

Framing the Future:

EPA vs. EC on Plastic Pollution Solutions

A Comparative Discourse Analysis of EPA and EC's Framing of Plastic
Pollution



LUNDS
UNIVERSITET

Abstract

This thesis investigates how the problem of plastic pollution is represented within the environmental policies of the European Union and the United States. By adopting and utilizing Bacchi's 'What's The Problem Represented To Be' approach, the research explores the specific aspects of plastic pollution that are problematized by these policies. The study applies issue framing and environmental justice as frameworks to understand how the EU and US frame their environmental policies and what they might lack. The analysis reveals a divergence between where, in the lifecycle of plastics, the different bodies assume accountability. It reveals several weaknesses, within the policy documents, particularly in addressing environmental justice, consumption patterns, and waste management infrastructure. The findings emphasize the need for continuous investigation into how different environmental bodies frame plastic pollution and the importance of integrating these perspectives to unify global efforts, especially during the ongoing negotiations for the UNEP Global Plastics Treaty. Finally, the conclusion underscores the importance of adopting a more extensive and inclusive approach to effectively diminish plastic pollution.

Key words: plastic pollution, environmental policies, environmental protection agency, european commission, policy analysis

Words: 9880

Abbreviations

Council of the European Union (CEU)

Circular Economy (CE)

Environmental Protection Agency (EPA)

European Commission (EC)

European Green Deal (EGD)

European Investment Bank (EIB)

European Parliament (EP)

European Union (EU)

Global Plastics Treaty (GPT)

Member States (MS)

Plastic Pollution (PP)

United Nations Environment Assembly (UNEA)

United Nations Environment Programme (UNEP)

United States (US)

What's The Problem Represented to be? (WPR)

Table of Contents

Abstract.....	1
Abbreviations.....	2
Table of Contents.....	3
1. Introduction.....	5
1.1 Research aim and question.....	6
1.2 Scope and Relevance.....	6
2. Background.....	7
2.1 The Escalating Use of Plastics.....	8
2.2 Global Recognition of Plastics as a Crisis.....	8
2.3 European Commission.....	9
2.4 Environmental Protection Agency.....	10
2.5 Literature review.....	10
2.5.1 The US and EU within Climate Governance.....	10
2.5.2 Plastic Pollution in Vulnerable Communities.....	11
3. Theoretical and Analytical Framework.....	13
3.1 Issue Framing.....	13
3.2 Environmental Justice.....	14
4. Methodology and Research Design.....	15
4.1 What's the Problem Represented to be? Approach.....	15
4.2 WPR Questions.....	16
4.3 Sampling and Material.....	17
4.3.1 The European Commission.....	17
4.3.2 The Environmental Protection Agency.....	18
4.4 Limitations and Ethical Considerations.....	18
5. Analysis.....	19
5.1 The European Commission.....	19
5.1.1 Question 1. Problem representation.....	21
5.1.2 Question 2. Assumptions for problem representation.....	22
5.1.3 Question 3. Silences in problem representation.....	23
5.2 The Environmental Protection Agency.....	25
5.2.1 Question 1. Problem representation.....	25
5.2.2 Question 2. Assumptions for problem representation.....	27

5.2.3 Question 3. Silences in problem representation.....	29
6. Conclusion.....	30
7. References.....	32

1. Introduction

The issue of plastic pollution has emerged as a critical environmental challenge, posing threats to marine ecosystems, biodiversity, and human health worldwide. Despite increasing awareness, there are continuous gaps in understanding the full extent of these impacts. The COVID-19 situation has made matters worse by increasing the usage of single-use plastics in personal protective equipment, which just a year later in 2021, were detected in high amounts in the environment (Owens & Conlon, 2021, p.1). Global policy responses and technological innovations to address plastic pollution are not keeping pace with the acceleration of this rate of consumption and production (Morrison, 2022, p.9). Moreover, plastic production is projected to continue its exponential growth, with expectations to double by 2050. An additional concern is that plastic production relies on fossil fuels, which contribute to environmental degradation and have significant health impacts due to the release of greenhouse gases and pollutants during disposal processes and production (Lebreton, 2019, p.2).

Governmental agencies have considerable accountability and influence in shaping policy responses, regulatory frameworks, and public perceptions of this issue. As two of the largest economies and most significant contributors to global plastic pollution, the United States (US) and the European Union (EU) possess great political and economic leverage in international environmental governance initiatives (Wendler, 2022, pp.5-6). In recent years, mitigation strategies aimed at reducing plastic pollution have increased. A notable development in this arena is the ongoing negotiations of the Global Plastics Treaty (GPT) under the United Nations Environment Programme (UNEP). A treaty that aims to create an international framework to address plastic pollution, involves several stakeholders, including governments, corporations, and civil society. The involvement of the US and the EU in the Intergovernmental Negotiating Committee (INC) for the GPT highlights their roles in shaping global plastic mitigation policies. This context underlines the importance of the approaches taken by the US Environmental Protection Agency (EPA) and the EU's European Commission (EC). Their strategies and policies influence domestic outcomes while additionally shaping international norms and standards through the GPT. By participating in the negotiations, both the US and the EU have the opportunity to advocate for their policy positions and coming international regulatory measures (Xu et al, 2024, p.4; Wang et al, 2022, p.6).

This thesis will explore how the two regulatory bodies, the EPA in the US and the EC in the EU, frame the issue of plastic pollution within their respective jurisdictions. By analyzing the framing strategies employed by the agencies, this paper aims to explore the conscious choices made within policy-making to shape the discourse of plastic pollution. The analysis will be based on the WPR approach and draw on principles of framing theory and environmental justice to uncover their different underlying motivations, policy orientations, cultural influences, and silenced aspects. All of which shape the EPA's and the EC's approaches to plastic pollution.

1.1 Research Aim and Question

As mentioned in Section 1, framing strategies play a crucial role in shaping policy formulation. This study aims to conduct a comprehensive analysis and comparison of the framing of plastic pollution by two major environmental regulatory bodies: the EPA in the US and the EC in the EU. By identifying narratives, strategies, and policy approaches employed by these agencies, the paper seeks to scrutinize differences and similarities in their respective framings. Through a comparative analysis, the study aims to contribute to a deeper understanding of the complexities inherent in managing plastic pollution at both national and supranational levels, thereby providing valuable insights into environmental protection efforts. By analyzing how they frame plastic pollution, the paper intent to highlight the shortcomings and weaknesses of proposed plastic pollution mitigation policies.

The study seeks to answer the following question:

How does the Environmental Protection Agency in the United States frame the issue of plastic pollution compared to the European Commission in the European Union?

1.2 Scope and Relevance

The EPA is responsible for safeguarding human health and the environment in the US, while the EC proposes legislation and implements decisions related to environmental issues in the EU. The selection of regulatory bodies in the US and the EU is further justified by their significant economic influence and political power, positioning them as influential stakeholders in global environmental governance initiatives. Furthermore, they represent substantial portions of the economically developed world, covering 12.6% (US) and 7.3%

(EU) of global greenhouse gas emissions, marking their climate impact (Wendler, 2022, p.2). This research investigates how the US and the EU frame the issue of plastic pollution, aiming to offer insights into global environmental governance dynamics (Boasson, 2012, pp.518-519). Their contrasting environmental approaches make them fitting subjects for comparative analysis (Wendler, 2022, p. 6). Both shape global environmental policies, as evident in landmark agreements like the ongoing UNEP GPT negotiations.

The scope of this study is defined by the analysis of specific policy documents related to plastic pollution issued by the EPA and the EC. The study covers documents published between 2018 and 2024 to capture recent and relevant policy approaches. The GPT, in particular, highlights the relevance of this research. The treaty aspires to address the full lifecycle of plastics, from production to disposal, requiring comprehensive international cooperation. Understanding the framing of plastic pollution by major players like the US and the EU is crucial for these negotiations. This research will specifically analyze the narratives, strategies, and policy approaches of the EPA and the EC, and how these influence the treaty's structure, effectiveness, and implementation. By examining the languages, priorities, and proposed solutions in these documents, this study aims to understand the broader implications for global environmental governance and predict future trends in international climate policy agreements.

This paper proceeds as follows first introducing the contextual background of the topic (section 2), followed by an introduction of the theoretical framework of issue framing and environmental justice (section 3) and the WPR methodology (section 4). Section 5 presents the analysis of the policy documents. Lastly, the conclusion will be found in section 6.

2. Background

The following section will provide contextual background to the research topic, focusing on the growing use of plastics, the global recognition of a plastics crisis, and the roles of the EC and the EPA in addressing the issue.

2.1 The Escalating Use of Plastics

The use of plastics is at its peak and continues to rise. Over 9.1 billion tons of plastic have been manufactured since the material was first introduced in the 1950s; since the 1970s, the

rate of plastic production has increased faster than that of any other material (UNEP, 2021). Approximately 50% of all plastic produced is used once before being thrown away. These single-use items, such as plastic bottles, shopping bags, and packaging waste, are the main sources of plastic garbage that ends up in the environment. Moreover, these plastics are made by polymerizing hazardous chemical monomers that are obtained from crude oil and fossil fuels boosting additional pollution (Wiesinger, 2021, p.9339). Virgin plastics, in particular, are newly manufactured from these petrochemical feedstocks, ensuring uniformity and purity but significantly contributing to environmental degradation due to the extraction and processing of fossil fuels (Ellen McCarthur Fund, 2023, p.23). This material has qualities that allow plastic to linger in the environment for decades after it is discarded, as it is inexpensive, lightweight, strong, and resistant to degradation. Since plastic cannot entirely break down, every plastic product ever made is still in existence today in one way or another (Geyer, 2017).

The widespread use of plastics has led to an increasing environmental challenge compounded by the reliance on unsustainable fossil fuel extraction for plastic production, resulting in substantial carbon emissions. Despite previous efforts, a vast majority of plastic production remains non-recyclable, exacerbating environmental degradation. The proliferation of microplastic particles poses threats to human and ecosystem health, perpetuating a cycle of pollution (Bauer et al, 2021, p.2; Landrigan, 2023, pp. 2274-2276). The production of primary plastics alone is estimated to contribute substantially to global greenhouse gas emissions, potentially accounting for 21-31% of the remaining global carbon budget needed to keep temperature rises below 1.5°C if current growth trends continue (Karali et al, 2024, p.1; Pew Charitable Trusts & SYSTEMIQ, 2020, p.15). The increased growth in plastic packaging weight therefore reinforces the need to rethink packaging, products, and business models to eliminate the need for single-use packaging altogether (Ellen McCarthur Fund, 2023, p.16).

2.2 Global Recognition of Plastics as a Crisis

These alarming trends have led to escalating concerns over the pervasive threat of marine litter and plastic pollution. In December 2017, the United Nations Environment Assembly (UNEA) established an expert group tasked with exploring potential global actions to address the pressing challenges of plastic pollution. This decision signaled a growing recognition of the urgent need for coordinated action globally (UNEA resolution, 2018, p.1). The group was

led by a diverse array of government experts and supported by representatives from both civil society organizations and scientific institutions. The expert group convened to assess the scope and magnitude of the plastic pollution crisis and identify strategies for its mitigation (Landrigan, 2023, p. 2274-2276). In 2022, recognizing the urgency of the issue, the UNEA passed a resolution to establish an internationally legally binding instrument to address plastic pollution, and negotiations are currently taking place with the aspiration of proposing a globally legally binding plastics treaty by mid-2025 (Aanesen, 2024, p.1; UNEP, 2024). The treaty aims to reduce plastic waste generation, promote sustainable alternatives to conventional plastics, and strengthen international cooperation on waste management and recycling (Holmberg, 2023, p.5).

2.3 European Commission

Within the EU, the EC is a key player in addressing plastic pollution. The EC has implemented several initiatives and policies aimed at reducing plastic waste and promoting recycling. Central to the Commission's approach is the acknowledgment of the need for a transition towards a more sustainable CE, where resources, including plastics, are used efficiently and responsibly. One of the key legislative measures undertaken by the EC is the *European Union's Single-Use Plastics Directive*, adopted in 2019. The directive targets the most problematic single-use plastic products, such as plastic cutlery, plates, and straws, and sets ambitious reduction targets for member states (MS). By regulating the production and consumption of these items, the directive intends to minimize their impact on the environment, particularly marine ecosystems (EC, n.d). In addition to legislative efforts, the EC has launched the *Circular Economy Action Plan*. A strategy that outlines a range of measures planned to promote the sustainable use of resources, including plastics, and accelerate the transition towards a CE. Furthermore, the EC's commitment to tackling plastic pollution is underscored by its broader environmental agenda, notably the European Green Deal (EGD). In line with this, the EGD published a roadmap in 2019 for making the EU's economy sustainable and achieving climate neutrality by 2050 (EC, n.d).

2.4 Environmental Protection Agency

The EPA in the US is an important stakeholder in addressing plastic pollution within the country. The EPA has taken steps to address plastic pollution as part of its environmental protection mandate; its efforts are situated within a larger framework of environmental protection (EPA, 2024). Initiatives by the EPA include research, educational campaigns, and

collaboration with various stakeholders, including governmental agencies, non-profit organizations, and industry partners, with the objective of developing strategies for reducing plastic waste and promoting recycling (EPA, 2024). These efforts are accentuated by the EPA's commitment to safeguarding public health and the environment from the adverse impacts of plastic pollution. Through regulatory measures, such as the *Clean Water Act and the Resource Conservation and Recovery Act*, the EPA seeks to minimize the discharge of plastic waste into water bodies and landfills, thereby mitigating its environmental impact (EPA, 2024).

However, the EPA faces challenges in implementing policies due to political divisions and competing priorities within the US. The high prevalence of major polluting companies based in the US in 2023 champions the urgent need for intensified domestic efforts (Break Free From Plastic, 2023, p.5). A notable advancement in the EPA's strategy is the draft of the *National Strategy to Prevent Plastic Pollution*, which represents a critical milestone in the agency's ongoing efforts to address plastic pollution. The draft document delineates clear objectives, priorities, and action plans intended to reduce plastic waste and foster a sustainable future. By promoting strategic coordination, offering policy guidance, supporting research and innovation, alongside enhancing education and awareness, the draft strategy seeks to empower stakeholders to mitigate plastic pollution (EPA, 2023).

2.5 Literature Review

The following section will first address how the US and the EU are discussed within the discourse and subsequently, the effects of plastic pollution on vulnerable communities.

2.5.1 The United States and the European Union Within Climate Governance

In the current academic debate on climate governance, divergent perspectives characterize the views of the EU and the US. Notably, there is a significant absence of direct comparisons between the EU and the US regarding their approaches to plastic pollution mitigation. As two major players in international climate governance, the US and the EU have adopted distinct approaches. It can partly be explained by the fact that Europeans are generally more concerned about climate change than Americans (EIB, n.d.). In the EU, a coherent and consistent narrative surrounding climate change governance infiltrates various institutional settings, such as the EC, European Parliament (EP), and Council of the European Union

(CEU). Their narrative emphasizes collective action and multilateral cooperation, reflecting the EU's commitment to addressing climate change as a shared challenge requiring collaboration among all MS (Aanesen, 2024, p.2; Wendler 2022, p.18). The EU's institutional framework facilitates dialogue and coordination, fostering a harmonized approach to climate policy formulation and implementation (Wendler, 2022, p.189; EU, 2015, p.8).

The US, however, presents a different landscape of climate discourse, characterized by a higher degree of variation and polarization. Climate politics in the US are deeply influenced by ideological divisions and competing interests, leading to fragmented narratives and policy priorities (Wendler, 2022, p.189). Security narratives have played a prominent role in US climate policy, and the US has not successfully shifted public opinion. Instead, these narratives empower traditional security actors, like the military, and influence policy processes by framing climate change as a security threat. This approach contrasts sharply with the EU's emphasis on scientific findings and leadership, which fosters a more collaborative and less adversarial climate policy environment (Hayes & Knox-Hayes, 2014, p.94). Despite these differences, the US has implemented behavioral change interventions aimed at reducing the consumption of single-use plastics, particularly straws and plastic bags, in recent years (Aanesen, 2024, p.2). The EU has introduced two directives to tackle plastic pollution and promote sustainable practices in EU MS. The first directive, enacted in 2015, specifically addresses the issue of plastic bags. The second directive, implemented in 2019, encompasses single-use plastic products, including fast-food containers, and establishes specific targets for reducing their usage (Aanesen, 2024, p.2). Showcasing the EU's leadership agenda in addressing climate change (Oberthür & Westphal, 2017, p.5).

2.5.2 Plastic Pollution in Vulnerable Communities

Plastic pollution is a critical global issue with severe consequences for both the environment and human health. It disproportionately burdens the global south, especially in regions like South and Southeast Asia, exacerbating environmental injustice and slow violence (Owens & Conlon, 2021, p.1). This pervasive environmental menace ranks as the leading cause of global disease, contributing to an estimated 9 million premature deaths annually (Fuller, 2018, p.535). Microplastics infiltrating water bodies pose significant health risks, particularly for the billions relying on these sources for drinking water, as current water treatment methods inadequately filter them, leading to inadvertent ingestion. Additionally, plastic decomposition releases harmful toxins, compounding environmental contamination

(McDermott, 2016, p.2). Marine plastic pollution has become a key transboundary environmental problem affecting biodiversity, and coastal communities, posing a potential food security risk (Tessnow-von Wysocki & Le Billon, 2019, p.102).

Disadvantaged communities, including minorities, low-income individuals, and those with limited education access, bear the brunt of plastic pollution's impact, constituting environmental inequality (McDermott, 2016, p.4). They are often located near industrial zones, waste facilities, and heavily polluted waterways due to lower land prices. These communities face heightened exposure to pollution, leading to elevated disease levels and exposure to toxic microplastic-associated chemicals (Landrigan et al, 2020, p.2). This unequal distribution of environmental risks based on socioeconomic status underscores the pressing need to address environmental justice concerns in plastic pollution mitigation efforts. Previous studies have underscored the unequal exposure to environmental hazards experienced by low-income and minority groups (Landrigan et al, 2020, p.29). The consequences, such as clogged drainage systems, increased vector-borne diseases, and reduced tourism, are acutely felt in impoverished communities lacking adequate solid waste management systems (Owens & Conlon, 2021, p.2).

In addition, plastics are exported from developed to developing nations for disposal, whether legal or illegal, further burdening poorer communities (Blettler & Wantzen, 2019, p.174; Deshmukh & Parameswaranpillai, 2014, p.159). In these communities, plastics are sometimes burned for heat or cooking or utilized in disposal methods (Owens & Conlon, 2021, p.2). Additionally, poorer communities may be chosen as sites for plastic manufacturing, compounding their environmental burdens (Bryant & Mohai, 2019, p.). Consequently, the responsibility for managing plastic waste often falls on those least accountable for its production (Conlon, 2020, pp.4-5). Further, the issue of plastic pollution has shifted and undergone scientific imperialism, explained as “microplastic pollution—as a topic of research—has been directly “imported” from developed countries to developing ones without scientific concerns or a critical view, i.e., without an agreement about its real importance in the context of the extreme levels of macroplastic pollution frequently found in rivers of emerging nations”, shifting focus from the disproportionate areas effected by redirecting research areas (Blettler & Wantzen, 2019, p.174).

3. Theoretical Framework

3.1 Issue framing

Issue framing is a branch of framing theory that assumes that how information is presented, or "framed," significantly influences how individuals perceive and respond to it. Frames are abstract constructs that shape the interpretation of messages, playing a crucial role in shaping public discourse and policy outcomes (Arowolo, 2017, p.2). Acting as interpretive schemas, frames filter and structure information, profoundly impacting how people understand and interpret issues, events, and policy proposals. These cognitive structures dictate the understanding of information while framing devices serve as tools for constructing and disseminating frames. Further within framing contents, as in the GPT, actors deploy competing frames to advance their interests and objectives. The dominant frames that emerge from these contests often dictate which issues gain prominence, how they are understood by the public, and which policy solutions are considered viable (Goffman, 1986, p.8-9).

Issue framing stems from framing theory and focuses on how topics or problems are presented to the public or within policy discussions. It examines how different actors, such as governments, organizations, or advocacy groups, shape public understanding and perception of specific issues by emphasizing certain aspects or interpretations while downplaying others (Nelson & Oxley, 1999, p.1041). This process involves selecting and highlighting particular aspects of an issue, such as its causes, consequences, or solutions, in ways that resonate with target audiences or policy stakeholders. Issue framing often involves strategically using language, imagery, and narratives to evoke specific emotions, values, or attitudes among the public or decision-makers. It aligns with the analytical approach of WPR (Nelson & Oxely, 1999, p.1042-1043).

Entman (1991, p. 6) highlights that frames are challenging to detect fully and reliably unless narratives are compared, as many framing devices may seem "natural" or unremarkable. Understanding how actors, such as the EPA and EC, frame issues is crucial for discerning their motivations, strategies, and the broader dynamics within policy negotiations. Entman's quote emphasizes the importance of comparative analysis in unveiling the subtle yet influential framing devices embedded within narratives. Through a comparative analysis of narratives, this thesis aims to uncover the distinct framing strategies employed by the EPA and the EC regarding plastic pollution. Such analysis facilitates a deeper understanding of

how each actor constructs and presents the issue, shedding light on their respective priorities, interests, and objectives. It reveals the subtle nuances in language, imagery, and rhetoric used to shape public perceptions and policy agendas (Goffman, 1986, p.439).

3.2 Environmental Justice

Environmental justice gained momentum in the 1980s in the US. The concept emerged from resistance against the unfair siting of toxic facilities in communities of color, particularly in the Black Belt region of the American South. This movement highlighted the excessive environmental burdens these neighborhoods face, often linked to the fossil fuel and petrochemical industries (Coolsaet, 2020, p.7). As Coolsaet notes, “the structural disparities in the distribution of environmental goods and ills follow predictable patterns of dominance and oppression”. The specific contexts of these communities and their experiences with past and present injustices shape the tactics and forms of resistance they employ against environmental injustice (Coolsaet, 2020, p.8). The concept of environmental justice extends beyond the distribution of environmental harms and benefits, as it is deeply intertwined with issues of race, class, and power. The sustainability-social justice nexus raises a crucial question: what should or should not be distributed to achieve justice? This question is particularly pertinent when examining issues like plastic pollution (Ali, 2001, p.11). Plastic pollution is not only an environmental issue but also a social justice concern. Marginalized communities often bear the brunt of the adverse effects of this issue, such as polluted waterways, health problems from exposure to toxic chemicals, and inadequate waste management infrastructure (McDermott, 2016, p.4).

Incorporating environmental justice as a theoretical framework in the analysis adds a critical dimension, ensuring that the analysis addresses the imperative of fair treatment and meaningful participation in environmental decision-making processes for all individuals, regardless of socio-economic backgrounds (Ali, 2001, p.18). Further provides a crucial lens to evaluate the framing strategies of these powerful actors. It sheds light on their efforts, or lack thereof, to promote fairness, inclusivity, and justice in addressing plastic pollution, ensuring that all communities, particularly the most vulnerable, are considered in environmental decision-making processes (Ali, p.15).

4. Methodology and Research Design

4.1 What's the Problem Represented to be?

For this research, the “What's the Problem Represented to be?” (WPR) approach, first proposed by Carol Bacchi (2009) will be employed to investigate how the EPA and EC frame the issue of plastic pollution. The method recognizes that policies are created in response to a problem. Despite that the policy does not explicitly state it, it subtly suggests that something needs to be fixed, which implies that there is a problem. Bacchi's method makes it easier to analyze policies critically by asking a number of questions. These questions will serve as a guide for the analysis, the key questions will be addressed in Section 5. The WPR method sheds light on the potential unintended outcomes of policies. According to Bacchi, formulating policies might inadvertently give problems shape rather than merely responding to them (Bacchi, 2009, p.1). Furthermore, researchers like Osborne (1997) examine the development and formulation of policies, noting that a problematization stage is necessary before a policy can be formulated (Osborne, p.174). Osborne clarifies that problematization requires "a range of factors be simplified by posing an issue as a particular sort of issue" (Osborne, 1997, p.175).

The WPR approach consists of six questions, however, not all of them will be used in this paper. Specific questions have been excluded due to their lack of applicability to the particular research field, aims, and objectives. Further, the three questions selected from Bacchi's approach have been adapted to the aim and research question. In addition, the objective of each question will be explained in detail in the following section. The questions that have been excluded are not listed in the table below, nor will they be covered in further detail in the following section.

The purpose of this thesis is to investigate how the EPA and EC define the problem of plastic pollution. It specifically aims to pinpoint the main issues they have brought up in the selected policy documents. Each component will be examined independently throughout the study in accordance with the research questions to provide a methodical examination.

Used WPR Question	Adapted Questions
What's the "problem" policy proposal?	What is the problem of plastic pollution represented to be from the perspective of the EC/EPA?
What presuppositions or assumptions underlie this representation of the problem?	What underlying assumptions inform the representation of plastic pollution as a problem as perceived by the EC/EPA?
What is left unproblematic in this problem representation where are the silences? Can the "problem" be thought about differently?	What aspects are overlooked or silenced in the representation of plastic pollution as a problem from the perspective of the EC/EPA, and is there potential for alternative perspectives to be considered?

4.2 The WPR Questions

Bacchi's approach offers an insightful perspective for evaluating policy matters by looking at how they address alleged concerns. Within the framework of the study, attention will be put on the problem of the depiction of plastic pollution by the EPA and EC. In order to shed light on the perceived problems and difficulties faced by policymakers, the analysis starts by examining how plastic pollution is problematized (Bacchi, 2009, p.5).

Expanding on this first investigation, the second question digs more into the underlying hypotheses and assumptions that influence how plastic pollution is portrayed as an issue in their respective policy frameworks. The research seeks to reveal the hidden meanings and presumptions that shape policymakers' attitudes toward plastic pollution by challenging the conceptual logics that underlie this depiction (Bacchi, 2009, pp.6-7). By critically analyzing these representations, one may determine the restrictions or simplifications that may be present, as well as the reasoning behind some problem representations.

Going forward, the third question focuses on the gaps in their respective policy discourse's portrayal of plastic pollution as a concern. These silences cover the limitations and oversimplifications in the problem's conceptualization, in addition to what is left out or

ignored (Bacchi, 2009, p.13). The literature review aims to cover aspects related to plastic pollution to critically examine these silences with the hope of drawing attention to the political, social, and environmental ramifications of these silences that are sometimes ignored or underrepresented in the discourse around contemporary policy. Further environmental justice will be used in this part of the analysis as a theoretical framework to add a critical dimension to the paper.

4.3 Sampling and Material

The choice of the EU and the US as cases for analysis is motivated by their significant influence on global environmental policy and their contrasting approaches to addressing plastic pollution. Policy documents from their respective environmental bodies have been sampled and will be presented below.

4.3.1 European Commission

The documents from the EC were specifically chosen for their focus on addressing plastic pollution and promoting sustainable practices within the EU. The first document presents an extensive plan for fostering a CE, which includes specific measures directed at reducing plastic waste and promoting the sustainable use of plastics. The second document is a directive proposed by the EC, which was later adopted by the EP and the CEU in 2019. By proposing legislative measures and regulatory frameworks, the EC plays an important role in guiding MS toward minimizing the adverse effects of plastic pollution on ecosystems and human health. Analyzing materials issued by the EC provides insights into the EU's approach to plastic pollution mitigation and its effectiveness in implementing strategies. The documents stated below will therefore be used:

European Commission. (2020). “Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions: A new circular economy action plan for a cleaner and more competitive Europe.” *20 pages*

European Commission. (2018). “Proposal for a directive of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment (Text with EEA relevance).” *33 pages*

4.3.2 Environmental Protection Agency

EPA's national strategy draft was chosen due to its extensive approach to mitigating plastic pollution within the US, emphasizing the importance of building a CE. Its focus on developing strategies for reducing plastic waste aligns with the research interest in analyzing the EPA's initiatives and effectiveness in addressing plastic pollution. Given the EPA's role as the primary environmental regulatory agency in the US, its strategies and actions regarding plastic pollution have significant implications for environmental protection and policy implementation nationwide. The document stated below will therefore be used:

United States Environmental Protection Agency (EPA). (2023). "Draft national strategy to prevent plastic pollution: Part of a series on building a circular economy for all". *48 pages*

4.4 Limitations and Ethical Considerations

The selected documents from the EPA and EC offer insights into their respective approaches to addressing plastic pollution. The limited availability of documents directly addressing plastic pollution within both agencies constrains comparisons between the EPA's draft strategy and the EC's finalized directives. This scarcity underscores the importance of considering the ethical implications inherent in relying on these documents, particularly when analyzing their framing of the issue (Robson & McCartan, 2014, p.362).

It is critical to acknowledge the possibility of subjectivity or bias while assessing the data during this research. Self-confirming bias throughout the analysis is a risk as the research is based on a fixed research design (Robson & McCartan, 2016, p.469). Additionally, time constraints and resource limitations may have impacted the depth of analysis or the breadth of sources consulted (Scheyvens, 2014, pp. 52, 84-85). Ethical considerations regarding the use of data include ensuring accuracy and avoiding misrepresentation of the documents' contents are crucial. To address these concerns, there is extensive use of direct quotes from the documents to capture the original context and meaning accurately. This approach's purpose is to help preserve the integrity of the source material and reduce the potential for misinterpretations or biases (Robson & McCartan, 2014, pp. 362-363).

The EPA's national strategy being in draft form suggests a potential for revisions or amendments before finalization, which significantly impacts the framing of the issue and the

proposed strategies. Both sets of documents lack comprehensive data on the actual implementation and effectiveness of the outlined measures, thus constraining the depth of analysis regarding their respective framing strategies. Furthermore, the political contexts in which documents are situated alongside their publication dates can exert substantial influence on their content and scope. While EPA documents typically target a broader audience, EC documents tend to have a narrower focus, potentially leading to biases or omissions in the framing of plastic pollution as an issue (Robson & McCartan, 2014, p.372). In conducting a discourse analysis, one must consider the background and political views of the researcher conducting the analysis. Reflecting on the researcher's biases and preconceptions is essential (Robson & McCartan, 2014, pp. 106, 331). As Bacchi (2009) underscores, it is essential to reflect on the problematizing concepts presupposed in the research material (Bacchi, 2009, p.19). By acknowledging these factors and using direct quotes to ensure accuracy, the aim is to secure a balanced and ethical approach to analyzing governmental documents and discourse surrounding plastic pollution mitigation strategies.

5. Analysis

The following section will examine the selected documents, structured around the three WPR questions. The analysis will be conducted separately for the European Union and the United States, providing an exploration of each entity's approach and framing.

5.1 European Union - European Commission

5.1.1 The EC's Problem Representation of Plastic Pollution

The EU's stance on plastic pollution is ingrained within its overarching environmental sustainability agenda, epitomized by the EGD (EC, 2020, p.2). It recognizes plastic pollution as a pressing environmental concern while also contextualizing it within the broader imperative of achieving multifaceted environmental and economic objectives. EGD acknowledges plastic pollution as a symptom of unsustainable consumption and production patterns that jeopardize the long-term health of the planet. By drawing attention to the anticipated surge in international material consumption and waste generation by 2050, the EU stresses the importance of addressing plastic pollution as an integral part of a comprehensive sustainability strategy (EC, 2020, p.2).

Beyond acknowledging the urgency of addressing plastic pollution, EC seeks to drive

substantive change by mobilizing legislative and regulatory measures. Initiatives such as widening the scope of the Ecodesign Directive and introducing sustainable product policy legislative initiatives exemplify the EU's commitment to making products fit a CE while reducing waste (EC, 2020, p. 4). The stance reflects the EU's recognition of plastic pollution as a systemic issue that requires targeted interventions across various sectors. Moreover, the EU's response to plastic pollution extends beyond policy frameworks to encompass concrete actions directed at curbing plastic waste and promoting sustainable consumption and production. The EC exhibits its commitment to tackling the underlying causes of the issue and progresses towards a more sustainable future by promoting significant changes and tangible actions (EC, 2020, pp.3,8).

The EC's elucidation of the environmental impact of plastic pollution highlights the gravity of the issue, highlighting its significant contribution to greenhouse gas emissions, biodiversity loss, and water stress resulting from resource extraction and processing activities (EC, 2020, pp.2,12,16). This recognition of the interconnectedness of environmental challenges positions plastic pollution as a central issue that demands immediate attention in the broader context of sustainable development. In response to the scale and complexity of the plastic pollution problem, the EC advocates transformative change through various legislative and regulatory measures (EC, 2020, p.3). These initiatives, ambitions at scaling up the CE to mitigate environmental impacts and ensure long-term competitiveness, reflect a commitment to address the drivers of plastic pollution. The EU's pledge for global leadership in promoting sustainability emphasizes efforts to leverage influence, expertise, and financial resources to implement the 2030 Sustainable Development Goals, further solidifying its stance on plastic pollution as a global challenge (EC, 2020, pp.3,9).

The following remark further encapsulates the EC's stance on plastic pollution. "Circular approaches that prioritize reusable products and re-use systems will lead to a reduction of waste generated, and such prevention is at the pinnacle of the waste hierarchy enshrined in Article 4 of Directive 2008/98/EC of the European Parliament and of the Council.³⁴ Such approaches are also in line with United Nations Sustainable Development Goal 12.5 to ensure sustainable consumption and production patterns" (EC, 2018, p.18). This frame is situated within the broader context of promoting CE principles and sustainable consumption patterns. By prioritizing reusable products and waste prevention, the EU underscores the need to shift away from single-use plastics, positioning waste reduction as a fundamental strategy

for addressing this issue. Furthermore, the EU's policy response to plastic pollution extends beyond broad strategic frameworks to cover specific legislative actions aspiring to restrict plastic waste and promote sustainable consumption and production. Initiatives such as widening the scope of the Ecodesign Directive and introducing sustainable product policy legislative initiatives exemplify the EU's proactive approach to making products fit a CE economy while reducing waste (EC, 2020, p.4).

In addition, the EC recognizes the urgent need for proper waste management to prevent marine litter, particularly plastic pollution (EC, 2018, p.2,3,4). While acknowledging the existing legislation and policy instruments targeting plastic waste, the EC acknowledges and considers the current measures as insufficient to effectively mitigate marine litter, highlighting the need for more extensive interventions (EC, 2018, p. 3). By integrating CE principles into its legislative framework and prioritizing waste prevention, the EU intends to frame the root causes of plastic pollution as inadequate waste prevention while promoting more sustainable consumption and production patterns (EC, 2018, p.3,4,5,6).

Lastly, plastic pollution is viewed as more than an environmental burden; it sustains a significant drain on the EU economy. Framing plastic pollution as an economic issue, highlights the significant financial burden plastic products create throughout their lifecycle, placing a strain on MS in several ways (EC, 2018, p.3,5). The reliance on single-use plastics creates a multitude of economic costs throughout their lifecycle, from production to disposal. The most immediate burden is the management of plastic waste. The sheer volume of generated plastic waste requires extensive collection, transportation, and treatment infrastructure (EC, p.6). Municipalities and waste management companies shoulder these costs, which can be substantial, particularly for cleaning up plastic pollution in littered areas and oceans (EC, p.12). The directive addresses adverse economic impacts on tourism and fisheries, two crucial sectors for many EU MS. Pristine coastlines are a major source for tourists, however, plastic pollution harms these ecosystems and disrupts marine life, leading to a decline in tourism revenue (EC, pp.3,7). This framework emphasizes the financial repercussions of environmental degradation and how plastic pollution directly threatens the economic vitality of coastal communities reliant on tourism.

Similarly, the fishing industry, another significant contributor to the EU economy, suffers from the negative impact of plastic pollution on marine life (EC, 2020, p.7). Plastic debris

entails marine organisms, damages fishing gear, and contaminates seafood, leading to reduced catches and increased costs for fishers (EC, 2020, p.3). The EC consequently stresses the necessity of reducing single-use plastics to protect the livelihoods of those dependent on marine ecosystem health. Through this framework, the EU's approach to tackling plastic pollution extends beyond environmental preservation to encompass economic sustainability. By highlighting the financial costs associated with waste management, tourism, and fisheries, the directive positions the reduction in single-use plastics as a critical economic priority. This perspective strengthens the case for legislative action while mobilizing a broader range of stakeholders to support and engage.

5.1.2 Assumptions Underlying EC's Problematization of Plastic Pollution

A notable assumption underlying the EC's framing of plastic pollution is the stark belief of the consumer as a key player in mitigation efforts. The statements “Nonetheless, a variety of factors linked to inadequate waste infrastructure and inappropriate consumer behavior will still result in littering and leakage of plastics into the environment” (EC, 2018, p.8) and “...the objective is to limit damages by better informing the consumers and making the producers financially responsible of the consequences on the environment” (EC, 2018, p.12) reflect several underlying assumptions. First, it presupposes that littering and improper waste disposal are primary contributors to plastic marine litter, and suggests that addressing plastic pollution requires interventions targeted at changing consumer behavior and waste management practices to prevent plastic waste from entering marine ecosystems (EC, 2018, p.12,14). Furthermore, the statement implies that consumers of single-use plastic products and plastic-containing fishing gear may lack awareness of reusable alternatives and reuse systems.

This belief underscores the importance of education and information dissemination in promoting sustainable consumption habits and encouraging the adoption of alternatives to reduce plastic waste. By providing information about reusable alternatives and reuse systems, the EU can effectively mitigate plastic pollution by reducing the demand for single-use plastics and minimizing the likelihood of littering and improper waste disposal (EC, 2018, p.26). This concept is based on the idea that awareness-raising measures are efficient in fostering behavioral change and promoting responsible consumption practices, placing significant accountability on consumers in addressing the crisis. The EU's liability to raise

awareness reflects its belief in the importance of engaging and mobilizing citizens as active participants in efforts to combat plastic pollution and promote environmental sustainability.

Additionally, the EC assumes a lack of coordinated action at the EU level as a contributor to plastic pollution is deemed essential for productively tackling plastic pollution and promoting sustainable practices (EC, 2018, pp.6,17). This accentuates the EC's recognition of the importance of regulatory intervention and cooperation among MS in addressing plastic pollution, emphasizing the need for cohesive strategies and shared efforts. Furthermore, the emphasis on penalties reflects the belief in the efficacy of deterrence mechanisms to incentivize adherence to environmental standards and discourage activities that contribute to plastic pollution (EC, 2018, pp.24, 30). By imposing penalties for non-compliance, the EU plans to enhance regulatory enforcement and promote responsible behavior among stakeholders, aligning with the theoretical framework of issue framing. This framing shows the EC's commitment to employing a regulatory approach to achieve its environmental objectives while addressing the inherent complexities of plastic pollution mitigation.

The EC's continuous approach stems from a steadfast conviction that transitioning towards a regenerative growth model is not just desirable, but rather imperative for addressing plastic pollution and achieving climate neutrality (EC, 2020, p.2). This assumption serves as a cornerstone of the EC's narrative, symbolizing its commitment to fostering economic activities that mitigate environmental harm whilst actively contributing to ecological regeneration and resilience. Understanding the systemic nature of plastic pollution allows the commission to develop evidence-based policies and solutions, furthering its commitment to successful environmental management.

5.1.3 Silences in EU's Representation of Plastic Pollution

The EC approach demonstrates an understanding of the issue's social, economic, and global ramifications and has made notable progress in addressing the environmental impacts of plastic pollution, including its contributions to greenhouse gas emissions and biodiversity loss (EC, 2020, p.2). However, there are prominent gaps in its current strategy that need to be addressed, particularly regarding environmental justice. Despite recognizing the international scope of plastic pollution, there is a need for an increased emphasis on international cooperation to effectively manage it (EC, 2018, pp.6,17). While EC's initiatives and legislation address a portion of the aspects of product sustainability, there is room for

improvement in enhancing the requirements to strengthen the effectiveness of current measures (EC, 2020, p.3). This includes retaining criteria related to environmental performance, embracing community engagement, and participatory approaches to product design (EC, 2020, p.4,5). Adopting a more holistic approach to plastic waste management, including improved considerations of factual consumer behavior and societal norms, can augment regulatory measures and promote systemic changes (EC, 2018, pp.8,12,15). Nevertheless, the focus on consumer behavior should not overshadow the role of the key players, such as plastic production companies and inadequate waste management infrastructure, in perpetuating plastic pollution (EC, 2020, p.2).

A critical oversight in the EC's approach is the insufficient consideration of environmental justice. Plastic pollution disproportionately affects marginalized communities, exacerbating social and economic inequalities. These communities often reside in areas with inadequate waste management infrastructure, leading to higher exposure to pollution and associated health risks, such as respiratory issues and other chronic conditions (Ali, 2001, pp.8,38). The EU's current policies tend to overlook these disparities, failing to address environmental injustices. Integrating environmental justice principles into the EU's strategy is essential. This involves recognizing and actively addressing the disproportionate burden that plastic pollution imposes on marginalized communities. Policies should ensure that these communities have equitable access to clean environments and involve them in the decision-making processes that affect their lives. This approach makes policies more inclusive and effective by incorporating diverse perspectives and solutions. In addition, the EU needs to recognize environmental justice's universal reach.

The majority of plastic garbage shipped from the EU ends up in developing nations, which has detrimental effects on the environment and public health. The EU can lessen these inequalities by assuming ownership of the entire plastics lifecycle, from manufacture to disposal, and by working with foreign partners to enhance waste management techniques worldwide (Ali, 2001, p.24). Applying an environmental justice perspective to the problem of plastic pollution entails moving the emphasis from consumer behavior to the responsibility of plastic production corporations and the enhancement of waste management systems. It entails committing to global fairness and ascertaining that sustainable practices and cleaner ecosystems benefit all communities, regardless of their location or socioeconomic standing.

5.2 United States - Environmental Protection Agency

5.2.1 EPA's Problem Representation of Plastic Pollution

Plastic pollution, as depicted from the perspective of the US, is not a local or regional issue but a pressing global crisis with severe implications (EPA, 2023, pp.1,15).

The EPA uses a strategic differentiation of terminology to discuss plastic pollution, exemplified by the differentiating use of "solid waste" and "trash". This framing reflects an understanding of the versatile nature of plastic pollution and emphasizes the need for tailored strategies to address its diverse dimensions. Within the US waste management framework, the term "solid waste" holds significant weight (EPA, 2023, p.16). It includes a wide range of discarded materials originating from industrial, commercial, mining, agricultural, and community activities. By employing this term, the EPA emphasizes the systemic origins of plastic waste, highlighting its industrial and commercial sources and the need for adequate waste management practices. The term "trash" finds prominence in water management programs, particularly in addressing the environmental impact of plastic pollution in aquatic ecosystems. "Trash" refers to a persistent solid material that enters the environment, often through littering, unintentional spillage, or other means. By delineating between "solid waste" and "trash," the EPA acknowledges the dual nature of the issue; one rooted in systemic waste management practices and the other in environmental contamination. A recognition that highlights the complexity of addressing plastic pollution emphasizes the importance of targeted interventions that include both waste management and environmental protection efforts.

Further, the representation of plastic pollution in US policy emphasizes the role of sustainable procurement practices and federal intervention. The statement, "The federal government should provide these resources to the federal acquisition workforce on a new or existing sustainable purchasing tool to identify products or delivery systems that can replace single-use products..." highlights key aspects of this perspective (EPA, 2023, p.18). Plastic pollution is framed as an intrinsic issue driven by the prevalence of single-use products. The solution is represented as requiring structured, government-led initiatives, with a focus on sustainable purchasing practices. By advocating for the development and sustainable use of tools, the statement highlights the need for the federal government to lead by example in promoting sustainable alternatives. The framing suggests that addressing plastic pollution involves managing waste while transforming procurement processes to prioritize sustainability. The federal government's role is crucial, providing resources and guidance to

the acquisition workforce to drive this change. This perspective also implies that significant environmental benefits can be achieved through institutional support and strategic policy implementation.

Solid waste management emerges as a critical focal point in the strategy, particularly in communities suffering from pollution (EPA, 2023, p.24). The emphasis on improving waste collection and management systems reflects a commitment to addressing the root causes of plastic pollution and preventing further environmental degradation. By investing in infrastructure and resources for waste management, the US plans to reduce the amount of plastic waste entering the environment and promote sustainable waste practices that minimize environmental impacts (EPA, 2023, pp.26-27). Public engagement and education are deemed indispensable components of the strategy, with a concerted effort to empower individuals and communities to take action against plastic pollution. The emphasis on consumer education and behavior change underscores the recognition of individual agency in driving change and fostering a culture of sustainability. By raising awareness and promoting environmentally friendly behaviors, the US aspires to mobilize public support for plastic pollution mitigation efforts and promote a culture of environmental ownership (EPA, 2023, p.28).

The strategy advocates for stakeholder collaboration and the integration of diverse perspectives to develop strategies that are not only effective but also equitable and sustainable. The frequent use of the word "stakeholder," mentioned 27 times in the draft, suggests a deliberate framing strategy to emphasize the importance of broad-based engagement and shared responsibility (EPA, 2023, pp.1,5,7, 13-17). The remark "Section 301 of the Act charges EPA, in consultation with stakeholders" (p.13), provides a meek attitude towards plastic pollution and an incline to be inclusive in their decisions and recommendations. By prioritizing collaboration and inclusivity, the US targets the use of collective expertise and resources from various stakeholders to develop innovative solutions that can address the root causes of plastic pollution and promote environmental sustainability (EPA, 2023, p.15). EPA's draft strategy acknowledges the disproportionate burden of plastic pollution on disadvantaged communities within the US, by mentioning the intersectionality of environmental issues with social and economic disparities. This recognition and fabrication of the issue underscore the importance of incorporating principles of environmental justice into policy frameworks to address systemic inequities and ensure that mitigation efforts benefit all communities equitably (EPA, 2023, pp.5,9). By prioritizing equity and inclusivity,

the US frames its commitment to addressing the underlying social and economic factors that exacerbate plastic pollution (EPA, 2023, p.10).

When discussing the issue of plastic production EPA states that “Setting a new national voluntary goal to reduce the production of single-use, unrecyclable, or frequently littered products identified in A1.1 is needed” (p.18). The proposal to set a voluntary goal for reducing plastic pollution shows that framing their strategies has an important influence on perceptions. The emphasis on voluntary participation, encourages a sense of shared responsibility among stakeholders, positioning plastic pollution as a problem that can be addressed through collective action rather than strict regulation alone. It intends to mobilize support and engagement from all sectors, including businesses, manufacturers, and advocacy groups, by presenting them with an *opportunity* rather than a mandatory act to contribute to the solution.

Lastly, the draft covers the adoption of technologies as a strategy that aims to minimize the adverse impacts of plastic pollution on both present and future generations. By investing in research and innovation, the US aims to develop new solutions and technologies that can reduce plastic pollution and promote environmental sustainability, slightly redirecting the issue to inadequate technology and creating less urgency to the matter (EPA, 2023, p.19,29).

5.2.2 Assumptions Underlying the EPA’s Problematization of Plastic Pollution

The representation of plastic pollution as a pressing environmental issue is built upon several underlying assumptions, each contributing to a far-reaching understanding of the problem and its potential solutions. One of the key assumptions in the draft is the belief in America as a channel of leadership and innovation. The US assumes its potential international leadership in developing innovative circular strategies, showcasing confidence in its capability. “The United States can be a leader in developing an innovative, circular approach to reducing plastic pollution while growing the economy and fulfilling America’s needs” (EPA, 2023, p.12). This framing suggests that environmental sustainability and economic growth are not mutually exclusive, a belief that indicates that addressing plastic pollution can contribute to economic prosperity. A perspective that in turn promotes the idea that sustainable practices, such as CE, can drive both ecological and economic benefits. Additionally, the emphasis on fulfilling America's needs presumes the belief that environmental health is integral to national well-being. This view implies that tackling plastic pollution is essential for the overall

prosperity and security of the nation, intertwining environmental objectives with broader socio-economic goals.

The transition to a circular approach, prioritizing reuse, recycling, and waste elimination, is seen as indispensable for effectively managing plastic products and reducing pollution. This assumption underscores the importance of embracing sustainable practices to promote environmental sustainability (EPA, 2023, p.1). Furthermore, it is assumed that policies, incentives, and public awareness campaigns are necessary to prevent plastic waste from entering waterways and oceans and mitigate its adverse impacts on ecosystems and communities. These measures are perceived as critical for altering behaviors and promoting responsible plastic consumption and disposal (EPA, 2023, p.2). The representation of plastic pollution as a problem is also underpinned by assumptions regarding the unsustainable trajectory of plastic production and consumption, inadequate waste management infrastructure, and the significant environmental and economic impacts of plastic products throughout their lifecycle (EPA, 2023, p.6).

Additionally, there is an assumption that collaborative efforts are essential for addressing plastic pollution comprehensively, from production to end-of-life management. This includes coordinated efforts among governments, industries, environmental organizations, academia, and the public to increase the circularity of plastic products and reduce their environmental and economic impacts (EPA, 2023, p.10, 35). Further, it is assumed that "ecolabels" are effective in promoting circularity and environmental impact, "...can be designed to promote circularity and decrease negative environmental and human health impacts" (EPA, 2023, p.19). Eco-labels are labels or certifications affixed to products to indicate their environmental attributes or sustainability credentials and are designed to inform the *consumer* about a product's environmental performance, allowing them to make more informed purchasing decisions. This assumes that American citizens care and are aware of the growing issue of plastic pollution while being willing to change their consumption patterns.

5.2.3 Silences in EPA's Representation of Plastic Pollution Issues

The EPA's strategy for addressing plastic pollution lacks consideration of environmental justice. While the strategy acknowledges the environmental justice implications of plastic pollution, it does so relatively briefly compared to other aspects. The focus primarily remains on reducing the pollution from plastic production, not the actual production, while improving

material management, with less attention given to consumption patterns, a significant driver of plastic pollution (EPA, 2023, p.1, 6). Furthermore, there is a lack of focus on prevention measures, as the statements on reducing plastic production are vague and non-binding in terms of what is expected from producers. Similarly, the strategy discusses consumption patterns but fails to provide more detailed strategies in this area. Consumer habits are deeply entrenched in societal norms and economic structures, playing a crucial role in the generation and disposal of plastic waste, and would benefit from more actionable recommendations (EPA, 2023, p.27). This limited focus on consumption patterns and prevention measures overlooks the disproportionate impact of plastic pollution on marginalized communities, who often bear the brunt of inadequate waste management infrastructure and high exposure to environmental contaminants. Communities of color and low-income areas are more likely to be located near landfills, incinerators, and industrial facilities that contribute to plastic pollution. These areas experience higher rates of health problems such as respiratory issues, cancer, and other chronic conditions linked to pollution exposure (Landrigan et al, 2020, p.29). By not fully addressing these issues, the strategy falls short of incorporating environmental justice principles.

The strategy scarcely mentions prevention measures to curtail plastic production and consumption as a significant part of mitigating the proliferation of plastic pollution (EPA, 2023, p.27). By addressing consumption patterns more holistically and involving local stakeholders in decision-making processes, the EPA can foster a sense of responsibility and accountability, leading to more sustainable outcomes (EPA, 2023, p.10). This involves implementing stricter regulations on plastic production and disposal, holding manufacturers accountable for the lifecycle impacts of their products, and incentivizing the adoption of sustainable practices across industries (EPA, 2023, pp.17-18). By holding corporations accountable for their environmental footprint and promoting transparency and responsibility in their operations, these measures can encourage systemic changes in production and consumption patterns, leading to a reduction in plastic pollution and its associated impacts.

6. Conclusion

The objective of this paper was to analyze how the EPA in the US and the EC in the EU frame the issue of plastic pollution. To accomplish this, a comparative framework that integrated issue framing theory and environmental justice principles was used to examine the

strategic framing employed by the regulatory bodies within their respective environmental agendas. Utilizing Bacchi's (2009) approach of 'What the problem represented to be,' this approach aimed to uncover the political, social, and environmental implications associated with their framing strategies, as well as the extent to which considerations of environmental justice are integrated into their approaches.

Prominent in the documents conducted by the EC is the integration of plastic pollution into its overarching environmental sustainability agenda. It is recognized as a significant concern situated within the imperative of achieving sustainable development goals. The interconnectedness of environmental challenges and the fact that plastic pollution is framed as a consequence of unsustainable consumption and production patterns threaten the planet's long-term health. By drawing attention to the surge in global material consumption and waste generation, the EC has emphasized the urgency of addressing plastic pollution as part of a comprehensive sustainability strategy. Similarly, the US EPA employs a strategic approach to frame plastic pollution within its environmental agenda. The EPA emphasizes federal leadership in promoting sustainable purchasing practices and investing in waste management infrastructure. The usage of strategic differentiation of terminology, such as "solid waste" and "trash," reflects the versatile nature of plastic pollution and the need for tailored strategies. However, the EPA often shifts its focus towards emissions from plastic production rather than addressing the production itself, and towards developing new technologies. This shift can divert attention from the urgency of the plastic pollution problem.

Both the EC and the EPA consider environmental justice to some extent within their framing strategies. The EC acknowledges the disproportionate burden of plastic pollution on specific communities and economic sectors. This aligns with environmental justice principles and advocates targeted interventions to address these disparities. The EC also emphasizes the role of consumers in mitigating plastic pollution, with a focus on raising awareness and education to promote responsible consumption habits. However, questions persist regarding the efficacy of individual behavioral changes in addressing systemic issues and structural inequalities. The EPA succinctly recognizes the disproportionate burden of plastic pollution on disadvantaged communities and emphasizes stakeholder collaboration and shared responsibility. Furthermore, the analysis illuminated gaps and silences within both bodies' framing approaches, particularly regarding environmental justice considerations. These gaps

underscore the imperative for more inclusive framing strategies that prioritize environmental justice principles to achieve progress on a global scale.

Another notable convergence in their approaches lies in their enforcement mechanisms. The EC emphasizes penalties and regulatory measures to enforce compliance with environmental standards, thereby ensuring stringent adherence to its sustainability goals. Conversely, the EPA's approach relies more on voluntary measures and encourages best practices, which raises questions about their effectiveness and the need for stronger regulatory action to achieve similar compliance and environmental protection.

In conclusion, addressing the silences within their framing approaches, particularly regarding environmental justice and prevention measures, will be essential for achieving meaningful progress in mitigating plastic pollution and promoting sustainability. By adopting more inclusive framing strategies that prioritize environmental justice and sustainability, the EC and EPA can contribute to a more informed and effective discourse surrounding plastic pollution and drive positive changes at both domestic and international levels. Despite these challenges, both the EC and EPA play crucial roles in shaping global environmental governance initiatives and advocating for their policy positions in international forums. Their framing strategies not only influence domestic outcomes but also contribute to shaping international norms and standards, as evidenced by their participation in the ongoing negotiations for the GPT.

Suggestions for future research include a further examination of how different environmental bodies frame plastic pollution, which is crucial for unifying global efforts such as the GPT. The distinct framing approaches of regulatory bodies like the EPA, and EC emphasize different aspects, impacting policy measures and international cooperation. Additionally, the socio-economic disproportionate burdens of plastic pollution need to be examined in order to properly address them. Analyzing these areas can help identify common goals and foster unity. Continuous research and dialogue can enhance international cooperation and strengthen the effectiveness of climate governance initiatives.

7. References

Aanesen, M., Ahi, J. C., Abate, T. G., et al. (2024). Insights from international environmental legislation and protocols for the global plastic treaty. *Scientific Reports*, 14, 2750. <https://doi.org/10.1038/s41598-024-53099-9>

Ali, A. (2001). A conceptual framework for environmental justice based on shared but differentiated responsibilities. CSERGE Working Paper EDM, No. 01-02, University of East Anglia, The Centre for Social and Economic Research on the Global Environment (CSERGE), Norwich.

Bacchi, C. L. (2009). *Analyzing policy: What's the problem represented to be?* Frenchs Forest, N.S.W.: Pearson.

Bauer, F., & Fontenit, G. (2021). Plastic dinosaurs – Digging deep into the accelerating carbon lock-in of plastics. *Energy Policy*, 156. <https://doi.org/10.1016/j.enpol.2021.112418>

Blettler, M. C., & Wantzen, K. M. (2019). Threats underestimated in freshwater plastic pollution: Mini-review. *Water, Air, & Soil Pollution*, 230, 1–11. <https://doi.org/10.1007/s11270-019-4220-z>

Break Free From Plastic. (2023). *Brand Audit Report 2023*. Retrieved [May 8, 2024], from <https://brandaudit.breakfreefromplastic.org/brand-audit-2023/>

Conlon, K. (2020). Adaptive injustice: Responsibility to act in the plastics economy. *Resources, Conservation and Recycling*, 153, 104563. <https://doi.org/10.1016/j.resconrec.2019.104563>

Coolsaet, B. (Ed.). (2020). *Environmental justice: Key issues* (1st ed.). Routledge. <https://doi.org/10.4324/9780429029585>

Ellen MacArthur Foundation. (2023). *The Global Commitment 2023 Progress Report*. Retrieved [May 10, 2024], from <https://www.ellenmacarthurfoundation.org/global-commitment-2023/overview>

European Investment Bank. (n.d.). EU climate change: A peer to the US and China. Retrieved [May 7, 2024], from <https://www.eib.org/en/infographics/eu-climate-change-peer-us-china>

European Commission. (2020). Communication from the commission to the European Parliament, the council, the European Economic and social committee, and the committee of the regions: A new circular economy action plan for a cleaner and more competitive Europe.

European Commission. (2018). Proposal for a directive of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment (Text with EEA relevance).

European Commission. (n.d.). Zero pollution action plan. Retrieved [May 12, 2024], from https://environment.ec.europa.eu/strategy/zero-pollution-action-plan_en

Fuller, R., Landrigan, P., Balakrishnan, K., Bathan, G., & Bose-O'Reilly, S. (2022). Pollution and health: A progress update. *National Library of Medicine*, 6(6), 535-547. [https://doi.org/10.1016/S2542-5196\(22\)00090-0](https://doi.org/10.1016/S2542-5196(22)00090-0)

Geyer, R., Jambeck, J., & Law, K. (2017). Production, use, and fate of all plastics ever made. *Science Advances*, 3(7). <https://doi.org/10.1126/sciadv.1700782>

Hayes, J., & Knox-Hayes, J. (2014). Security in climate change discourse: Analyzing the divergence between US and EU approaches to policy. *Global Environmental Politics*, 14(2), 82-101. https://doi.org/10.1162/GLEP_a_00230

Karali, N., Khanna, N., & Shah, N. (2024). Home: Climate impact of primary plastic production. Berkeley Lab. <https://doi.org/10.1016/j.envsci.2019.06.005>

Landrigan, P., Symeonides, C., Raps, H., & Dunlop, S. (2023). The global plastics treaty: Why is it needed? *The Lancet*, 402(10419), 2274-2276. [https://doi.org/10.1016/S0140-6736\(23\)02198-0](https://doi.org/10.1016/S0140-6736(23)02198-0)

Landrigan, P., Stegeman, J., Fleming, L., Allemand, D., & Anderson, D. (2020). Human health and ocean pollution. National Library of Medicine.

Lebreton, L., & Andrady, A. (2019). Future scenarios of global plastic waste generation and disposal. Palgrave Communications. <https://doi.org/10.1057/s41599-018-0212-7>

McDermott, K. (2016). Plastic pollution and the global throwaway culture: Environmental injustices of single-use plastic. ENV 434 Environmental Justice, Salve Regina University. Retrieved [May 14, 2024], from https://digitalcommons.salve.edu/env434_justice/7

Nelson, T. E., & Oxley, Z. M. (1999). Issue framing effects on belief importance and opinion. *The Journal of Politics*, 61(4), 1040-1067.

Osborne, T. (1997). On health and statecraft. In A. Petersen & R. Bunton (Eds.), *Foucault, health and medicine*. Routledge.

Owens, K. A., & Conlon, K. (2021). Mopping up or turning off the tap? Environmental injustice and the ethics of plastic pollution. *Frontiers in Marine Science*, 8. <https://doi.org/10.3389/fmars.2021.713385>

Pew Charitable Trusts & SYSTEMIQ. (2020). Breaking the plastic wave: A comprehensive assessment of pathways towards stopping ocean plastic pollution. Retrieved [May 11, 2024], from https://www.pewtrusts.org/-/media/assets/2020/07/breakingtheplasticwave_report.pdf

Robson, C., & McCartan, K. (2016). *Real world research* (4th ed.). SAGE Publications.

Scheyvens, R. (2014). *Development fieldwork: A practical guide* (2nd ed.). SAGE Publications.

Tessnow-von Wysocki, I., & Le Billon, P. (2019). Plastics at sea: Treaty design for a global solution to marine plastic pollution. *Environmental Science & Policy*, 100, 94-104. <https://doi.org/10.1016/j.envsci.2019.06.005>

United Nations Environment Programme. (n.d.). Intergovernmental Negotiating Committee (INC) to develop an international legally binding instrument on plastic pollution, including in the marine environment. Retrieved [May 10, 2024], from <https://www.unep.org/inc-plastic-pollution>

United Nations Environment Programme. (2021). Visual feature: Beat plastic pollution. Retrieved [May 5, 2024], from <https://www.unep.org/interactives/beat-plastic-pollution/>

United States Environmental Protection Agency (EPA). (2023). Draft national strategy to prevent plastic pollution: Part of a series on building a circular economy for all.

U.S. Environmental Protection Agency. (n.d.). Our mission and what we do. Retrieved [May 19, 2024], from <https://www.epa.gov/aboutepa/our-mission-and-what-we-do>

Wang, Q., Tweedy, A., & Wang, H. G. (2022). Reducing plastic waste through legislative interventions in the United States: Development, obstacles, potentials, and challenges. *Sustainable Horizons*, 2, 100013. <https://doi.org/10.1016/j.horiz.2022.100013>

Wendler, F. (2022). Framing climate change in the EU and US after the Paris agreement. *Palgrave Studies in European Union Politics*.

Wiesinger, H., Wang, Z., & Hellweg, S. (2021). Deep dive into plastic monomers, additives, and processing aids. *Environmental Science & Technology*, 55(13), 9339–9351. <https://doi.org/10.1021/acs.est.1c00976>

Xu, Q., Zhang, M., & Han, S. (2024). Reflections on the European Union's participation in negotiations of the global plastic pollution instrument under international environmental law. *Frontiers in Marine Science*, 11. <https://doi.org/10.3389/fmars.2024.1388975>