

BRATISLAVA INTERNATIONAL SCHOOL OF LIBERAL ARTS

**Environmental Diplomacy:
Three-part Strategy in Plastic Waste Policies**

BACHELOR THESIS

Nikolaj Podhájecký

Bratislava, 2022

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Declaration of Originality

I hereby declare that this bachelor thesis is a work of my own and has not been published in whole or in part elsewhere. All literature sources used in this thesis are attributed and cited in references.

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Abstract

The goal of this thesis is to address the question of why plastic waste policies are so hard to carry out and also to gain an understanding of solutions that can be used to tackle this problem. The thesis aims at analyzing which factors block states from enacting more environmental-friendly policies and what can be done to possibly overcome these factors. Moreover, it analyzes what aspects have to be addressed in order to support the transition towards better management of plastic waste. For this purpose, I have interviewed three people that were or still are directly connected with this field to properly analyze the situation and provide numerous insightful observations of the issue and things connected with it.

Through extensive analysis of the literature, documents, studies, policy and research papers, it can be concluded that the proper management of plastic waste pollution is a difficult task because there are many different factors that come into play when dealing with the issue. However, both the EU and Slovakia have started to come up with various approaches to tackle the problem. The conclusion of this thesis that can be drawn from analyzing these approaches is that the EU and its Member States should employ a more elaborate framework to deal with these problems in a more thorough way.

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Abstrakt

Cieľom tejto bakalárskej práce je získať odpoveď na otázku, prečo je politika plastového odpadu rozsiahla a zložitá problematika a zároveň sa priblížiť k riešeniu tohto problému.

Práca analyzuje faktory, ktoré zabraňujú štátom vykonávať v plnej miere environmentálnu legislatívu a akým smerom sa môžeme dopracovať k ich riešeniu.

Okrem toho si všíma aj aspekty, ktorými sa treba zaoberať, na to aby sa podporil prechod na lepší manažment plastového odpadu. Za týmto účelom, boli vykonané rozhovory s tromi ľuďmi, ktorí sú priamo angažovaní v oblasti plastového hospodárstva, za účelom správnej analýzy situácie a zhromaždenia postrehov ohľadom tejto problematiky a iných aspektov spojených s ňou.

Na základe dôsledného rozboru literatúry, štúdií, výskumných prác, politických a iných dokumentov, je možné vyvodiť záver, že správny manažment plastových odpadov je komplikovaná problematika, a to kvôli množstvu rôznych faktorov, ktoré tu hrajú rolu. Hoci už EU a Slovensko začali prichádzať s viacerými riešeniami tohoto problému, závery tejto práce ukazujú, že EU a členské štáty musia prísť s prepracovanejšou koncepciou, aby sa táto problematika dala riešiť v rozsiahlejšej miere.

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Introduction

The European Union has annually on average 31kg of plastic packaging waste produced per person. This eventually adds up to a staggering 15.8 million tonnes of annually generated packaging waste in the EU (Eurostat, 2018). However this is only plastic packaging, it does not include other types of plastic used by people and companies. Therefore, the number is a lot higher and it only increases every year. The recycling rate of plastic packaging in the EU reaches 41.5% (Statista Research Department, 2021). Although this number might seem high it is not enough for us to prevent further ecological catastrophes. And additionally, this is only the packaging, the rates of other types of plastics are significantly lower. To address the problem of the mismanagement of plastic waste I have chosen to explore different approaches that can be employed by Slovakia and also the EU to have a more interconnected framework that can ultimately improve the situation and avert future crises.

This ever-pressing issue of plastic waste management is not new. However, the steps connected to dealing with the issue are in their early stages. Also, there is little information on how different types of approaches can be connected to prevent the mismanagement of plastic waste. Daily we use plastic products and we do not even think about it. As there are people who do not put emphasis on the issue of dealing with plastic waste, there are also states that are lacking in this direction. Therefore, there has to be some kind of mechanism that would push these states either by force, by providing benefits, or even by combining both to promote a more ecological future that would be not littered by the wide scale of plastics products ranging from big plastic products to microplastics that pollute our oceans.

To analyze how this issue could be handled, I intend to use theories of neo-institutionalism to explore the capabilities of the European Union and its institutions in improving the compliance of Member States with plastic waste policies. Furthermore, I am going to work with the idea brought upon by Nye (2004) and it is that states can gain soft power through improving their reputation and increasing their desirability. This

ability to gain more influence on the world stage can be further employed by both Slovakia and the EU to act as a motivator that would incentivize them to promote more environmentally friendly policies. They can also utilize various different strategies of motivation, such as financial motivation to promote compliance with its environmental policies. However, the current incentives, such as the promise of a cleaner future are insufficient to motivate them to behave more ecologically. Therefore, there needs to be a form of enforcement that would serve to keep them in order. There are the roles of the EU institutions, the roles of citizens, and the roles of states which all have a part in enforcing environmental policies. The role of communication is also an important factor that can be further divided into two parts. The informative part is in which citizens get their information and the educational part is in which citizens are taught how to properly deal and abide by said policies.

The thesis was structured into four main chapters. In the first part, I reviewed existing literature that touches upon the researched subject and things that are associated with it. In the second part, I wrote about the different methods of research design I chose to apply in order to analyze the problem of plastic waste management both in the European Union and in the country of Slovakia. The next part was focused on the analysis of secondary sources and also on outlooks and answers that were provided by the interviews. Finally, the last part was focused on coming up with possible measures that can be used to mitigate the problem of plastic waste pollution.

My goal is to address the question why plastic waste policies are difficult to manage and also to gain an understanding of what can be done to help while addressing this issue. Moreover, I question what can both Slovakia and the European Union do to promote their environmental policies regarding plastic waste? My proposed answer to this problem is that to promote proper ways of management of plastic waste, a three-part strategy is needed. This strategy includes incentivizing people and states, informing and educating citizens while also punishing those actors that fail to comply with the environmental law.

Chapter 1: Literature Review

Humanity has entered a new self-conscious era. For far too long have we ignored environmental problems up to a point when they started to bother individuals in their everyday lives. Since the invention of plastic products, their production has increased dramatically. Today we cannot even imagine a world without plastics in it. The demand for plastic products could be compared to a high-speed train that has no intention of stopping. Only the plastic packaging waste in the EU has increased by 21% in the period from 2005 to 2018 (Tiseo, 2021). This increase in waste means that there has to be clear legislation on how to deal with it. States should set up proper plastic waste management policies to deal with the issue. However, currently, only baby steps have been taken by the EU to support this initiative. One of these steps are the policies to reduce and limit the production of various single-use plastic products (Tomra, 2021). Moreover, the EU has passed a legislation that brought up non-recycled plastic tax to discourage states from other types of waste management (Smart Waste, 2021). However, the research on introducing other options that could serve as solutions to this problem is needed. In my thesis, I will connect and analyze several approaches and will propose a solution that will address numerous parts of the problem with managing plastic waste.

Soft Power as a Tool for Motivation

The European Union can utilize the idea of soft power to motivate its Member States to address the issues that come out of dealing with plastic waste management policies. The main text that focuses on this point is the book by Joseph S. Nye: *The Means To Success In World Politics* (2004). In this publication he explains the idea that the states could influence and persuade other states through different means than coercion. The idea is based on that states could shape preferences of others through attraction and appeal. According to Nye there are three pillars to soft power: foreign policy, political values and culture. However, Nye doesn't write about how soft power could be used in the field of environmental diplomacy.

The article entitled *Going Soft? Environment Policy in the European Union*, by May (2011) serves as a connection of soft power to environmental policies of the EU. In this article he explains how the EU has managed to become one of the leaders in the sphere of addressing the international environmental issues despite not using coercion. He argues that in the field of environmental policies soft power is more effective than hard power, and he backs up the argument by stating the fact that the EU was able to take up a leadership role in the environmental debate through the use of it. However, the shortcoming of this publication is that it does not research the topic thoroughly, therefore it fails to find clearer implications and real consequences of using the idea of soft power to address environmental challenges.

A research paper by Volintru (2020), provides a comprehensive study into how Europe's position as a global actor could be further strengthened by more integrated environmental policies. She argues that to address environmental issues the EU needs to address it through several channels that include the proper usage of financial expenditures, setting up a proper regulatory framework, using know-how that is available and also through effective political agenda. However, she does not talk about how the EU can use the notion of soft power to motivate the Member States to deal with the plastic waste issue, but rather only about how to deal with climate action.

Additionally, Karakır (2018) writes a case study of two countries and how their environmental policy served as a tool to increase their soft power. She argues that China's and India's initiatives and achievements in environmental issues have helped them to gain more influence in the field of international politics. These real-life scenarios and their concepts can be applied to the EU and to its Member States to strengthen the plastic waste policies, while also improving their influence on the world stage. Taking all things into consideration literature to support this part is sufficient, however, there are gaps in the assumptions and the literature does not look at the subject in-depth and it does not cover the things that EU can do to incentivize Member States to comply with the policies through the use of this concept.

Are Institutions the Key?

Through the utilization of institutions, the EU and its Member States can address the issue of plastic waste. The article entitled *The New Institutionalism: Organizational Factors in Political Life*, by March and Olsen (1983) provides an approach in which the actions of individuals are constrained and shaped by an environment that is governed by a set of regulations and rules. They argue that the organization of the political life actually influences the environment around the institutions and it shapes individuals accordingly. However, the article written by them does not direct this approach towards environmental issues.

For the sake of connecting these subjects, the article entitled *Institutional work in environmental governance*, by Peterson and Beunen (2019) serves as a link to understand how institutional work can provide novel perspectives and new insights into environmental issues. They argue that in order to address environmental problems a focus on institutional structures and their adjustability is necessary. Furthermore, they state that institutional work enables one to look at how the modernization and changes in society could be accomplished through not only introducing novel innovations but also bolstering the existing ones. However, their article fails to cover the problems that might arise when dealing with such issues.

Ménard (2011) provides an insight into such problems. He believes that all environmental solutions have imperfections that can put some actors at disadvantage, therefore, a new, unique way of dealing with such problems needs to arise. Ménard claims that if the world is to change to a more environmentally friendly version of it innovative and adaptive organization is necessary. If such an approach is undertaken the institutions could act as strong tools in this shift.

With all of these things taken into consideration, the theories of neo-institutionalism can be applied to dealing with environmental issues, however, the sources fail to address the more in-depth issues such as dealing with plastic waste policies.

Communication as an Important Factor

Communication of the EU and its institutions towards its citizens plays an important role in how they support new legislation. For Member States to follow plastic waste policies of the EU, its citizens need to be properly informed and educated in the area of this issue. For this part the study by Stroeker et al. (2014): *Communicating 'Europe' to its Citizens: State of Affairs and Prospects* will be a backbone that will serve as a building block for my argument of the importance of communication. It covers communication towards citizens, communication of EU institutions to the Member States, and also touches on the subject of the importance of education. They believe that the lack of proper communication is contributing to the growing distrust towards the EU and its institutions. However, this research only touches upon the surface of the importance of education and it only describes different approaches to the education of citizens in the various Member States. Also, the shortcoming of this study is that it does not talk about environmental policies and environmental education.

The methods that the European Union can employ for the effective education of its citizens are through the tools described by Ardoin et al. (2019). They believe that this type of education should be composed of various approaches that help to strengthen environmental values, outlooks, and knowledge while also helping to develop numerous individual but also collective skills that would help to tackle the environmental issue more effectively. This article will serve as an introduction to the importance of environmental education and its proper utilization that can be used as a catalyst to steer political will to be more environmentally friendly.

The idea of proper education in regards to reducing the environmental impact of humans is further supported in the article entitled *Plastic Waste Problem and Education for Plastic Waste Management* by Chow et al. (2017). They argue that to reduce the harm that plastic waste causes a proper education of people is necessary. They examine three teaching approaches that were found to notably improve the knowledge in this field. This idea can be further utilized by the European Union to properly represent the

education for correct plastic waste management that would ultimately support the EU's goal of compliance of citizens with its environmental policies. Furthermore, another part of communication that the EU can employ is through the use of the internet.

To identify best practices in EU member states and to point out challenges associated with e-participation I will use a study by Lironi (2016) this will allow for further exploration of another form of communication that could be utilized by the EU. He argues that the EU should strive to improve the existing e-participation tools by making them more user-friendly, improving their cost-effectiveness, and even experimenting with new types of participation such as using these platforms to allow citizens to participate in EU policymaking. Looking at the sources they suffice to back up my argument, however, there are clear gaps in individual sources that allow me to connect different ideas to identify how communication could be used to improve attitudes towards plastic waste policies.

Riding for Free is Bad

Plastic waste management is a matter of either state policies or the policies of the EU. However as in almost all matters of public goods that are provided, there comes up a problem of free riding. The publication named Free Rider Problem by Hardin (2020) provides a comprehensive analysis of the issue and uses various lenses through which this problem can be looked at. The topics he focused on are free-riding in the area of public goods, in democracy itself and even analyzes the question of morality when associated with free-riding. Furthermore, he provides some solutions to how state could tackle this problem. He believes that curbing the problem with free-riding when providing public goods can be solved by voting, therefore, agreeing to supply said good to the public. Another solution provided by Hardin is that the free-riders dilemma could be solved by proposing mandatory financial participation of every citizen, when dealing with diverse subjects that could be affected by this problem. However, this text looks at the problem of this dilemma only generally and it does not focus directly on different fields, such as the problem of plastic waste policy management.

For this part, Friedrich (2021) provides us with an analytical study on how plastic tax can be utilized to help curb this issue. Furthermore, this text also proposes additional uses to the money collected that can be further used for damage prevention such as investing into new technologies that would help to address past environmental damage moreover, assist in preventing further damage. Although as mentioned citizens within states can become free riders, also the states themselves can be part of this problem. Roy (2021) illustrates how states participate in this problem as well. She argues that if some states such as China push forward their environmental agendas it would benefit other states as well, however only China would bear the costs of such measures. She states that for such measures to be adopted internationally, there has to be a binding mechanism through which every country is obligated to participate and if they refuse they would be financially penalized. However, the shortcoming of this source is that she focuses solely on climate change, but the principles can be applied to plastic waste policies as well.

Enforcement as a Measure for Compliance

The capability of the EU to enforce their policies is an essential part of making member states comply with policies that are agreed on. The book by Headman-Robinson: *Enforcement of European Union Environmental Law (2015)* shall serve as a backbone for this part of analysis. He differentiates between three different actors that have a role in enforcing environmental policies. In the first part, he describes the role of EU institutions and their ability gained through various environmental laws and treaties that allow them to enforce their policies. In the second part, he looks at the competencies of private persons to enforce the EU's environmental law. The last part is focused on the Member States and their legal role and responsibility in addressing environmental laws. For the purpose of answering the question of what are the causes of states' lack of effort towards promoting environmentally friendly policies and what can be done to counter it, I will connect these different parts of enforcement in order to come up with the idea of a framework that would connect these separate actors. Furthermore, an overview of the legal capabilities of various actors in this book provides

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a factual basis of this part, but they lack other information about what other mechanisms can the EU use to further promote a more environmentally friendly future.

The article by Hofmann: Left to interest groups? On the prospects for enforcing environmental law in the European Union (2019) provides insight into other types of enforcement that the EU can utilize to overcome the challenges of enforcing environmental policies. He argues that private enforcement, through NGOs, could help to address the issues more swiftly. However, he states that current administrative law needs to be updated to allow private enforcement to perform more effectively.

Additionally, the publication by the United Nations Environment Programme (2020) for tackling plastic pollution, provides a legislative guide for the regulation of single-use plastic products. In this guide there are numerous approaches that the policymakers can adopt to reduce the environmental burden of plastic products, these approaches include the regulation of consumption and production, promotion of alternate products, improving the logistics of waste management, recycling, and disposal. It looks at common practices that are used in this field while also exemplifying their use in governments from all around the world. The sources for this part are sufficient, although the shortcomings of them stem from the lack of connection of all possible approaches through which the enforcement can be utilized to address the issues related to plastic waste policies.

Chapter 2: Research Design

For my research I chose to do an empirical study, considering numerous secondary sources such as official EU documents, research papers, publications, and studies dedicated to the topic and to the things connected with achieving the proper plastic waste management. To properly analyze the realities of enacting plastic waste policies in the European Union and in Slovakia such sources were necessary to provide factual information about the subjects, furthermore, they also proposed several possible approaches that could be taken to overcome the challenges connected with enacting these goals. Moreover, the analysis of environmental policies adopted at the EU level was required to observe how they connect with the actual reality, and also an examination of desired goals that have to be met in order to solve these problems was required to research the topic thoroughly.

The first interviewee was Mr. Martin Kovačič, an executive manager at EKOS PLUS, a company that provides complex environmental management. They provide professional and legal consulting in the areas of environmental protection, while also providing consulting in the area of waste management. The second interviewee was Mr. Peter Šimurka, former director of a section of waste management of the Ministry of Environment of Slovakia, and current independent environmental counselor. The last interviewee was Mr. Martin Murín, an employee at a company Ekotox, that provides counseling services for customers that want to enter the market in the Member States of the European Union.

Participants for the interviews were selected based on various types of criteria such as being connected to the field directly or having been connected to actual decision-making processes in the past, moreover looking at the institutions that they work at and what are the purposes of their work. This was done to acquire perceptive insights into the realities of legislative and other measures connected with the proper management of plastic waste. Also, it allowed me to delve deeper into the topic because the

interviewees were knowledgeable about the proposed questions and they had experience with working in the environment that was researched.

For the purpose of this thesis, the research model followed the essence of qualitative study, therefore, the interviews were done by using the method of semi-structured interviews. Such a method allowed for setting up the borders to various topics that were talked about, while also allowing the interviewees to provide numerous personal insights into the conversation and present various other observations that they deemed important to add while discussing this subject. This further allowed for a better understanding of the problem as a whole and it helped to analyze the topic of plastic waste management and policies connected to it thoroughly, while also observing shortcomings of already used approaches.

The research on the thesis was conducted through analyzing numerous secondary sources that allowed me to grasp the subject and come up with various different approaches that I would use to analyze the plastic waste policies that were already applied in the European Union and Slovakia alike and to realize the realities of enacting them and limitations that pose challenges to a successful transition to a more ecological society. This was further complemented with the interviews that provided more insightful types of information that allowed for a constructive analysis of the issue as a whole.

At first the data was analyzed by transcribing part of the audio of the interviews into written text. Afterwards I have highlighted several sections of the text to produce different codes that they focused on. This process further led me to incorporating the answers of the interviewees into the conceptual framework of my thesis. And finally, I have analyzed numerous secondary sources that allowed me to back up the arguments of the interviewees and to further elaborate their points of view.

Ethical considerations are important to consider when carrying out any type of interview. The interviews for this thesis were executed in an ethical manner since all problems that might have happened were averted after communication between

interviewees and interviewer. Participation in the interviews was voluntary and they were conducted after mutual agreement between both sides. Moreover, the participants were informed about the purpose of the interview and the overall aim of the thesis. When asked, neither of the participants wanted to be anonymous, and they have all agreed that the communication that happened during the interviews could be recorded and further used as a primary source for the thesis. Furthermore, their answers were properly reflected and used in the appropriate parts of the text.

To conclude, the purpose of this qualitative study is to analyze how is the EU and the country of Slovakia handling the issue of managing plastic waste. To do so many different types of texts had to be properly analyzed and connected together. Such a thing was necessary to provide factual background to the problem and further analyze it from different angles. Furthermore, interviews were used to provide professional insights into the challenges associated with proper plastic waste management and also to gain further understanding of the issue.

Chapter 3: Analysis of the Problem of Plastic Pollution

Is There a Problem?

Challenges that the human race has up to now encountered are countless. There are numerous fields of these issues that have posed or are still posing a threat to the wellbeing of humans. The spectrum of these challenges is vast. Some of them might be just momentary and others could span for many hundred or even thousands of years. However, today we are to face a fairly new type of challenge. Environmental protection has just now recently gained the attention that it deserves. Although such an issue was researched for many years, up until now it was not considered to be among the most serious problems. However today it can be said that it is one of the existential threats that humanity has to solve. One aspect of this problem is how do countries deal with a relatively new issue of plastic pollution.

The invention of synthetic plastics was a both blessing and a curse to humanity. Plastic is a useful substance that has a wide variety of uses that improve the everyday life of many individuals. Its incredible versatility is so useful that since its invention it has been produced in incredible amounts. According to United Nations Environment Programme (2018), the production of plastics has surpassed the production of nearly all other substances, and a great deal of the products that are made out of them are intended to be disposed of after only a single use. Therefore, they generate massive amounts of waste that eventually ends up in landfills or in the natural environment itself. UNEP claims that only 9% of the plastic waste that was produced in the history of humanity was recycled. Since most plastics do not biodegrade they occupy landfills and nature until they break down into even smaller pieces that can be eventually consumed by various types of organisms and through the food cycle brought into human bodies. This process disturbs both environmental and human health.

One of the other environments that is increasingly getting more polluted is the ocean. Annually over 14 billion tons of plastic waste end up in the ocean (IUCN, 2021). The problem with this is that the waste ends up causing numerous problems to the

ecosystems. Many species ingest the plastic debris and its parts and eventually through the food chain they introduce them back to human bodies. Also, since plastic is such a robust material, it may trap many animals and eventually kill them. Therefore, if countries wish to prevent such things from happening they should strive to work towards introducing new types of legislation to combat the issue.

To prevent the contamination of human habitats and nature with plastics proper waste management is required. In most countries today this management is provided by governmental institutions, local communities, and various organizations. They use different methods including incineration, recycling, or disposing into landfills to make sure that such products are taken care of. However, some of these methods such as recycling are more environmentally friendly than just moving the waste into landfill, burning it up, or even exporting it to other countries. Therefore, to ensure that the environmental load is minimized proper channels for recycling have to be established. However, as it is often the case the cheaper option usually prevails and a great portion of the plastics are dumped into landfills (Parker, 2018). Since the decomposition process of plastics in such landfills takes several hundreds of years the result of it is that the landfills fill over time and most of the plastic waste remains as they fill up. Additionally, the decomposition produces toxic chemicals that could contaminate the soil and eventually harm nature and humans alike (Alabi et al., 2019). Moreover, other forms of disposal such as incineration are also not viable options. According to Verma et al. (2016) burning of plastics is a major source of air pollution that releases many harmful chemicals into the air we breathe. These chemicals can cause numerous amounts of diseases and conditions that threaten the health of living creatures. Therefore, arguably recycling is the only responsible way by which governments should dispose of plastic waste.

However, for the recycling process to even begin many other steps are required. First and foremost, the state needs to provide a suitable waste management system with mechanisms in place to support recycling rather than to use other methods of disposal. This is often a problem because the companies responsible for it are not funded

properly and do not allocate their resources to be good for the environment but rather to be cost-effective, therefore, they do not have the capacity to process all the waste properly. This often leads to improper waste management which ultimately reduces the portion of plastics that otherwise could have been recycled. The other side of the issue is the citizens themselves. Since recycling works only when the waste is properly disposed of citizens have to be disciplined enough to separate their trash into the right containers. For this to be the case governments need to provide proper waste collection systems that would promote the willingness of citizens to separate. Taking all these things into consideration, yes there is a problem with plastic waste pollution that states need to resolve if they want to work towards an environmentally friendly future. Many obstacles lie ahead and this is yet another challenge that the human race has to overcome.

Management of Plastic Waste on the EU Level

It is important that big actors, such as the European Union, take action when dealing with the environmental problem of proper plastic waste management. It allows for unique and novel ways of dealing with such problems that transcend the capabilities and determinations of individual Member States. Since the EU is such a big actor on a world stage, Member States need to uphold a certain level of standard when dealing with numerous issues. This allows the EU and its institutions to work towards improving a multitude of areas that ultimately leads to improving the well-being of citizens. The European Union and its institutions play a big role in securing a proper way of plastic waste management in its Member States.

During the interview with Mr. Martin Murín, when asked the question that what he thinks about the management of plastic waste in the country of Slovakia, he has argued that actually the European Union should be the key actor when dealing with various forms of plastic waste policies. He believes that policies that affect the whole EU have far better consequences on individuals and even on the private sector than policies that individual Member States would enact only on their territories. The reasoning behind

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this claim is that when a state uses a ban on certain plastic products, the company that is behind the manufacturing process is not incentivized to change their product, however, when there is an EU-wide ban, the producer is forced to use the environmentally friendly ways of production.

The European Union employs various strategies that ensure that the problems with plastic waste management are dealt with. These strategies are ultimately aimed towards reaching the goals of the 2030 Agenda for Sustainable Development. The European Commission (2018) proposed a plan that would reduce the environmental strain and eventually work towards achieving a circular economy. It included key commitments for action on the EU level but also did not omit the urge for mobilization of private, national, and individual levels. It also included concrete measures that were aimed at promoting smart and sustainable practices that would allow the EU to raise its environmental standards. The main points of the strategy were that all products containing plastics would be designed for recycling or reusing them cost-effectively. Additionally, supporting the integration of the plastic value chain by combining efforts of numerous industries.

Moreover, the European Union has also already started the battle against marine pollution. It has done so by introducing several marine protection plans such as the Marine Strategy Framework Directive which strives to ensure that marine litter does not damage the environment, or the Directive on Single-Use Plastics and fishing gear that introduced several courses of action that are directed towards preventing plastic waste to even reach the ocean (European Commission, n.d.-a). The pressure of having a better marine environment is significant for the EU to take several steps in combatting the issue, however more rapid action has to be taken to deal with such a far-reaching problem so that in the future the EU can be seen as a leader in the fight even against this type of solution.

The plan to fight against plastic waste pollution was further strengthened by the Single-Use Plastics Directive, which outlined several measures while dealing with such types of

plastic products (Tomra, 2021). This all would help with the establishment of a market that would allow the Member States to effectively manage their plastic waste, reduce pollution and increase the demand for reusable plastic products. The establishment of such a market is critical for having a proper circular economy, eventually, it would bring much-needed investment in new recycling technologies, because it would provide demand for recycled products and that would incentivize the private sector to invest their capital.

Although the vision of a circular economy is a great idea it has to be supported through various legislative deals and directives that would eventually lead to improving the situation. Fortunately, the European Union has mechanisms that would allow for such a thing to happen. One of the most recent efforts to do so is through the European Green Deal. This deal focuses on three main points set out by the EU: having no net emission of greenhouse gases by 2050, economic growth decoupled from resource use, and having no person and no place left behind (European Commission, 2019-a). This deal is legally binding for all Member States and was approved by both the European Parliament and the Council of the EU. Furthermore, it ensures that the plastic waste policies in the Member States have to be adapted to be more sustainable and it lays out ground for a framework that would help to do so. However, such a deal has to be supported through numerous legislative changes that would force the Member States to comply with the goals. One of the steps has already been undertaken and it is through non-recycled plastic waste tax (Smart Waste, 2021). This is a step in the right direction because it gives an incentive to the Member States to reduce their plastic waste, however, after all, it is just a new type of tax that states can simply pay and it does not provide an actual solution to the real problem.

Many issues come into play when the EU adopts its policies to reality. The first issue stems from the many negative externalities that the market faces when adopting new types of regulations. Since from the economical perspective current situation is plausible and companies that deal with plastic waste do not have the incentive to adapt their business model to a more economically friendly one. One of the solutions to this

problem is that the EU is that applied strict regulations and taxes on various forms of plastics (Neri, 2021). This approach would further increase the price of conventional plastics while also decreasing the demand for them.

Another problem lies in the coordination of various industries and the collection of waste. A part of this problem is also associated with the transition process towards more sustainable forms of plastics. The European Union tackles this problem by introducing certain standards that have to be met. They approve specific design requirements that new products have to meet while also requiring the Member States to increase their collection of plastic products (Tomra, 2021). The EU also invests large sums of money into research and development of new types of plastic products while also supporting other industries that help with the issue of recycling (Plastics Europe, n. d.). This approach increases the demand for sustainable plastic products while also decreasing their price. All these solutions to the problems are realized through deals and directives that are encapsulated in the European legislature. However, even if all these solutions are realized their real-life impact is slow and it does not cover the issues in their whole complexity.

The management of plastic waste pollution on the EU level is a difficult problem to address. Every Member State has its own approach towards this problem, therefore, some of them might be at the top of the ladder when dealing with such things but some of them have problems addressing such issues. The European Union has to play a key role in which they provide a unified framework that the Member States should follow and they should provide incentives that would make them actually want to do it by themselves. Today the effort towards resolving this problem is in its initial steps, the key goals have been set out and now it is up to the management provided both by the EU and the Member States themselves to fulfill these goals.

Management of Plastic Waste in Slovakia

Since entering the European Union in 2004, the country of Slovakia has undergone many reforms that resulted in changes in its legislature. Because the EU has set out many

minimal standards that countries have to keep, some of these changes benefited Slovakia and its citizens and they helped to increase the living standard. However, as it is often the case dealing with environmental issues was not prioritized and thus many people might say that Slovakia is lagging behind in dealing with them. Environmental issues have a huge impact on the economy, employment sector, and even the wellbeing of citizens, therefore, the effort in resolving such issues has to be proportional to their severity of them. However, since there are many obstacles that Slovakia has to overcome in order to develop into a fully environmentally sustainable country the process towards it is slow. Since the EU has adopted the European Green Deal many new efforts are being made to improve the situation and some of them are already in place now.

According to OECD (2020), solid waste management has been identified as one of the major environmental challenges that Slovakia needs to address. This is a major issue if Slovakia wants to work towards fulfilling the goals that the Environmental Strategy 2030 has set out to achieve. Currently, Slovakia ranks one of the lowest in the recycling rate of municipal waste and it is primarily using landfilling as its strategy when dealing with waste management (OECD, 2020). The current goal that the European Union has set out is a recycling rate of 65% for municipal waste. One of the setbacks to achieving such a goal was that Slovakia did not achieve the recycling target of 50% in the year 2020 (Hudec, 2021-a). To improve this situation there needs to be a greater emphasis put on smaller steps that would gradually help with resolving such a situation. Arguably achieving such gradual goals is important in working towards the final objective and thus there is still a lot of work to be done.

During the interview with Mr. Martin, when asked the question that what are the shortcomings of management of plastic waste in Slovakia, he reported that it has a big problem with landfills. He believes that this is the case because the fees for landfilling are low and thus other types of waste management are not economically viable. Therefore, he argues that such fees should be increased while also being structured to reflect various components of the waste. Additionally, he proposes another solution and

that is the fees should be regionally adjusted to reflect the problems of different regions.

An observation by another interviewee Mr. Peter Šimurka, commented on this exact problem by saying that plastic waste as such should not even end up in landfills, because it violates legislation that says that before using the method of landfilling an alternative solution such as incineration or recycling should be considered. He argues that every plastic product can be dealt with using these two solutions, therefore, landfilling plastic waste is essentially unlawful.

Yet another problem connected with the mismanagement of plastic waste in Slovakia is the lack of inspection. Interviewee Mr. Šimurka when asked the question that if the legislature of Slovakia is sufficiently adjusted to the ever-increasing demands of the EU, argues that the legislation that is targeted at enforcing policies is in a good shape. However, the lack of employees that could inspect various entities in Slovakia is one of the leading causes of why plastic waste management is not in ideal shape. Nevertheless, he argues that giving as many sanctions to individuals as a state can should not be the point. However, there should be a notion that people can actually get fined, therefore, they would be discouraged from breaking the law.

The issue of plastic waste is undeniably one of the major issues that solid waste management has to address. Due to new legislation, in Slovakia, the responsibility for such waste is directed towards producers. However, such a system as this lacks transparency and efficiency because it does not provide benefits for citizens, therefore, the collection rate and the actual number of recycled products is significantly lower than it could be (SAO, 2021). Additionally, this also causes a problem with reporting on the recycling rates. Allegedly the figures reported by Eurostat could be inflated due to the fact of how is the recycling rate obtained (Hudec, 2021-b). Such problems as these would further disrupt the efforts to battle plastic waste since on paper it could look like Slovakia is managing the problem well, but the reality would be different. Moreover, this could cause disruption to the pace of how are plastic waste policies implemented.

During the interview with Mr. Šimurka, when asked the question that what is his opinion about the problematic of management of plastic waste policies, he pointed out that one of the problems in Slovakia is the lack of incentives to properly manage plastic waste. He argues that the ministry of finance does not want to provide many benefits such as tax deductions or cash benefits to individuals or organizations that properly recycle their waste. Authors Hutton and Markley (1991), have shown that incentives are effective tools to promote compliance with waste management strategies. They argue that this method could be used to improve the environmental habits of citizens and further strengthen their ability to behave ecologically constantly. Such an approach would improve the situation by decreasing the strain on the environment by bad separation habits. Furthermore, it would also further incentivize citizens to vote in politicians that would promote more policies that are environmentally friendly.

On another note, incentivizing the private sector also plays a big role in reducing the environmental strain. The authors Rademaekers et al. (2012) carried out a study that has shown that incentives play a crucial role in enhancing the environmental performance of the private sector. Providing companies with benefits would help them to strive for better management of waste. Furthermore, this would promote competition between companies in developing the best possible method that would allow them to get such benefits.

As can be observed Slovakia has arguably a big problem with plastic waste management since it is one of the leaders in producing plastic waste (The Slovak Spectator, 2021). Therefore, the key strategy to combat this specific issue lays in taking drastic measures to ban numerous single-use plastic products. Such an approach would reduce consumption significantly while enabling the creation of various approaches that would deal with the leftover plastic products that are needed for everyday life. Yet another step to further aid the process of environmental transition is to incentivize citizens and companies by combating the free riders' problem.

In Slovakia, the competence to deal with plastic waste is in the hands of municipalities. Therefore, it is considered as a part of public services. Such services experience the problem of free-riding, meaning that some individuals contribute in greater amounts than others, and of course, people who do not put emphasis on such issues at all are also benefited. Therefore, people who participate and separate their waste can oftentimes feel demotivated to do so because the benefits of their efforts are enjoyed by everyone, regardless of participation. According to Hardin (2020), the problem of pollution is greatly affected by this issue since no one can be excluded from resolving it. However, he believes that such issues as providing public goods could be partially solved by including the citizens into the process and that is by making them vote for in the matters of public goods. This would include Slovaks in the decision-making process by making them participate in it. However, for environmental issues such as plastic waste policies, voting has to be directed only towards resolving the problem. Arguably this could be done in a way in which citizens would vote for the most environmentally friendly method that would benefit their municipality. Additionally, the upside of such voting would be that citizens would be informed of the numerous possibilities that are available and thus it would expand their knowledge and that would ultimately lead to strengthening their discipline in relation to waste management. This would increase the incentives of already well-behaved citizens while also helping to train the ones that were not participating in such processes. Hardin also believes that solving the problem with free-riding lays in introducing mandatory financial participation.

During the interview with Mr. Kovačič, when we talked about what can be done to improve the situation of plastic waste collection, he argues that economical motivation that is targeted towards citizens is important because it would incentivize them to properly collect the plastic waste. He believes that economic incentives are good when they visibly save the money of citizens. This means that people could actually see themselves that they have paid less when they have properly collected their waste. To do this municipalities in Slovakia could introduce special types of taxes that would help to incentivize citizens to properly separate their plastic waste, thus increasing the

collection of it. However, the acceptance of such tax plays a big role in resolving the free-riders problem naturally. An analytical study by Friedrich (2021) has concluded that the proper utilization of such taxes plays a crucial role in influencing public opinion. If such a form of tax was introduced by municipalities in Slovakia, it would be crucial to provide exact ways of utilization of such taxes. One of the best approaches would be to directly fund projects and research that would allow municipalities to make their region ecologically cleaner. This would incentivize citizens to pay such tax, while also providing them with real-life outcomes of it. Furthermore, this would also provide new jobs that would participate in resolving the environmental issues, and it would ultimately boost the economy.

There are several other steps that can be undertaken in order to improve the situation. One of the crucial steps that would help to combat the issue is improving the collection strategies. This is due to the fact that if waste is properly collected and separated it reduces the financial and environmental strain. The collection strategies include correct deployment and collection of containers, thorough sorting process to increase the value of recyclable plastics. Furthermore, the collection includes proper storage and shipment to appropriate facilities that would lead to a proper recycling process.

Interviewee Mr. Šimurka, when asked the question that what is his opinion on Slovak infrastructure that allows for proper collection of plastic waste, emphasizes that the comfort of the collection plays a big factor in society. He believes that every house should have all types of waste disposal containers in an immediate range of habitat, to encourage their proper usage and to improve the collection rates. If such strategies as these are properly implemented the amount of plastic waste that would otherwise be left in landfills or burned the number of recycled plastics would significantly increase.

During the interview with Mr. Murín, when asked the question about what he thinks that are shortcomings of management of plastic waste in Slovakia, he has brought up the point that Slovakia lacks in the area of actual promoting of environmental issues through numerous communication channels such as tv programs, advertisements,

trailers. According to him, such methods should be used to improve the awareness of citizens towards the problems of plastic waste management and to educate them to behave more environmentally friendly. Authors Stroeker et. al. (2014), Ardoin et al. (2019), Chow et al. (2017), have argued that communication and education of citizens is important in order to achieve optimal values of environmental practices. They believe that these things can be accomplished through numerous types of communication channels between different actors either towards citizens themselves or between EU institutions and the Member States. Moreover, education should be taken on complexly and promote proper environmental habits. This would further reduce the improper collection of waste and further improve the situation on various different fronts.

Plastic waste pollution is an issue that the country of Slovakia has to resolve. To ensure that the goals set out by the European Union are met numerous efforts have to be undertaken. Increasing the recycling rate by improving the collection strategies is essential to resolving the situation. Also reducing the amount of waste going into landfills is important to further promote the process of recycling. Moreover, another important thing is to have disciplined citizens that would separate their trash thoroughly.

Chapter 4: Measures to Mitigate the Problem

To address the ongoing problem of environmental pollution many efforts had to be undertaken to mitigate the damages that have already happened, while also creating a ground for new types of legislation that would prevent or decrease further environmental damage. Addressing the problem of plastic waste pollution is an important part of this struggle. Both the European Union and Slovakia own its own have taken up measures to tackle the numerous problems associated with environmental protection. Many organizations and even states all around the world have already carried out experiments that would help in this fight for a better future. Swift implementation of such policies is important to properly address the issue. This part serves as a place to connect numerous measures from three different perspectives. The enforcement to punish and control, incentives to motivate, and the communication to educate.

Enforcement as a Measure for Compliance

Enforcement of already existing policies is an important part of the battle against plastic waste pollution. Actors such as the EU institutions, Member States themselves, and citizens are all actors that have a role in dealing with environmental policies. It is important to have numerous types of ways in which such policies could be enforced, while also providing an adequate number of people that can actually control the actors and eventually punish them for their mismanagement of environmental issues. In Slovakia legislation associated with plastic waste management is often hard to enforce because of the lack of personnel that would carry out numerous controls. Therefore, it is ineffective and the system as a whole has to be redesigned to be properly maintained.

For Slovakia to improve its performance while managing waste and recycling, enforcement is crucial while enacting new types of legislation (European Commission, 2019-b). One of the ways how to do it is to carry out transparent investigations to individual potential violations of the law. However, for this to be effective increasing personnel doing such investigations is required. Such a thing might at first seem like a

costly thing to do, however, after a proper number of investigators is met the enforcing capabilities of the state are increased. Therefore, individuals and even the private sector would be demotivated from polluting since the risk of getting caught would significantly increase. This would all lead to less plastic waste getting not recycled which would ultimately result in Slovakia paying fewer taxes to the EU.

Another approach to improve the enforcement of environmental laws is to expand the roles of private individuals. Currently, they have only limited options as to when they can take legal steps to enforce the environmental policies (Headman-Robinson, 2015). The approach that can be undertaken is to grant more possibilities for private persons to come before national courts to present their demands. This is important because as it happens the official control personnel is often understaffed and citizens can often point out many environmental violations, however, their demands for control are frequently challenged with long bureaucratic struggle and are often even dismissed afterward without proper investigation of the issue.

Institutions of the EU traditionally enforced the environmental law, however, the process of such enforcement was usually slow and full of obstacles. According to Hofmann (2019), NGOs can step in to accelerate this process and help with the proper management of environmental issues. Currently, the law regarding this course of action is obsolete and needs an update to help with the ever-increasing environmental requirements. Additionally, to aid the process of plastic waste enforcement the EU should make it clear who is responsible for the actual enforcement and name an authority that would have clearly defined competencies (United Nations Environment Programme, 2020).

The interconnection of EU institutions having clearly defined legislation and roles for the Member States. The states themselves bolstering their employees associated with enforcement and the citizens gaining more ways to aid with the process of enforcement should result in an increasingly better situation in the environment and also into greater rates of recycling for the plastic waste itself.

Utilization of Incentives to Tackle the Issue of Plastic Waste

One of the possible approaches is to motivate the citizens, companies, and even the Member States themselves through numerous types of incentives that would ultimately help with creating an approach that would address the issue as a whole. Both the European Union and Slovakia could utilize various types of incentives that could help them with finding the solution to this prominent problem.

When it comes to dealing with environmental issues the methods of coercion are ineffective. Thus, the European Union and also countries such as Slovakia have to use different means of persuasion towards their internal actors. Since reputation is a big deal in the world of international politics, states strive to be as reputable as possible. The idea behind influencing and persuading other states through the usage of attraction and appeal was named soft power. As argued by Nye (2004), there are three main categories from which countries source their influence: culture, foreign policies, and political values. Since currently environmental issues are highly debated countries can be easily incentivized by the promise of better standing in the hierarchy, to deal with the environmental problems in the best way possible.

One of the good examples that countries such as Slovakia could look up to is the example of how the European Union has become one of the leading actors in dealing with such issues. According to May (2011), the impact of intertwining environmental policies with economic policies has allowed the EU to become an international leader with the responsibility to negotiate and influence environmental policies. He argues that the EU has done so because it has demonstrated its competence inside its own territory, showing the world that it is capable to deal with its internal issues better than others which resulted in improving its appeal. According to Volintru (2020), better integration of EU policies would result in strengthening its standing on the world stage. Therefore, this incentivizes them to adopt such policies. Karakır (2018) argues that both rising superpowers China and India were at the beginning of their rise unwilling to support environmental agendas. However, when they realized that they could actually gain

power through doing so, they started to be more willing and have joined the fight against environmental problems. Since then both countries have been incentivized to manage their internal policies to be more environmentally friendly.

One of the most effective types of incentive is a financial incentive. They motivate and encourage people and states to follow and abide by certain standards and provide an actual reward that they can get for achieving things. Both the EU and Slovakia can provide financial incentives in the form of tax deductions if they comply and succeed in following the goals that were set up. It is important especially for the country of Slovakia to push forward numerous types of financial incentives that are aimed towards fulfilling the goals that the EUs Environmental Strategy 2030 has set to achieve. The incentive of having landfill tax is helping to reduce the mismanagement of waste to some degree, however, it has been not updated to meet the ever-increasing environmental demands (OECD, 2020). Therefore, such tax should be updated to ensure that plastic waste is reduced.

Using Proper Communication Channels to Educate Citizens

The European Union, its institutions, and the Member States use different ways of communication towards citizens. Such communication is important for teaching the citizens to behave in environmentally friendly ways. The utilization of institutions plays a crucial role in how the environmental policies are adapted into real-life situations. Moreover, the education of citizens is also important to improve the environmental habits and further ensure that people are supporting the notion of a green future through their behavior and even through the shaping of their political preferences to promote environmentally inclined politicians.

As March and Olsen (1983) pointed out, institutions influence individuals and shape their preferences. Therefore, such institutions could and should be used to improve the environmental ways of life and to organize political preferences of citizens through, communicating numerous environmental agendas. However, such institution lacks proper adjustments to the modern era, therefore, there needs to be an improvement in

the modernization of such institutions to ensure that needs of citizens are properly met (Peterson and Beunen, 2019). Such modernization would be costly but would provide many benefits in the forms of novel ways of communication, while also improving the already existing ones.

A study by Lironi (2016) focuses on one aspect of communication that the EU institutions should improve. He argues that current forms of e-participation in various agendas are often obsolete, costly, and are not user friendly. Citizens often cannot participate in different types of policymaking, therefore, the communication between the EU and its citizens is lacking. Furthermore, e-communication itself is not thoroughly developed and it lacks in many ways. Therefore, the EU should invest in improving different means of e-participation and e-communication to bring the citizens closer while allowing for the effective spread of information. As reported by Stroeker et al. (2014) improvement of communication as such would further improve the trust towards EU and its institutions. Therefore, such investment would not only help with better communication but would strengthen the EU and its institutions in many other ways. Moreover, institutional work can act as a tool in the shift towards better enactment of numerous environmental policies (Ménard, 2021). Such tools are much needed to improve the situation as a whole and to further aid other types of similar approaches.

While communication is important it also serves as a tool for the education itself. Effective education is achieved through a complex process that includes strengthening of already existing environmental values, while also developing skills to tackle the issues themselves (Ardoin et al., 2019). Therefore, proper utilization of communication towards educatory purposes is necessary. Moreover, the improvement of practices such as e-communication can greatly add to the knowledge of the new generations of citizens. Additionally, proper methods of education are important to improve the environmental habits of citizens. As reported by Chow et al. (2017), to improve the education process it is best that three different strategies are combined. Direct teaching through providing useful information and raising awareness. Hands-on teaching is where citizens learn their habits by actually doing environmental deeds, such as

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properly separating waste. And, lastly, simulation game-based strategies in which citizens experience and understand all the different ways in which cities and countries are dealing with environmental issues.

Conclusion

Dealing with environmental issues is indeed one of the greatest obstacles that humanity has to overcome. Pollution of the environment has reached unprecedented heights, therefore, measurements to combat this issue are required for it to not become unmanageable. Up until now, such solutions were not highly debated and the emphasis that was given to them was fairly low. However, now the European Union has taken up a position as one of the leaders of this international fight for a clean future. Countries such as Slovakia play an important role in the struggle for a better environment because if such countries can manage the handling of the situation, other countries can get inspired by their solution and join the difficult fight.

Dealing with plastic waste policies is an important part of solving the crisis as a whole. Since as time progresses, each year we are producing more plastic waste than the previous one. Plastic products are robust and are hard to manage in the long run. Therefore, we as humans have to come up with solutions that would help us deal with this issue entirely. One of the great solutions to this problem is the process of recycling. If the plastic waste management strategies greatly improve over time, the enactment of a circular economy through the process of recycling is indeed possible.

However, the proper management of plastic waste is a difficult process that encompasses numerous additional problems that have to be addressed. The European Union has proposed many strategies that include set goals that the countries have to meet for them to improve in plastic waste management. These strategies include numerous legislative changes that would lay out exact processes on how the waste is managed, moreover, bans on various types of plastic products to reduce unnecessary strain on the environment. However, many issues come into play when adopting such policies. The transition process towards new technologies is costly and it requires the private sector to change its strategies. Moreover, coordination of industries that collect plastic waste and process it is a difficult process to manage. Member States have difficulties addressing such issues because each state is unique and wishes to deal with

the issue themselves. However, the EU has a role of creating a unified framework that would provide the Member States with guidelines that are most effective, therefore, they could adopt them and deal with the plastic waste accordingly.

The country of Slovakia has its own sets of difficulties that it has to address when looking at the issues connected with managing plastic waste. In Slovakia the method of landfilling is significantly cheaper than others, therefore, it creates a problem that people chose such methods over more environmentally friendly ones. Moreover, the lack of personnel to control if companies comply with the plastic waste policies results in yet another problem. Additionally, there is a problem with the lack of financial incentives that private companies and citizens get, therefore, they are not incentivized to deal with plastic waste in an environmental way. Of course, there are solutions available to address such issues but the process of enacting them is slow.

Motivating citizens and private sector through incentives brings desired results, and the European Union and its Member States should strive to enact their policies in a way that would promote this course of action. Moreover, communicating and educating citizens aids this process by improving the environmental habits while providing a building ground for further environmental ideas. Finally, enforcing policies is also an important thing, however the best strategy to do so is not only through giving fines but rather through giving options for more effective ways of enforcement, therefore, discouraging citizens and the private sector from breaking the law.

To conclude environmental issues are an important aspect of the 21st century. The further development of measures to deal with such issues is crucial for the development of humanity itself. There are many difficulties in the process, however, currently, countries are improving their strategies and inventing new ways how to deal with said issues. Both the European Union itself and the country of Slovakia are on a good course to realize these agendas, however, they need to overcome numerous problems associated with it. One of the ways to do so is to employ incentives, improve communication, and manage enforcement.

Resumé

Dôvodom k napísaniu tejto bakalárskej práce bol môj pretrvávajúci záujem o environmentálne problémy a ich riešenia. Jeden z problémov, ktoré sa toho týkajú bol problém plastového znečistenia zeme. Účelom mojej práce bolo zistenie a následné možné riešenie skutočností, ktoré sa týkajú plastového odpadu z pohľadu súčasnej legislatívy Slovenska, ale aj Európskej Únie. Realizácia tejto témy ma priviedla k myšlienke prepojiť tri rôzne formy perspektív, ktoré prisupujú k riešeniu tohto problému, a to z pohľadu prvotnej motivácie, dostatočne účinnej komunikácie a správnej kontroly dodržiavania legislatívy plastového odpadu a zároveň k jej realizácii v praxi.

Na správne rozpracovanie tejto témy bolo použitých viacero sekundárnych zdrojov, ako sú oficiálne dokumenty Európskej Únie, výskumné články, publikácie a štúdie zamerané na tému manažmentu plastových odpadov. Tieto zdroje prispeli k analýze súčasnej legislatívy a tiež k zisteniu rôznych skutočností, ktoré dopomohli ku komplexnému rozboru danej problematiky. Súčasťou tejto metodológie boli rozhovory, ktoré poskytli nielen informácie k téme plastového odpadu, ale aj možné riešenia, ktoré by sa mohli úspešne aplikovať do praxe. Jednou z dôležitých častí tejto bakalárskej práce bolo polozenie si prvotnej výskumnej otázky, na ktorú som sa snažil pomocou mojich metodologických postupov odpovedať. Otázka spočívala v dvoch rozličných fázach a to po prvé, prečo je politika plastových odpadov obzvlášť organizačne zložitá. Po druhé, čo môže dopomôcť ku komplexnejšiemu riešeniu daného problému. Odpoveď na prvú časť otázky bola docielená analýzou zdrojov, a následným prepojením myšlienok, ktoré budú detailnejšie popísané v nasledujúcich odsekoch. Odpoveď na druhú časť otázky spočívala v aplikovaní už vyššie spomenutej trojfázovej stratégie v rámci motivácie, komunikácie a kontroly dodržiavania legislatívy.

V prvom rade je dôležitá analýza existujúcich problémov. Jedným z týchto problémov je nedostatočná komunikácia EU smerom k občanom a to zapríčiňuje, že ich environmentálne návyky sú podpriemerné. Ďalší problém spočíva v tom, že existuje mnoho prekážok, ktoré stoja v ceste transformovania legislatívy do reality. Dôležitým aspektom z pohľadu ekonomickej perspektívy je to, že terajšie zaobchádzanie s

plastovým odpadom vyhovuje mnohým firmám a preto neprejavujú dostatočné úsilie na prispôsobovanie sa k neustále sa zvyšujúcim environmentálnym nárokom. V tejto časti sú rovnako dôležité aj riešenia, ktoré zaviedla Európska Únia k tejto problematike, a to tým, že prijímala legislatívne úkony vo forme smerníc, vyhlášok, zákazov a cieľov, ktoré si určila v Agende 2030 pre udržateľný rozvoj. Táto Agenda zaviedla stratégiu, ktorou by sa mali členské štáty riadiť, aby docielili presne stanovené ciele, a to napríklad zníženie množstva jednorazových plastových výrobkov, upravenie smerníc, ktorými sa vymedzujú druhy povolených plastových výrobkov, ale aj posilnenie výskumu, ktorý je zameraný na zefektívňovanie recyklačných procesov. Jedným z hlavných cieľov je zavedenie takzvanej cirkulárnej ekonomiky, ktorej myšlienka je znovu používať už predtým použité produkty, a tiež stimul pre samotné firmy, ktoré by mali efektívnejšie spracovávať zdroje a obchodovať s nimi. Výsledkom tejto Agendy by malo byť zníženie celkového znečistenia životného prostredia, ako aj nadmerného znečistenia plastovým odpadom a zvýšenie dopytu na znovupoužiteľné produkty.

Slovensko má v tejto oblasti svoje vlastné špecifické problémy. Týkajú sa najmä nesprávnej formy nastavenia systému zaobchádzania s plastovým odpadom. Jedným z problémov, ktoré prispievajú k nelichotivej situácii na Slovensku je problém skládkovania a to preto, lebo táto alternatíva je ekonomicky najefektívnejšia. Problém nastáva už v tom, že legislatíva Slovenskej republiky je nastavená tak, že odpad môže byť odvezený na skládku iba v prípade, že je nezrecyklovateľný alebo sa nedá energeticky spotrebovať. Keďže plasty vždy spadajú aspoň do jednej z týchto kategórií, tak by nikdy takýto produkt nemal skončiť na skládke, ale v praxi sa to deje neustále. Ďalším problémom je nedostatočná motivácia zo strany štátu, aby občania a súkromné firmy preferovali ekologickejšie riešenia. Najlepšia motivácia je finančná, a to v pozitívnom zmysle, vo forme daňových úľav. A rovnako má nedostatky aj negatívna finančná motivácia, sankcionovanie, z dôvodu nedostatočnej kontroly.

Odpoveď na druhú časť otázky spočíva v analýze nedostatkov Európskej Únie a Slovenska a v ich riešení. Toto riešenie môžeme rodeliť do troch rôznych fáz, ktoré sa dajú vzájomne prepojiť do komplexného procesu. Prvou fázou je ponúkание istých

stimulov, ktoré následne motivujú buď občanov, firmy alebo aj samotné štáty, aby samovoľne prispievali do tohto environmentálneho boja. Tieto stimuly môžu byť buď ekonomického charakteru, vo forme príspevkov alebo daňových úľav alebo štáty môžu byť stimulované pomocou prísľubu získania vyššieho hierarchického postavenia a atraktivity na medzinárodnej úrovni, takzvanej "soft power". Druhou fázou je správna komunikácia, či už zo strany EU alebo samotných štátov k občanom. Výsledkom tejto komunikácie má byť vzdelávanie populácie a naučenie environmentálnych zásad. A treťou fázou je kontrola už zavedenej legislatívy a jej následné vynucovanie formou rôznych sankcií. V tejto fáze však nemôžeme dbať iba na samotné sankcie, ale práve na ich preventívny charakter, ktorým môžeme doceliť to, že všetky zúčastnené strany budú odradené od porušovania environmentálnych predpisov.

Vyriešenie problematiky plastového odpadu je jedným z dôležitých míľnikov dnešnej civilizácie. Výstupmi tejto práce sú možné riešenia uvedenej problematiky a ich konkrétne aplikovania do reality. Síce problémy plastového odpadu Európskej Únie a Slovenska majú mierne odlišný charakter, ale ich podstata spočíva v konfrontovaní problémov občanov, súkromných firiem a inštitúcií a ich následného riešenia. Jedna časť riešenia môže byť viditeľná aj na základe tejto práce a to je adresovanie problémov pomocou už spomínanej trojfázovej stratégie. Na to aby sa situácia v EU a jej členských štátoch zlepšila, bude potrebné aby sa experimentovalo s rôznou praxou správneho a efektívneho zaobchádzania s plastovým odpadom, čím by sa prispelo k riešeniu pretrvávajúceho environmentálneho zaťaženia zeme.

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