

# **How the Plastic Pollution Coalition Fights Plastic Pollution**

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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## **Introduction and Methods**

Waste creates many of today's environmental, health, and economic problems. Humans create enormous amounts of trash, both personally and on an industrial scale. Globally, more than 0.74 kilograms of waste per capita is produced daily. In 2016, 2.22 billion tons of waste were made, almost 1000 times more than in 1950, with expected growth to 3.75 billion tons in 2050 with a business as usual approach. Waste from low-income countries is expected to triple by 2050, and is growing fastest in Sub-Saharan Africa, South Asia, and the Middle East. Most of this waste is not disposed of properly, leading to significant environmental and health problems. Globally, only about 19 percent of waste is recycled or composted, 11 percent is incinerated, and 70 percent is openly dumped or landfilled (Kaza et al., 2018). This waste kills wildlife, emits greenhouse gasses into the atmosphere, and endangers human health (Joyner & Frew, 1999). Thus, there is a need to address the waste problem before it gets even worse.

One of the most harmful forms of waste currently produced by humans is plastic. Plastic pollution harms humans, animals, and the environment. It kills marine life, leeches harmful chemicals into waterways and soil, and emits greenhouse gasses (Joyner & Frew, 1999). At least 8 million tons of plastic end up in our oceans every year, and plastic makes up 80 percent of all marine debris (Thevenon et al., 2014). In waterways, only some of the plastic waste can be captured and the rest goes on to kill wildlife and cause pollution (Schmaltz et al., 2020). Plastic waste includes microplastics (fragments less than 5 mm long, typically from cosmetics, clothing, and industrial processes), and macroplastics (larger objects, such as shopping bags or plastic bottles). Both of these types of plastics are extremely harmful. According to the Pew Charitable Trusts (2020), in 2016, microplastics accounted for 1.3 million metric tons of plastic pollution entering oceans. Microplastics can be a vector for water borne pollutants, including

polychlorinated biphenyls (PCBs), which can cause cancer, mutations, or birth defects (Thevenon et al., 2014). Over 200 marine species get entangled in or ingest toxic plastic debris, which can cause significant harm or even kill them (Li et al., 2018). When humans eat these animals, they also consume the toxic plastic. Macroplastics make up the bulk of plastic pollution in rivers, adversely affect the river habitat, and can increase flood risk (Al-Zawaidah, 2021). Plastic pollution can also cause serious economic impacts. Plastic debris can impair fishing and tourism; cleanup can be time consuming and expensive (Thevenon et al., 2014). According to the UN, \$13 billion is lost per year from plastic pollution (Raynaud et al., 2014). Clearly, plastic is a very dangerous problem that we need to fix before it gets any worse.

There are many advocacy groups in this area who are working to reduce the problem of plastic pollution. These groups have many different approaches and tools that they use to move towards this goal. In order to learn more about effective strategies, researchers have investigated how advocacies promote their environmental agendas. For instance, Hall and Taplin (2019) found that climate campaigners in California took advantage of the state's competition for economic growth, environmental awareness in some communities, history of progressive legislation, and public trust of nonprofits (Hall and Taplin, 2019). In another study, Koebele (2020), found that coalitions that unite diverse groups of people are effective. Kuppuswamy (2020) found that used in combination with conventional media, social media can boost environmental awareness. These are some of the many different techniques that environmental advocacies can use to promote their agendas.

Within the area of plastic pollution, there are many interested parties, with a variety of agendas. The Plastic Pollution Coalition is a global alliance of 1,200 organizations, businesses, and advocates in 75 countries working to diminish plastic pollution (PPC, 2021). The PPC and

other participants sponsor research (Vered & Shekhar, 2021). The Plastics Industry Association represents plastics manufacturers, defending the business interests of its member companies (PIA, 2017). Waste management companies, such as Waste Management or Republic Services, are in the business of waste disposal, including the disposal of plastic products (Waste Management, 2021). According to Principles for Responsible Investment, a UN-affiliated network representing investors committed to more sustainable economies, waste management companies influence waste disposal policies (PRI, 2021). All of these organizations have a financial or social stake in the issue of plastic waste, with some profiting from it directly and others fighting against it. In this paper, I will be looking at the Plastic Pollution Coalition and their role in the waste dilemma.

In the face of overwhelming plastic pollution, it is important for the organizations fighting this pollution to have effective, well researched and tested strategies. They need to be able to get their message across effectively, raise money to be able to implement programs, and recruit people who care about the issue to their cause. Therefore I will be looking at the Plastic Pollution Coalition, one such organization working to reduce plastic pollution, and their main techniques used to achieve their end goal. I will identify these techniques and evaluate their effectiveness within the PPC and as shown by other research. To achieve this goal, I will be using research articles and books on the subject of waste, as well as those on important techniques in social and environmental movements. This paper will answer the question of how the PPC achieves its goals of fighting plastic pollution.

## **Results and Analysis**

The techniques that I will be evaluating are uniting diverse groups of people, utilizing social media, and giving people easy ways to make small changes. These specific methods are all highlighted on the PPC's website and do not represent all of what the PPC does. However, they are all distinct, fairly well supported and researched techniques and they cover a large spectrum of what the PPC does. In the sections below, I will evaluate how each technique is used by the PPC, as well as providing research on the effectiveness of each in a broader context.

### **Creating a Diverse Coalition**

The first technique is bringing together a diverse group of participants who all care about the issue of plastic pollution. These groups come to the PPC with different viewpoints, resources, and networks that can be combined to advance the PPC's agenda of reducing plastic waste. As the name suggests, the Plastic Pollution Coalition has built a coalition of more than 1,200 organizations, businesses, and individuals from 75 countries all with the same goal: "... a more just, equitable world free of plastic pollution and its toxic impact on humans, animals, waterways, oceans, and the environment" (PPC, 2021). In combining all of these people and organizations, they hope to be able to make more impactful change in the plastic pollution arena. As the PPC says on their website, they envision a world in which "Individuals embody zero-waste values and have reduced the use of single use plastic...NGOs work together to drive demand for system solutions..." and "Governments and Businesses enforce regulations, legislation, and practices of a circular economy" (PPC, 2022). They believe that we can only reduce our plastic waste by working together as individuals and organizations towards our common goal.

This type of coalition building is becoming more common among various change minded individuals and organizations. Many communities form coalitions to effect change, whether they are focused on housing inequality, healthcare, environmental justice, or other important social and environmental issues. According to one study, “Numerous communities have used coalitions to mobilize their resources to successfully solve the emerging problems they are facing.” (Wolff, 2001). Wolff goes on to say that the most effective coalitions are “holistic and comprehensive”, “flexible and responsive”, and “build a sense of community”. The PPC applies these techniques to their own work by bringing together a wide range of perspectives to build a community around the issue of plastic pollution. This community works together to address new and varied problems that arise within their area. Another important strategy for effective coalition building and changemaking is to “Establish and Maintain Key Relationships” (McKay and Hewlett, 2009). As McKay and Hewlett highlight in their findings about grassroots coalition building, particularly in the healthcare field, “The coalition should be inclusionary not exclusionary, continuously building strength through membership diversity”. Many different viewpoints are important to seeing all sides of the issue and being able to make the most well informed decisions that will create the most change. This idea is further supported by Gawerc, who reviewed literature on diverse alliances and how they can be used to create real change. As she points out, “...diverse alliances may make a larger and broader-based mobilization possible due to their varied networks, which can heighten visibility for their cause, confer additional legitimacy, and intensify pressure on the target” (Gawerc, 2021). Clearly the PPC has realized the power that comes from combining groups of diverse people and organizations, all with different perspectives and means, in order to form a coalition that will enact meaningful change in reducing plastic pollution.

## **Social Media**

The next technique I will investigate is using social media to educate people on plastic pollution and spread the PPC's message to a large group of people. By spreading this message, there is the hope that it will inspire them to make changes in their own lives, contribute to the PPC with time or money, and teach others about the things they learn. The PPC provides lots of helpful information on their website and their social media. On their website, they have sustainable living guides, webinars, and easy to read graphics detailing the problem with plastic. On their social media, primarily Instagram and Twitter, they post small, easy to digest graphics and videos about plastic and its effects on people and the planet. They also have one hundred and thirty nine thousand Instagram followers and sixty thousand Twitter followers, so they are reaching a large audience from their social media. Social media is very popular in the modern world, as it makes it simple to provide small amounts of easy to understand information to a large audience. In the next paragraph I will be evaluating the effectiveness of this strategy.

Social media is becoming very popular as a vehicle for activism, with the ability to reach large numbers of people very quickly and easily and to convey important information about issues that need attention. One such example of the significant role social media can play in activism is in Malaysia, where social media enabled a social movement that pushed for electoral reform. When researching this social movement, Tye et. al found that social media was used in "...empowering citizens by enabling them to facilitate and coordinate collective action towards producing change in their community" (Tye et. al, 2018). In another instance, Spanish youth were studied to figure out how digitization and hyperconnectivity can lead to activism. According to the study, "Since digital resources are widely available to young people, they serve as an ideal and accessible platform to share opinions and commit to causes without formally

joining an organization” (Cortes-Ramos et. al, 2021). They conclude that social media and virtual platforms have a lot of potential to turn “an informal mode of communication into an effective vehicle for social transformation” (Cortes-Ramos et. al, 2021). In determining why social media is so useful and important in social movements, there have been many theories. Some argue that social media platforms enhance the reach of protest related information (Rosa, 2014), others have focused on the use of Internet platforms to disseminate information internationally (Castells, 2010), while others think that the ability for creativity and innovation has allowed for more public engagement (Earl, 2010). All of these explanations seem to work together to say that social media can be a powerful tool for change when handled correctly, and the PPC is utilizing this tool to create change in their area.

### **Small Actions to Inspire Activism**

The final technique that the PPC uses to achieve their agenda is providing small and easy to do actions to members and nonmembers alike. For example, on their website there is a page called Take Action, in which people are able to sign petitions targeting government officials or businesses asking them to stop using plastic packaging, using fossil fuels, and to provide sustainable options to consumers. With one click, people are able to make their voices heard and feel good about making a difference, no matter how small. This serves a dual purpose of hopefully encouraging political leaders and businesses to be more sustainable, and allows people to feel invested in the PPC’s campaigns and mission. It will also hopefully encourage them to participate more in anti-plastic pollution movements. The PPC also has a pledge that anyone can sign that says they will follow the 4 R’s: Refuse, Reduce, Reuse, and Recycle. This in turn will result in less plastic use, as the act of signing the petition will hold the signer accountable for

their waste, even to a small extent. By completing one or both of these actions, the PPC is able to both create small change and draw in an audience of more engaged citizens who feel like a part of the community and want to do more.

Petitions and pledges are fairly common in the activism field, and have been shown to have varying degrees of effectiveness. While researching petition sites like Change.org and their roles within consumer activism, Minocher (2018), found that those who sign petitions are able to “create an activist identity and role for themselves”. This finding ties in well with the idea that even the small act of signing a petition causes people to view themselves as activists, and therefore to do more to support the PPC and other efforts against plastic pollution. These petitions were also found to “create a negative brand image to challenge companies into more desirable patterns of behavior” (Minocher, 2018). Therefore the petitions are able to be used for the dual purpose of encouraging companies to use more sustainable practices and creating activists from everyday consumers, both of which will further the PPC’s goals. While petitions have had success in creating activists, the effectiveness of pledges on changing behavior is difficult to discern. In one study, the effects of pledges on volunteering rates was studied to determine if it makes a difference. The study found that while “pledges decrease immediate rejection to volunteering requests...pledges are often renege later, resulting in no overall change in volunteering rates” (Capra et. al, 2022). This study suggests that pledges are not very effective in creating actual change in people’s habits. While not much has been found on this topic, the research seems to suggest that while pledges are not very effective, petitions have been shown to create some meaningful change and sense of community. While signing one petition does not make much difference in the overall scope of the problem, the action can make people view

themselves more as activists, with more incentive to behave sustainably or join the PPC in the future.

## **Discussion**

While reviewing and researching the techniques the PPC uses to further its agenda, I discovered them all to be fairly effective. My research suggests that the least effective of all the practices employed by the PPC is the pledge to reduce individual plastic consumption, while the most effective seem to be using social media to amplify their message and creating a diverse coalition. Using these techniques in conjunction with each other allows for the PPC to reach a large audience with diverse backgrounds and perspectives and provide easy access to important information that will lead to more activism in the future.

The PPC has used these techniques on many campaigns, such as the Last Plastic Straw Movement, where they work with their coalition to to “encourage eateries to no longer automatically give plastic straws...educate individuals to refuse plastic straws and spread the “straw free” message...change local regulation to stop this unnecessary plastic pollution” (PPC, 2022). Using their large audience and engaged members, they are working to change the public mindset around plastic and create change in the government and in businesses around the world. They even provide a store in which people can purchase reusable silverware, cups, and bottles, with the funds from their sales going back into the Coalition to fund their plastic fighting efforts. Clearly, the PPC is working hard and making an impact in the plastic pollution area. In 2021, the PPC was awarded the Mother Teresa Memorial Award for their role in “leading a remarkable social movement that seeks to create a world free of plastic pollution” (PPC, 2022). They have been featured on popular news sites and shows such as NBC News and CGTN America, and are

working to grow their already large membership base to create even more change. The practices that I have evaluated in the course of this paper have been largely effective and successful in helping the Plastic Pollution Coalition advance their agenda, but there are definitely ways in which the PPC could improve their efforts.

From the course of my research, I have a few recommendations for the PPC to improve their reach and further advance their agenda. First, I think they should do more work to reach out to different groups who might be interested in joining the PPC, such as people in sustainability clubs at universities. This would make their coalition larger and stronger, and provide more views to their mission. While they focus on targeting businesses, NGOs, and governments, growing their individual membership base, especially a young, passionate one like college students, could prove useful in the future. Another suggestion is that they focus more on petitions rather than pledges, as the research points to more success from petitions. Lastly, I think that the PPC should expand their social media presence and provide more resources on their social media instead of their website. Interested people, especially young people, are more likely to go to their Instagram or Twitter versus a website, and providing some of the in depth resources available on the website in an easier to access manner would allow them to spread their information more widely. The PPC has lots of very helpful, detailed, scientifically backed information on their website in the forms of graphics, papers, and webinars but they could be much more useful if this information was provided in more locations where people are likely to come across it. In conclusion, the PPC utilizes a number of effective strategies to gain members and spread their message to reduce plastic pollution. Growing a large coalition, using social media, and providing small actions for people to complete work together to create a large group of informed, passionate people working together to make a more sustainable future for all. While there are

certain practices that I feel would be valuable if implemented, the PPC has already done a lot of very important work to reduce plastic pollution and they will hopefully continue to do even more in the future.

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