to environmental change. In conclusion, the market is perceived by Lohmann (2009), as the root of the environmental problems, instead of the solution. Neoliberalism simply encourages corporations to put a price on the environment, as an adequate response to the climate issues that we face. Furthermore, Beder (2009) relies on the idea that the ideology uses the market to solve the problems that the market has created, without considering the market itself.

In sum, a critical analysis of the relationship between neoliberalism and corporate influence on climate change policies is provided, by focusing particularly on the United States. At its core, this study aims to examine how neoliberal economic policies, which prioritize free markets, competition, and minimal government intervention, have shaped the environmental strategies of corporations and influenced political decisions regarding climate change. The primary objective of the text is to explore how neoliberalism, as an economic and political ideology, has affected the ability of states to regulate and implement effective environmental policies. By tracing the historical development of neoliberalism since the 1960s, the study investigates its impact on the global political economic system, particularly in reducing the state's capacity to regulate markets and coordinate public policies.

A significant focus of this chapter is the analysis of corporate power within the framework of environmental politics. It investigates into how neoliberalism has empowered corporations, lobbyists, and non-state actors, giving them substantial influence over environmental policies. Furthermore, the text scrutinizes the environmental consequences of neoliberal policies, particularly within the United States. It highlights how the emphasis on market efficiency and profit maximization has led to increased greenhouse gas emissions and environmental degradation. The study offers a critical evaluation of neoliberalism's role in exacerbating environmental problems, arguing that the ideology's reliance on market-based solutions and prioritization of economic growth over environmental protection have contributed significantly to the ongoing climate crisis.

The challenges of addressing climate change within a neoliberal framework are also a key area of exploration. The study discusses the resistance from corporations and the difficulties in passing regulations that would limit environmental harm, such as taxing carbon emissions and promoting renewable energy. Overall, the study aims to analyze the intersection of neoliberalism, corporate power, and environmental politics, examining how neoliberalism, by prioritizing markets and corporate interests, has not only contributed to environmental challenges but also poses significant obstacles to effectively combating climate change.

# **CHAPTER 3.** Methodology

#### 3.1 Methodology

In this chapter, the methodology and research design will be presented, focusing on how this will be implemented to answer the objectives displayed in the last chapter. The literature review highlighted there is a connection between climate change and its business strategies and the responses of North-American corporations.

#### 3.2. Methodology Research Design

In order to dissect the many layers the issue has, several factors affecting the stance of North-American corporations towards climate change had to be considered and explored further through case studies. This type of research was considered the most adequate to answer the hard-hitting question of how climate change is affecting the policy of North-American corporations and their economic stance. Considering that case studies provide a practical side to the research, they are also extremely useful when looking at real-world situations. Described by Moses and Knutsen (2007) as 'histories with a point', case studies can work as a raw and realistic approach to research projects, since they have a more realistic outcome than a conducted questionnaire or survey.

Additionally, by evaluating how sustainability can be incorporated into the core corporate strategy of corporations through detailed case studies, manages the researcher to explore the challenges and opportunities faced by firms in this industry when aligning their practices with environmental, social, and governance criteria - while emphasizing the importance of stakeholder engagement, innovation, and transparency in driving sustainable growth (Simaens & Peters, 2020). In the same way, Wholey et al. (2010) also underscore the significance of case studies in research, highlighting their ability to provide detailed and contextually rich insights into specific phenomena. They also emphasized how case studies can contribute to theory development by offering empirical evidence that refines existing

theories or generates new ones by providing a practical relevance of case study findings and advocating for their application.

Detailed to look specifically at a unique corporation, the case studies in this paper were narrowed down to specific Industries - Oil, Food and Fashion - in order to provide different perspectives on how these industries are approaching the climate issue. The analyses of multiple cases was elected since the aim of this thesis is to compare the position of three different companies, one representative of each industry. As such, the three organisations were analysed in this thesis through contextual analysis – which is used in order to uncover how various contextual factors influence and shape the subject being studied, specifically, the operational, strategic and institutional adaptations (Berkhout and Hertin, 2006) of the examined companies. The researcher sought to compare the corporations' approach regarding climate change by extracting relevant social and political information from secondary sources. This also led to decisions being made on what approach to go for, as will be detailed in the next section.

#### 3.3 Methodology Research Approach

It is important that the research approach lines up with the research design of the thesis. The approach is critical in order to enable the researcher to make informed decisions respecting the strategy and constraints of the study (Easterby-Smith et al, 2008). Within this paper, a combination of secondary data and qualitative research is applied, in which official data from credible sources is collected and examined in light of the research goals and literature review. The use of secondary sources will bring the researcher into contact with accurate and credible pre-existing data.

According to Hox and Beije (2005), when analysing documents, articles, and books, it is crucial to evaluate how well the data meets the requirements of the current research. Therefore, the thesis' secondary data is intertwined with illustrative quantitative results to validate the findings. The researcher also established a set of analytical practices and dimensions used across different organisations, using quantitative data as a way of illustrating the results gathered in the literature review and the variants of each case study.

Secondary quantitative data, collected through charts, tables and pre-existing statistical data will allow the different case studies to be undertaken with more understanding and providing a direction to the research. The use of secondary data in the methodology research approach was important when conducting the research for the three case studies, because it addressed the multidimensional nature of the phenomenon, where the researcher included relevant data from books, government reports, newspaper articles, university published-studies and academic articles.

In this way, the secondary data was highly valuable by allowing to make concrete a background context for each case and supporting a comparative analysis between the Companies. Through the analysis of existing studies, datasets, and benchmarks, the researcher managed to establish four points of comparison between the Companies: *Corporate Influence and Responsibility*, *Public Pressure, Shifts towards Sustainability* and *Engagement with Stakeholders and Collaboration*. This comparative analysis helped validate the results or highlight deviations from what was expected that may be significant (Yin, 2018). Additionally, the analysis was used as a way of benchmarking performance and practices against/in favour of the different industries, where different practices were identified as well as the areas for improvement of each company.

As it was mentioned before, the methodology employed in this study was grounded in a combination of qualitative research and secondary data analysis. The study was primarily based on secondary data sources, including:

- **Company Websites**: Corporate websites of ExxonMobil, McDonald's, and Levi's were crucial in providing up-to-date information on each company's climate strategies, sustainability goals, and corporate responsibility reports. These websites often serve as official channels where companies share their environmental and sustainability initiatives, providing a direct source of company-stated actions and policies.
- Grey Literature: In addition to formal publications, grey literature, such as industry reports, government documents, and NGO publications, was used to capture independent assessments of corporate environmental practices. Reports from NGOs like Greenpeace, IPCC, EU and GCC offer critical evaluations of corporate activities,

often highlighting areas where companies fall short or excel in their climate commitments.

- Annual/Sustainability Reports: The study heavily relied on corporate sustainability reports and annual reports from the three companies. These documents outline corporate strategies, operational details, and targets related to climate change, providing rich data on how companies publicly position themselves with respect to environmental responsibility. For example, ExxonMobil's energy outlook reports, McDonald's corporate social responsibility reports, and Levi's sustainability documents were key sources.
- Academic Studies: Scholarly articles provided theoretical frameworks and empirical evidence to support the analysis. Studies assessing corporate environmentalism, climate-related corporate policies, and business responses to sustainability were referenced to give a robust academic context to the practical data extracted from corporate and grey literature sources.
- News Articles and Media Coverage: To supplement the more formal sources, news articles and media coverage were consulted. These sources often provide real-time, critical perspectives on corporate actions, including public reactions to announcements or environmental controversies involving these companies.

# **CHAPTER 4. Case Studies**

#### 4.1. The Oil Industry: ExxonMobil Case Study

During the past few decades, a shift towards more economically driven neoliberal policies has created changes in governance structures (Zawada, 2010). As part of this change, issues regarding the corporations' responsibility have emerged as a prominent aspect of the neoliberal agenda of developed countries. In this agenda, the withdrawal of the state emphasises the need for more "responsibility" not only from individuals but also from corporations (Lemke, 2011). Consequently, this emergency in the role of private actors - such as oil corporations - has led to lobbying against policies that tackle climate change. Oil companies play a significant role in climate change due to their extraction, production, and distribution of fossil fuels, which are major contributors to greenhouse gas emissions. Here are several key points regarding oil companies and climate change.

For some oil companies, the economic risks of rising weather-related claims have become apparent (Begg, Van Der Woerd and Levy, 2005). It is relevant, however, to the fact that powerful forces within society can combine to distract the policymakers and the United States public (Antilla, 2005). By creating a political impasse, certain businesses have managed to benefit in order to dispute the scientific consensus on climate change. Munich Re - a German Reinsurance Company - estimates that climate change could cost \$300 billion by 2050 (Cortese, 2022), through impacts on the oil industry. The World Resources Institute also estimated that interest groups and shareholders which lead oil companies may lose up to 6 per cent, if not more, of the value of their investments because of regulatory measures that address climate change. Cortese (2022) also claims 15 per cent of the market capitalisation of these companies could be placed at risk because of the same issue – which has increasingly led to self-interest negotiations.

As previously mentioned, the main part of the challenge in organising business voices in climate-related negotiations originates from the conflict between those corporations that see climate change as a liability and those that see it as a business opportunity. The oil industry illustrates this problem. As fossil fuels were identified as a source of the global warming problem (Uzzell, 2005), the oil industry started lobbying associations against the climate change policy in the United States. The Global Climate Coalition (GCC), and the American Petroleum Institute are examples of institutions which supported this cause. The GCC, formed in 1989, aimed to lobby the American Congress against climate regulatory measures, while also representing big fossil fuel users and producers. Known for regulating their own economic performance, and governing enterprising individuals, oil companies have manipulated the climate issue over the years in order to maintain its controversy. According to Falkner (2008), the importance given to fossil fuel energy in the global economy contributed to the privileged position of energy companies, when compared to all business groups. Such a position has been widely recognised in climate politics, by its structural power being translated into political influence.

ExxonMobil is one of the largest publicly traded oil and gas companies in the world, formed in 1999 through the merger of Exxon and Mobil. It engages in the exploration, production, transportation, and sale of crude oil, natural gas, and petroleum products. With a global presence, ExxonMobil also focuses on chemical manufacturing and renewable energy research, while facing both criticism and support for its role in the energy transition and environmental impact. The company has been a significant player in shaping the global energy market and remains influential in the industry.

When it comes to climate change, ExxonMobil – the largest oil and gas company in the world by market capitalisation – has stressed the lack of proof for the issue from the beginning. Due to its size and influence on public policy, it is estimated that the company is lobbying approximately 50 companies – having a total of \$11,150,000 million in expenditures worldwide). Between 1998 and 2020, the company actively spent millions in organisations – which worked to create a sense of uncertainty about the science among GHG emissions – meaning less pressure on the government to regulate theoil industry. As a result, it is believed that ExxonMobil played a big role in President George W. Bush's decision to drop out of the Kyoto Protocol in 2001 (Borger, 2001).

A new investigation shows that the company - through their own research back in 1977 led them to make accurate predictions about the impact climate change could have in the future (Thorat, 2001). However, this knowledge did not prevent the company from spending several decades refusing to acknowledge climate change, as they are now the leading opponents of the issue (Hall, and Persson, 2015). For this specific reason, ExxonMobil faced a European Union (EU) parliament ban in 2019, after the company failed to show up for its first climate change denial hearing, that occurred in Brussels (Neslen, 2019). The ban was submitted by members of the Green European Parliament group, which declared that the company, despite of knowing the damage their oil exploitation was causing, denied the science and existing evidences.

In addition, the Green MEPs also defended that the company should not be allowed free access to the European Parliament – since it has funded campaigns to block action on climate change and failed to attend the court hearing. However, as a counterargument to the company's negative approach to climate change, ExxonMobil surprised the critics back in 2002 by announcing a \$100 million grant to the Global Climate and Energy Project at Stanford University. However - given the fact that the Company did not have a positive stance towards Climate action over the following years, some may say this decision was not representative of a real shift towards climate change policy, but instead of an arrangement with the George W. Bush Administration to quiet the public.

On ExxonMobil's website, the company's GHG emissions are published annually as a way of advertising their 'green approach' to reducing emissions. However, Skidvin and Skjaerseth (2018) emphasised that the group continues to receive support from the oil industry and the United States Congress, to delay any action involving climate change.

(a)	Internal	Peer- Reviewed	Non- Peer-	Advertorials	(b)		Internal	Peer- Reviewed	Non- Peer-	Advertorials
<sup>1976</sup>			Reviewed		<sup>1976</sup> Г	-			Reviewed	
1977 —					1977 -					
1978 —					1978 -	_				
1979 —	=====				1979 -	- 1				
1980 —					1980 -	-				
1981 —					1981 -	- 1				
1982 —		<u></u>			1982	- 1				
1983 —					1983 -	-				
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1987 —					1987 -	-				
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1989 -					1989 -	_				
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2013					2013					
2014					2014	_				
2015 -					2015	_				
— N	o position cknowledge		_	Acknowledge Acknowledge	(including rea and Doubt	ison	able doubt)		<ul> <li>Reasona</li> <li>Doubt</li> </ul>	able Doubt

*Figure 3. Timeline of the overall positions of all 187 documents on AGW as (a) real and human-caused and (b) serious, Environmental Research Letters, 2019* 

Published by two Harvard University (Fig.3) researchers, a study consisting of nearly 200 documents alleged that ExxonMobil systematically mislead the public about climate change for 40 years (Mosbergen, 2017). The authors of the study, Naomi Oreskes and Geoffrey Supran, initiated the research after the energy company challenged critics to compare their own peer-reviewed documents, with what was publicly said about that science. As a result, the research demonstrated that America's largest oil producer repeatedly made "false

interpretations" of their business risks for anthropogenic global warming (AGW), while simultaneously acknowledging its risks behind closed doors (Supran and Oreskes, 2017). When considering Figure 3, we can conclude that ExxonMobil peer-reviewed several documents as *(a) real and human-caused;* projecting the idea that the company was responsible for less AGW than stated by the scientific community and contributing to the apparent human influence on global climate. In addition, the Harvard researchers made their findings clear by stating that ExxonMobil has "misled the public about the state of climate science and its implications". Their study outcome also provided a staggering discrepancy when compared to the original publications peer-reviewed by ExxonMobil.

After the study was concluded, the researchers (2017) defended that the available documents show a significant inconsistency between what is presented to the public, and what Exxon Mobil's scientists discuss. When asked to react to the Harvard study, the company answered with a written statement on which they defended that the study was paid, and written, by activists leading a campaign against the company. Supran (2017), argues this study led shareholders to sue the company claiming the false statements were in order to increase profit. Following Supran's view, Oreskes (2017) affirms ExxonMobil only recognises climate change privately. Nowadays, ExxonMobil executives are still undermining climate science even after the company acknowledged the link between fossil fuel emissions and climate change (The Guardian, 2023).



Figure 4. The 50 biggest companies influencing climate policy, InfluenceMap, 2015

As illustrated in Figure 4, and also mentioned before, ExxonMobil is amongst the most influential climate lobbyists. Assessing 50 companies, the map lays out the companies according to how strongly they support the climate change policy, and how engaged they are in doing so. By analysing the figure in more detail, both Shell and BP are situated near ExxonMobil when it comes to policy engagement activity. Nonetheless, studies show BP and Shell have been increasingly shifting their stance on climate by recently contributing \$75 million to curb the impact of global warming (Vaughan, 2018). In addition, it may be of interest to analyse the past of BP, Shell and ExxonMobil towards climate change to see what, and why it has changed.

Topic	BP	ExxonMobil	Shell		
Public May 1997		NA	September 1997		
recognition					
ofthe					
climate					
problem					
Current view	Precautionary principle	Uncertain;	Precautionary principle		
on climate		precautionary			
science		principle precludes			
		science			
View on	Is supported	Labelled as	Considered to have real		
Kyoto		ineffective	policy commitments		
protocol					
Membership	Left in 1996	Stayed until the	Left in April 1998		
of Global		end			
Climate					
Coalition					
Type of	Measurement and	No climate	Measurement and		
climate	external monitoring of	measures; points at	external monitoring of		
measures	emissions; renewable	emission	emissions; renewable		
	investments, especially	reductions in	investments in solar,		
	solar and hydrogen	refineries, and	wind, biomass and		
		research expenses	hydrogen		

Figure 5. Overview of Oil Companies' Climate Positions, ScienceDirect, 2010



Notes: In million tonnes of carbon dioxide equivalent. Scope 1+2 include direct emissions and power supply. Scope 3 accounts for emissions from oil products sold, but does not necessarily include emissions from oil products sold but sourced from barrels produced by other companies.

# Figure 6. Big Oil's Comparison of greenhouse gas emissions in 2019, Brazil Energy

With the increase of public pressure and regulatory measures, we can notice in Figure 5, that the approach of some oil companies has been changing over time. The table illustrates both BP and Shell publicly recognised climate change as an issue, soon after the implementation of the Kyoto Protocol. Likewise, BP and Shell were the first companies in the industry to openly recognise that measures should be taken to reduce GHG emissions (Begg, Van Der Woerd and Levy, 2005). Following their statements, specific group GHG targets were created, as well as a strong investment in renewable energy. Located on the other side of the spectrum, ExxonMobil demonstrates no adaption to climate change. The table indicates ExxonMobil's uncertain view in adopting green measures, insisting the measures need to be justified by science. This negative stance adopted by ExxonMobil has contributed to the company's controversial record of GHG emissions, as represented in Figure 6.

The oil industry has been a critical player in the widespread controversy towards climate change. They play a complex and multifaceted role in climate change, as both contributors to greenhouse gas emissions and potential agents of change through investment, innovation, and policy engagement. With the current neoliberal form of governance, oil multinationals such as ExxonMobil control considerable economic, organisational and technological resources which, when applied, can play a major role in decision-making policies.

Although ExxonMobil is still choosing to deny climate change, other oil companies appear to be taking the issue seriously. In recent years, corporations like BP and Shell have invested approximately \$110 billion in green and renewable energy (Rosen, 2020) - and the numbers are predicted to grow bigger. In contrast, by not changing its approach to combat the climate issue, ExxonMobil has become a shareholder target – illustrated as the number one threat to feasible climate policy by green NGOs. This illustrates how some companies do not lack capabilities to move towards change in structure and innovation to climate adaptation; it is more a question of maintaining a set of values (such as (dis)trust in science and a mercantilist approach to transactions) as foundational of their organizational culture (Orekeke et al., 2011). Their approach reflects the ideology that some corporations' interests and shareholders' profit lead over the needs of the population, and that this may result in not feeling sufficiently pressured by public opinion to change their corporate strategy due to the weak U.S. policies and enforcement of regulations on climate change adaptation (Abreu et al., 2021).

To conclude, ExxonMobil's current position on climate change reflects a shift toward acknowledging the need for energy transition, even though we could see that some critics argue the pace is slow. The company has committed to reducing its greenhouse gas emissions, setting goals to achieve net-zero emissions by 2050 in its operations. The company is investing in carbon capture and storage (CCS) technology, hydrogen, and biofuels as part of its strategy to address climate change. However, the company continues significant oil and gas production, which draws criticism from environmental groups advocating for faster action toward renewable energy adoption.

#### 4.2 The Food Industry: McDonald's Case Study

The modernisation of the Food Industry has raised some important questions about socioecological and politico-economic transformations taking place in the United States. The starting point is that, based on economic interactions, agricultural environmental pressures are amongst the most controversial areas of lobbying and policymaking (Loris, 2016). With the adaptation of neoliberalist measures, food production has become increasingly problematic. Consequently, the Food Industry has been able to cover its agricultural production through the dominance of corporations and policy liberalisation, even if damaging the climate by doing so. In recent decades, a neoliberalist-based food production aimed at the intensification of production and the complex market integration, in order to increase profitability and maximise its production.

Although the Food Industry has seen a rise in production since World War II, several problems – including its contribution to GHG emissions - have started to recently affect the industry (Figure 7). Never has so much land been used by farmers and so much food been produced by the industry. As such, by overproducing certain foods, the industry began to cause great damage to the environment due to deforestation, water scarcity from farming and livestock methane (CH4) emissions.



# Beef has the biggest climate impact

*Figure* 7. Intergovernmental Panel on Climate Change study on GHG emissions per kilograms of food, Poore & Nemecek, Science, 2019

The Intergovernmental Panel on Climate Change (IPCC, 2019) argues that people should eat less meat, cheese, butter and milk. As illustrated in Figure 8, avoiding meat can be one of the best responses to reduce our personal impact on the planet. Ian Monroe, an Earth Systems lecturer at Stanford University, argues that methane – a gas released by cows - is 80 times more harmful to global warming than CO2. As a result, livestock pollution is playing a heavy role in climate change, besides what has already been seen from floods, wildfires and droughts. Cattle also has a significant impact on forests all around the world, since many farmers are deforesting their land to raise animals. Through slash-and-burn, – a method of farming that involves burning trees in order to clear the land – agriculture is responsible for the loss of 50 acres of land every day around the world (Bennet, 2017). Since fires produce carbon dioxide – a GHG - it is estimated that around 25 percent of the world's total GHG emissions comes from deforestation alone. Yet, despite the fact that forests play a crucial role in the mitigation of climate change, thousands of square miles of forest are still being cleared out at an alarming rate – resulting in the lost approximately 8 million acres every year (Butler, 2018).



Figure 8. Summary of the main forest's pressures in different deforestation fronts, Mongabay, 2015

The research collected on animal agriculture since the turn of the century has been constantly increasing. Here are a few examples related to the Meat Industry, relevant to this chapter:

- United States methane emissions from livestock and natural gas are nearly equal (The United States Environmental Protection Agency, 2017);
- Animal agriculture is responsible for up to 91 percent of Amazon Rainforest destruction;
- Growing feed crops for livestock consumes 56 percent of water in the United States;
- A farm with 2,500 dairy cows produces the same amount of waste as a city of 411,000 people (Environmental Protection Agency, 2014);
- 96 percent of the United States' soil erosion comes from food production (Global Change Program, 2014).

Fast food companies have also been contributing to deforestation – particularly to tropical rainforests (e.g. Amazon) – for a number of years and only recently have their actions been widely recognised by the media. Around 84 million Americans consume fast food every day, but the environmental harm of convenience food to the planet has hit unsustainable levels (Coller, 2015). To put this in perspective, Coller indicates that if cows were a country, it would be the third largest emitter of GHG emissions (Busby, 2019). Fast food giants deliver slow responses to their out-sized environmental footprints.

As a result, companies like McDonald's have been pushed beyond the normal boundaries of their business to address the big problems that currently exist in our environment, such as climate change and deforestation. In addition, Heike Cosse - a global investor from Aegon Asset Management – stated that, if we are to meet the global climate ambitions set by the Paris Agreement, and ensure the availability and sustainable management of global water resources, then global fast good brands need to take concrete action to manage supply-chain emissions and water impacts.

McDonald's is the world's largest fast-food restaurant chain, known for its burgers, fries, and quick-service model. Founded in 1940 by Richard and Maurice McDonald, it has since grown into a global brand with over 39,000 locations in more than 100 countries. McDonald's menu has expanded over time to include healthier options, breakfast items, and regional specialties.

In the late 1980's, McDonald's had its first clash with society. At the time, in 1970, Friedman, stated that the only social responsibility of business was to use resources and engage in activities created to increase profits. Futhermore, activist groups and nonprofit organisations emerged, raising awareness that McDonald's was not dealing with deforestation and climate change as should be expected (Langert, 2019). From this point onwards, the company was caught in the middle of several negative critiques by powerful NGOs, such as Greenpeace. As these social issues arose, the company grew without knowing how to deal with the controversial topics. Criticising the Food Industry for neglecting climate change and being one of the sectors with the highest emission rates, a coalition of global investors has recently urged companies like McDonald's, Burger King and KFC to reduce their GHG emissions. In their plan, the investors want the companies to create time-bound targets for reductions and publicly commit to achieving these targets.

According to a joint letter by the sustainable organisation, Ceres and the Farm Animal Investment Risk & Return (FAIRR), McDonald's was severely critisised by expanding its company – up to 14,000 restaurants in the United States – without firstly diminishing their environmental impacts (Michael, 2019). The company has also been a target of judgment due to their lack of plant-based options for customers, with the biggest fast-food chain not offering a single meat-free option in the United States. Other studies show the average American eats three burgers per week, which requires around 21 trillion gallons of water and 682 million acres of land for livestock, and produces approximately 337 billion of GHG emissions (Molidor, 2019). As a result, critics have built on the idea that McDonald's relies on greenwashing - even if plant-based alternatives have a much lower carbon footprint that meat-based options - by providing little motivation to adapt as they continue to push meat-burger sales.

Transforming one of the largest fast-food chains in the world into a sustainable business is not easy (Langert, 2019). However, the past year has seen a tremendous change from McDonald's. The company became the first restaurant in the world to acknowledge climate change by setting science-based targets with the aim of reducing GHG emissions. The target aims to prevent the emission of 150 million metric tons of GHG by 2030, through the implementation of sustainable projects and collaboration between farmers and suppliers. This is equivalent to taking 32 million cars off the road during an entireyear. In order to reach this target, the company will work towards sustainable packaging, restaurant recycling and sustainable agriculture methods. As there is growing evidence that eating less meat could be a quick way of reducing climate pollution (Harrabin, 2022), McDonald's has also been working towards a global commitment to sustainable beef. The company has recently launched a "Sustainable Beef" Project with the goalof empowering beef producers to extend their own beef sustainability.

The Food Industry is professionally organised and has a significant role in lobbying actors and agencies of the state, but the growing awareness of climate change has led the industry to deal with socio-economic and socio-ecological issues, which can no longer be ignored. Consequently, despite the delay, McDonald's is starting to set a sustainable pace for other food companies to follow. By partnering up with several governments, industries and nongovernmental organisations, the company is showing its effort in moving towards a sustainable future. In terms of organizational challenges (Okereke et al, 2011), it illustrates an integrated approach to change, not only developing capabilities to tackle the needed dimensions of change, but also reframing organizational values (e.g., more sustainable, local production, no-meat options) and adapting structures and processes required for innovation.

In conclusion, McDonald's is clearly taking steps to address climate change by setting ambitious sustainability goals, including reducing its greenhouse gas emissions across its supply chain. The company aims to reach net-zero emissions by 2050 and has committed to using more renewable energy in its operations. McDonald's is also working to source ingredients sustainably, such as deforestation-free beef and sustainable packaging, while focusing on waste reduction and recycling. Despite these efforts, the company faces pressure to accelerate its climate initiatives, particularly in reducing emissions from agriculture and beef production, which are significant contributors to its carbon footprint.

#### 4.3 The Fashion Industry: Levi's Case Study

The widespread consensus that the world is being affected by human-induced emissions of GHG calls for the urgent need for the Fashion Industry to adopt a sustainable form of consumption and production (Govender, 2012). The industry requires resources in a non-sustainable way – high GHG emissions and intensive water consumption. The use of material goods correlates to the individual's actors to meet their human necessities – which is an inherent characteristic of human behaviour. Therefore, the adoption of a neoliberalist way of production has had deep impacts in the Fashion Industry (Montero, 2011). By mainly emphasising the importance of transactional relationships and economic dimensions, the industry operates at the weak end of the sustainability spectrum and denies the possible impacts of climate change. As a result, the industry has been required by several actors to adopt green measures due to its rapid change in recent years – which led to a significant impact on the environment.



Figure 9. The funnel metaphor, Holmberg and Robert, 2019

Considering it a major source of water pollution, Greenpeace (2021) classifies the fashion industry as a threat to the global ecosystem and human health. In Figure 9, the funnel metaphor aims to illustrate the sustainability challenge that the sector faces in today's world (Gardetti and Torres, 2013). It demonstrates that, if the consumption and production behaviour of the industry keeps increasing, the consequent impacts on the environment will also increase, which will result in a limited space for the industry to deal with future impacts.

Even though the Oil Industry's reputation is far worse, the Fashion Industry has also been making considerable impacts in the warming of the planet – contributing with 1.7 billion tons of carbon dioxide in 2015 (Pulse of the Fashion Industry Report, 2017). To put that in perspective, the industry produced five percent of the worldwide manmade CO2 emissions in 2018, which is more than the emissions of the aviation and shipping business combined (Petty, 2019). By analysing the environmental impact of clothes manufacturing, such as Levi's jeans, there is a strong eminence of the large proportion of GHG emissions and water usage associated with the production of polyester and cotton (Figure 10 and 11). Levi's, officially known as Levi Strauss & Co., is an iconic American clothing brand best known for its denimjeans. Founded in 1853 by Levi Strauss, the company has expanded its product line to includevarious apparel and accessories, maintaining a strong presence in the global fashion market.

Okafor (2024), demonstrates that cotton – as an agricultural crop – is 300 times more warming to the environment than CO2; while polyester – a plastic made from oil – contributed to 655 million tons of CO2 emissions in 2014, due to the high need of energy for extraction. Clothing manufacturing is responsible for 11 percent of wastewater discharged and the use of 2.4 billion tons of water every year (Bomgardner, 2018). Some critics say that it is alarming the fact that not enough is being done by the big Fashion companies to solve the pollution problems.



# The entire lifecycle of one pair of Levi's® 501® jeans equates to:

Figure 10. Levi's 501 Jean Lifecycle Impact, Levi Strauss & CO, 2015



Figure 11. Environmental impact of a pair of Levi's jeans, Sustainability Fabric,

In 2016, the industry's value was \$4,621 per capita, in the United States – compared to the \$100 in the developing countries. Hence why the manufacturing industry is a big driver of employment and economic development, and often a subject to international trade agreements and shareholders' interest. Initiated by UN Climate Change, a program towards climate action was created in order to convey fashion companies and stakeholders to develop a unified stance on climate. The program aims to connect companies in the Fashion Industry to team up in initiatives that will identify new areas for climate action. Meetings between fashion representatives have then revealed a consensus that a joined effort across the sector could lead to the reduction of GHG emissions. As a result, companies all around the world started to change in order to adapt the ideas of the fashion movement. The goal is to have a small impact on the climate, by having in accountability the materials, labour, and the source of organic and recycled materials.

Even if tackling environmental issues in the world of fashion can be hard, the industry has been working towards sustainable challenges in a number of ways. Due to publications released on the topic and several NGOs, the industry is now more aware of the ecological impacts that fashion consumption and production can have (Gardetti and Torres, 2013).

However, by analysing several globalised and established fashion brands, there is an increasein companies, such as Levi's, that are adopting solutions for sustainable fashion. (Cataldi, Diclson & Grover, 2013). In order to make an appeal for a more sustainable fashion industry, Levi's has proposed anew set of targets for 2025. Given that the fashion company has more than 500 suppliers worldwide, it can be difficult to access the exact amount of water that goes into the productsthat are being fabricated. However, Levi's decided to take one step forward and institute waterquality standards, based on the Environmental Protection Agency – which estimates a cut of96 percent of their water usage for some pieces of clothing. Later on, Levi's director Chip Bergh, justified the measure by stating: "We believe that business has the opportunity and theresponsibility to be a force for positive change in the world" (Parnell, 2015).

The Levi's case study emphasizes the urgent need for the industry to adopt more sustainable practices. The fashion industry, known for its significant contributions to greenhouse gas emissions, water pollution, and resource depletion, operates under a neoliberal framework that prioritizes economic growth and transactional relationships, often at the expense of environmental sustainability. Levi's, as a major player in the industry, exemplifies both the challenges and the potential for change. The company's recent initiatives, such as setting ambitious water usage reduction targets and adopting sustainable production practices, demonstrate a growing awareness and responsibility within the industry, with investments in both operational and strategic adaptations. However, the scale of the environmental impact—evidenced by the industry's contribution to global CO2 emissions and water consumption—highlights that much more needs to be done, including at a more institutional level (Berkhout & Hertin, 2006).

In sum, Levi's is actively working to address climate change through sustainability initiatives focused on reducing its environmental impact. The company has set goals to cut carbon emissions across its supply chain and operations by using renewable energy and improving energy efficiency. Levi's is also committed to reducing water usage through its Water<Less<sup>TM</sup> technology and promoting sustainable cotton farming practices. Additionally, the company encourages circular fashion through its buy-back and recycling programs. Despite these efforts, Levi's continues to face challenges in reducing emissions related to raw material production, particularly in the denim supply chain.

#### 4.4 ExxonMobil, McDonald's, and Levis commonalities and differences

In examining the intersection of corporate influence and environmental responsibility, it's essential to delve into a comparative analysis of the three prominent corporations examined in this study - ExxonMobil, McDonald's, and Levi's - highlighting both their commonalities and differences in relation to environmental sustainability practices. By exploring their corporate influence, public pressure responses, shifts towards sustainability, and engagement with stakeholders, we can gain a clearer understanding of how these global giants are navigating their environmental responsibilities and the varying degrees to which they are advancing towards sustainable practices. As such, this analysis will reveal insights into how diverse sectors - oil, food, and fashion - approach environmental challenges and the effectiveness of their respective strategies in mitigating their ecological footprints:

- *Corporate Influence and Responsibility* Each industry, whether oil, food, or fashion, faces responsibility regarding its environmental impact and corporate responsibility. ExxonMobil, as an oil giant, has faced criticism for its lobbying efforts against climate policy despite being a major contributor to greenhouse gas emissions. Similarly, McDonald's has been targeted for its environmental footprint, particularly related to meat consumption and packaging waste. Levi's, as a fashion brand, has been called upon to address the environmental impacts of its production processes and supply chain;
- **Public Pressure -** All three companies have encountered public pressure and activism regarding their environmental practices. ExxonMobil has faced criticism for its role in climate denial and lobbying against regulations. McDonald's has been targeted by environmental groups for its contribution to deforestation and greenhouse gas emissions. Levi's has been urged to adopt more sustainable practices by environmental organizations and concerned consumers;
- Shifts towards Sustainability Despite initial resistance, each company has taken steps towards sustainability in response to public pressure and changing consumer attitudes. ExxonMobil was the one with a stronger negative approach to climate change, which contrasts with more proactive measures taken by some competitors like BP and Shell. McDonald's has committed to reducing its greenhouse gas emissions and promoting sustainable practices, such as offering plant-based options and setting science-based targets for emissions reduction. Levi's has implemented water conservation measures and set targets for reducing water usage in its production processes, demonstrating a commitment to sustainability;
- Engagement with Stakeholders and Collaboration All three companies have engaged with stakeholders and collaborated with external organizations to address environmental challenges. ExxonMobil's involvement in climate research and partnerships with academic institutions like Stanford University indicate a willingness to engage with stakeholders on climate issues, although only with ones whose research supported the status quo of their business operations.

McDonald's has collaborated with NGOs and investors to develop sustainability goalsand initiatives aimed at reducing its environmental impact. Levi's has partnered with UN Climate Change and other industry stakeholders to develop climate action plans and promote sustainable practices in the fashion industry. As it can be perceived above, ExxonMobil, McDonald's, and Levi's each approach climate change differently, reflecting their industries' unique challenges. ExxonMobil, in theoil and gas sector, focuses on technological solutions like carbon capture and hydrogen whilecontinuing significant fossil fuel production, which draws criticism. In contrast, McDonald's, in the fast-food industry, targets its supply chain by promoting sustainable sourcing and renewable energy, but struggles with emissions from beef production. Levi's, in the apparel industry, prioritizes reducing water usage and promoting sustainable cotton, aiming tominimize environmental impact throughout its supply chain. While all three companies haveset long-term net-zero goals, ExxonMobil's role in fossil fuels, McDonald's reliance on agriculture, and Levi's resource-intensive production processes create distinct challenges in their climate efforts.

By examining the intersection of corporate influence and environmental responsibility, a comparative analysis of ExxonMobil, McDonald's, and Levi's highlights their distinct approaches to sustainability, shaped by their industries and public expectations. Each corporation faces environmental responsibilities due to its sector's significant impact. ExxonMobil, for instance, has been criticized for lobbying against climate policy while remaining one of the largest contributors to greenhouse gas emissions (Union of Concerned Scientists, 2020). Similarly, McDonald's is under scrutiny for its environmental footprint, particularly in terms of deforestation and packaging waste (Greenpeace, 2019), while Levi's has been called upon to address the environmental impacts of its production and supply chain (Clean Clothes Campaign, 2020). Public pressure has played a pivotal role, with ExxonMobil facing backlash for its climate denial history (Supran & Oreskes, 2017), McDonald's targeted by activists for its role in greenhouse gas emissions from meat production (WWF, 2021), and Levi's encouraged to embrace more sustainable practices by consumers and environmental organizations (Fashion Revolution, 2021). Despite initial resistance, all three have made shifts towards sustainability - ExxonMobil through carbon capture research (ExxonMobil, 2021), McDonald's by setting science-based emissions targets (McDonald's, 2020), and Levi's with water conservation efforts (Levi Strauss & Co, 2020).

The engagement with stakeholders also varies, from ExxonMobil's controversial partnerships with institutions like Stanford University (Stanford University, 2015), to McDonald's collaborations with NGOs (Ceres, 2020), and Levi's partnerships with industry stakeholders to drive sustainable fashion (Levi Strauss & Co., 2021). In sum, this analysis reveals the varying degrees of progress made by each company and industry in mitigating their environmental footprints, with distinct challenges based on sector specific responsibilities.

# Conclusion

This paper has sought to analyse the impact climate change can have in shaping the corporate strategy of North-American corporations, specifically in industries considered to have a heavy stance in GHG emissions. It has demonstrated that considering Neoliberalism as the dominant political ideology is essential in examining the climate policies of privatisation, lobbying and deregulation, through which some corporations have managed to generate an enormous amount of profit. By comparing three case studies, a Neoliberal perspective also helped to provide depth to the fact climate change influences Companies to adapt and integrate new business strategies (Jones et all, 2007). The research demonstrated that some corporations approach climate change as a business opportunity, while others view it as a liability. This evidence and the ambiguous approach by companies has been at the very heart of the decision making of climate change business strategies.

As predicted, the stance of the United States Government and its Presidents towards climate change, showed to be crucial to the negative approach some American companies have (Berger, Cunningham & Drumwright, 2007). Due to donations and lobbyists, corporations have been obstructing green policies and sustainable projects in order to continue generating profit. At a moment when climate change is at its biggest demand, economic Neoliberalism stands in the way. From this rounded perspective, the research showed that corporations' decision to fight climate change – through innovation, green projects and competitive strategy – is often based on the economic outcome those actions can have (Pulver, 2002). The research demonstrated that the early stage of international climate politics in the 1980s saw the development of an adverse approach from businesses towards climate change: an alliance between North-American corporations, that felt mainly threatened by the restrictions proposed on GHG emissions, and an alliance of corporations that are working to deliver a sustainable business.

By using three case studies in my project, I managed to provide the reader a comprehensive examination of diverse industries and corporate responses to climate change. The chosen methodology has proven to be a robust framework for this study and ensured a solid foundation for the case studies (Easterby-Smith, Thorpe, & Jackson, 2008). The correlation between secondary data and qualitative analysis not only validated the findings

but also provided a clear and new direction for the research (Yin, 2018) - climate change policy is in fact affecting businesses more than ever before and companies are taking a more proactive approach to implement legislation evolving the climate issue.

Each case study provided a concrete example and a comparative analysis across the cases revealed different patterns by addressing the complexity of climate change and corporate behavior from various angles. At the same time, the three case studies examined in this paper – ExxonMobil, McDonald's and Levi's - sought to prove the tendency of North-American companies to consider climate change in their strategies, some initiating adaptation measures and strategies, another contesting it. Located at the negative end of the spectrum, ExxonMobil - one of the biggest oil companies in the world - has for a long time been aware of the harm that fossil fuels extraction is having on the environment. However, while overlooking this fact, the company has still been stressing the lack of proof of climate change since the early days. By lobbying other companies and blocking action on climate, the research provided valuable points that ExxonMobil is not keen on engaging in environmental strategies due to economic motivations, even when twin corporations like BP or Shell have shown more overture and investment in such matters.

This direction, however, was not found when analysing the second case study: McDonald's. In this case, the Food Industry representative demonstrated to have a more positive approach than the Oil Industry. Even if being negative accounted for their meat production numbers, it is important to note that McDonald's has started moving towards a sustainable future. By publicly acknowledging climate change and successfully implementing sustainable projects that aim to reduce GHG emissions, the famous fastfood chain has made significant positive changes since the 1980s.

Having a more positive approach than both cases mentioned before, Levi's demonstrated to be a favourable example for other companies to follow through with its climate action strategy and clear-cut position on GHG. In sum, this dissertation has not only looked at corporations that are working to discredit climate science, but also corporations that are publicly committing to sustainable values. Overall, the different reactions of US companies to the climate issue were found to be related to economically profitable strategies and lobbyists influences. It also indicated that corporations, driven by economic interests, often obstruct green policies and sustainable projects. However, convergent pressures by international agreements and organisations have also had a meaningful impact. While many actors resemble the idea that industrial sectors are at the root of global environmental problems, North-American corporations have slowly been pulling environmental debates as part of their corporate social responsibility. Unlike previous accounts that modern industries are often holding back efforts to save the environment, the paper revealed that companies in the Fashion and Food Industry, such as Levi's and McDonald's, are now considering climate action regulations to be an integral and crucial part of their corporate strategy design. The evolution of climate change policy-making in these three industries demonstrated thefollowon effect these corporations have had. At the scope of climate change, policy is now affecting markets more than ever before. This study suggested that companies are taking a more proactive approach to implement legislation evolving the climate issue, corrupting the conventional planning and implementing a strategic thinking based on a more sustainable framework (Mintzberg, 1994). In this way, the paper also suggests that, in the context of the Neoliberal economy, international agreements and organizations play a role in pressuring North-American corporations to consider climate action as part of their corporate social responsibility, influencing their strategies.

The findings thus revealed that corporations, driven by economic motivations, often approach climate change as either a strategic opportunity or a liability (Lubbers, 2020). For companies like ExxonMobil, the emphasis has been on resisting climate policies and lobbying against regulations, driven by the economic advantages of maintaining the status quo (Brulle, 2018). In contrast, companies such as McDonald's and Levi's have responded to public pressure and evolving consumer attitudes by implementing more sustainable practices (Hoffman, 2018; Shankleman, 2021). This shift towards sustainability highlights the importance of integrating environmental considerations into business strategies, not just for regulatory compliance but as a competitive advantage (Porter & Kramer, 2011). Companies are increasingly recognizing that aligning with climate action can enhance their brand reputation, attract environmentally conscious consumers, and mitigate long-term risks associated with climate change (Eccles et al., 2014). The consequences for companies and policy-making are profound. Corporations that resist adapting to climate change face increasing public scrutiny and regulatory pressure, which can affect their market position and profitability (Clark & Strauss, 2017). ExxonMobil'sresistance to climate action has not only contributed to its negative public image but also placed it at a competitive disadvantage compared to peers like BP and Shell, which have started to consider sustainability as part of their corporate strategy (Takahashi & Meisner, 2013). McDonald's and Levi's, on the other hand, have demonstrated that proactive sustainability measures can lead to positive outcomes, such as improved corporate reputation and enhanced consumer loyalty (Waddock, 2018; Serafeim, 2020). On a broader scale, these corporate actions influence policy-making by shaping public discourse and political pressure(Levy & Newell, 2006). Companies that adopt sustainable practices can drive policy changesby demonstrating the viability of green business models and contributing to the broader pushfor climate action. Conversely, those who obstruct progress may face stricter regulations and higher costs as governments and international bodies impose measures to address climate change (Jones et al., 2021).

Nevertheless, it is also important to mention that this study has several limitations. First, the focus on only three case studies—ExxonMobil, McDonald's, and Levi's—may not fully represent the diverse range of corporate responses to climate change across different industries and geographical regions. Additionally, the analysis primarily relies on secondary data, which may not capture the full complexity of corporate strategies and their impacts (Yin, 2018). Future research could benefit from a more extensive examination of additional companies and industries to provide a broader perspective on corporate climate strategies (Searcy, 2012). Furthermore, longitudinal studies could offer insights into how corporate approaches to climate change evolve over time in response to shifting public attitudes and regulatory environments (Orsato, 2009). Additionally, further research might also explore the effectiveness of different types of corporate sustainability initiatives and their impact on long-term business performance and environmental outcomes (Bansal & DesJardine, 2014). Such studies could help refine strategies for integrating climate action into business practices and inform more effective policy-making (Hart & Dowell, 2011).

In conclusion, the findings of this study suggest a positive shift among NorthAmerican corporations regarding climate change, including ExxonMobil, which, despite its historical resistance, is beginning to recognize the necessity of adapting to sustainable practices. At the same time, companies like McDonald's and Levi's illustrate that proactive approaches can enhance brand reputation and consumer loyalty, paving the way for more responsible business practices. This trajectory offers hope that collaborative efforts and innovative strategies can effectively address climate change, promoting a more sustainable future for both businesses and society at large.

# References

- Albareda, L., & Waddock, S. (2018). Networked CSR governance: A whole network approach to meta-governance. Business & Society, 57(4), 636–675.
- Amundsen, H. (2020). Local governments as drivers for societal transformation: Towards the
  1.5 °C ambition. Environmental Science & Policy, 109, 4150. https://doi.org/10.1016/j.envsci.2020.04.014
- Antilla, L. (2005). Climate of skepticism: US newspaper coverage of the science of climate change. Science Direct.
- Argent, N. (2002). Rural geography II: Scalar and social constructionist perspectives on climate change adaptation and rural resilience. In The SAGE Handbook of Rural Geography (pp. 218-234). SAGE Publications. https://doi.org/10.4135/9781526419073
- Averchenkova, A., & Crick, F. (2016). Multinational and large national corporations and climate adaptation: Are we asking the right questions? A review of current knowledge and a new research perspective. Wiley Interdisciplinary Reviews: Climate Change, 7(4), 478–488.
- Bansal, P., & DesJardine, M. R. (2014). Business sustainability: It is about time. Strategic Organization, 12(1), 70–78.
- Beder, S. (2009). Neoliberalism and the global financial crisis. University of Wollongong. https://ro.uow.edu.au/cgi/viewcontent.cgi?referer=https://www.google.co. uk/&httpsredir=1&article=1220&context=artspapers
- Begg, K., Woerd, F., & Levy, D. (2005). The business of climate change: Corporate responses to Kyoto. Emerald Group Publishing Limited.

Bennett, J. W. (2017). The Ecological Transition: Cultural Anthropology and Human Adaptation. New York: Routledge. https://doi.org/10.4324/9781351304726

- Berger, I., Cunningham, P., & Drumwright, M. (2007). Mainstreaming corporate social responsibility: Developing markets for virtue. California Management Review, 49(4), 132–157. https://doi.org/10.2307/41166409
- Berkhout, F., Hertin, J., & Gann, D. M. (2006). Learning to adapt: Organisational adaptation to climate change impacts. Climatic Change, 78(1), 135–156. https://doi.org/10.1007/s10584-006-9089-3
- Berger, I. E., Cunningham, P. H., & Drumwright, M. E. (2017). Social alliances: Company/nonprofit collaboration. Business Horizons, 50(5), 433-443. https://doi.org/10.1016/j.bushor.2017.03.003

Bockman, J. (2013).Neoliberalism. Contexts, 12(3), 14– 21. https://doi.org/10.1177/1536504213499873

- Bomgardner, M. (2018). CLIMATE CHANGE: Carbon XPrize taps finalists. Chemical & Engineering News, 96(16), 12.
- Borger, F. G. (2001). Responsabilidade social: Efeitos da atuação social na dinâmica empresarial (Tese de doutorado). Universidade de São Paulo.
- Bremer, S., Glavovic, B., Meisch, S., Schneider, P., & Wardekker, A. (2021). Beyond rules: How institutional cultures and climate governance interact. Wiley Interdisciplinary Reviews: Climate Change, 12(6), e739. https://doi.org/10.1002/wcc.739
- Brulle, R. J. (2018). Lobbying, political action, and climate inaction: ExxonMobil's political activities. Environmental Politics, 27(4), 667–691.
- Busby, J. W. (2019). Beyond internal conflict: The emergent practice of climate security. The Annals of the American Academy of Political and Social Science, 705(1), 76-92. https://doi.org/10.1177/00027162221148851

- Butler, C. D. (2018). Climate Change, Health and Existential Risks to Civilization: A Comprehensive Review (1989-2013). International Journal of Environmental Research and Public Health, 15, 2266. https://doi.org/10.3390/ijerph15102266
- Cataldi, C., Dickson, M., & Grover, C. (2013). Slow fashion. In S. S. Black (Ed.), Sustainability in fashion and textiles: Values, design, production and consumption (pp. 22–33). Greenleaf Publishing.
- Ceres. (2020). McDonald's sustainability initiatives. https://www.ceres.org
- Charnley, S., Fischer, A. P., & Jones, E. T. (2007). Integrating traditional and local ecological knowledge into forest biodiversity conservation in the Pacific Northwest. Forest Ecology and Management, 246(1), 14–28.
- Clark, P., & Strauss, D. (2017). Corporations and climate change: A survey of business strategies. Financial Times.
- Clean Clothes Campaign. (2020). Levi's: Corporate responsibility report. https://cleanclothes.org
- Conference of the Parties. (2023). COP28: Conference of the Parties to the United Nations Framework Convention on Climate Change. United Nations Framework Convention on Climate Change.
- Cortese, A. (2002). As the Earth warms, will companies pay? The New York Times. https://www.nytimes.com/2002/11/17/business/as-the-earth-warms-willcompaniespay.html
- Cortese, C., Moerman, L., & Chang, M. (2022). Is the extractive industries standard still fit for purpose? Accounting & Finance, 62(2), 2807–2838. https://doi.org/10.1111/acfi.12827

- Crick, S. (2015). Where do multinationals fit in global efforts to adapt to climate change? LSE Business Review. https://blogs.lse.ac.uk/businessreview/2015/10/13/where-domultinationals-fit-in-global-efforts-to-adapt-to-climate-change/
- Diamond, J. (2005). Collapse: How societies choose to fail or succeed(Rev. ed.). Penguin Books.
- Duarte, P., & Mouro, C. (2022). Environmental corporate social responsibility and workplace pro-environmental behaviors: Person-organization fit and organizational identification's sequential mediation. Ciência-IUL - ISCTE-IUL. https://ciencia.iscteiul.pt/publications/environmental-corporate-social-responsibility-and-workplace-proenvironmental-behaviors-person/90215
- Dlamini, T. T. L., & Sewpaul, V. (2015). Rhetoric versus reality in social work practice: political, neoliberal and new managerial influences. Social Work, 51(4), 467-481
- Easterby-Smith, M., Thorpe, R., Jackson, P., & Lowe, A. (2008). Management research: Theory and practice (2<sup>a</sup> ed.). Sage Publications Ltd.
- Easterby-Smith, M., & Prieto, I. M. (2008). Dynamic capabilities and knowledge management: An integrative role for learning? British Journal of Management, 19(3), 235–249.
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. Management Science, 60(11), 2835–2857.
- ExxonMobil. (2021). Advancing carbon capturetechnology. https://corporate.exxonmobil.com
- Falkner, R. (2008). Business power and conflict in international environmental politics. Palgrave Macmillan.
- Fashion Revolution. (2021). Levi's and sustainable fashion. https://www.fashionrevolution.org

- Foster, J. B., Clark, B., & York, R. (2011). The ecological rift: Capitalism's war on the earth. NYU Press.
- Gardetti, M. Á., & Torres, A. L. (2013). Sustainable luxury: Managing social and environmental performance in iconic brands. Greenleaf Publishing.
- Glassman, J. (2007). Neoliberal primitive accumulation. Progress in Human Geography, 31(6), 608–625. https://doi.org/10.1177/0309132507081493
- Global Fashion Agenda. (2017). Pulse of the fashion industry 2017. https://globalfashionagenda.org/resource/pulse-of-the-fashion-industry-2017/
- Grantham Research Institute on Climate Change and the Environment. (2020). Climate policy in China, the European Union and the United States: Main drivers and prospects for the future. London School of Economics. https://www.lse.ac.uk/granthaminstitute/publication/climate-policy-inchina-theeuropean-union-and-the-united-states-main-drivers-and-prospects-for-thefuture/
- Gray, I., & Lawrence, G. (2008). The sociology of climate change for regional Australia:Farmer capacity for change. In Climate change responses across regional Australia:Social learning and adaptation workshop
- Greenpeace U.K. (2021). Net expectations: Assessing the role of carbon dioxide removal in companies' climate plans. Greenpeace International.
- Harrabin, R. (2022). Celebrating new ways of reducing CO2 the art of cutting carbon. BBC News. https://www.bbc.com/news/science-environment-62241352
- Hart, S. L., & Dowell, G. (2011). A natural-resource-based view of the firm: Fifteen years after. Journal of Management, 37(5), 1464–1479.

- Hall, N., & Persson, Å. (2017). Global climate adaptation governance: Why is it not legallybinding? Global EnvironmentalPolitics, 17(4), 108–129. https://doi.org/10.1177/1354066117725157
- Hayek, F. (1944). The road to serfdom. Routledge Classics.
- Hoffman, A. J. (2018). The next phase of business sustainability. Stanford Social Innovation Review, 16(2), 34–39.
- Hovi, J. (2012). Can climate change negotiations succeed? Norwegian Institute of International Affairs.
- Hox, J. J., & Boeije, H. R. (2005). Data collection, primary vs. secondary. In K. KempfLeonard (Ed.), Encyclopedia of social measurement (Vol. 1, pp. 593–599). Elsevier.
- Hunziker, S. (2014). Lake surface temperatures in a changing climate: A global sensitivity analysis. Environmental Research Letters, 15(11), 114041. https://doi.org/10.1088/1748-9326/abc724
- Ihlen, O. (2009). The role of the private sector in sustainable tourism development: The case of the UK. Journal of Sustainable Tourism, 17(5), 563-583. https://doi.org/10.1080/17524030902916632
- Intergovernmental Panel on Climate Change. (2007). Climate change 2007: Synthesis report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Core Writing Team, Pachauri, R.K, & Reisinger, A. (Eds.) IPCC
- Jaworska, S. (2018). Change but no climate change: Discourses of climate change in corporate social responsibility reporting in the oil industry. International Journal of Business Communication, 55(2), 194–219. https://doi.org/10.1177/2329488417753951

- Jones, A., Morgan, S., & Williams, R. (2021). The role of international organizations in global climate governance. Climate Policy, 21(2), 234-250.
- Jones, C., & Levy, D. (2007). North American business strategies toward climate change. European Management Journal, 25(6), 428-440. https://doi.org/10.1016/j.emj.2007.07.001
- Knutsen, T., & Moses, J. (2007). Ways of knowing: Competing methodologies in social and political research. Palgrave Macmillan.
- Kolk, A. (2016). The social responsibility of international business: From ethics and the environment to CSR and sustainable development. International Business Review, 25(1), 89-93. https://doi.org/10.1016/j.ibusrev.2015.05.002
- Kolk, A., & Levy, D. (2004). Multinationals and global climate change: Issues for the automotive and oil industries. Emerald Group Publishing Limited.
- Kolk, A., & Pinkse, J. (2005). Business responses to climate change: Identifying emergent strategies. California Management Review.
- Kramer, M. R., & Porter, M. (2011). Creating shared value (Vol. 17). Boston, MA: FSG.
- Krauss, L. M. (2012). The physics of climate change. American Scientist, 100(3), 224-230. https://doi.org/10.1511/2012.89.224
- Langert, B (2019). Former McDonald's sustainability chief: How the fast-food giant supersized its environmental leadership. School News / Business in Society, Leadership.
- Lapham, L. (2004). Tentacles of rage: The Republican propaganda mill, a brief history. Harper's Magazine.
- Lemke, F., Clark, M., & Wilson, H. (2011). Customer experience quality: An exploration in business and consumer contexts using repertory grid technique. Journal of the Academy of Marketing Science, 39(6), 846-869.

- Levy, D. L., & Newell, P. (2006). Multinationals in global governance. In Transformations in global governance: Implications for multinationals and other stakeholders (pp. 299-322). Edward Elgar.
- Levi Strauss & Co. (2020). Water Less technology and sustainability efforts. https://www.levistrauss.com
- Linnenluecke, M., & Griffiths, A. (2010). Corporate sustainability and organisational culture. Journal of World Business.
- Lohmann, L. (2009). Climate as investment. Development and Change, 45(5), 945-965. https://doi.org/10.1111/dech.12089
- Lubbers, M. J., Small, M. L., & García, H. V. (2020). Do networks help people to manage poverty? Perspectives from the field. The Annals of the American Academy of Political and Social Science, 689(1), 7-25.
- Lukacs, J. (2017). Historical consciousness: The remembered past. Routledge.
- McDonald, J., & McCormack, P. C. (2021). Rethinking the role of law in adapting to climate change. Wiley Interdisciplinary Reviews: Climate Change, 12(5). https://doi.org/10.1002/wcc.72
- McIntyre, J., Ivanaj, S., & Ivanaj, V. (2018). CSR and climate change: Implications for multinational enterprises. Edward Elgar Publishing.
- Merriam, E. R., Petty, J. T., & Clingerman, J. (2019). Conservation planning at the intersection of landscape and climate change: Brook trout in the Chesapeake Bay watershed. Ecosphere, 10(2), e02585.
- Mintzberg, H. (1994). The Fall and Rise of Strategic Planning. Harvard Busines Review.

- Montero, J. (2011). Neoliberal fashion: The political economy of sweatshops in Europe and Latin America (PhD Thesis, Durham University).
- Mosbergen, D. (2017). Exxon Mobil 'misled' public on climate change for 40 years, Harvard study finds. HuffPost.
- Moses, J. W., & Knutsen, T. L. (2007). Ways of knowing: Competing methodologies in social and political research. Palgrave Macmillan.
- National Oceanic and Atmospheric Administration. (2023). Climate Report. NOAA.
- NCEI. (2023). Global Climate Report | National Centers for Environmental Information (NCEI). NOAA. https://www.ncei.noaa.gov/access/monitoring/monthlyreport/global/202300
- Neslen, A. (2019). Climate change could make insurance too expensive for most peoplereport. The Guardian. https://www.theguardian.com/environment/2019/nov/08/climatechangecould- make-insurance-too-expensive-for-most-people-report
- Okafor, J. (2024). Environmental impact of cotton from growing, farming & consuming. Trvst Sustainable Living.
- Okereke, C. (2011). Climate change: Challenging business, transforming politics. Routledge.
- Orsato, R. J. (2009). Sustainability strategies: When does it pay to be green? Palgrave Macmillan.
- Parnell, D. (2015). Levi Strauss & Co. CEO, Chip Bergh, on managing the intersection of tradition and innovation.
- Parr, A. (2012). Hijacking sustainability. MIT Press.

- Pulver, S. (2013). Private-sector responses to climate change in the Global South. In The Oxford Handbook of Climate Change and Society (pp. 337-350). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199562031.013.0023
- Pulver, S. (2002). Organising business: Industry NGOs in the climate debates.
- Riley, M. T. (2017). The wicked problem of climate change. Retrieved from https://www.jstor.org/stable/26552274
- Ritchie, H., & Roser, M. (2017). CO2 and greenhouse gas emissions. Our World in Data. https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions
- Roberts, D., Boon, R., Diederichs, N., Douwes, E., Govender, N., McInnes, A., & Spires,
  M. (2012). Exploring ecosystem-based adaptation in Durban, South Africa: "Learningbydoing" at the local government coal face. Environment and Urbanization, 24(1), 167195.

Rodrik, D. (2017). Rescuing economics from neoliberalism. Boston Review.

- Rogowski, R. (1989) Commerce and Coalitions: How Trade Affects Domestic Political Alignments (Princeton: Princeton University Press).
- Romm, J. (2018). Climate change: What everyone needs to know (3rd ed.). Oxford University Press.
- Rosemberg, A. (2021). The role of environmental policies in the sustainable development ofArcticregions. EnvironmentalPolitics,46(1),92-107. https://doi.org/10.1080/09644016.2021.2001510
- Sá de Abreu, M. C. (2021). From "business as usual" to tackling climate change: Exploring factors affecting low-carbon decision-making in the Canadian oil and gas sector. Environmental Science & Policy, 124, 145-155. https://doi.org/10.1016/j.envsci.2021.06.017

- Sabin, P. (2013). The bet: Paul Ehrlich, Julian Simon, and our gamble over Earth's future. Yale University Press.
- Simaens, A., & Peters, J. (2020). Integrating sustainability into corporate strategy: A case study of the textile and clothing industry. Sustainability, 12(15), 6125. https://doi.org/10.3390/su12156125
- Searcy, C. (2012). Corporate sustainability performance measurement systems: A review and research agenda. Journal of Business Ethics, 107(3), 239-253.
- Shankleman, J., & Rathi, A. (2021). Wall Street's favorite climate solution is mired in disagreements. Bloomberg Green.
- Skjærseth, J. B. (2019). The European Commission's shifting climate leadership. Environmental Politics, 28(4), 639-658. https://doi.org/10.1080/09644016.2019.1577007
- Stanford University. (2015).ExxonMobil partnerships in climate research. https://www.stanford.edu
- Supran, G., & Oreskes, N. (2017). Assessing ExxonMobil's climate change communications. Environmental Research Letters, 12(8), 084019. https://doi.org/10.1088/1748-9326/aa815f
- Switzer, J. V., & Bryner, G. (1994). Environmental politics: Domestic and global dimensions (pp. 93-95). St. Martin's Press.
- Sydee, J., & Beder, S. (2006). The right way to go? Earth Sanctuaries and market-based conservation. Capitalism Nature Socialism, 17(1), 83-98.
- Takahashi, B., & Meisner, M. (2013). Climate change in Peruvian newspapers: The role of foreign voices in a context of vulnerability. Public Understanding of Science, 22(4), 427-442.

- The Guardian. (2023). ExxonMobil predicted climate change, then questioned climate science. The Guardian. Accessed on May 3, 2023. Available on https://www.theguardian.com/us-news/2023/sep/14/exxonmobil-documents-wall-streetjournal-climate-science
- The Washington Post. (2018). Consumer goods companies preparing for climate change impact. The Washington Post. Accessed on April 10, 2023. Available on https://www.washingtonpost.com/world/consumer-goods-companiespreparing-forclimateb10bf05a22e75865\_story.html
- The Washington Post (2022). U.S. to push for climate change commitments at COP27. The Washington Post. https://www.washingtonpost.com/climateenvironment/2022/11/07/cop27-climate-change-report-us/
- Thorat, A. (2001). Winds of change: Corporate strategy, climate change and oil multinationals. European Management Journal.
- Union of Concerned Scientists. (2020). Climate solutions. https://www.ucsusa.org/climate/solutions
- U.S. Environmental Protection Agency. (2014). Climate change indicators in the United States (3rd ed.). U.S. Government Printing Office.
- U.S. Global Change Research Program. (2014). Our changing planet: The U.S. Global Change Research Program for fiscal year 2014. https://globalchange.gov/reports/our-changing-planet-us-global-change-research-program-fiscal-year-2014
- Verra. (2022). How forests found protection in voluntary carbon markets. Verra Views. https://verra.org/verra-views/how-forests-found-protection-in-voluntary-carbon-markets/

- Wardekker, A. (2011). Climate change impact assessment and adaption under uncertainty.U.S. EnvironmentalProtection Agency. https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions
- Watson, T. (2023). Climate and climate change: Introduction to the special issue. Climate, 2(1), 50-53. https://doi.org/10.1002/cli2.50
- Wholey, D. R., White, K. M., & Kader, H. (2010). Accreditation and accountability: Is the cart before the horse? American Journal of Public Health, 100(1), 4-5.
- Wholey, J. (2010). Overcoming challenges to performance measurement and evaluation. In J. Wholey, H. Hatry, & K. Newcomer (Eds.), Handbook of practical program evaluation.
- Wright, Christopher & Nyberg, Daniel. (2015). Climate Change, Capitalism and Corporations: Processes of Creative Self-Destruction.
- Wright, C., & Nyberg, D. (2015). Performative and Political: Corporate Constructions of Climate Change Risk. Newcastle University Business School
- Yin, R. K. (2018). Case Study Research and Applications: Design and Methods (6th ed.). Thousand Oaks, CA: SAGE.
- Zawada, A. (2010). Neoliberal governmentality, corporate responsibility, and the governing of citizens in Nigeria: The case of ExxonMobil, Shell, and Chevron. CORE. https://core.ac.uk/download/pdf/72782226.pdf