# Palacký University Olomouc Faculty of Arts

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# **EU** waste management in Foreign Policy: The case of Turkey

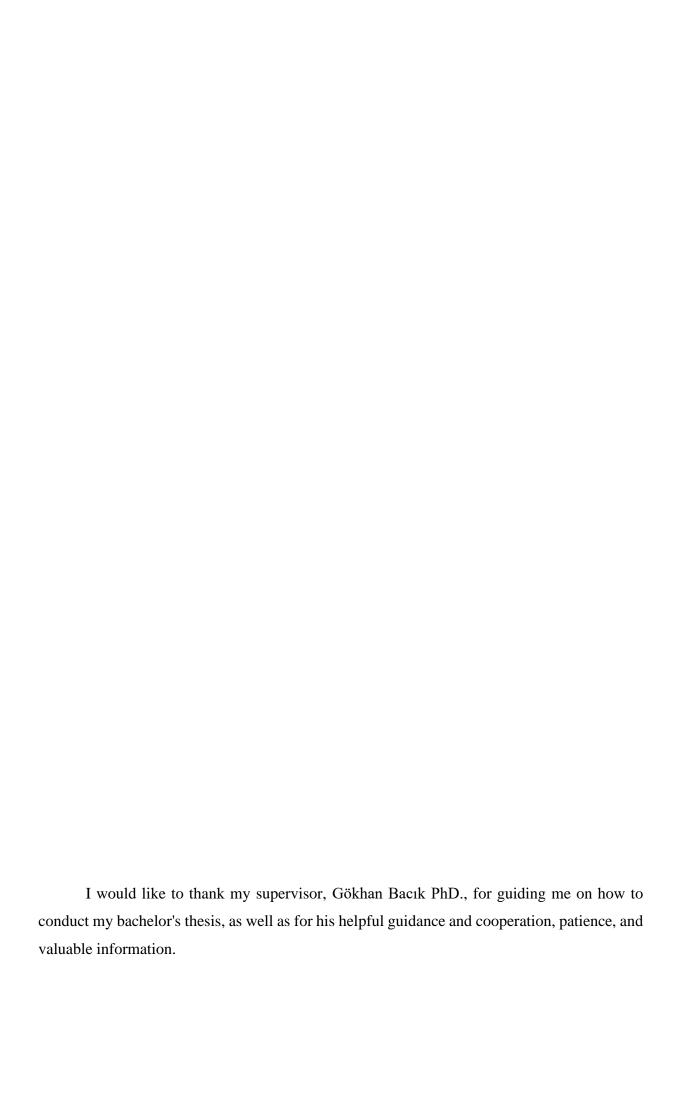
Bachelor's thesis

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Olomouc 2023

| I hereby declare that this Thesis is solely my own work and I have written it with the help of cited sources and literature. |                |  |
|--|----------------|--|
| Olomouc 4th April 2023   |                |  |
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# Introduction

This thesis focuses on the issue of European Union's waste management in the case of Turkey. This area intersecting ecology, law, economy, and also politics, has been a topic for many years due to the growing production of waste. As the population grows, so does the demand for goods such as food, clothing, heavy materials, plastics, and so on. That said, over the last decade or so, cross-border transit of waste to foreign nations has also expanded dramatically. Since 2004, waste exports from the 27-member European Union to countries outside the EU have increased by two-thirds (Eurostat, 2021). The EU globally exported 31.0 million tons of waste for 13.4 billion euros just in 2019. And therefore, with a volume of approximately 14,7 million tons in 2021, Turkey is the main destination for EU waste exports and has become a significant player in this sector after China prohibited plastic imports on January 1, 2018. (Brooks, Wang, Jambeck, 2018) Please see graphs of 5 main destinations for waste from the EU from 2019 to 2021. (Eurostat, 2020, 2021, 2022)

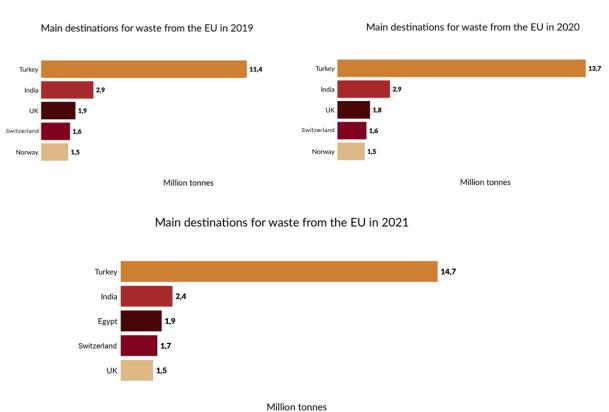


Figure 1: Main destinations for waste from the EU, 2019-2021. (Source: Eurostat, 2020, 2021, 2022)

For developed countries (EU in this case), exporting waste appears to be a quick solution because the waste is out of sight. But in reality, it simply shifts the problem to another region without providing proper solution. The most serious issue that must be addressed in this context is that frank recycling industries are rising in developing countries, resulting in the government's incapacity to ban activities that may result in the negative externalities of the recycling process (United Nations Environment Programme, 2015). Many of these scenarios then result in the shipment of plastic waste under violation of the country of origin's recycling rules, and in many situations, insufficiency in environmental monitoring leads to an even more difficult approach to environmental and social consequences. (Greenpeace, 2022) Frequently, waste is not only incorrectly recycled or disposed of, but it is simply dumped into the ocean and rivers (Greenpeace, 2022). And that is all regardless of the fact that current residential waste management and recycling systems are unable to deal even with domestic plastic waste production. Also, in spite of recent restrictions on the import of plastic waste, illegal dumping and burning are still frequent. (Greenpeace, 2022)

Thus, the issues surrounding waste management are numerous and highly contentious. From pollution of air, ecosystems, soil, marine environments, and others. Its rules, implementations, and laws can also vary from country to country. (United Nations Environment Programme, 2015) The same can be said for the reasons for exporting and importing. Therefore, for this reason, I specifically chose the EU (as a Western organization) and Turkey (as a developing country), and I shall explain the reasons, laws, rules, problematics, and possible solutions for them. Other cases of waste trade will be used simply for comparison and analysis, mainly because they can vary dramatically and would not explain this case completely.

The main aim of this thesis is to validate the EU's wide range of rules and analyze how these tools are relevant in the case of Turkey. Furthermore, the thesis will investigate the environmental and economic consequences of this approach in Turkey. The thesis will also address a number of secondary related topics, such as how the EU manages its exports to Europe in consideration of the numerous bans in the European and Turkish judicial systems.

The thesis shall subsequently answer the following research questions: Primarily, what motivates countries (in our case Turkey) to import waste that can have harmful effects on their environment, citizen's health, and so on? Secondary, what can the EU and Turkey do to achieve better environmental sustainability in waste management? When it comes to the hypotheses, these shall be either excluded or approved, *in total I established four relevant hypotheses*:

H1: The EU-Turkey waste trade is motivated by financial benefits.

H2: The EU-Turkey waste trade is solely motivated by close relations, and of both of them being OECD members.

H3: The possible solution for the problematic aspect of waste trade would be tighter regulations from either EU and either Turkey.

H4: The solution for problematic aspect of waste trade is in improvement of the Turkish waste management industries/companies.

The bachelor's thesis can be furthermore divided into theoretical and empirical part. The thesis has both a theoretical approach and an applied approach, which corresponds to the methods used. Furthermore, the thesis will be divided into five chapters, where chapters 1 and 2 are of theoretical focus and chapters 3, 4 and 5 are of empirical focus. The first chapter will define the theoretical framework of the work and also deal with general concepts and characteristics of the waste management sector. For the analysis of the thesis, I will use the theory of environmental politics. This theory will be based on the domestic and international parameters of environmental politics. This also includes a theoretical description of environmental policy, including its object and subjects, in the context of waste management. It also discusses in detail the objectives and instruments of environmental policy in this sphere and focuses on the general characteristics of environmental politics as a relevant theory in terms of searching for patterns in the behavior of the EU and Turkey in the waste trade.

The second chapter is about the historical background of the issue itself. The global trade of waste is enormous and has expanded significantly during the past twenty years. Its aim is not only to trace the origins of waste management in the past but also to trace waste management in its evolution and to describe the basic tendencies of its development. Here, I also focus on the EU and Turkish legislative frameworks regarding waste trade, its developments, and its impacts, which draws attention to critical developments in the EU-Turkey waste trade. I consider the Basel Convention a critical point for this chapter, which is mandatory to mention, mainly because it shows the historical development and also raises discussion of the future in this problematic area.

Between the second and third chapter I subsequently also develop chapter dedicated to certain introduction to practical part. This shall be certain crossing between the theoretical and

practical parts of my thesis. Here, I shortly evaluate the methods of research which will be used and establish the hypotheses. Furthermore, I shall also give short introduction into what is my aim in the practical part and point out the most important aspects.

In the third chapter, I will look at the broader reasons that stand behind waste trade. Even though the reasons for the waste trade might seem very simple at first, in fact, there are a wide range of factors standing behind this issue, both from the side of the exporter (the EU) and from the side of the importer (Turkey). So, I shall describe certain factors which may stand behind such waste trade and discover specific rationale of the EU-Turkey case. My aim is to discuss the issues from many different angles, including the political system, the economy, technology, geography, and more. That should help in sorting through all the different motivations behind this trade. Once I've eliminated those that don't apply in my case, I shall be able to find the root reason(s). This section will also answer the main research question, which is the main purpose of this chapter.

In the fourth chapter then, I mention the problematic aspects of this topic and analyze solutions for such problems. In this part of my thesis, I also analyze the potential future scenarios. Furthermore, in this chapter, I discuss the methods used in waste trade among the EU and Turkey, especially their weak points and their impacts not only on the environment, the health of citizens, economics, and politics, but I also evaluate these methods and their effectiveness in terms of reducing the negative externalities of waste and their cost-effectiveness. I also attempt to summarize potential solutions to this problem.

Additionally, I add fifth and last chapter. This chapter shall be then devoted to found results, answering hypotheses and research questions and general summarization of my topic. After that, conclusion of this thesis is established discussing final opinion, issues or achievements while working on the thesis, formulation of further research, analysis of used literature etc.

Regarding sources and literature, one of the main inspirations for this thesis is the frequently cited research from author Kate O'Neill with the title *Waste Trading among Rich Nations* (2000), where she established whether the procedural differences between national systems of environmental regulation can explain why some countries willingly take on the risks of disposing of hazardous wastes that other countries do not want. She develops analysis based on Germany, the United Kingdom, Australia, Japan, and France from approximately the 1970s

to the 1990s. Such as an examination of the institutional structures that pattern the relationship between state and society, the goals they pursue, and the power relations between them. She also noted the features of national systems of environmental regulation that affect a country's propensity to legally import hazardous waste from abroad and the differences between these systems that help to determine patterns of trade in hazardous waste. Even though all of these countries are industrialized, democracies, and are looked at in different time periods, she comes up with very valid points, which I will use throughout my whole thesis.

Another important source I used a book written by Paul F. Steinberg and Stacy D. VanDeever with the title *Comparative Environmental Politics: Theory, Practice, and Prospects*. It examines how various nations and political systems approach environmental challenges. Thus, it compares methodically the political structures, regulatory methods, and state-society relations of various nations. In addition, it provides an overview of the comparative environmental policy framework and demonstrates how it can be utilized to address policy and environmental management concerns. It demonstrates, among other things, the intersection of environmental politics with issues such as the greening of the state, the rise of social movements and green parties, the expansion of the EU, corporate social responsibility, federalism, political instability, the governance of local commons, and policymaking in democratic and autocratic systems. It provides inovative perspectives on environmental issues like climate change, water scarcity, and tropical forest loss. In addition, it studies the activities of state and non-state entities on a local to continental scale. The book is useful for this thesis since it illustrates the global interdependence of politics and environmental issues. I mainly use it for the theoretical part.

As another inspiration, which was great source for this problematic was book titled *The Environmental Policy Paradox* written by Zachary A. Smith and Peter Jacques. This book examines the inconsistencies and difficulties inherent in the formulation and implementation of environmental policies. The authors claim that while environmental regulations are essential for addressing serious environmental concerns such as climate change and biodiversity loss, they are frequently met with disagreement and resistance from a variety of stakeholders. This book investigates the "paradox" of environmental policy, in which initiatives aimed at protecting the environment can be impeded by political, economic, and social issues. The book provides a detailed review of the various parties and elements involved in the formulation of environmental policy, such as governments, enterprises, civil society organizations, and

international agencies. It also examines the challenges and tradeoffs between economic growth, social equality, and environmental sustainability, emphasizing the necessity for integrated approaches to policymaking. Case studies from around the world are used to illustrate the challenges and complexities of environmental policy-making, and recommendations are provided for how policymakers, stakeholders, and citizens can collaborate to overcome these challenges and promote more effective and sustainable environmental policies. It was important aspect of understanding the base of this thesis and even though it is not sourced as frequently as other academic sources the I also consider it important for understanding the problem as a whole and it was used in the theoretical part of this thesis.

One of the substantial sources was article *The Chinese import ban and its impact on global plastic waste trade* written by A.L. Brooks, S. Wang, and J.R. Jambeck, published in Science Advances in 2018, explores the impact of China's 2018 ban on plastic waste imports on the global plastic waste trade. The writers discuss the history and scope of plastic waste shipments to China, as well as the environmental and social consequences. According to the study, China's prohibition has disrupted global plastic waste trade and caused challenges to waste management systems in many countries. The authors examine the probable consequences of this prohibition, such as increased plastic waste exports to other nations and thus they also adress need for better domestic waste management procedures. Given the urgency and complexity of the issue, the article underlines the significance of global action to address plastic waste management. Overall, the study gives vital insights into the complicated challenges underlying the sale and management of plastic garbage, and it emphasizes the need for immediate action to address this environmental challenge. As a result, this provides an unconventional perspective on the issue, making it an essential component of this thesis.

Subsequently, another and maybe even more important sources were official data, statements, reports, legislative and other official documents from not only the EUs documents, but also of course Turkish documents. Furthermore, among these official documentations I will also frequently use the United Nations (UN) documents, Organization for Economic Cooperation and Development (OECD) documents and other documents from official organizations/governments etc. I consider these sources especially crucial because it provides great objective source which allows to form own opinions and arguments more freely than other sources could. These sources are furthermore also especially crucial not only through the whole thesis but also specifically for practical part.

Furthermore, as secondary source, I drew on validated sources such as news articles and a few research papers or environmental politics papers on waste management. Such as Politico, which frequently notes the ongoing situation. Furthermore, there are also articles from environmental organizations such as Greenpeace, Human Rights Watch and Zero Waste Europe that are involved in dissecting this issue. However, many of these secondary sources are harshly critical of EU policy in this area. That is not what I want to show in this thesis. Even though there might be some deficiencies in the EU's legislative framework, the problem itself is much wider than just simply pointing out one side of the issue. And therefore, we have to keep in mind that Turkey is benefiting from importing the waste too, which I will discuss later on in this thesis. And also, simply stating that one country's environmental regulations are more lax than another's will not suffice to explain the complex interactions and effects that make up an environmental regime, be it national or international. (Kate O'Neill, 2000) With this in consideration, it is important to note that further research into the field could only be beneficial and will provide valuable insight into this multifaceted area.

# 1. Theoretical framework

In this chapter, I develop a theoretical framework for this problem. I concentrate on the meaning of environmental policy, its aims, instruments, and subjects. This is my primary theoretical notion since waste management is a significant aspect of this strategy, and so it complements the subject of my thesis. In addition to the topic of waste management, I believe it is also essential to discuss other areas of environmental policy, as this issue is significant as a whole. Consequently, I will focus on the theory of environmental policy in the following paragraphs. Furthermore, I will also discuss the definition of waste trade as a part of waste management, and other than that, I will also discuss the relations between the EU and Turkey themselves, as I want to apply my particular example of waste management and subsequently waste trade throughout them, so it is important to mention the general relations between these two actors.

Therefore, this part of my thesis also examines the analysis, assessment, and implementation of environmental policy in the context of waste management in the EU and Turkey in the context of their relations. It will also be concentrated on the EU's and Turkey's waste management practices and environmental rules separately for each of them.

# 1.1. General characteristics of environmental policy

First, I shall provide a brief overview of the specialists, academics, and influential figures involved in the formulation of the term "environmentalism," as well as the contributions they made to the field and to environmental policy, which had a significant impact not only on natural spaces, but also to the topic of this theses, waste management. Throughout history, there have been a substantial number of individuals concerned with environmental protection and, by extension, environmentalism. Beginning with the 1960s and early 1970s, the environmental movement was predominantly pessimistic at the outset of this issue. (Elliot, 2023) This was owing to a pervasive feeling of "modern civilization lethargy". (Elliot, 2023) Works from authors such as Rachel Carson's Silent Spring (1962), Paul Ehrlich's "The Population Bomb" (1968), Garrett Hardin's "The Tragedy of the Commons" (1968), and Edward Goldsmith's "Blueprint for Survival" (1972) demonstrated that the carrying capacity of the planet's ecosystem had been reached. (Elliot, 2023) This so-called "apocalyptic" or "survivalist" literature persuaded some environmentalists to reluctantly advocate for greater government control over environmentally damaging human activities. (Elliot, 2023)

Furthermore, I shall also mention influential figures in this topic in current time. Such as for example Penny Whetton, an Australian climatologist who has been warning about climate change since 1990. In that year, she became a climate scientist at the Commonwealth Scientific and Industrial Research Organisation. She soon became the organization's top researcher, and she also helped compose several assessment reports for the United Nations Intergovernmental Panel on Climate Change, one of which won the 2017 Nobel Peace Prize. (Whetton, P., n.d.) Furthermore, for instance William Ernest McKibben is an American environmentalist, writer, and journalist who has discussed global warming's effects. He has also written validated books about the environment, including for example, The End of Nature (1989), about climate change,. Further also: Has the Human Game Begun to Play Itself Out? (2019), about the current state and future prospects of environmental challenges. (350.org, n.d.) Moreover, wide variety of other public figures are currently interested in environmentalism and environmental problems in general. Increasingly, politicians, scientists, and celebrities discuss environmental issues, this, among other factors, influences entire generations to take these issues more seriously than ever before (Falkner, 2012), including the subject of waste management and waste trade itself, as evidenced by Zero Waste movements etc.

In addition, I shall finally also answer the question, "What is environmental policy exactly?" This question can be interpreted in an extensive variety of ways. For a better understanding of this subject, I believe it is essential to mention a some political scientists who defined the theory of environmental policy and how they speculatively viewed the issues. Among them is the book Theory of Environmental Policy by William J. Baumol and Wallace E. Oates. In this book, Professors Baumol and Oates look at the economic theory behind environmental policy in a detailed and comprehensive way. The writers have kept the basic structure, which has become the standard reference in the field, by talking about both the theory of externalities and how it can be used in environmental policy. Moreover, Lynton Keith Caldwell, in his book International Environmental Policy, Lynton Keith Caldwell updates his extensive analysis of the global environmental movement. As a history of international collaboration on environmental concerns, this book examines the growth of international accords and institutional arrangements, both governmental and nonprofit, as well as the effects of science, technology, trade, and communication on environmental policy. This book further discusses the events and politics that have shaped the movement over the last two decades and will continue to do so in the next century, affecting multinational commerce, population policy, agriculture, energy issues, biological and cultural diversity, transnational

equity, ideology, and education. I must imply that there is of course wide range of other scholars who disccused environmental policy and many more of them could be used for this thesis. Although for the purpose of certain introduction of the theory of this topic, these two are enough for now.

Thus, we can generally say that environmental policy is a relatively new field of study, having emerged in the late 1960s and early 1970s, it corresponds to the extensively coordinated efforts of governments and organizations, public administrations, institutions, and citizens and producer groups that are centered on the notion of sustainable development. Consequently, multiple players, including political parties, economic actors, and the public sector, shape environmental policy (Bell, & Russell; 2002, Soukopová, 2011; O'Neill, 2009). The primary reasons for the existence of environmental policy include the condition of the environment (necessary protection of natural resources; global influences acting on the environment); the costs associated with environmental protection exceeding the capabilities of companies; and the state's economy as a whole. (Steinberg & VanDeveer, 2012)

Also, in other words, environmental policy can be defined as the politics of environmental protection, and at its heart, it is an institutionalized form of environmental management. In this context, politics implies that it already has its own theory, derived from experience and methodology. Therefore, it includes a study of the political cycle in ecopolitics and negotiations on a wide range of topics, as well as a description and validation of a wide range of environmental policy tools. As with other policies, environmental policy is an ongoing process governed by certain rules and procedures. The primary objective of environmental policy is to provide a framework and set of rules for decision making that will not only improve the quality of the environment as a whole, but also its individual components. In addition, it emphasizes the use of sustainability principles, enhanced economic efficiency, and societal acceptance of environmental initiatives and activities. Furthermore, it also implies that the integration of the environment into political sectors continues at the international, national, regional, and local levels. (Smith & Jacques, 2022; Steinberg & VanDeveer, 2012)

Consequently, from a narrower perspective, this may also include the attempt to identify solutions to environmental problems using intervention, preventive, or protective measures available to a certain country or organization. And in a broader sense, it can be understood as a variety of strategies through which particular actors achieve their environmental protection interests. By doing so, these actors can alter or influence unsuitable laws, norms, and policies.

(Falkner, 2012; Steinberg & VanDeveer, 2012) Therefore, in the framework of environmental policy, the state/organization (in this case, the EU and Turkey) acts as a public authority by interfering with market conditions and creating legal norms. It also concerns the preservation and, if necessary, protection of the environment. In conclusion, it can be defined as a combination of multiple strategies and procedures by which, during the administration of a given entity (state, organization, or company), the main aim is to not only prevent harm to the environment but also to contribute to its recovery. (Cocklin, 2009)

# 1.2. Waste management as part of environmental policy

In general, "waste management" refers to the numerous methods of waste treatment and disposal. It may include eliminating, destroying, processing, recycling, reusing, or regulating wastes. The primary goal of waste management is to limit the quantity of non-recyclable items and prevent potential health and environmental problems. In addition, it includes garbage collection, transportation, and processing, as well as waste recycling and disposal. (Demirbas, 2011). Consequently, the primary purpose of waste management is to limit the environmental and health risks associated with the indiscriminate disposal of waste and the contamination of natural resources such as land, sea, and air. (Bromokusumo, 2022) Even though waste management involves a wide variety of factors and solutions, it remains a challenging process. For example, effective waste management can result in the availability of reusable resources of high value. This can save money and provide new employment and business possibilities. Therefore, reducing, reusing, and recycling waste is crucial for the health of the ecosystem, but it may also be lucrative. (Kellenberg, 2015) Poor waste management, on the other hand, leads to climate change and air pollution and directly impacts several ecosystems and species, humans including. (OECD, 2021) For the subject of EU waste management in Turkey, it is essential to place primary emphasis on the transportation/trading aspect of waste management, i.e., waste trade. This is primarily due to the fact that in the waste management relationship (export/import) between the EU and Turkey, that plays the largest role. For example, as stated in the introduction, each year hundreds of thousands of metric tons of waste from the EU are shipped to Turkey for recycling.

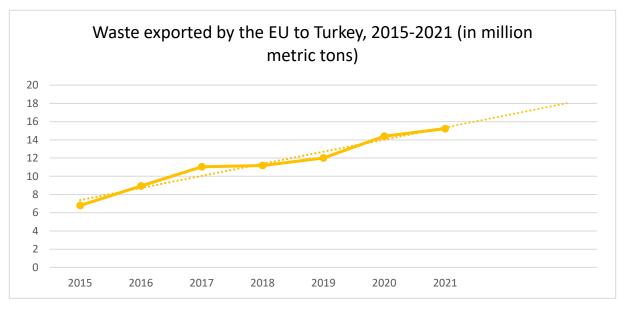


Figure 2: Waste exports from the EU to Turkey, 2015-2021. (Source: Statista, 2023)

As a result, I believe it is critical to explain the characteristics of waste trade, even in its theory. Later on, the other crucial aspects of waste trade, specifically those affecting this case, will be examined more deeply in the practical part of this thesis.

That leads me to address, first of all, the term "waste" itself. "Waste" refers to undesired or unusable substances. Furthermore, the term "waste" refers to any substance that has been discarded after serving its primary purpose or that is worthless, flawed, or useless. (Bromokusumo, 2022). The exchange of waste between nations for further treatment, disposal, or recycling is then referred to as global waste trade. Thus, because waste is technically defined as an undesired commodity, the payment is reversed. (Strohm, 1993). Waste is not a commodity that is deliberately purchased for use. Parties must be compensated for accepting waste, this is equal to the expenses of handling, shipping, disposal, and liability protection, and it has a negative value for the producer. This eliminates the typical protective patterns of self-interest in trading, as neither the importer nor the exporter care about the quality or fate of the second party "product." And regularly, industrialized nations transfer toxic or dangerous garbage to developing ones. (Strohm, 1993).

As an argument for waste trade, we can therefore speak about economic benefits, stimulation of the economy, and overall financial profits for the developing countries. On the other hand, in general arguments against waste trade, it is said that regulations for waste trade are not strict enough and that the increasing amount of waste transferred to developing nations therefore presents a major risk to the population and the environment of these nations. The argument against waste trade also stresses the fact that the majority of the world's waste is created by western nations, while those who suffer the harmful health effects of this waste are from poorer nations that did not in fact manufacture it. Furthermore, we can also find arguments regarding links to illegal activities in the waste trade. (Cotta, 2020)

In addition, the historical perspective of waste management/trade will be examined in the historical section of my thesis. There, I shall mention an examination of diplomatic negotiations, conventions, and laws, as well as their strengths and weaknesses, either globally or, furthermore, in the case of the EU and Turkey itself. Timeline of this topic will be also discussed there. In this section, however, it was crucial to define the general characteristics of the waste trade specifically and in their entirety.

# 1.3. Subjects of environmental policy in the context of waste trade

In this subsection, I outline the subjects of environmental policy, such as corporations, international organizations, interest groups, and the general public. Then, I focus specifically on my case, EU and Turkey as actors. This chapter should be divided into three subsections. The generals and their characteristics will be discussed first. In the second section, I will address the specific situation of the EU, and in the last section, I will do the same for the case of Turkey.

#### 1.3.1. General actors

First and foremost, it is critical to emphasize that the primary reason for the existence of these actors, and thus their significance, is that each of them carries a unique set of instruments and tools for implementing environmental policy and, by extension, waste management policy. We can generalize several tools but inspired by academics (Montgomery, 1995; Moldan, 2015; Smith & Jacques, 2022), I consider accurate to focus mainly on three categories. First, we can find instruments that rely on the free will of humans, such as enterprises and municipalities that modify their conduct in response to ecological requirements. Therefore, these are voluntary tools centered on information collection, education, and awareness. Regulatory and control instruments are the second group of tools. These are instruments that rely on diverse laws or prohibitions and apply diverse standards, constraints, directives, and criteria. The third kind consists of economic instruments, which are based on the idea that a person, organization, or state will adjust its behavior if it results in an economic benefit (Moldan, 2015). Clearly, it is crucial that all instruments pursue the same goals: productivity, efficiency (minimizing costs to economic entities), and prevention (avoiding negative influences and supporting positive impacts on other areas of society) (Letcher & Vallero, 2011).

First and foremost among the subjects/actors, I shall discuss the *state and its institutions*, primarily because policy implementation is typically characterized as a sequence of operations conducted by the government to fulfill the aims and objectives specified in policy pronouncements. Consequently, the state is also the primary agent for executing environmental policies. Legislators, judges, bureaucrats, pressure groups, community organizations, and even individuals are examples of official and formal actors that can carry out implementation. In government institutions, authority is broadly distributed and dispersed. In addition, the institutional environment viewpoint emphasizes the dominance of regulatory institutions,

normative institutions, and cognitive institutions in determining the legitimacy of its members (Letcher & Vallero, 2011; O'Neill, 2009).

Also, *companies* must be added as significant actor. All corporate actions inevitably have an impact on the environment. Activities related to industry, commerce, transport, and agriculture can all be major causes of environmental issues. Companies may be required to demonstrate considerate and responsible behavior towards the environment because such action is legally required or is consistent with the business motive of making a profit (Letcher & Vallero, 2011; O'Neill, 2009). For example, as in my case, the companies that profit from the waste trade.

International organizations are another significant player in environmental policy and the waste trade. Since the 1970s, the global, regional, national, and local impacts of international organizations on environmental policy have continuously expanded. These international organizations have a significant impact on the international community of environmental policy. For example, of crucial organizations, we can mention the United Nations, its Environment Programme (UNEP), and the United Nation's Commission for Sustainable Development (UNCSD). Thus, they can impact the path of negotiations on international systems of policy formation and execution. Simultaneously, they contribute to the negotiation and acceptance of voluntary norms and agreements. In areas of environmental policy, that are not the subject of international talks, they also influence state policy at the national level (Letcher & Vallero, 2011; O'Neill, 2009).

**NGOs** also play a significant role in this context. The significance of **non-governmental organizations** (NGOs) in worldwide environmental cooperation has expanded rapidly during the past few decades. They primarily aid the government in obtaining valid information to promote and assist certain environmental programs (Letcher & Vallero, 2011; O'Neill, 2009).

As a last, but not least, significant actor, I believe it is appropriate to address the *general public and consumers*. Public engagement in the formulation of environmental policy is usually mediated indirectly. Thus, either via political parties, the political system, environmental non-governmental groups, or public opinion. Public opinion then has a significant impact on the programs and policies of political parties, as well as the extent of an organization's environmental impact and, ultimately, on the behavior of businesses (Letcher & Vallero, 2011; O'Neill, 2009).

#### 1.3.2. EU as a specific actor in environmental policy

The EU has a significant impact on the formulation, design, and implementation of environmental laws in various regions of the world, notably, of course, in Europe. Furthermore, in general, environmental policy in the EU is founded on the ideas of prudence, prevention, and lowering of pollution, as well as the principle of "polluter pays." Multiannual environmental action plans lay the groundwork for future environmental policy action in all areas. They are included in horizontal plans and considered in international environmental talks. (European Parliament, 2022a) Environment policy has lately moved to the center of EU policymaking, with the European Commission introducing the European Green Deal as the primary driver of its economic development plan. (European Parliament, 2022a)

Therefore, the EU's environmental policy is founded on evolving concepts and it has evolved significantly over the years (Jordan & Gravey, 2021). In addition to essential concepts like strong environmental protection, "polluter pays," and preventative or precautionary measures, EU environmental policy addresses additional ideas, including integration, subsidiarity, and sustainable development. Furthermore, the precautionary principle states that if a risk is suspected, one must act as if it is real. As a result, depending on the activity or policy, it reduces risks to human health or the environment. One of the other important methods is above mentioned, polluter-pays. The notion is that polluters must pay, for instance, supervisors of activities that transport toxic chemicals or dump waste into water must take precautions. However, if the harm has already occurred, they must take the necessary steps to restore it and pay for it. (European Parliament, 2022a)

On the topic of waste management itself, the general objective of the EU's waste policy is to increase the efficiency of waste management across the Union by firs of all eliminating the waste and if there is waste, then treating it as a resource and evolving toward a European recycling society in which member states can establish their own waste elimination systems. (Blanes, 2018)

In this matter, the Waste Framework Directive (WFD) is the overreaching EU regulation that defines fundamental terms such as waste, end-of-waste status, re-use, and recycling. Adopted in 2008, the Waste Framework Directive aims to improve Europe's energy and resource efficiency toward the development of a "circular economy." (European Comission, n.d.b) This is accomplished primarily by encouraging waste reduction, reuse, and the prevention

of harmful effects on both human health and ecosystems. The WFD takes into account the precautionary principle outlined in the EU Treaty and is founded on the three aforementioned principles. (European Comission, n.d.b) Thus, the existing EU waste regulations are highly complex. In addition to the Waste Framework Directive, the Waste Shipment Regulation also establishes the basic framework. (European Comission, n.d.b) The objective of the Waste Shipment Regulation is to ensure both public and environmental protection during these transports. It applies to all waste transported within, to, or from the European Union. (European Comission, n.d.b)

Consequently, EU law also includes regulations on the transport of waste between its member states, such as a system of required notification, a standardized consignment statement, and prior approval to send refuse for disposal or recovery, all of which are required steps in the shipment of waste. Member nations are responsible for inspecting, testing, and monitoring waste exports. (European Comission, n.d.b) This includes the second level of legislation, which consists of rules that address waste treatment activities, such as the Industrial Emissions Directive (Waste Incineration) and the Landfill Directive. The third level of legislation consists of restrictions on toxic substances in electrical and electronic equipment, packaging, end-of-life vehicles, batteries and accumulators, and other electrical waste. (European Union, 2008)

The EU has also incorporated the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal into its laws, making it binding on all EU member states. (European Union, 2002) Thus, even though, this system is very complex, it still has certain loopholes and issues. Later on, specific problems with this system will be addressed in the practical part of my thesis.

#### 1.3.3. Turkey as a specific actor

Since the early 1980s, the Turkish governments have implemented environmental legislation and regulations. The fundamental legal framework is environmental law. The framework considers the environment as a whole to prevent and eliminate environmental pollution as well as make it easier to manage natural resources and land. Numerous laws have been passed as a result of Turkey's quick urbanization and population increase since that time and thus since the beginning of the twenty-first century, authorities have implemented environmental legislation more actively and seriously, leading to transformation in this area. (Ministry of Environment and Urbanization of Turkey, 2021)

National laws, regulations, statutes, and judicial decisions make up the majority of Turkish environmental legislation. (Mavioglu et al., 2021) Subsequently, environmental regulation covers waste management, quality of water, pollution levels, natural resource treatment, chemicals and genetically modified organisms, industrial noise, and nuclear pollution. (Ministry of Environment and Urbanization of Turkey, 2021) The key developments of environmental legislation in Turkey will be further mentioned in the historical part when focusing on the timeline and progression of this topic.

Furthermore, the Ministry of Environment and Urbanization is the primary organization in charge of policy development and implementation in the areas of environmental protection, pollution prevention, monitoring facilities and plants, issuing licenses, sustainable development, global warming, and climate change. (Ministry of Environment and Urbanization of Turkey, 2021) (Mavioglu et al., 2021)

Other environmental-related ministries and agencies include the Ministry of Culture and Tourism, the Ministry of Agriculture and Forestry, the General Directorate of Environmental Management, the General Directorate of Natural Asset Protection, the Turkish Environmental Agency, the General Directorate of Environmental Impact Assessment Permit and Audit, and municipalities (which regulate waste management activities). (Mavioglu et al., 2021) As previously said, NGOs have a role in defending society's needs, increasing awareness, giving professional information and guidance, and seeking solutions. Many Turkish non-governmental organizations (NGOs) work on environmental issues. The majority of them are devoted to a specific goal. Among these are the Turkish Nature Protection Association (Türkiye Tabiatn Koruma Dernei) (TTKD), which aims to develop policies for the protection of natural assets,

the Turkish Foundation for Combating Soil Erosion, Reforestation, and Natural Habitat Protection (Türkiye Erozyonla Mücadele, Aaçlandrma ve Doal Varlklar Koruma Vakf) (TEMA), and many others. Furthermore, certain international non-governmental organizations (NGOs) such as Greenpeace and the World Wildlife Fund (WWF) are engaged in Turkey. (Mavioglu et al., 2021)

Subsequently, variety of environmental laws serve as the foundation for Turkey's waste management and appropriate technological concepts, although it is also necessary to mention, that in Turkey, the management of solid waste is the responsibility of several agencies and entities, but there is no integration or coordination between them. (Gören & Özdemir, 2010) Solid waste poses issues if it is not disposed of correctly, and as the population continues to grow, the problems will worsen in the future. (Gören & Özdemir, 2010)

# 1.4. EU-Turkey relations in general

Relationships between the EU and Turkey are quite complex and have a rather lengthy history. The EU and Turkey began relations in 1959, and the Ankara Agreement of 1963 formalized the institutional structure. Although Turkey is not an official member of the EU, it is one of the EU's most important trading partners, and both are members of the EU-Turkey Customs Union. Turkey is also a significant strategic partner of the EU in areas such as climate, migration, security, anti-terrorism, and the economy. (EU External Action, 2019) For the subject of my thesis, I believe it is vital to focus primarily on the political and economic aspects of the issue. This chapter will be divided accordingly. In the first subchapter, I will discuss political relations, and in the second, economic relations.

#### 1.4.1. Political relations

Political cooperation within the EU and Turkey is coordinated by a very wide range of agencies and institutions. The Association Council, for example, which is made up of officials from the Turkish government, the European Commission, and the European Council, defines the direction of EU-Turkey relations and aims to aid in the implementation of the Association Agreement. (Euroskop, 2018) The Association Council meets at the ministerial level twice a year to do this. The Association Council's political direction is subsequently followed by the Association Committee, where experts from Turkey and the EU examine detailed and technical concerns in the numerous industries under consideration. (Euroskop, 2018) A Joint Parliamentary Committee formed up of members of the European Parliament and the Turkish Grand National Assembly assesses the evolution of Turkey-EU relations. The Joint Customs Union Committee is in charge of maintaining the Customs Union's effective operation through the harmonization of laws, whilst the Joint Consultative Committee fosters contact between interest groups. (Euroskop, 2018)

Turkey has also set up particular organizations to deal with the interaction between the country and the EU. This even led to the formation of the Ministry of European Affairs in 2011. (Euroskop, 2018)

#### 1.4.2. Economic relations

The trade ties between the EU and Turkey are controlled by certain preferential trade agreements. Even though the historical perspective will be developed in the upcoming part of the thesis, I consider it important to mention the most important ones, that being, as an example, the EU-Turkey Customs Union (CU), established in 1995, which encompasses trade in industrial items and, by extension, the vast majority of trade flows. In 1998, the Association Council approved a free trade agreement for agricultural products in addition to the Customs Union. (EU External Action, 2019)

Later on, in 2020, bilateral commerce in products was valued at around 132.5 billion euros. Approximately 41% of all Turkish exports of commodities go to the EU, whereas roughly a third of all Turkish imports come from the EU. In 2018, the EU was by far the largest source of foreign direct investment in Turkey, with a stock of 58.5 billion euros. (European Commission, n. d.) After an initially favorable trend of improved Turkish compliance with the norms of the Customs Union, Turkey has diverged from these standards in an increasingly systematic manner in recent years. Thus, it is obvious that the economic relations are very strong and important for either the EU and The Turkey. Furthermore, additional customs taxes charged on imports from foreign countries are currently the primary concern (even when imported from the EU). (EU External Action, 2019)

# 2. Historical background

As another part, I believe it is essential to establish the extent of the time period on which this thesis will focus. I consider the contemporary history of waste management and thus also the early modern period of EU-Turkey relations on this matter to be crucial. Despite the fact that references to somehow modern concept of waste management strategies date back to the Roman Empire (Havlíček & Morcinek, 2016), the important time period for the topic of my thesis is the second half of the twentieth century up to the present. In this regard, the second half of the 20th century is extremely significant, primarily since this is when crucial official EU-Turkey relations and negotiations began. In addition, environmental policy and by extension, waste management arose during this time period (as discussed in the previous chapter). Thus, this shall be the approximate boundary of the historical chapter.

Later on in the practical part, the time line will get even thinner, and it will roughly cover the years 2000 to the present. Thus, during that time period, waste management between the EU and Turkey itself became challenging. The practical section of my thesis shall also focus on recent developments in this problematic area, their resolutions, and potential future results; therefore, this will not be discussed in this historical part.

Yet, this historical element is required and therefore highly valuable. Hence, it will aid in demonstrating the problem's complex historical evolution; consequently, it is essential to first have a comprehensive understanding of the problem's historical context as a whole. Thus, this chapter will be revised accordingly. In the first section, I will assess the history of modern environmental policy and waste management. The second section will cover the history of EU waste management. The third section will then focus on the particular historical evolution of Turkish waste management. The fourth and final section will then concentrate on the establishment of specific EU-Turkey mediation in this problematic.

# 2.1. Contemporary history of environmental policy/waste management

Current international environmental policy can be understood only if we understand how the process of it looked in the past. That simply meaning, we need to know about the past to understand the present. Therefore, this subchapter's primary objective is to outline the contemporary history of waste management. I will concentrate on the general characteristics of time periods spanning from the 1970s to the present day. This timeline is selected mostly due to the fact that, as stated previously, the first environmental policy principles were created approximately in the early 1970s. (United Nations, 2017) My objective is to provide a basic and comprehensive overview of the evolution of waste management and its patterns over the past fifty years. This will help in developing a more detailed perspective on the issue as a whole.

I consider the above mentioned United Nations Environment Programme (UNEP) being the best choice when describing the general development of this problematics, because it is a key part of environmental policy and goes hand in hand with waste management. Hence, not only are all EU member states its members, but so is Turkey and other countries from across the globe. Therefore, it can provide an excellent foundation for a brief historical description of international environmental policy and notably, waste trade. That said, focus shall be given to the most important multilateral environmental agreements over the years.

Starting after the historic UN Conference on the Human Environment in 1972, held in Stockholm, the UNEP was created to keep an eye on the world's environment, provide scientific data to help policymakers make decisions, and coordinate international responses to environmental crises. (UNEP, 2022) Furthermore, in fact, we may distinguish a number of norms among the significant developments over the years, which I shall list for context. One example is the 1972 Convention on International Trade in Endangered Species (CITES), established to protect endangered species from commercial exploitation, the main objective of that, was to regulate the worldwide trade of plants and animals. (UNEP, 2022) Later on, the Vienna Ozone Convention of 1985 was meant to help countries work together by sharing information about how human actions affect the ozone layer. (UNEP, 2022) Furthermore, the crucial Basel Convention of 1989 began control of transboundary movements of hazardous wastes and other wastes, requiring its parties to ensure that these pollutants be managed and disposed of in an environmentally sound manner. (UNEP, 2022) This convention is also crucial to the historical underpinning of my thesis and will be expanded upon in further subchapters. In addition, further the reference should be also made to the 1992 Climate Change Convention,

which established an international environmental treaty to prevent "dangerous human interference in the climate system", by stabilizing atmospheric greenhouse gas regulations. (UNEP, 2022) Another significant achievement was the 1994 Desertification Agreement, a legally binding worldwide pact that combines sustainable land management with environmental protection. (UNEP, 2022) Furthermore, the Rotterdam Convention was established in 1998 to aid governments in making informed decisions about the trade of hazardous substances. (UNEP, 2022) The final convention to be debated in this part of my thesis is the Stockholm POPs Convention, an international environmental pact signed on May 22, 2001 and entered into force on November 17, 2004, with the purpose of eliminating or limiting the production and use of organic pollutants. (UNEP, 2022)

This was just a short list of important treaties implemented by UNEP. There is, of course, a huge number of other treaties and negotiations in this short 50-year history, that are not mentioned here, mainly because of the extent of this thesis. However, even from this short description, we might conclude that the environment's condition, and as well the concern about it, evolved steadily throughout the years. This was alarming for organizations like UNEP. The objective here, was therefore to provide an overview of political development of environmental policy, thus, that including also waste management in specific treaties. I shall now go to the more specific aspect, hence, the EU's environmental policy and waste management throughout history.

# 2.2. Particular historical development of the EU in this context

In this subchapter, I will briefly discuss the further development of environmental policy of the EU itself, highlighting the most important aspects, which will be noted in the Environment Action Programs, thus that offer a broad policy framework, where the most essential objectives are identified and outlined in a fundamental strategy. In addition, I will focus on the evolution of waste management policy, particularly in the context of the most important conventions and accords.

As a start, the environmental policy of the European Economic Community (EEC) (former name for the EU before Maastricht treaty in 1993) was established with an ambitious initiative. That consisted of a variety of modern concepts regarding sustainable development. At the very first United Nations Conference on the Environment, in 1972 (mentioned above), and in response to growing public and scientific concerns over the limitations of industrialization, the Commission, launched a new community strategy. (Hey, 2005)

That was, the first Environment Action Programme (EAP), launched in November 1973. This EAP was based on the principles that prevention is preferable to treatment and polluters must pay. During this time period, the first ministries for the environment were also founded. (Hey, 2005) Further, later on, the Second EAP (1977–1981) was established and it addressed a greater range of issues and was essentially a continuation of the first in terms of approach and purpose. (Hey, 2005) Generally said, the First and Second Programs (1973–1981) then advocated pragmatically for water and air quality standards. The criteria for the cleanliness of drinking water were very high, although those for the quality of air were given much less of government attention. (Hey, 2005) Furthermore, the Third EAP (1982–1986) and, to a lesser extent, the Fourth EAP (1987-1992) showed a significant shift in policy strategy, with both heavily reliant on internal market growth. Throughout the 1980s, clean air rules and noise and risk management at industrial sites dominated environmental policy practice. (Hey, 2005) Latter, "Towards Sustainability" was formed as the fifth EAP in 1992 and remained in operation until 2000. It was established in cooperation with the UN Rio Conference and Agenda 21, as the Commission's contribution to the discussion on sustainable development. Hence, the fifth EAP defined longer-term goals and stressed a more global strategy than its predecessors. (European Commission, 1993) Coming next, the sixth EAP (2002–2012) promoted the complete integration of environmental protection standards into all Community policies and actions and is the environmental component of the Community's plan for sustainable growth; thus, environment and European growth, economy, and employment goals are interconnected. (European Commission, 2002) Further, in November 2013, the European Parliament and European Council ratified the seventh EAP, in action until 2020, entitled "Living well within the limits of our planet." This plan was created to guide the development of environmental and climate change policies in the EU beyond the year 2020. (European Commission, 2013). Furthermore, the last and the current and eighth EAP is in effect from 2022 to 2030 (European Commission, 2019) This EAP solicits participation from all relevant parties at all levels of government in order to ensure compliance with EU climate and environmental regulations. It also is the foundation of the EU's plan for accomplishing the Sustainable Development Goals of the 2030 Agenda. (European Commission, 2019) The EAP also focuses on recognizing that human well-being and prosperity depend on living ecosystems and its seeking to speed up the transition towards a climate-neutral and resource-efficient economy. (European Commission, 2019)

Furthermore, concerning the waste management plan itself, I consider important to highlight the most important agreements and treaties in the history of the EU. Along this, in the 1970s, the unification of Europe required the creation of European waste standards, the harmonization of state waste laws, and the integration of waste management policies. (Meyer, 2011) Adaptation of the European Directives by European countries and progress in EEC standardization, including terminology standards pertaining to waste, was therefore necessity. This led to the adoption of the Waste Framework Directive, the Hazardous Waste Directive, and the Waste Shipping Regulation in 1975, followed also by the adoption of national measures by member states to control and manage waste. (Council Directive 75/442/EEC, 1975) These key pieces of legislation defined waste and other crucial concepts, ensuring that waste is managed without harming the environment or human health, and regulate the movement of waste throughout the EEC. (Council Directive 75/442/EEC, 1975)

The early EEC/EU Directives, however, did not specify emission limits for landfilling, incineration, or recycling. As indicated by a number of difficulties, such as pollution from incinerators or landfills, this proved to be the weakest component in terms of environmental damage from waste. These shortcomings, such as the lack of legislation governing air and groundwater contamination, were later addressed in major part by the introduction of the Landfill Directive in 2001 and the Waste Incineration Directive in 2000. (European Parliament & Council, 2000; European Commission, 2010)

Furthermore, the 1996 Directive on Integrated Pollution Prevention and Control (IPPC) established standards for a wide spectrum of other waste-related activities. (European Parliament, 1996; European Commission, 2010) The next important thing to do to help improve waste management was to put recycling, reusing, and recovery ahead of dumping waste. The European Commission's 1996 Waste Strategy Communication reaffirmed the idea of a waste hierarchy, emphasized the "polluter pays" principle, and brought up the idea of "priority waste streams". (European Parliament, 1996; European Commission, 2010) However, there were also waste streams for which current disposal methods had a negative environmental impact or for which it proved very difficult to manage recycling finances, despite the obvious environmental benefits. In the last decade or two this has led to packaging and packaging waste regulation, end-of-life vehicle legislation and legislation on waste electrical and electronic equipment. (European Commission, 2010; European Commission, n.d.b)

The original Waste Framework Directive, as mentioned above, was issued in 1975. Later, it had been significantly revised in 1991 (Jordan & Liffernik, 2004) and 2006 and the existing Directive was approved on November 19, 2008. Aside from this, the legislation was naturally improved several times such as in 2012 when the Commission's "better regulation" plan was in adaption. After a discussion, several of the most crucial new rules were chosen. Furthermore, the Commission also revised in its 2013 road map, "Review of Waste Policy and Law". Three components were discussed: a review of key targets in EU waste legislation (in accordance with the review clauses in the Waste Framework Directive, the Landfill Directive, and the Packaging Directive); a "fitness check" of the Directives dealing with separate waste streams; and an evaluation of how to best address plastic waste in light of the 2013 Green Paper on Plastic Waste. (European Parliament, 2023) We can therefore conclude, that EU legislation on waste is an ever-improving and debated sector and is a matter not only for the main EU institutions but also, for example, for European think tanks and others. Another example of that might be that on November 17, 2021, the European Commission submitted a proposal to modify EU waste shipment regulations. The proposed regulation seeks to simplify the shipment of waste for re-use and recycling within the EU, as well as to ensure that waste exported from the EU is managed in an environmentally responsible manner in the destination countries; and to strengthen enforcement to battle illegal waste shipments. (European Parliament, 2023)

Other than that, several recent EU policies and programs, including the 8th EAP, the Resource Efficiency Roadmap, the Raw Materials Initiative, and the Circular Economy

Package, are applicable in this context beginning in 2022. The current goal of the EU's waste strategy is to help the circular economy by getting as many good resources as possible out of waste. (Blanes, 2018) Furthermore, the goal of the European Green Deal is to stimulate economic growth by facilitating the transition to a modern, resource-efficient, and competitive economy. (European Commission, 2019)

Please see diagrams of classic waste management system vs. circular economy waste management system, where amount of waste is meant to decrease by significant number at the end of the process.

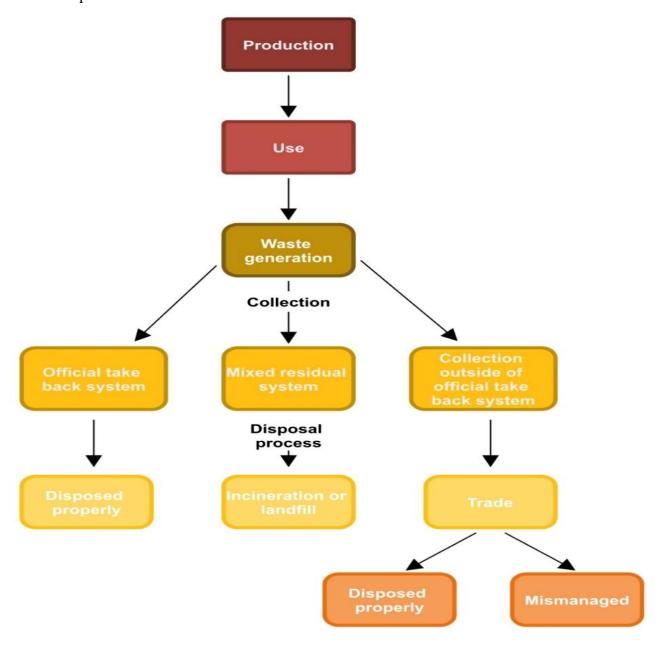


Figure 3:Simplified diagram of current waste management system (Source: Abu Hanieh, Hasan, Abdelall, & Krajnik, 2013)

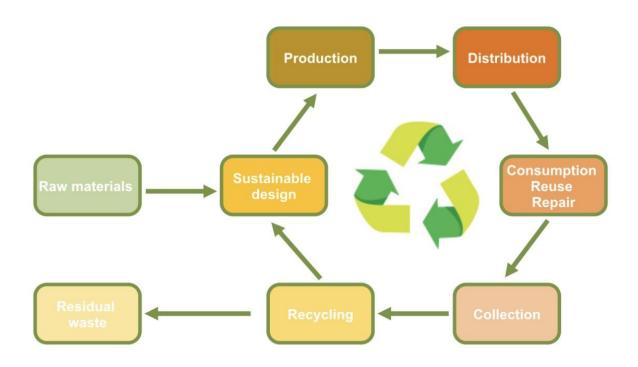


Figure 4: Simplified diagram of circular economy (European Commission, 2020)

# 2.3. Particular historical development of Turkish waste management

Beginning in the early 1980s, the Turkish government has adopted environmental protection measures. On August 11, 1983, the environment law was published in the Official Gazette of Turkey. Certainly, environmental law provides the fundamental legal framework, to avoid and remove environmental damage, as well as to permit the management of natural resources and land. (Turkish Environmental Law No. 2872, 1983) The aim of the environment law is furthermore to protect and improve the environment, preserve and make better use of land and natural resources, prevent water, soil, and air pollution, and, by preserving the country's natural and historical wealth, organize all measures and precautions for enhancing and securing the health, and living conditions of present and future generations. (UNEP Legal Ecosystem Assessment Portal, n.d.)

Due to Turkey's rapid urbanization and population growth, various legislative bodies have been founded since then, authorities have also taken a more active and severe approach to applying environmental rules, and steady progress has been made in this area, but at the same time it is also important to note that significant challenges remain. (OECD & SGI, 2020) These laws and regulations include for example, among others, the Regulation on Water Pollution Control from December 31, 2004, the Regulation on Industrial Air Pollution Control from July 3, 2009, the Regulation on Radioactive Waste Management from March 9, 2013, and the Regulation on Environmental Impact Assessment from November 25, 2014. In addition, much progress has been made in aligning Turkish law with EU law and international norms (European Environment Agency, 2015), which will be discussed in upcoming subchapter. As of now, Turkey's current environmental policy tries to control and stop pollution and other types of environmental damage within its land borders and territorial waters. It also establishes a permit and compliance regime for parties participating in a specific list of activities. (OECD, 2019)

To the topic of waste management policies itself, since about the 1970s, waste has been a common concern and a substantial cause of environmental damage in Turkey (Republic of Turkey Ministry of Environment and Urbanization, 2021) Nowadays, several environmental regulations serve as the basis for waste management and relevant technological concepts in Turkey. The first legislative measures regarding the collection and evaluation of solid wastes in Turkey were drafted in 1930 under the General Sanitary Law and Municipalities Act, but comprehensive regulation was not achieved until the Solid Waste Control Regulation was published in 1991. (Gören & Özdemir, 2010)

It is also essential to note that the Turkish waste management laws and policies were formed in accordance with the country's process of harmonization with the EU. (European Environment Agency, 2015) Municipal solid waste, soil, demolition and building waste, medical waste, toxic waste, packaging waste, batteries and accumulators, waste oils, waste electronic equipment, end-of-life vehicles, etc. are all subject to regulations based on above mentioned Environmental Law No. 2872. (Republic of Turkey Ministry of Environment and Urbanization, n.d.) The (also above mentioned) Waste Framework Directive (Directive 2008/98/EC) served as inspiration for Turkey's Waste Management Regulation. Furthermore, Turkey has joined the international community by ratifying the Basel Convention on the Management of Transboundary Movements of Hazardous Wastes and Their Disposal. (Basel Convention, 2021)

Hence, despite the fact that Turkey alone has several environmental and waste management laws and regulations, it is also in compliance with EU law. Considering the specific topic of my thesis, this is crucial and will be discussed in the next subchapter.

## 2.4. The particular process of EU-Turkey negotiations

In this chapter, I will provide a brief overview of EU and Turkish historical development, highlighting the most important milestones and successes from an environmental viewpoint. In addition, I will briefly explore the challenges surrounding EU-Turkey waste management and trade.

Turkey was one of the first countries to seek collaboration with the newly formed European Economic Community (EEC) in 1959. (European External Action Service, n.d.) The Ankara Agreement, signed on September 12, 1963, laid the groundwork for this collaboration. In addition, the Ankara pact's main goal was to continually improve living conditions in Turkey and the EEC through accelerated economic development and trade growth, and to eliminate the disparity between the Turkish economy and the Community. (European External Action Service, n.d.)

This relationship is also visible in a variety of other parameters. Significant turning points in this relationship happened, such as on April 14, 1987, when Turkey applied for EU membership. (European Commission, n.d.a; European Commission, 2022) Furthermore, customs union talks between the EU and Turkey began in 1993, and the Customs Union went into force on January 1, 1996. Another noteworthy year was 1999, when the European Council granted Turkey candidate status for EU membership at the Helsinki Summit in December. (European Commission, n.d.a; European Commission, 2022) Furthermore, the European Council later established the EU-Turkey Accession Partnership in 2001, which provided a detailed framework for Turkey's EU accession process, and the Turkish government then issued the National framework for the Adoption of the Accession. (European Commission, n.d.a; European Commission, 2022) Furthermore, the European Council resolved to expand EU financial support through the so-called "pre-accession mechanism" during the Copenhagen Summit in September 2001. Another significant event occurred on December 17, 2004, when the European Council resolved to begin membership discussions with Turkey, and the membership discussions began on October 3, 2005. (European Commission, n.d.a; European Commission, 2022) The "Screening Process," a review of conformity with the acquisition, began in October 2005. Then, in December 2005, the Council adopted the new cooperation document for the Turkish admission. (European Commission, n.d.a; European Commission, 2022)

Besides that, environmentally, the EU and Turkey have also cooperated and continue to do so. As is evident, Turkey has been especially engaged in the past in the process of applying for EU membership, and environmental concerns were a major obstacle in the talks. As a result, even though the relations are currently "colder" and there is very small chance that Turkey would gain the EU membership, the negotiations on environmental metrics took place in the past, considering that in order to gain EU membership, a large number of EU directives must be accepted. (Ministry of Foreign Affairs of the Republic of Turkey, n.d.) Thus, the environment chapter of Turkey's EU membership negotiations commenced on December 21, 2009 and relevant ministries, government agencies, local authorities, municipalities, and financial institutions have accomplished the process of convergence in the sphere of the environment. In this context, special initiatives have been also conducted to draft new legislation, ensure that national laws are in conformity with EU regulations, and determine the amount of investment required in the environmental sector. (Ministry of Foreign Affairs of the Republic of Turkey, n.d.)

Considering the waste trading relationship, I'll begin by addressing the origin of the problems. When did Turkey come to be known as Europe's garbage dump? As a result of China's ban on the importation of certain types of plastic, EU nations began shipping their waste to Turkey in 2017. (Human Rights Watch, 2022) As shown above, Turkey is close to the EU (EU), has strong trade ties with the EU, and is a member of the OECD. These factors have made it a major destination for EU exports of plastic waste since China banned them. (Brooks, Wang, Jambeck, 2018) But the waste trade itself, was a problematic even before 2017. (Human Rights Watch, 2022)

As a basis, I shall concentrate mostly on the Basel Convention when discussing the historical development of this issue. As the environmental rules got gradually stricter in industrialized countries in the late 1980s, the price of getting rid of hazardous waste went up. This was problematic mainly because "Toxic traders" started sending dangerous waste to poor countries and Eastern Europe so they could get rid of it for less money. (Montgomery, 1995) Thus, the creation and adoption of the international Basel Convention on the environment, signed in 1989 (went into effect in 1992) was thus motivated by international outrage. (Secretariat of the Basel, Rotterdam and Stockholm Conventions, n.d.) The Convention addressed cleaner manufacturing, hazardous waste minimization, and limitations on the transit of these wastes, and, in conjunction with OECD efforts, has resulted in the elimination of a

number of ineffective waste management practices. (Basel Convention, 1989; UNEP, 2017) It also aims to get rid of the possible dangers that come with moving hazardous wastes and other wastes across borders. (Basel Convention, 2019) The Convention's primary concern is hence the transfer of waste from developed to developing countries. A preliminary notification is necessary prior to any real transfer of trash between Basel Convention countries. According to the Basel Convention, in order for a trans-boundary movement to be legal, the exporting state must obtain and get formal authorization to import from the importing state. (Basel Convention, 1989; UNEP, 2017) Each shipment of hazardous or other trash must be accompanied by a record of movement from the start of transboundary transit to the point where the waste is disposed of. As a result, any state that has signed the Convention has the authority to limit the import and export of hazardous and other waste. (Basel Convention, 1989; UNEP, 2017; Basel Convention, 2019) As of September 2022, 190 countries, including 187 UN member states, the Cook Islands, the EU, and the State of Palestine, had signed the treaty. Turkey signed the Convention on May 22, 1989, and officially joined the group on June 22, 1994. (Secretariat of the Basel, Rotterdam and Stockholm Conventions, n.d.)

To prevent harm to human and environmental health from the global trade of plastic waste, the 2019 Basel Convention has been updated with new provisions. Between April 29 and May 10, 2019, governments meeting was held at the Basel Conference of the Parties to amend the Basel Convention to include plastic waste in a legally binding framework, that will increase transparency and regulation of the global trade in plastic waste and make its management safer for human health and the environment. At the same time, the Partnership on Plastic Waste was formed to bring together the interests and resources of private and public sectors in order to facilitate the new measures' implementation and supply a variety of helpful resources like guidelines, models, and funding. (Basel Convention, 2021)

In addition to the Basel Convention, a number of bilateral agreements and the majority of EU waste management directives have been adopted into Turkish law, such as the By-Laws on General Waste Management Principles, Packaging Waste Regulation, and Waste Landfilling By-Laws. (Metin, Eröztürk, & Neyim, 2003)

# **Introduction to practical part**

In this part of my thesis, I will focus on the practical aspects of my instance. This will be the focus of the first practical chapter, which shall identify the precise goals and objectives of the practical research, as well as the techniques of research and the hypotheses.

In addition to this initial chapter, I will develop two more chapters. Firstly, I will examine the broader motivations for waste trading. Despite the fact that the reasons for the waste trade may initially appear to be quite simple, there are in fact a variety of issues involved on both the exporter (the EU) and importer side (Turkey). In the following chapter, I will then discuss the problematic features of this topic and assess potential remedies. I also examine alternative future possibilities. In addition, I examine the effectiveness of these strategies in decreasing the negative externalities of waste and their cost-effectiveness in this chapter. I also attempt to describe potential solutions to this issue.

These chapters shall thus describe and examine political, economic, and societal factors, as well as technological, environmental, and legal aspects. This shall present concrete arguments for the EU and Turkey case. My aim is also to cover this mainly from a political standpoint, such as political institutions, the system of government, the legal framework, state versus non-state entities (such as corporations, businesses, etc.), political stability, and more. As another important economic component, I cite disposal costs, taxes, environmental laws, transportation costs, and unemployment, among others. This part shall help with answering of the primary and as well secondary research question. For this purpose, I also develop last chapter of this practical part which shall be dedicated for the found results and subsequently also answering the hypotheses and research questions themselves.

### **Methods of research**

I shall finally also develop the methodological tools which will be used for the practical part. I concluded that for this thesis, it would be best to use root cause analysis due to overall aim of this thesis. Other than that, due to that the problematics of environmental policies, waste management and so also waste trade are emerging field, I shall also pay great attention to methods and data developed by other scholars.

Firstly, I shall shortly explain the steps for the method of root cause analysis. The first step, is to define the problem or areas to improvement. In my case this is defined as finding the reason behind the EU and Turkey waste trade and that is also defined in the primary research question. The second step shall be assembling data and inputs. This shall be done in my case from statistics of exported and imported waste, disposal rate, opinions of academics and other sources active in this issue. As and third step I shall identify possible factors. I will thus establish the factors which could be possible reasoning for the waste trade. As fourth step, I shall locate the root causes, I will evaluate this from possible factors of waste trade of either EU and subsequently Turkey. From this, the fifth and last step should be establishing and recommending possible solutions, this will be also my secondary research question. (Rooney & Heuvel, 2004; Williams, 2001) I thus believe this shall be adequate method which will help me when developing the practical part of my thesis.

## **Hypotheses**

The thesis shall furthermore answer the following research questions: Primarily, what motivates countries (in this case Turkey) to import waste that can have harmful effects on their environment, citizens' health, and so on? Secondary, what can the EU and Turkey do to achieve better environmental sustainability in waste management? Thus, from this we can conclude specific research hypotheses accurate for problematics of his thesis. I will specifically focus on 4 main hypotheses which I shall further either confirm or exclude. For recapitulation, these hypotheses are:

H1: The EU-Turkey waste trade is motivated by financial benefits.

H2: The EU-Turkey waste trade is solely motivated by close relations, and of both of them being OECD members.

H3: The possible solution for the problematic aspect of waste trade would be tighter regulations from either EU and either Turkey

H4: The solution for problematic aspect of waste trade is in improvement of the Turkish waste management industries/companies.

Finding methodological and provable answer for these shall be also priority in this part of my thesis. Subsequently, when searching the answer for these hypotheses, all the other goals mentioned above in introduction should be answered as well. This all shall be achieved by using developed theoretical and historical facts in previous chapters, listed literature, statistical data and methodological research.

### 3. Reasons for the waste trade

It is not difficult to understand waste exportation. A more challenging topic to explain is why certain governments permit waste imports. In other circumstances, the explanation may differ but the purpose of this chapter shall be to investigate the various causes of waste trade specifically between the EU and Turkey. The outcome will be determined by the methods indicated above. And although there may be a wide variety of reasons, due to the scope of this thesis, I will primarily focus on the answering of hypotheses H1 and H2, thereby seeking an answer to my core research question. This chapter will be subsequently divided in this manner. In the first subchapter, I will highlight the significant distinctions between the EU and Turkey, which I believe is necessary for addressing my hypothesis. I shall evaluate the financial, legal and even political disparities. The found data from the previous chapter will then be analyzed and investigated in the second subchapter using the given approach. In the final subchapter, I will summarize the findings and thereby this shall provide base for answering the major research question and hypotheses H1 and H2.

These factors are mostly concerned with the EU perspective. As a result, EU member countries expressly pick Turkey as the destination of their waste. I believe these variables are intertwined in the EU's decision-making process. What is vital is to identify the component that also plays a role in Turkish side. It is not difficult in this situation to find an answer for waste export; thus, the motivation is to get rid of the waste. The more difficult solution is to determine why a country, in this example Turkey, would accept the import of waste. In this scenario, I believe that by omitting certain criteria that are not true for both sides, I will be able to get an answer to this question as well.

### 3.1. Factors which may explain waste trade between the EU and Turkey

For this part I shall start with naming the possible insufficiencies in this problematic. These factors can be later on analyzed and create greater perspective and answer regarding my primary question. Great inspiration for both this chapter and also following chapter, was book from Kate O'Neill, with title Waste trade among rich nations. Thus, the author is searching the answer from unconventional perspectives. Even though, my case is different, and I am not analyzing this problematic in exactly economically, politically or even law basely, similar countries, I consider it as great inspiration and certain idea of what point of view I want to

implement. Certain aspects such as actors, laws etc., were already mentioned in the theoretical part, although for this practical part I aim to develop more exact and current point of view, which shall mainly lead to finding the reasons itself.

### 3.1.1. Structural/political regime

I consider important to imply the political factor here as well, thus how can we generally describe the political regime of the EU. Political regime may vary among the EU member states, although, for this case we can implement the general EU ideologies. The EU treaties provide that the Union is founded on representative democracy, and direct elections are held for the European Parliament. The EU's legislative arm is composed of the European Parliament and the Council. The council is comprised of state governments, symbolizing the intergovernmental aspect of the EU. (European Parliament, 2022b)

In the case of Turkey, the situation is slightly more difficult. Although we can generally describe it as autocracy with democratic facade. Turkey was on the point of becoming a prominent democracy in the Central Asia/Middle East area twenty years ago, with an excellent and creative economy and promising liberal reforms. In contrast, the country has undergone a major shift towards authoritarianism over the past decade. (Tol & Eissenstat, 2022) Since Tayyip Erdogan became the first directly elected president of Turkey in 2014, he and his Justice and Development Party (AKP) have crushed individual liberties, amassed control of the free press, and dramatically extended executive power. (Tol & Eissenstat, 2022) Some experts classify Turkey's rule as electoral authoritarianism, joining a rising number of autocratic nations around the world. This is a word used to characterize "regimes that provide the illusion of multiparty democracy at the local and national levels, but depriving elections of their actual power." (Tol & Eissenstat, 2022)

What I argue here is that this could specifically play role in the greater oppressing of public opinion and subsequently linked corruption in authoritarian regimes. This also includes waste trade, which has great opposition in the public sphere thus it negatively affects the environment, health of citizens and others. This could mean that other actors such as companies or government can peruse their interests more easily. I thus consider relevant to evaluate the aspects.

### 3.1.2. Economics and technology

Another aspect which could play a role in waste trade is economic and technological development of certain country. In this case we might consider EU as the more developed actor and Turkey as the less developed country.

The explanation might be thus visible from two points of views. First being, waste is sent to country which is more technologically advanced in waste treatment and thus there is no great risk in this trade because the waste should be well treated in the destination country. This is although not the case of mine. The European Union (EU) has a highly developed and diverse economy with a GDP of about \$17.7 trillion, whereas Turkey is a developing nation with a less diverse economy and a GDP of about \$819 billion. The EU has a substantially higher GDP per capita than Turkey, with an average GDP per capita of approximately \$33,000 compared to Turkey's average GDP per capita of approximately \$13,300. (World Bank, 2021a; World Bank, 2021b) Thus, we can exclude this factor right away.

The second point of view shall be the opposite. More economically developed country aim to export the waste to less developer country, with vision of the waste being treated for cheaper. In this case there is also great financial compensation available for the importing country. On the other hand, there is also great risk of the waste not being treated properly, have harmful effect on the environment and health of citizens and furthermore also links on illegal activities such as illegal dumping, child labor and more. (Human Rights Watch, 2022) I argue that this is the major answer for the waste trade between EU and Turkey and shall furthermore provide reasoning for this.

# 3.1.3. Regulatory form

In the theoretical part of my thesis, I mentioned the waste laws and basic waste management actors which stands behind the waste trade. Here I aim to point out the perspective rather in form of evaluating if there is certain influence on waste trade in a sense that country with strict waste management will rather export was to country with more loose waste management.

Drawing from theoretical and historical part, we can conclude that EU has pretty strong regulatory system. With wide range of tools, organs and agreements focusing on cleaner environment, implementing sanctions and establishing certain limits. In Turkey on the other hand the regulatory system is not as strong, with major gaps, which were mentioned in the

theoretical part. I shall therefore evaluate if there is certain connection if country, in this case EU, will rather export waste to country with less strict or more flexible policy making and regulations.

#### 3.1.4. Relations

As another factor I consider important to evaluate if certain close, or less close relations between countries might influence the waste trade within them. As mentioned above, both EU and Turkey are OECD members. Their relations cannot be called necessarily cold either, especially with their long history. Does this factor therefor have certain influence? I shall furthermore also evaluate it and otherwise confirm or exclude this factor.

### 3.1.5. Geography

As a last factor which I shall mention is the geographical distance between the EU and Turkey. Thus, if this factor wouldn't be mentioned here, we might ask why is not the number one destination country for EU waste for example countries in South East Asia such as India or Pakistan, where the disposal cost of waste might be even cheaper comparatively with Turkey.

I argue that the reason for this is geographical distance. With long transport of waste, not only the price of it increases, but also the risk of waste getting "lost", having negative environmental impact, or even links on illegal activity is much higher. Thus, Turkey being relatively close to the EU in geographical manner might play role in why is it preferable over India, Pakistan and other countries.

# 4. Problematic aspects and possible solutions of the waste trade

In this chapter I shall first evaluate the problematic aspects of waste trade, address why these issues are present and furthermore and mainly, finding possible solutions for them. Thus, this chapter shall help with answering my secondary research question and hypotheses H3 and H4. The chapter will be divided accordingly. In the first subchapter I will evaluate the problematic aspects of waste management between the EU and Turkey. Next, in the second subchapter I shall evaluate what does this loose waste management strategy causes in regards of environment and general health of the humans and other species and subsequently environment.

## 4.1. Space for loopholes

I shall finally address how is waste trade even possible with relatively strict restriction, regulations and laws mentioned above in theoretical and historical part. Researches and critiques argue that the answer for this is above mentioned loopholes in the Basel convention and in the waste management system in general (Environmental Investigation Agency, 2018), and that is the answer even in this case. That said, the answer might be as simple as that the strict EU regulations are mainly in act on the EU territory but for the exports of waste outside EU are mostly regulated just by the Basel convention and few other frameworks. (European Commission, 2021b)

This means that all hazardous waste exports from OECD countries to the rest of the world are prohibited under the Basel Convention's Ban Amendment. (Basel Convention, 1989) However, in this case, both the EU member states and Turkey have signed on to this convention. Nonetheless, the parties have agreed to the following: not to export (or import) hazardous wastes or other wastes to (or from) a non-signatory state; not to export waste unless the state of import has given its prior consent for the specific export; and to communicate information about proposed international movements to the states concerned via a notification form, allowing them to analyze the effects of hazardous waste or other wastes on human health. (Basel Convention, 1989; UNEP, 2017) Furthermore, any party may impose additional limits that are compatible with the convention. Furthermore, the treaty sets notice procedures for international movements between parties as well as international movements from a party across non-signatory nations' territory. The treaty also states that countries must re-import illegally exported waste. (Basel Convention, 1989; UNEP, 2017) In addition, parties commit to

collaborate on ecologically responsible techniques for managing hazardous and other wastes. Even so, disagreements should be resolved through dialogue or other soft power tools. If no resolution is reached, the case is referred to the International Court of Justice or a three-party arbitration body. (Basel Convention, 1989; UNEP, 2017)

This said, even though the EU is very active on its own territory in the environmental sphere, in this case, it is still trade; the EU is exporting waste, paying for it, and expecting for the waste to be disposed of in the importing country. Furthermore, Turkey is accepting the waste and fulfilling the requirements of the Basel Convention, so legally, everything is in order.

I must, of course, imply that even though everything looks in order on paper, the practice is usually very different. We cannot forget that Turkey is a so-called authoritarian regime with a democratic facade. In this case, that means again that even though the Turkish environmental laws might seem to be in compliance with the EU environmental laws (developed in theoretical part of this thesis) and subsequently with the Basel Convention obligations, the reality is often very different. (Human Rights Watch, 2022) This goes in hand with above mentioned oppressing of public opinion and corruption in this matter and preferring the profit of these actions before environmental and health safety. This might have been further evident when Turkey implied a ban on importing waste in June 2021, but shortly after, it was lifted because of the pressure of waste disposal companies, thus we might imply that profit is usually put above the environmental matter. (Human Rights Watch, 2022) (Visible in graph)

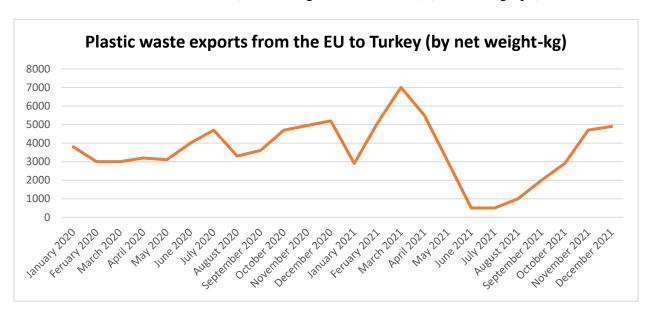


Figure 5: EU plastic waste exports to Turkey, from January 2020 to December 2021. (Source: Human Rights Watch, 2022)

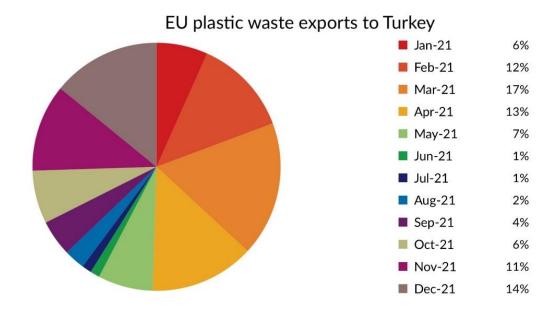


Figure 6: EU plastic waste exports to Turkey, from January 2021 to December 2021, shown in percentages. (Sources: Human Rights Watch, 2022)

In addition, I shall also address that, despite the fact that all types of waste are shipped to Turkey, Turkey faces the greatest challenges in disposing of plastic waste. (OECD & SGI, 2020; Human Rights Watch, 2022) Yet, until recently, plastic waste was not properly defined or included in the initial classification of hazardous chemicals. To address the trade in plastic waste, on January 1, 2021, amendments to Annexes II (now covering all plastic waste, including mixed plastics), VIII (containing hazardous plastic waste), and IX (containing nonhazardous plastic waste intended for recycling) were implemented. (Basel Convention, n. d.) This is therefore a new restriction that might have a positive effect on the environment of this trade, but only time will tell if it's really successful. (Basel Convention, n. d.)

When we summarize these aspects, Turkey is a country with a somewhat authoritarian regime (leading to oppressing public opinion and violations of human rights); it is also corrupt, as has been proven, and it doesn't care that much about the environment as much as their legal documents show. Furthermore, there is no very great integration in the Turkish waste companies. This only adds to the issues, and it is also sure to increase the risk of illegal activities linked to the waste trade. (Human Rights Watch, 2022) How can the EU therefore consider it the correct destination for their waste? Factors which make the EU choose Turkey will be

evaluated and addressed later on in the next chapter, but looking from an ethical perspective, does the EU really think that when this trade is backed up legally in a sound manner, the practice will look the same under these circumstances?

As I mentioned, the EU has lots of criticisms for this activity, and we might find several opinions on this if we look at it from different aspects. The EU either really believes and expects that the waste will be disposed of without a problem in an environmentally sound manner, and the second reasoning might be that the EU just simply ignores the facts and prefers the financial benefits.

For argument 1, first of all, we must acknowledge that the EU itself realizes the problem and is aiming to tighten the regulations, as noted: Poor management of plastic waste has harmful consequences on the environment and climate, including the disposal of plastic and microplastics on land and in rivers and oceans around the world. Plastic contributes to climate change through emissions of greenhouse gases during production and waste disposal, as well as through the use of chemicals and water. Little is known or transparent about the management of EU plastic trash sent to other nations. (European Parliament, 2018) In addition, the EU states that it must identify circular and climate-friendly methods to manage its plastic waste, such as by increasing reuse and recycling. According to OECD figures, 182 million metric tons of trash were trafficked globally in 2018. The EU has also acknowledged that this number is constantly increasing. In 2020, the EU exported 32.7 million metric tons of waste to non-EU nations for a total value of €13 billion, an increase of 75% since 2004. (Eurostat, 2021) Subsequently, according to Eurostat (2021), the majority of the waste exported from Europe in 2020 consisted of ferrous and non-ferrous metal scrap, paper, plastic, textiles, and glass. The issue although persists, which permits EU member states to continue this environmentally harmful business. (Human Right Watch, 2022) This brings me to the critics' argument.

For opponents, the issue pertains to double standards: should the quick profits from European waste outweigh the environment and health of the recipient countries' populations? There are many reasons for opponents to dislike the waste trade, and they usually as well argue, that the true source of the problem is our ever-increasing manufacture and usage of plastic. They also argue that the shipping regulations can be modified, but they will be rendered ineffective if the cause of plastic pollution is not addressed. (Reuters, 2019) The EU has one of the world's most efficient recycling systems. (Condamine, 2022) Nonetheless, the EU also has one of the greatest plastic production rates per capita and is the world's leading

exporter of plastic garbage. Although a significant portion of this plastic garbage is non-recyclable, it was never intended to function inside a toxin-free circular economy in Europe. (Condamine, 2022)

To conclude this, the European Parliament points out that this irresponsible activity must stop, especially in regards to the export of hazardous and poisonous plastic waste. In many instances, however, the export of non-recyclable waste remains possible. (European Parliament, 2018) Thus, we might see that the EU is trying to find solutions and admits the problems, but the EU itself is a very complex and difficult organization, and it's not as simple as it seems, and again, Turkey itself accepts the waste. We might hope for further discussion, realization of the problems on both sides, and future development.

# 4.2. Results of insufficient waste management

In this subchapter, I also believe it is important to briefly identify and explain the consequences of insufficient waste trade. This is the fundamental reason why waste trade should be improved, and it inspires me to find answers to both my primary and secondary research questions. There are, of course, a variety of variables that might result from poor waste trading, ranging from climate change to harm to the health of the citizens of a country that imports trash with insufficient components. I am referring especially to the environmental, economic, and health-related factors. (Human Rights Watch, 2022)

In the environmental field, improper waste management typically pollutes the air, land, and marine environments. This is tied to global warming, increasing sea levels, air pollution, the extinction of animals, and much more. Although if garbage trade is financially compensated, it may have negative economic repercussions. This consists of decreased land prices, decreased tourists, wasted resources, and clean-up expenses. Furthermore, negative effects on citizen and even non-citizen health are another significant consequence. (Human Rights Watch, 2022)

I believe this and the preceding chapter are intrinsically linked. Why would the EU, which is very environmentally conscious on its own territory, allow its member states to export waste to a country that has demonstrated it cannot effectively process such a massive volume of waste and is not necessarily the most environmentally friendly nation.

# 5. Findings of the thesis

### 5.1. Reasons

As is mentioned above the EU is influenced by lots of factors why to choose Turkey as the destination for their waste. On the other hand, we cannot say the same about Turkey. The only factor which their share although is the financial benefits from this trade. The EU aims to get rid of their waste, and Turkey is the ideal actor for them. We have to keep in mind that waste trade is still a trade. From following diagram, it is obvious why did the EU choose Turkey as and subject for its waste. Not only that EU itself states that it's choosing the importing country for the waste according to some of these factors, the other factors such as regulatory aspects or political system (according to Kate O'Neill) might play role as well. The answer for why did Turkey choose to import the waste are furthermore visible form statistics and diagrams. Thus, not all of the factors are valid for Turkey, we can in fact hardly find these same factors to be valid for the side of importer, except for the case of financial benefit. As it was mentioned many times throughout this thesis, waste trade might be very lucrative business (Kellenberg, 2015), and that I argue is the case also for Turkey. Not only that Turkeys regime is not very democratically friendly, their regulations are as well weaker, relations with the EU are not necessarily getting better and also geography cannot be taken in mind, thus the transportation cost of waste is on the exporter expense, and thus none of these factors play certain role for Turkey.

Thus, the primary reason behind this stays the certain economic benefits for both sides. EU saves money by exporting waste to Turkey rather than to other countries in the west which have higher prices, or countries which would be more far (India), where the price would get subsequently higher due to far distance. For the instance of Turkey, we can also see country in very great need of stabilization of their economy (inflation), and we might also find several other cases in Turkey when the financial benefit was put above the environmental aspects. Other than that, I shall also imply that if country has weaker democratic government and less strict regulations it is more likely to import waste. But that is not the reason behind the waste trade, it is factor on the way which influences the process, but the reason itself, as it was proven stays the financial benefits on both sides. Please see diagram for summarization. (This diagram was established on several sources, including scholars discussing this topic, such as O'Neill, 2000; Letcher & Vallero, 2011 and others. Further I drew also from environmental organizations as

for example Human Rights Watch, 2022. Furthermore also data sources from Eurostat, 2020, 2021, 2022; World Bank, 2021a; 2021b, etc., were used, and subsequently also sources regarding root cause analysis (Rooney & Heuvel, 2004; Williams, 2001) and lastly, I also drew from my general knowledge regarding this issue.)

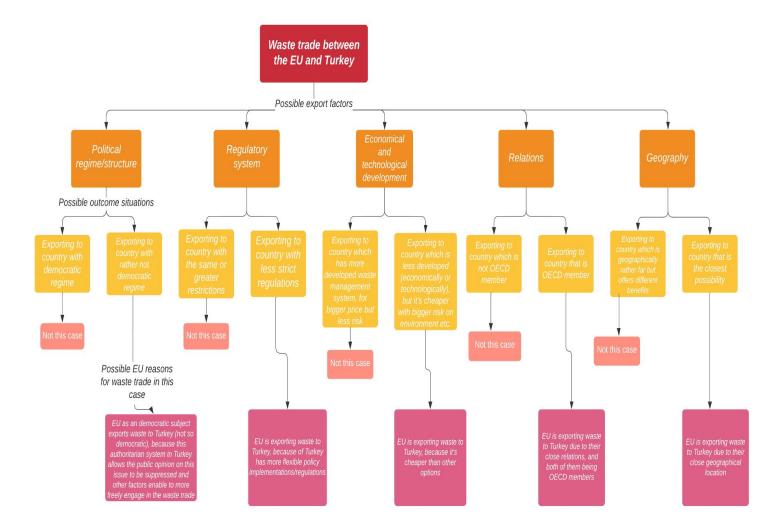


Figure 7: Diagram of possible exporter reasons for waste trade

### **5.2.** Possible solutions

That said, we shall finally answer what are then the possible solutions for this problematic. Waste trade among different nations might vary but I argue that several solutions could be beneficial in this case, solutions would be the best in this case. Consequently, if we exclude utopian and currently unachievable solutions, such as stopping the waste trade completely, sending waste into space, or stopping waste production altogether, we may be able to evaluate a variety of possible alternatives, thus these may be long-term solutions one day,

but they do not address the unique waste trading issue between the EU and Turkey, especially as of now and thus they are not necessarily topic of this thesis. I must also imply that as it was previously stated throughout this thesis, Turkey became the greatest importer in 2018 after China implemented ban on most types of plastics waste. Through this I also implement that ban from the side of importer is not exactly a solution for this issue as a whole, thus the problem just shifts to different region. (Brooks, Wang, Jambeck, 2018; Human Rights Watch, 2022) Please see graph bellow, which shows that exports of waste from the EU did not get any lower even after Chinese ban in 2018.

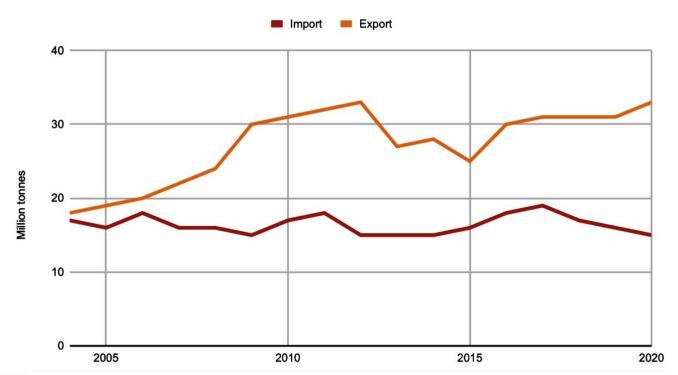


Figure 8: EU's imports and exports of waste throughout approximately 2004-2020. (Source: Eurostat, 2021)

Also, as it was shown in theoretical part, waste trade is very complex process with variety of actors active in it. According to that, we might develop certain solutions. I drew inspirations for these solutions from either scholars such as Smith & Jacques, 2022, researches and subsequently data, and statistics. I believe that with combination of the theory, this shall be sufficient to develop certain possible solutions for this problematic. I shall also address that these solutions might rather be defined as an improvement in the ongoing waste trade. I of course might have implied that total ban would be the best solution, but it is not necessarily what would either of the parties want and neither it solves the problem globally, thus if ban

would be the scenario of this case, the problem itself (insufficient waste management), would simply shift into another region as it is shown above.

Thus, I shall finally address the possible solutions for improvement of the waste management. As the rate of recycling in Turkey increases, the government and relevant ministries must ensure that recycling and waste management techniques avoid harm. It is currently mandated by Turkish law; recycling facilities should not be situated adjacent to residential areas. (Human Rights Watch, 2022) The Turkish government should guarantee that recycling facilities already positioned too close to residential areas are relocated and that new recycling facilities are situated at a safe distance from residential areas. Plastic recycling enterprises in Turkey can reduce exposure to discharged pollutants by enhancing air circulation and air filtering systems in recycling plants, among other measures. This may involve installing ventilation hoods with filters above equipment to remove airborne contaminants. (Human Rights Watch, 2022) Efficient air filtering systems lower the exposure risk for recycling facility employees and nearby residents. The availability of protective equipment, such as masks, gloves, suits, and goggles, can greatly limit worker exposure to contaminants. But, as long as plastic items contain harmful chemical compounds, the recycling process will continue to endanger human health. (Human Rights Watch, 2022)

To address what the EU can do to improve, following the bans on plastic waste imports imposed by some receiving countries, EU members have continued to export their waste to other countries with less stringent regulations, potentially resulting in significant human rights violations and environmental damage. (Human Rights Watch, 2022) As required by the EU Circular Economy Action Plan, EU countries should limit trash exports outside the EU and prioritize measures to encourage waste avoidance to minimize the disadvantages associated with plastic recycling and disposal abroad. (Human Rights Watch, 2022) Ensure that the revised Waste Shipment Regulation, which is currently being debated by the European Parliament and the European Council, prohibits the export of plastic waste to non-EU or European Free Trade Association countries and extends protections to all nations, regardless of OECD status. (Human Rights Watch, 2022) As mandated by the Basel Convention, the European Commission, through the European Anti-Fraud Office, and EU member states must audit EU plastic waste exports to verify they are "virtually free of contamination" and prohibit the export of such wastes. (Human Rights Watch, 2022) Support policies and practices that increase the transparency of chemical additions in materials and limit the use of hazardous

chemical additives in plastic products. In accordance with the EU's Circular Economy Action Plan, take steps to limit plastic production and improve waste management. (Human Rights Watch, 2022) Please see diagram for summarization:

# Main points-Possible solutions for improvement of the Eu-Turkey waste trade

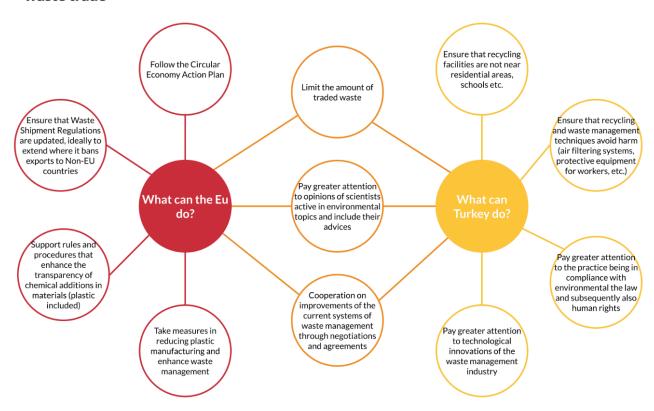


Figure 9: Possible solutions for improvement of the EU-Turkey waste trade. (Source: Human Rights Watch, 2022)

# 5.3. Answering hypotheses and research questions

Subsequently, I shall also the finally approve or exclude the established hypotheses:

### H1: The EU-Turkey waste trade is motivated by financial benefits.

This hypothesis can be confirmed, and it can be proven that financial factor plays certain role in the waste trade for both of the actors. Thus, the EU-Turkey waste trade is driven by economic benefits. Transporting waste from EU nations to Turkey is less expensive than within the EU, providing a distinct financial benefit to EU nations on one side. On the other side, Turkey has a large and expanding waste management industry that is benefiting from EU waste shipments, and it is also creating economic opportunities and employment. Thus overall, the evidence supports the hypothesis that monetary incentives are a significant driver of EU-Turkey waste trade.

# H2: The EU-Turkey waste trade is solely motivated by close relations, and of both of them being OECD members.

This hypothesis can be excluded, thus even though it is indeed case for the EU, it is not necessarily case for Turkey and therefore we cannot say that this is the **sole** reason. The trade of waste between the EU and Turkey is a complex issue involving economic, environmental, and political factors. Although close ties and membership in the OECD may aid this trade, they are simply unlikely to be the sole reason.

# H3: The possible solution for the problematic aspect of waste trade would be tighter regulations from either EU and either Turkey.

Some of the environmental and health problems with the waste trade, like the risk of pollution and the wrong way to get rid of hazardous waste, could be fixed with stricter rules. Tighter regulations could also help make the waste trade more open and less likely to involve illegal activities. But it's important to think about how stricter rules might affect the economy, since they could make it more expensive for businesses to deal with waste and limit the economic opportunities in the waste trade. But this hypothesis can be still overall generally approved thus it is one of the first steps in how to make waste trade more manageable. Question although stays that there is possibility that waste trade would then shift to different country. I therefore argue that regulations mainly (but not solely) from the side of exporter specifically

(the EU in this case), would be the best option for this. Thus, this would not give a space to transfer the problem elsewhere, but it would push on the exporting nations to find the real solutions for disposal of their waste.

# H4: The possible solution for the problematic aspect of waste trade could be in improvement of the Turkish waste management industries/companies.

By improving Turkey's waste management practices and infrastructure, environmental and health risks related to the waste trade may be lowered. Improvements in the Turkish waste management business could also contribute to increased efficiency and lower prices, making waste trade more economically sustainable. Furthermore, if Turkey's waste management methods improve, more focus may be directed to local waste management solutions, and perhaps eliminating the need for waste trading. Overall, boosting waste management sectors and companies in Turkey could be an approach for solving the negative aspects of waste trading. This could result in better environmental outcomes, economic benefits, and less dependency on waste trading as a whole. This hypothesis can be therefore approved as well, thus technological development could really help with more environmentally sound disposal of waste. This also from quantitative and qualitative perspective. With this hypothesis it is although needed to state that first of all, it would be the best working in manner with other aspects (H3), and second of all it is very much long time run perspective. Although, aside from that, this really could be the solution.

And finally, I shall also answer my research questions:

# Primarily research question: what motivates countries (Turkey in this case) to import waste that can have harmful effects on their environment, citizens' health, and so on?

This thesis found out that the main reason behind the waste trade as whole, thus from the side of importer and also exporter, are financial benefits for both sides. Other possible factors were excluded due to their validity from just one side of this trade (importer/exporter). Reasons for waste trade may vary, but in this EU-Turkey case, we can state, that if there would not be financial benefit on both sides, the waste trade simply would not be present. The reason for countries like Turkey to import waste that can harm their environment and residents' health is deep and multifaceted. Other than economic considerations, other reasons such as political, and environmental considerations might play role too. Although, in the instance of this thesis, it was demonstrated that the one primary and most likely motive is financial benefits, as

importing waste can give economic prospects for waste management enterprises and produce jobs in the field. Furthermore, the reduced cost of waste disposal in nations such as Turkey may make it a desirable destination for waste export from countries with higher disposal costs.

# And secondary research question, what can the EU and Turkey do to achieve better environmental sustainability in waste management?

The thesis then furthermore evaluated the possible solutions. For the specific solutions in the EU-Turkey waste trade four of them came out as really possible and applicable. Many initiatives might be taken by the EU and Turkey to improve environmental sustainability in waste management. To begin, both countries can enact and enforce stricter waste management legislation in order to eliminate environmental and health concerns. Second, an emphasis can be placed on enhancing waste management infrastructure, such as waste collection and recycling facilities, in order to boost waste management efficiency and reduce the demand for waste export/import. Third, improving public knowledge and education about sustainable waste management techniques can inspire individual and communal action toward waste reduction and recycling rate increases. Finally, collaboration between the EU and Turkey, including information and resource exchange, can help to develop sustainable waste management solutions that benefit both areas. These possible solutions are in compliance with the previous solution and is also furthermore developed in H4. All of these solutions are also not excluding themselves, but the exact opposite. They complement each other and are applicable ideally all together. Thus, the ideal scenario would be first of all reduce the amount of exported waste, meanwhile develop better waste management system and furthermore support it all aby stricter regulations.

## **Conclusion**

The goal of the thesis was to find the reason behind waste trade between the EU and the Turkey, as well as point out its problematic's aspects of their waste management and establish possible solutions for it. Not only this was successfully constructed and described, but furthermore the importance of specific factors was made clear.

The thesis itself was furthermore built on the definitions of environmental politics, its actors, environmental laws and regulations in general and that all in context of waste management, and thus, subsequently also waste trade between the EU and Turkey. The historical aspects of this problematic were also crucial as it is important for viewing the topic as complex. Regarding this, main focus was put onto development of waste management not only in general but also specifically in EUs and Turkish legislative frameworks and aims. Subsequently, negotiations in this matter between them were also discussed. Later on, in the practical part of this thesis, the methodological tools were developed, where the root cause analysis was established. I consider that relatively adequate choice thus not only it helped when searching for the reason of this specific waste trade, it also aimed to find the possible solutions. The root cause analysis this was furthermore especially helpful when used with subsequent literature and proper investigation of this literature. These two aspects helped to build the practical part as a whole, which was in most parts established easily and I consider, also successfully.

Regarding the evaluation of literature, I state that overall and in most of the topics, literature was easily searchable due to increasing attention paid to waste trade problematics. Subsequently, I consider the literature that was drew from official organizations such as the EU legislative frameworks and databases, OECD documents and also UN documents, as the most clear and useful. Literature from scholars was also used and that of course mainly for the theoretical part of this thesis. This literature was notably very important source for this thesis as well and there was not any great issue either, although comparatively with the sources from official organizations, it was used less and when it was used it was mainly as secondary source, which was not expected at first, although I think this occurred mostly due to official documents being clearly very objective which gave me greater space to form and think from unbiased perspective. On the other hand, great difficulties were experienced when searching for the literature which shall provide complex view on the Turkish environmental legislative. There are several scholars discussing this topic, and there is of course also official Turkish legislative,

but this was mainly found in Turkish language or from not verified sources and thus due to limited resources, it was often evaluated with difficulties. Another problem with literature was also found with the very critical, maybe even harsh, perspective on the EU as an exporter. This in my opinion, is very subjective point of view (and therefore not valid for this thesis), and even though the EU have impact on the waste trade issues to certain point, I must again imply, that Turkey itself voluntarily accepts the waste. Thus, the problematic lies on both sides and both of these actors are equal when taking action and responsibility for this problematic. Also, as it was mentioned, even though waste trade is receiving increasing attention, the EU-Turkey case is still limited to certain point and it definitely deserves greater attention as well, especially when Turkey stays the greater importer of waste from the EU till this day, thus there is subsequently great space for further research and that not only from the political perspective, but of course also from the perspective of natural sciences, law sciences and others. I shall also imply that even though I was solely focusing the case of the EU and Turkey, waste trade issue is present in lot of other regions of the world and focus shall be implied on that also.

As another thing, it is also important to state that since the date collection was limited to public resources, the thesis can be missing (and most probably is) some piece that was not found while collecting the evidence or have not been published by authorities. For further research into this topic, the availability of trustful data will be necessary. Subsequently, due to this limited data collection the scope of the thesis was also limited. As I already noted, there is ongoing waste trade among wide variety of nations, with many different aspects and factors than in the case of the EU and Turkey. We might therefore expect western nations which import waste, to have completely different reasons for importing the waste, or subsequently for example India (which is great importer of waste as well) might have different reasons for this trade as well. This goes the same way for waste exporters in these cases. Furthermore, even if a significant number of factors remains shared, there will always be differences.

Other than that, this thesis should have offered future possibility of investigating not only the reason behind waste trade but most importantly, the possible solution which are crucial to find because activities of waste trade are harming the environment and health of citizens. Even though this is currently mainly regional problem of countries which import waste, if not solved properly, it might have further consequences also globally.

Subsequently if I shall evaluate the thesis under my personal opinion, I consider it overall relatively successful, I answered both research questions as well as hypotheses and researching of this topic brought me greater understanding of course not only regarding waste

trade issue, but also all the subsequent issues. Even though as I mentioned there were met certain difficulties when working on this thesis, and also, the thesis for sure has certain limits, I am more than grateful for choosing this topic and hopefully I will be able to eventually overcome the mentioned limits and extend the boarders of this topic.

Finally, this leads me to summarization of this problematic. The problematic of waste management and subsequently waste trade, and that not only of the EU and Turkey, but also in cases of other nations is long way run and there is wide variety of subsequent problems, if it will not be solved. This also goes hand in hand with possible solutions, we can find variety of them but the main message that should be stressed is that this can be only achieved when cooperation of all actors present in this problematic, from government, through businesess to NGOs and others, plays for common goal. (Lipman, 2002) And that shall be preserving the environment for future generations. Even though this might sound idealistic in current world, it will be eventually necessary and the sooner this will start the better for the environment and subsequently the greater good of us all.

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## **Abstract**

The bachelor thesis focuses on the issue of plastic waste management as well as the rules, laws, implementation, and statistics of environmental policy in the EU with a special reference to the problem of exporting EU plastic waste to foreign countries. Specifically, I will focus on the case of Turkey, i.e., exporting EU plastic waste to Turkey. As is known, the EU has a wide range of rules and available tools, and the aim is to analyze how these tools are relevant in the case of Turkey. Furthermore, the thesis will study the environmental as well as economic impacts of this policy unto Turkey. The thesis will also focus on various secondary (relevant) issues such as how the EU regulates its exports to Europe given the various banns in the European and Turkish legal system. In this regard, the thesis will analyze how new regulations (2021) affect waste export from the EU to Turkey in terms of how those changes the exporting of plastic waste in terms of compliance and non-compliance to the relevant European rules.

# **Key words**

Key words: European Union, Europe, Turkey, environmental politics, waste management, waste trade

# **Abstrakt**

Tato bakalářská práce se zaměřuje na problematiku nakládání s plastovým odpadem a dále na pravidla, zákony, implementaci a statistiku environmentální politiky v EU se zvláštním zřetelem na problém vývozu plastového odpadu z EU do zahraničí. Konkrétně se zaměřím na případ Turecka, tedy vývoz plastového odpadu z EU do Turecka. Jak je známo, EU má širokou škálu pravidel a dostupných nástrojů a cílem je analyzovat, jak jsou tyto nástroje relevantní v případě Turecka. Dále bude práce studovat environmentální a ekonomické dopady této politiky na Turecko. Práce se také zaměří na různé sekundární (relevantní) otázky, jako je například to, jak EU reguluje svůj vývoz do Evropy s ohledem na různé zákazy v evropském a tureckém právním systému. V tomto ohledu bude práce analyzovat, jak nové předpisy (2021) ovlivňují vývoz odpadů z EU do Turecka z hlediska toho, jak tyto změny mění vývoz plastového odpadu zejména z hlediska dodržování a nedodržování příslušných evropských pravidel.

## Klíčová slova

Klíčová slova: Evropská Unie, Evropa, Turecko, environmentální politika, odpadové hospodářství, obchod s odpadem