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**Environmental Crimes and Illegal
Waste Trade.
A Study of the Perception of the
Seriousness of Crimes Related to
Slow Violence and Ecomafie in the
Province of Brescia, Italy**

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Declaration

I, Luisa Olivi, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature.....

Date: 29th May 2021

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Environmental crimes and illegal waste trade.

A study of the perception of the seriousness of crimes related to slow violence and *ecomafie* in the province of Brescia, Italy.

Table of Contents

Acknowledgments.....	3
Table of Contents.....	4
Abstract.....	6
Abbreviations.....	7
Chapter 1. Environmental crimes: an underestimated topic.....	8
1.1 The research.....	9
1.2 Methodology.....	12
1.3 Environmental crimes and theories.....	15
Chapter 2. Mafia and the environment: legislations about environmental crimes and the characteristics of <i>ecomafie</i>.....	21
2.1 The legislations about environmental crimes and waste trade.....	21
2.1.1 Environmental Legislation: the European approach.....	21
2.1.2 Italian legislations about environmental crimes.....	24
2.1.3 Waste management in Italy: a general introduction.....	26
2.2 <i>Ecomafie</i> and illegal waste trade in Northern Italy.....	28
2.2.1 A general introduction of the characteristics of mafia-type organizations.....	28
2.2.2 When mafia groups commit eco-crimes: the peculiarities of <i>ecomafie</i>	32
Chapter 3. The new Land of Fire: environmental crimes in the province of Brescia.....	37
3.1 The context of the research: the province of Brescia.....	37
3.1.1 PCB pollution: the Caffaro Case.....	39
3.1.2 Environmental disasters related to the waste cycle and illegal waste trade.....	41
3.2 Italian legislation related to environmental crimes. Implementation of the law through the case study of the Prosecutor’s District of Brescia.....	46
Chapter 4. Perceptions of environmental crimes and slow violence.....	53

4.1 Perception of the seriousness of environmental crimes	53
4.1.2 Environmental crimes and health	61
4.2 Victimization and perception of slow violence related to illegal waste trade	63
Chapter 5. <i>Ecomafie</i>'s aggravated circumstances and the role of society.....	67
5.1 The perceptions of the roles of ecomafie in the illegal waste trade.....	67
5.1.1 Ecomafie as an aggravated form of environmental crimes	67
5.1.2 Corruption	72
5.1.3 The “grey area” where ecomafie operates.....	73
5.2 Civil society and environmental crime’s awareness.....	75
5.2.1 Are we paying attention? The role of mass media in the diffusion of information about environmental crimes.	75
5.2.2 Institution’s roles and trust	77
Conclusions	80
References	84
Figure Index.....	84
Tables Index.....	84
References	85
Appendix	91
1. Map of the province of Brescia	91
2. Environmental crimes registered by the Public Prosecutor of Brescia (2015-2019)...	92
3. Survey questions	94
4. Interviewer’s responses.....	96

Abstract

This Master Thesis project in International Environmental Studies, Noragric, NMBU, focuses on environmental crimes related to the illegal waste cycle in Northern Italy. The research aims to study the perceptions of the public about the slow violence processes caused by environmental crimes of the illegal waste trade, and how the public's perceptions are affected whenever the offenders are part of organized crime groups, the *ecomafie*. The study will discuss the concept of slow violence elaborated by Nixon (2011) according to the data collected and compared to theoretical sources.

The project combines primary data, gathered through an online survey of the population of the province of Brescia (Italy) with secondary sources. The research is supported by the description of the legislative framework about environmental crimes, especially focused on waste trade and the development of the normative that address activities led by mafia-types organizations. With the goal of giving an exhaustive understanding of the phenomenon of *ecomafie*, the research will describe the main characteristics of the criminal activities and their *modus operandi*.

Abbreviations

ARPA – Regional Agency for the Protection of the Environment (Agenzia Regionale per la Protezione dell’Ambiente)

DDA – Anti-Mafia Investigation District Office (Direzione Distrettuale Antimafia)

DIA – Anti-Mafia Investigative Department (Direzione Investigativa Antimafia)

DNAA - National Antimafia and Antiterrorism Directorate (Direzione Nazionale Antimafia e Antiterrorismo)

ISPRA – Institute for the Protection and Research of the Environment (Istituto Superiore per la Protezione e per la Ricerca Ambientale)

OCG – Organized crime groups

PPP – Polluters-Pay Principle

SIN – Site of National Interest (Sito di Interesse Nazionale)

TUA – Environmental Act (Testo Unico Ambientale)

Chapter 1. Environmental crimes: an underestimated topic

This Master Thesis project in International Environmental Studies, Noragric, NMBU, focuses on environmental crimes related to the illegal waste trade cycle in Northern Italy. The increasing number of illegal activities registered in the area in the last decades motivated my research to focus on this topic. The first peculiarity of the phenomenon regards the involvement of mafia-type criminal organizations, called “ecomafie” when the crimes are related to the environment. The second interesting aspect is the development in the *modus operandi* of *ecomafie* that have been registered in the last decades due to the expansion of the activities in new areas and social settings far away from the territories of origin.

The social setting and geographical localization of the crimes committed by *ecomafie* have been changing during the last decades and are rarely addressed in the news unless a spectacular event happens. For these reasons, the area taken into consideration in the study is the Province of Brescia located in the North of Italy, which have been the setting of several environmental crimes related to waste trade and pollution. The research aims to analyse the public’s opinions about environmental crimes, depending on their seriousness which is normally perceived according to the type of violence enforced in the activity. The perception of the seriousness of the crime varies with the different understanding of dangerousness when they are committed by *ecomafie*. The primary data were collected by an online survey with open-ended questions addressed to the population of Brescia.

The study of people’s perceptions of the seriousness of environmental crimes intends to discuss how these incidents have been understood by the public and what makes them serious. The perceptions are used as an analytical concept to further address the concept of slow violence. The interviewees were questioned about their perceptions of the violence of environmental crimes and their seriousness, analysed through the theory of slow violence, elaborated by Rob Nixon (2011). The survey further inquiries into the role of civil society in raising awareness about environmental crimes and about the diffusion of information from the mass media, which is crucial in the construction of the conceptualization of slow violence. The research is supported by the description of the most relevant legislations about waste trade and environmental crimes, together with the study of the main features that characterize the mafia groups.

The project is structured as followed: Chapter 1 aims to give an introduction of the research and the reasons that motivated the study. It explains the importance of the environmental crime’s topic in the environmental discussion, and it illustrates the research questions, followed by the methodology used and the most relevant theories about environmental crimes. Chapter 2 explains the legislation

about environmental crimes and outlines the frameworks of the main regulation on European and Italian levels. Furthermore, it presents the studies about mafia-type organizations, as a background for an exhaustive explanation of the phenomenon and it addresses the expansion of the *ecomafie* activities in Northern Italy. Chapter 3 focuses on environmental crimes in the province of Brescia, describing the context of the area accounted for in the research. It addresses the environmental crimes committed in the area according to the data provided by the Anti-Mafia Investigation District Office (DDA) of Brescia. Chapter 4 draws upon the primary data collected and focuses on the perception of the respondent about the seriousness of environmental crimes and on the victimization, from the perspective of slow violence. Chapter 5 focuses on the perception of the role of *ecomafie* in environmental crimes, on the opinion about the coverage of the mass media and how it influences the slow violence process, and on the perception of the role of the civil society in the fight against them. Conclusion, Appendix and References follow.

1.1 The research

We are living in a crucial historical moment, where every decision we make related to environmental policies can affect the life of future generations and the wellbeing of the planet. In spite of all the effort that has been done so far in achieving sustainability, in preventing biodiversity loss, and in limiting pollutions, there is a branch of study that also needs attention and that, unfortunately, is rarely considered a priority: environmental crimes. Without a focus on environmental crimes, all the efforts made in other areas can become useless.

The study of the environment entails numerous aspects and subjects, spanning from environmental law, political ecology, ecology and restoration, and environmental governance. The definition of what are considered environmental crimes by the academia is still discussed due to the complexity of the topic as it requires a multidisciplinary approach. The elaborate features of environmental crimes produce several challenges in terms of the investigations and persecution of the illicit activity. In fact, they normally include several actors and interests, which also challenges the identification of the responsibilities of the crimes, in terms of both punishments and restorations. In addition, on a legal level, often national and international legislation for the recognition and punishment of the environmental crimes are weak or lack harmonization.

Environmental crimes comprised of those illegal and harmful practices led by human activities that damage the ecosystem through pollution or other kind of disasters. They include illegal poaching, illegal logging, illegal fishing, and illegal waste trade, which will be the focus of this thesis. These crimes are often connected to financial crimes, as the main aim of the offender is to improve their

profits through illegal trade or money laundering, so it is not uncommon to identify the presence of organized crime groups and of businessmen in these activities.

The role played by organized crime groups (OCG) in environmental crime became more prominent in the last decades, especially in countries as Italy where mafia-type criminal groups¹ have solid structures rooted into the society and strong expertise in creating relations with actors on economic, political and social level. Indeed, since the 1980s, the investigations proved the presence of organized crime in the waste cycle, especially of those organizations that count on strong structures and connections with the territories, with businessmen and with politicians. The OCG's network are undoubtedly the most relevant element that allowed them to reinforce their power, together with the internal structure of the organization, with its hierarchic roles and strict rules created to both protect the clans and to establish co-dependents and binding relationships (Dalla Chiesa, 2016; DIA, 2019; Legambiente, 2019b).

The illegal economic activities connected to the environment became very profitable in Italy, leading to the creation of the term “ecomafie”² (Legambiente, 2019b, p.15) to address the environmental crime committed by the mafia-type organizations. In 2018, the estimated amount of the activities of the *ecomafie* in Italy was of 16.6 billion euros, with 365 mafia clans involved (Legambiente, 2019b). Of these activities, 28.4% was related to illegal waste trade, where the *ecomafie* are involved in every phase of the process: brokerage, facilitation of business, transport, storage and disposal of waste. The complexity and the characteristic that identifies the mafia – and the *ecomafia* in this specific case, are some of the reasons that explain why it is so complicated to investigate the phenomenon. The connections with the territories, high levels of corruption, complicity of businessman and politicians make the investigations very complex. The investigations shows that the *ecomafie* activities have been expanding abroad as well, making them part of transnational waste trafficking. Unfortunately, the persecution of the crimes committed by the *ecomafie* can be more challenging outside Italy, mainly due to the fact that the “mafia methods” are less understood abroad, making the cooperation within the police forces complex (Legambiente, 2019b).

In this project, I will focus on illegal waste trade in the Northern Italy, with the aim to understand how the concept of slow violence (Nixon, 2011) can be applied to the activities. Following the theory elaborated by Nixon, in this research slow violence is considered as the invisible and constant environmental damage that human generated by the illegal waste trade, namely the dumping of waste.

¹ With the terminology “mafia-type criminal groups”, or “mafia”, I refer to the criminal groups of Camorra, ‘Ndrangheta and Cosa Nostra. The generalization in “mafia-type criminal groups” is used only for clarity purposes. However, whenever some characteristic of one of the organizations have to be remarked, it will be specified.

² When referring to only one group, it will be called “ecomafia”.

The violence is considered slow as it perpetuates through time and as it is not caused by an accident, but instead by continuous harmful actions towards the ecosystem. Because of its characteristics, slow violence is not perceived as an interesting topic for the media and the public discourse, therefore becoming underestimated and ignored by the politicians and by the civil society. In the project, I will address people's perceptions of the seriousness of environmental crimes related to illegal waste trade and of the slow violence process that these practices trigger. I will also address how people perceive the involvement of OCG in illegal waste trade.

The general context where the OCG work is characterized by a thin line between legal and illegal business markets, the main objective is for their activities to be unnoticed by both the State and the civil society. Corruption, clientelism and coercion are undoubtedly fundamental features for the *ecomafie*'s activities. Moreover, the general idea that *ecomafie* only exist in the territories of origin—namely Calabria, Campania, Sicilia and Puglia regions—, make it complicated to address the issue in Northern Italy. Several studies (Dalla Chiesa, 2016; Sciarrone & Storti, 2019) explain the reasons behind the expansion of OCG in the North of Italy, which have been motivated by business opportunities, higher profits and lower social awareness of the mafias' *modus operandi*—especially in the smallest municipalities. These features apply to the *ecomafie* activities. The operational schemes of *ecomafie* also includes financial crimes, which are one part of the illegal waste trade. In particular, a common element is the falsification of documents and lab tests, which permits the disposal of dangerous waste in landfills, creating possible pollution of soil, air and water sources. The violence caused by the financial crimes in the illegal waste trade is different from the one of the typical mafioso activities. Nevertheless, the consequences of illegal waste trade activities are as dangerous—or even more dangerous—, than other the mafioso activities as the pollution can harm a larger amount of people.

The concept of slow violence addresses the role of the media and of authors that decide to speak up about a specific issue. Raising awareness is considered one of the main tools to stop the slow violence, so also the social involvement of the citizens. The research will analyse people's perception of the role of media and information in the dispersal of news about *ecomafie* activities, and about the opinion of the role of civil society and individuals in raising awareness about the topic.

The research studies people's perceptions about environmental crimes of illegal trade waste and it relies on a broader conceptual context. Such context is composed of a legislative framework about environmental crimes in Europe and in Italy, focused on waste regulations with explanations of how it is applied in the case studied. Moreover, with the aim of giving an exhaustive explanation of the peculiarities of eco-crimes, the research relies on sociological explanations of the characteristics of *ecomafie*.

The case study is the province of Brescia, in the Lombardia region in Northern Italy. This location was chosen for two main reasons: first of all, it is where I was born and grew up, therefore I have a good knowledge of its features and a genuine interest in studying the area because I would like to apport my contribution to the issue existing in Brescia. There is no doubt that the pollution of Brescia affected the citizens' life, including mine: I have childhood memories of not being allowed to play in the public parks because they were polluted with PCB. Second of all, the characteristic of the province made it the one with the highest density of landfills in the North of Italy (CROSS, 2019), other than being an area severely affected by air pollution (IS Global Ranking, 2021; Osservatorio Aria Bene Comune, 2021). These dreadful acknowledgements made me understand the importance of the topic of waste trade and its possible consequences on the population – both in case of legal and illegal landfills.

The research questions are the following:

RQ 1: How are the environmental crimes related to illegal waste trade perceived by the population of the province of Brescia?

- > How do people conceive of environmental crimes, distinct and comparable to other types of crimes?
- > How do people understand the concept of slow violence related to environmental crimes and illegal waste trade?

RQ 2: How does the public conceive of the dangers of environmental crimes when they are committed by *ecomafie*?

- > Is the characteristic of being a mafia-type crime perceived as an aggravation?
- > How is corruption in the *ecomafie* activities of illegal waste trade perceived?

RQ 3: How does the public understand the roles of the civil society in raising awareness about environmental crimes?

- > What are people's opinions about the role of mass media in the diffusion of information about environmental crimes and *ecomafie*?

1.2 Methodology

The study of environmental crime requires a multidisciplinary approach able to connect different subjects and thus to understand the reasons that caused the events. With the final goal of creating an exhaustive paper, the research is based on both first and secondary data, and it will use an inductive method for the analysis and discussion of the results.

The theories related to environmental crimes refers to concepts from the fields of green criminology (Ruggiero & South, 2013), political ecology and environmental governance, which are fundamental to understand how laws were created and what are the possible future scenarios, and are further explained in 1.3.

The study of environmental crimes requires an analysis of the topic of harmfulness and wrongfulness of crimes (Greenfield & Paoli, 2013; Rosenmerkel, 2001) and victimization (Skinnider, 2011), which are essential to create a conceptual ground to study the perception of the seriousness of environmental crimes (Adriaenssen et al., 2020; Shelley et al., 2011). The main theory on which the thesis is build is “slow violence”, developed by Rob Nixon (2011) and its application from Davies (Davies, 2018; Davies, 2019; Nixon, 2011). These concepts are addressed in Chapters 4 and 5.

The framework used in the study includes environmental laws and legislation at Italian and European level. The legislative framework taken into consideration is related to the normative and the legislation from the European Union and from Italy, supported by studies about the legislations. In particular, insights about the development of Italian legislation on environmental crimes (Covucci, 2019) and on waste are used (Agovino et al., 2016a; Agovino et al., 2016b; Agovino et al., 2018; D'Amato et al., 2018; D'Amato et al., 2015).

The second crucial theoretical topic of this project is the sociological understanding of how mafia-type organized crimes groups operate, especially the *ecomafie*. Hence, the studies of Sciarrone (Sciarrone, 1998; Sciarrone, 2002; Sciarrone & Storti, 2019) and Dalla Chiesa (Dalla Chiesa, 2016), among others, are the cardinal points to understand the *modus operandi* of the mafia organizations and the factors that allow their expansion in new territories. The theory and information about the eco-crime offences committed by mafia groups are thoughtfully described in the yearly reports about *ecomafie*, made by the environmental association Legambiente. The reports taken into account for this study are the ones from 2018 and 2019. Additional important literatures about *ecomafie* are from Germani & Reganati (Germani & Reganati, 2018; Germani et al., 2020) and Bonzanni (Bonzanni, 2019; Bonzanni, 2020).

Documents and report of the Italian Anti-mafia department of the Ministry of Justice (Direzione Investigativa Antimafia, DIA) provide the key guidelines to follow the development of the activity of *ecomafie*. Specifically, data recorded by Anti-Mafia Investigation District Office of Brescia (Direzione Distrettuale Antimafia, DDA) shows the outcome of the enforcement of the new legislation against environmental crime introduced in 2015, confirming a relevant number of cases of crimes against the environment in the province of Brescia.

The desk research is reinforced with the qualitative data, collected through an online survey with open-ended questions. The survey aims to study the awareness of environmental crime in Northern Italy and the awareness of the existence of slow violence processes. Because of Covid-19, it was

impossible to carry on face-to-face interviews, and reaching people to have online interviews would have been very complicated too. Thus, the idea of having a survey, created with written interviews with open-ended questions, seemed the most efficient and suitable way of collecting data. The method used for data collection is a hybridization between personal interviews and an online survey. It provides “less personal touch by the researcher as it lack of relations between interviewer and interviewee” (Bryman, 2016, p.658). The lack of direct relations between me and the interviewees was done with the aim to avoid possible bias. The risk of bias could have happened because of the method used to select the sample of the population, namely the snowball method, starting from my acquaintances. With the snowball sample, “the researcher makes initial contact with a small group of people who are relevant to the research topic and then uses these to establish contacts with others” (*ibidem*, p.202). The combination of the online survey and the snowball sample resulted to be an efficient way to collect the data for this research.

The survey was conducted via Nettskjema, from the 31.10.2020 until 18.11.2020. The sample of the population are those, older than 18 years old, living in the region of Lombardia, in the province of Brescia. The total number of the respondent is 86. Of those, 22 were chosen to be part of the analysis.

The process of data analysis followed three steps. First, I anonymized and translated the responses in order to improve the objectivity of the analysis, and I selected the ones that provide interesting insights on the topic. In fact, the main limitation of this method of collecting data can be found in the way people responded, with a risk of very short responses. Probably the same survey conducted in an oral way as a structured interview, could have avoid the risk of short responses. Then I narrowed the sample by choosing the ones from the province of Brescia, with some exceptions that included respondent from other areas that gave relevant opinions. The last step consisted of the analysis of the answers with the aim to find trends and pattern that could answer the research questions. The full text of the questionnaire and the responses chosen for the analysis are provided in the Appendix. The respondents were anonymized using the codes “Respondent 1”, abbreviated as R1, R2 (...) from now on.

The other limitations of the research are the difficult access to data, also compromised by the lack of updated material, especially from the institutions. For example, the last report of the Parliament Commission about the illegal waste trade in Lombardia was published in 2012, so we could assume that the scenario has slightly changed. Also, new judicial inquiries were carried on until the date, especially as a new Environmental Legislation was introduced in 2015. As explained by Legambiente, in 2019 the Covid pandemic made the collection of data from different institutions particularly challenging. Unfortunately, the pandemic did not stop the illegal waste trade nor other kind of environmental crimes (Legambiente, 2020a). For these reasons, the information and data

collected and taken into account are until 2019. The research will not conduct an environmental assets impact of the pollution in the area of the case study, but will address the official studies and statistics, provided by open-source databased of the main institutions, such as Institution of Environmental Protection and Research (ISPRA) and the Regional Agency for Environmental Protection (ARPA).

The data collected are stored according to NMBU guidelines, all data has been processed anonymously. The research has been registered and approved by the Norwegian Centre for Research Data (NSD).

1.3 Environmental crimes and theories

The studies related to environmental crimes are relatively recent. Green criminology, eco-criminology, and conservation theories are some of the disciplines that propose theories to study environmental crimes (Ruggiero & South, 2010). Despite that, the academia has not developed an exhaustive and comprehensive definition of environmental crimes, but it generally relies on legislative assumptions, as the violation of environmental regulation (Shelley et al., 2011). Green criminology arose in the academia discourse in the 1990s, thus considered an emerging field in criminology, covering topics as environmental harm and laws (Ruggiero & South, 2013). The debate around the appropriate terminology that should be applied on the branch of studies labelled “green criminology”, “eco-global criminology” or “conservation-criminology” is still open. This is due also because there is a common understanding of being a subject that has the characteristics of being multi- and inter-disciplinary, comprehending political science, economy, sociology, law, criminology and environmental science. Interesting developments have been made so far, however despite the recent development of the discipline, criminological researches on environmental crimes are still dawning (Burns, 2008).

The definition of what are environmental crimes first requires the study of the concepts that compose the terms “environment” and “crimes”. The delineation of environment is undoubtedly complicated, especially in juridical terms as it relies on the definition given by other sciences, which generally understand humans as part of the natural environment, therefore any harm to the environment is also an harm towards mankind (Skinnider, 2011, p.15). The second important notion is the concept of crime. The concept is a social construct, meaning that has been created by the human society with the aim to regulate or punish a specific action, because it caused harms to another actor – in case of confirmed offences-, or it punishes the possible danger that the action could have done.

Moreover, the process of determination of what are environmental crimes requires the definition of what is considered legal and illegal when related to action that can harm the environment. A holistic perspective could argue that a broader range of human action creates some sort of pollution. It is

thanks to the legislations that societies are able to manage the amount of pollution that is considered more or less harmful to the ecosystems. As Skinnider explains, it is complicated to understand and define what *is* illegal and what *should be* illegal when we talk about pollution, therefore it is extremely complex to understand which pollution is legal or illegal and consequently to define its victims (*ibidem*, p.19). It is also important to remark that the existing legislations are created with anthropocentric standpoints, where the victims are human beings or ecosystems that are used for human's activities: animals and nature are never considered victims because of their role in the ecosystems but in function of the needs of mankind (*ibidem*, p.18).

The complexity of environmental crimes relies on the difficult identification of both the responsible and the victims of the crimes. It is possible to find two main lines in the categorization of the victims of environmental crimes. Indeed, the literature often talks about "invisible victims" or about "victimless crimes". The former definition is related to the concept of environmental victimization which addresses powerless populations living in areas exposed to high pollution or risks of environmental disasters (Simon (2000) in Ruggiero & South, 2010). The latter concept refers to the absence of immediate victims, as environmental crimes "do not always produce an immediate consequence, the harm may be diffused or go undetected for a lengthy period of time" (Skinnider, 2011, p.2).

Whenever a crime involves a violent action, it is very common to rate its seriousness according to how violent the act is. A generalization would describe a violent act as an unexpected harmful action that creates sudden damages and injuries towards someone or something. When addressing the concept of violence in environmental crimes, it is often related to extreme and spectacular accidents, such as arsons, nuclear plants incidents or traffic of exotics animals.

In spite of that, the most common feature of the violence inflicted in environmental crimes resides in the consequences and damages that the action creates. In case of waste trade, the consequences are mainly the pollution of the soil, air, and water sources, which in the long term can have effects on the life of the ecosystems and the population. The violent consequences of the illegal waste trade crimes are the starting point for the development of a new perspective in the understanding of the concept of violence, which is not perceived anymore in the action but in its consequences.

Environmental damages can be caused by accidents, so-called environmental disasters, but more often it is a result of other types of actions which are characterized by repetitive and intentional contaminating practices. Such practices are potentially more harmful than an environmental disaster. The feature that makes these practices so dangerous is both the intentionality and the low-key aspect that do not catch the attention of the mass media. Indeed, the contamination will leave some sort of damage, that will continue over time and could expand within the environment, creating a harm that can be addressed to as "slow violence" (Nixon, 2011). The author understands this term as "a violence

that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all” (Nixon, 2011, p.2), requiring a new understanding of what is considered harm (Davies, 2019, p.2). Being a spatial and temporal concept, slow violence addresses the importance of long-term disaster and how they can easily be ignored due to the “fast and breaking news” approach from the media, where spectacularism and immediacy are far more catching than long-lasting exposure to contaminants.

In most of the examples used by Nixon to explain slow violence, the victims are also facing environmental racism in different ways – being a minority, gender discriminations, living in isolated areas. The role of the victims of slow violence is crucial in the study of the topic, especially because the inhabitants of the area, other than being the first witnesses, are those that mainly face the consequences and are aware of them. Therefore, the invisibility of slow violence should be taken into consideration according to the point of view of who is looking at it: is it invisible for the politicians, that do not act to improve restoration? For the company that keeps polluting? For the rest of the society that is ignoring the issues? For the mass media? (Davies, 2019).

The development of studies about environmental crimes required the conceptualizations of different aspects in the environmental justice discourse, as the definition of environmental racism, environmental equity and equality. These concepts show the strict relation between environmental justice, sociology and human rights. In this research, it is important to address the concept of environmental racism, as it is also an important feature of the slow violence discourse. Indeed, the so-called “environmental racism” can be both direct and indirect. A spatial relationship between class and race can often be found in the victim of environmental crimes, especially in the less developed countries (Burns, 2008). Environmental racism is considered one of the most common forms of institutional racism, as the landfills are often placed in areas where the poorer population live and are consequently more exposed to hazardous consequences on health (Burns, 2008).

One of the purposes of this thesis is to apply the concept of slow violence to those contexts that have some distinctive features compared to the ones normally taken into consideration by the slow violence studies. In fact, whenever academia applies the concept of slow violence to a specific case study, the element of environmental racism is one of the most prominent features that can be identified as is the case in the research carried out by both Nixon (2011) and Davies (2018, 2019). However, the understanding of the concept of slow violence in this project concerns an indiscriminating kind of violence, that impact the populations depending on the geographical location, without taking into account other socio-economic characteristics. In fact, in the case of this research, talking about environmental racism could be considered a forced and potentially wrong assumption.

Since the province of Brescia is one of the richest in Northern Italy, it would be wrong to address the existence of an inequity gap on an economic level compared to the rest of the country. It would

also be incorrect to talk about an economic gap within the Province itself. However, in Brescia it is possible to talk about an environmental iniquity gap. With the term “environmental iniquity” I refer to the availability of access to the natural environment and its resources and how it can be affected by environmental degradation (Pastorelli & Stocchiero, 2019). Moreover, I understand the term applied to a spatial diffusion of inequity regarding the contaminations, precisely the presence of a relevant number of landfills and polluted sites in some areas compared to others area of the province. The area is known for severe air pollution caused by the urban traffic (IS Global Ranking, 2021; Legambiente, 2020b, p.166), plus the numbers of landfills, consistently varies within the province, with areas that are more inclined to be used as waste disposal sites due to either the strategic geographical location or the characteristics of the soil, that is characterized by several excavation sites for sand, gravel and clay that once decommissioned could be turned into landfill. Indeed, the good qualities of the gravel in the area made it a very important commercial location for excavation activities. However, the institutions registered asymmetries in the allocation of authorisation to excavate to a high number of private companies, but these suspicious were not enough to start investigations (Camera dei Deputati & Senato della Repubblica, 2012, p.179).

Furthermore, the environmental inequity is proven by the distribution of the pollution caused by PCB waste disposal, which is geographically defined in a specific area. The data collected and used in the research (as explained in 1.2), can be clustered in three major areas: Brescia municipality, Val Sabbia and Garda Lake, and Franciacorta. The different kind of industrial activity that create waste, the landfills (both illegal and legal) are common in all three areas (Camera dei Deputati & Senato della Repubblica, 2012), demonstrating a correspondence between the awareness of environmental crimes and the vicinity of the respondent’s to the areas that have been most affected by them. These areas are indeed affected by cases of environmental crimes or by a high density of landfills, as it will be further explained in Chapter 3 and that support the concept of environmental iniquity.

The intensive construction of landfills is directly connected to the commodification of waste. Indeed, waste can be considered both as a “problem” or as an object to trade (Steenmans 2017). The waste trade is an extremely lucrative practice, and its commodification created several business opportunities, thus it is not a surprise that criminal organizations are also interested in it. Also, the public discourse has been describing the waste as a “problem” that compromises the beauty of landscapes and city and that needs to be solved quickly but discretely. It is precisely the characteristic and the promise of completing the job efficiently that is considered the most important requirement when contracting a new company for waste trade. However, whenever these company are owned by *ecomafie* they are able to offer the lower price and have more chance to win the tender for the public contract.

Interestingly enough, related to *ecomafia*'s activities, it is possible to find a connection between illegal waste trade and the cement cycle. The interest of mafia groups in the cement cycle business (“ciclo del cemento”) is well known. The cement cycle is characterized by illegal buildings, where the construction building is owned by a mafia group, that is able to offer cheaper prices as they employ illegal workers and uses cheapest materials coming from illegal trades. The cement cycle includes all the activities that are needed for a construction site: purchasing of land, digging, demolitions, transport of materials and constructions. (NoEcomafia, 2019).

The permeation of the mafia groups in the business requires the company owned by an OCG to be a successful tenderer of a public or private contract. This is possible thanks to the ability of the OCG to propose the lower price for doing the job and because they claim the construction will be finished on time. The infiltration of the OCG occurs thanks to corruption and infiltration in several sectors of the public administration. For example, often they will know in advance the project, or they can become part of the construction process later when another company already took the leading of the project. (CROSS, 2019, p. 23). Moreover, the mafia groups reached a monopolistic role in the construction business as they are the main owner of companies that can provide the equipment needed for these activities, such as excavators and truck to transport the materials (Camera dei Deputati & Senato della Repubblica, 2012, p.15).

The presence of activities in the cement cycle business related to mafia groups in the province of Brescia is the highest in Lombardia (CROSS, 2019, p.15). Interestingly enough, also the number of illegal waste trade activities in the province of Brescia is the highest of the region (*ibidem* p.27). This correlation explains how the two business of the cement cycle and the waste trade are connected: purchasing the land is one of the most versatile business, as the area can be used for different purposes with enormous profits. The land purchased by the OCG groups, which is obtained through other financial illicit agreements, can be used to bury the waste or, if there is the project to construct a building, it may be financed by money coming from the gains of the illegal waste trade, as it will further discussed in Chapter 2. These activities require a professional knowledge and expertise; therefore, one could anticipate the involvement of elite actors– at least in the decision-making process.

The investigations about crimes related to the waste trade require the understanding of financial crimes and requires a good knowledge of how the institutions work and collaborate within each other. Moreover, these crimes imply the political and especially the financial sphere, so they could also be investigated because of financial illicit crimes – not always exclusively because of environmental damages. The investigations required specific knowledge and techniques that may vary from those used in typical investigations. For example, some of the crimes related to the waste cycle can be (i)

illegal disposal of waste, (ii) falsification of data from the laboratories and/or of other bureaucratic documents (Burns, 2008).

The so-called “dirty collar crimes” or “white collar crimes” are connected with environmental crimes since companies may choose to act illegally due to the little chance of detection and for the difficulty to prove their responsibility in the event that there is a trial in court. It possible to notice that these crimes have been increasing from the number of the investigations, these show that a larger number of enterprises that have little to do with the criminal world itself have been accused of pollution and obliged to comply with the restoration of the site and/or with the compensation to the victims. (Ruggiero & South, 2010). Despite the improvements in the legislations, the enforcement of the laws to fight environmental crimes is still weak, explaining the motivations of the enterprises to commit environmental crimes.

In conclusion, this first chapter aimed to provide the reader with a general structure of the research, by addressing the topic that will be further discussed in the next sections. The theoretical framework exposed created the ground to build the research, and it is embedded in the development of the analysis.

Chapter 2. Mafia and the environment: legislations about environmental crimes and the characteristics of *ecomafie*

In this Chapter I will discuss the legislation framework on European and Italian levels about environmental crimes, with focus on waste regulations. In the second part of the Chapter, I will explain the characteristics of the *ecomafie* and the *modus operandi* that made possible the expansion of the activities in other areas of Italy, specifically in the Lombardia region.

2.1 The legislations about environmental crimes and waste trade

2.1.1 Environmental Legislation: the European approach

The definition of environmental crimes is still an ongoing debate in the academia discourse, but it is possible to find a definition from legal and legislative perspectives. Nevertheless, the definition of environmental crimes has the condition of being culturally dependent, therefore it can become blurred as each jurisdiction can have different understanding. In fact, one of the main challenges that could threaten the harmonization of the environmental law is the diverse definition given by the different legislations.

The European Commission defines environmental crimes as “acts that breach environmental legislation and cause significant harm or risk to the environment and human health” (EC, n.d.-a). It has created several directives that address the specific topics of environmental crime. The goal is to “propose a directive that requires the Member states to provide for criminal sanctions for the most serious environmental offences because only this type of measures seems adequate, and dissuasive enough, to achieve proper implementation of environmental law” (*idem*).

Aiming to improve the harmonization of the environmental laws related to waste trade, the European Union implemented a system of Directives and legislation, based on the Basel Convention on the Control of Transboundary Movement of Hazardous Waste, through the creation of framework of norms that the Members have to follow and implement accordingly. Specifically, the Directive 2008/99/EC on the “protection of the environment through criminal law” aims to give the minimum requirements that have to be implemented by the national legislations in order to protect the environment. Related to the waste cycle, the action considered environmental crimes are described in Art.3 as (EC, 2008):

a) the discharge, emission or introduction of a quantity of materials or ionising radiation into air, soil or water, which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants.

b) the collection, transport, recovery or disposal of waste, including the supervision of such operations and the after-care of disposal sites, and including action taken as a dealer or a broker (waste management), which causes or is likely to cause death or serious injury to any person or substantial damage to the quality of air, the quality of soil or the quality of water, or to animals or plants.

c) the shipment of waste, where this activity falls within the scope of Article 2(35) of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste and is undertaken in a non-negligible quantity, whether executed in a single shipment or in several shipments which appear to be linked.

Interestingly enough, the Directive 2008/99/EC acknowledges the need for each State to implement their environmental legislations, therefore leaving to the Member State full discretionary powers. The flexibility granted by the EU means that each State can determine the quality and amount of the sanctions, and they can be either administrative or penal sanctions (Favarin & Aziani, 2020). Consequently, the freedom and discretion given by the EU has two possible outcomes. On the one side, the State can create strict legislations to regulate environmental crimes and punishments. On the other side, there can be a lack of harmonization between the legislation of the countries, leading to increasing transnational environmental crimes in those countries where the legislations are weaker. (Favarin & Aziani, 2020). Indeed, the EU acknowledged these limitations and conducted several studies after the adoption of the Directive 2008/99/EC with the final goal to improve the framework and harmonization (EC, n.d.-b).

The European Union has a strict approach to the regulation of waste and draws some important guidelines regarding the classification of materials and how they can be disposed of. Waste is regulated by Directive 2008/98/EC and by Directive 2006/12/EC. In addition, the European Union created a framework to classify the waste, called “European Waste Catalogue” (EWC), which has to be followed by the Member states during the process of sorting and disposal of the waste. The list has been reviewed and revised throughout the years in order to be exhaustive and comprehensive of all types of waste, which were added to the list aiming to improve the management of the waste and its disposal (EC, 2000).

These directives are part of the “Waste Framework Directives”, which drafts the requirements of the waste management. The framework pays particular attention to the safety of all the procedures of waste sorting or disposal, aiming to preserve the health and avoid any kind of harms to human, water, air, soil, plants or animals. It also addresses the procedure of the waste treatment, suggesting the implementation of recycling and re-using practices, and the criteria for the end-of waste. It also

introduces the “extended producer responsibility”, aimed to improve the concept of the polluter-pay principle by giving the responsibility to the producer of waste to ensure proper disposal measure of the waste (EC, n.d.-c).

Regarding the harmonization of European Legislation about waste into the Italian legislations, the most ground-breaking introduction was the “Ronchi-decree” in 1997 (Dl. 22/1997) (Romano et al., 2021). It established the guidelines for proper disposal of urban waste and the goal of proper recycling that was supposed to be achieved. The Ronchi decree initiated the harmonization between the legislation of the European Union and Italy, and it was successfully implemented in the following years. In addition, the Italian legislation implemented the directive 2008/98/EC through the Environmental Act, later on modified with the Decree 205/2010 (Agovino et al., 2016b). The Environmental Act classifies toxic and radioactive waste, but its management is regulated by other norms according on the type of waste, i.e., radioactive waste from hospitals is regulated by DPR 254/03, following national guidelines and procedures.

The polluter-pay principle approach is one of the key points of the Waste Framework Directive and it is well defined in the EU directive 2004/35/EC, stating clearly that “an operator causing environmental damage, or creating an imminent threat, should bear the cost of the necessary preventive or remedial measures”. The directive draws the baseline of the measures that each Member State should reinforce in their national legislation in order to either prevent environmental damage or create regulations and guidelines for the remediation. The main issue in cases of restoration is the identification of the responsible, which requires the conjoint work of different institutions and professionals. The cooperation of different actors requires a lot of time and it could be very costly, therefore amplifying the lengths of the investigation for the identification of the responsible that committed the crime. The limitation of the Directive 2004/35/EC is that it is not retroactive, therefore any environmental damage committed before the date of the actuation of the law is not included (EC, 2004).

The Italian legislation of environmental crimes is the only one in Europe that includes aggravated circumstances for environmental crimes committed by mafia-type organizations. The aggravated circumstances are those elements that are considered to influence the dangerousness of the crime and consequently increase the punishment of the sentence. In the case of Italy, being part of a mafia-type organization, or just collaborating with them is considered an aggravance, therefore the punishments are more severe. It is due to the fact that Italy is well aware of the social, cultural and economic implication that surround the activities of the mafia, which cannot be treated as other organized criminal groups but need a specific approach and law enforcement. The environmental crimes committed by *ecomafie* are part of the whole mafia business, they could be considered a branch of the mafia activities, as they follow similar *modus operandi* as other crimes – for example, eco-crimes

use the same routes as drug smuggling (Europol, n.d.). The particularities of the Italian environmental laws are explained in the following sections.

2.1.2 Italian legislations about environmental crimes

The current Italian legislation about environmental crimes is relatively new and it was the result of a very long process, led by environmental organizations such as Legambiente, which guided the civil society and raised public opinion's awareness about the need for proper legislation that could address environmental crimes and specifically the ones committed by *ecomafie*.

Legambiente recorded, for the year 2018, more than 77 infraction of the environmental law per day, for a total of 28,137 infractions. In the same period, 35,104 people were denounced for environmental crimes and 252 were arrested. In total, approximately 10,000 sites were confiscated for investigations (Legambiente, 2019b, p.19). The illegal waste trade has been the most prominent environmental crime committed in Italy, with more than 8,000 illicit activities, namely 28,4% of all the cases recorded in 2018 (Fig. 1). In the same year 9,828 people were denounced for illegal waste trade but only 93 arrested, whilst 3,091 sites were confiscated (Legambiente, 2019b, p.37). The majority of the crimes were committed in the region with traditional mafia presences, namely

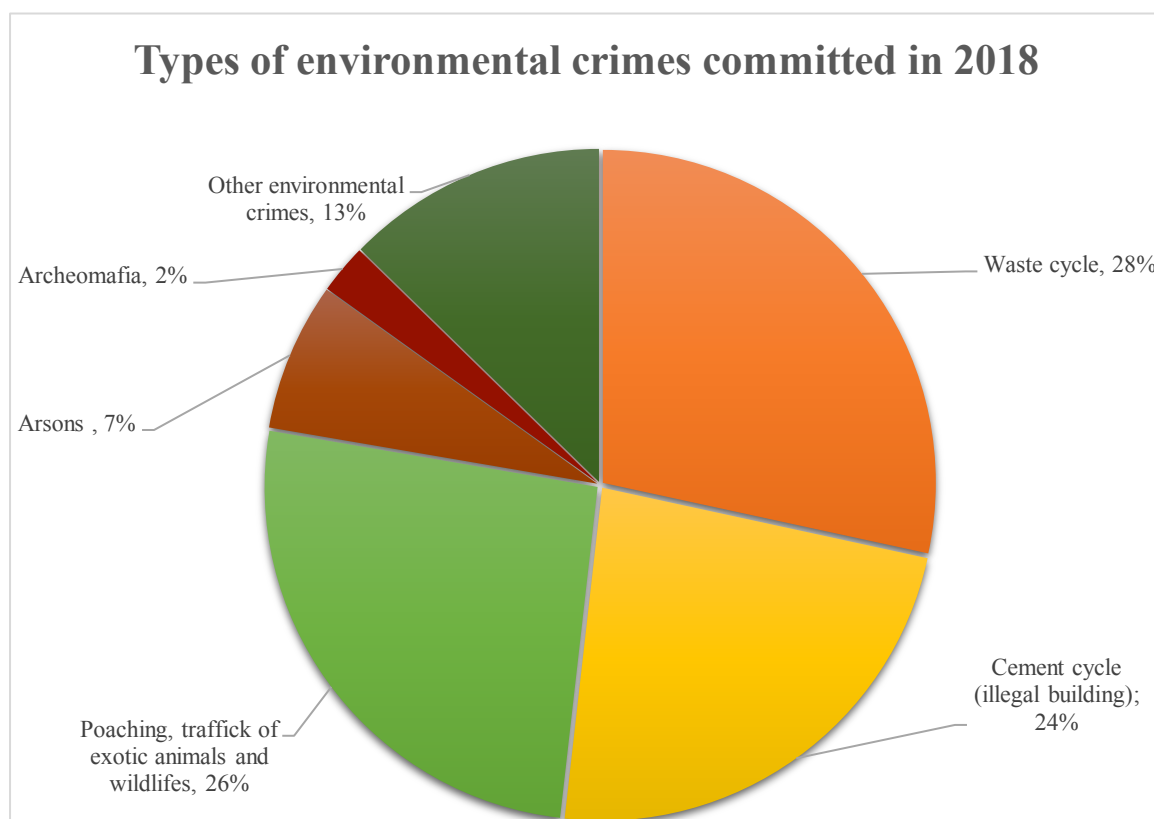


Figure 1: Types of environmental crimes committed in 2018. Source: Legambiente (2019, p.36).

Campania, Puglia, Calabria and Sicilia, but an increasing trend was registered in the other regions too.

The first legislation addressing environmental crimes was elaborated in 2006, with Decree 152/2006, called “Environmental Act” (Testo Unico Ambientale, TUA), which defined the concept of environmental impact (Art.5) and environmental damage (Art.300). It was only in 2015 when the legislation became more complete, and its juridical reason was changed: Law 68/2015 introduced environmental crimes into the Italian Penal Code. Five types of environmental crimes were defined:

- i. Pollution.
- ii. Environmental disaster.
- iii. Omitted remediation.
- iv. Obstruction of controls.
- v. Illegal transport and disposal of radioactive materials.

Moreover, the public persecutor can now use different methods of investigation such as phone tapping, as well as collaboration with a broader number of institutions.

The addition of environmental crimes to the Italian Penal Code was done through Art.452, which describes for every category of crime the sentences and aggravances, with both pecuniary and penal terms. Regarding pollution, Art. 452 *bis* provide 2-6 years of reclusion and sanctions between 10-100 thousand euros for the pollution of air, water, ground, ecosystems, and biodiversity. If the crime is committed in a protected area, the punishment increases. The aggravance in case of death or injuries caused by the pollution are stated in Art. 452 *ter*, with a maximum reclusion of 20 years. Art. 452 *quarties* defines environmental disaster as “the irreversible alteration of the equilibrium of an ecosystem”, meaning that costs of the restoration of the ecosystem’s equilibrium are very high and it requires special measures to be restored to its original form. In addition, as the alteration of the ecosystem creates public harm to both the population and the environment, the punishment for environmental disaster can be 5-15 years of reclusion (Covucci, 2019).

Intending to fight organized environmental crimes, the most innovative introduction in the Italian legislation is undoubtedly Art. 452 *octavis*. It adds aggravance circumstances whenever the crimes are committed by an organized syndicate (“associazione a delinquere”) referring to the Art.416 of the Penal Code; whilst for mafia-type organized syndicate (“associazione mafiosa”) it refers to the Art. 416 *bis* of the Penal Code³. This innovative approach is crucial in the fight against *ecomafie*, especially because it is known that environmental crimes are becoming more and more common, as it is a secure source of income other than an easy method to launder money of other illicit trades.

³ Art. 416 *bis* of the Penal Code defines the characteristic of a mafia-type organizations and establishes the punishment for the crimes. It differs from Art. 416, which addresses the “organized syndicates” that do not have the mafioso aggravance.

The innovative articles introduced with Law 68/2015 were not the only measures enforced by the Italian government. In fact, the changes and improvements in the Italian legislation included, in 2010, a shift of the investigating responsibility to the National Antimafia and Antiterrorism Directorate (DNAA) and its districts, the DDA (the Anti-Mafia Investigation District Office). The number of the arrests for environmental crimes recorded between 2002 and 2015 showed a steady trend, dropping after 2010 probably because of the shift of responsibility and the adaptation to the new system for the DDA. However, the studies shows that the average number of people arrested in each investigation related to illegal waste trade, was between 4 and 6 individuals, which is the amount of people considered to be enough to establish and running an illegal waste cycle business (Germani & Reganati, 2018).

In 2018, the application of the new Law 68/2015 recorded 1,108 cases: more than 3 per day. This was also due to the addition, in April 2018, of the Art. 452 *quaterdecies*, which adds the offense of organized waste trade activities, previously regulated by art. 260 TUA. Besides the continuous improvement, several critiques have been carried out regarding the need of a more exhaustive system to prevent environmental crimes. One important suggestion made by Legambiente is the implementation and full operativity of the National System for Environmental Protection, aimed to improve the local monitoring controls, and management of the environment. The project for the implementation was created in 2016 but it lacks the approval of the Government. It consist of the collaboration of financial and environmental institutions in the monitoring of the environment, with the goal or a more efficient system that can prevent environmental crimes (Legambiente, 2019b, p.10).

2.1.3 Waste management in Italy: a general introduction

In order to achieve a good understanding of how *ecomafie* operate, it is necessary to describe the characteristics of the waste management in Italy.

Waste management is regulated on a regional level, following national guidelines. Each Region of Italy can decide how to regulate the transport and disposal of waste produced within its border, especially regarding special non-hazardous waste. The Province and its Municipalities coordinate the collection of waste, particularly domestic waste, and its disposal. Several studies were made during the years, addressing the effectiveness of the Environmental Act (namely the TUA, introduced with Dlgs.152/2006) in the Province and Regions. These studies investigating if the introduction of the decree improved recycling and in general the waste management. In particular the ones made by Agovino et al. (Agovino et al., 2016a; Agovino et al., 2016b; Agovino et al., 2018) investigated the rate of urban waste recycling activities among the Provinces of Italy. The results confirmed the

decisive role of institutions and how their efficiency in the monitoring process can have direct consequences on the management of waste. The studies showed that those provinces that had good management before the introduction of the TUA were only partially affected by its enactment (Agovino et al., 2018). Differences related to the type of waste management implemented were found in the results of the studies carried out in 2016. It shows that overall, the goal of improving the sorting and recycling of urban waste was not achieved on a national level, but only on a macro-regional level, with severe differences between the regions of the North and the South. The studies explain the role that institutions, corruption and involvement of organized crimes group have within the management of waste, negatively affecting the waste cycle. The analysis expresses how the illegalities in the waste trade are one of the most important issues that does not permit the development of an efficient system of collection and disposal of waste. The researchers agree upon the importance of the introduction of more specific guidelines about waste management that have to be followed by each Region and should tailored to the needs and on the resources of each Region.

The outcomes of different managements systems have been monitored by the national and regional environmental institutions, namely the Institute for the Protection and Research of the Environment (ISPRA) and the Regional Agency for the Protection of the Environment (ARPA). These institutions underlined the positive improvements of the management and monitoring made by the Lombardia Region regarding the implementation of the sorting of waste operations of the households. In fact, in 2017, Lombardia region produced 1/5 of the national production of special waste⁴, particularly in the provinces of Brescia (24.9%) and Milan (17.6%). There was an increase in production of 6.8% compared to 2016, with +7.2% of non-dangerous waste and +5.2% of dangerous material. Regarding the management of these kinds of waste, 7.6% of the total were recovered (ARPA, n.d.).

According to the report of ARPA Lombardia, the increase quantities of special waste was due to the implementation of restoration activities in the provinces of Brescia, Bergamo and Monza. Nevertheless, the data of the last years confirmed a continuum of the production and disposal processes, with an average of less than 50 million tons per year. Being the most populated area of the country, with more than 10 million inhabitants, the production of waste is naturally increasing every year. At the same time, in 2018 the amount of waste correctly disposed of, and going through recycling processes have been increasing with a total of 83.9% of materials and energy recovered, and only an increase of 0.6% of the urban waste going to landfills. The amount of waste collection

⁴ The data provided by Arpa Lombardia do not include the waste produced by constructions/demolition sites and activities.

correctly sorted (called “raccolta differenziata”) was around 70.8%. This data confirms that the amount of waste that was recycled was higher than the one going to landfill disposition (*idem*).

The improvement of the regulations and waste management refers mainly the urban waste, namely household waste. Regarding special waste produced by private companies, the Lombardia Region introduced the so-called “ecotassa”, which is a taxation system addressed to companies (it does not refer to private household waste, as the taxation for household waste is determined by the Municipality), and it was created with the goal of improving the recycle of materials and to reuse as much as possible, therefore diminishing the amount of waste to be disposed in the landfills. The *ecotassa* has to be paid by anyone that manages or owns landfills, incinerators and other kind of waste disposal facilities within the Region. For example, in case the owner or manager of the disposal site does not submit the report of the activities of the site, it will incur pecuniary sanctions. Similar sanctions will be applied to illegal waste storage or disposal. The sum of the punishment depends on the type of waste and on the amount (Regione Lombardia, n.d.). However, the *ecotassa* also produced the opposite effect in those cases where a company may refuse to pay, leading to the falsification of documents or participation in the illegal waste trade.

2.2 Ecomafie and illegal waste trade in Northern Italy

2.2.1 A general introduction of the characteristics of mafia-type organizations

In order to understand how the *ecomafie* operate, it is imperative to first provide a more general picture of the characteristic of the mafia-type organizations, aiming to give an exhaustive understanding about how they differ from other types of criminal groups, and why they require specific legislation to fight them. Mafia groups arose from specific socio-cultural settings, based on familiar relations which evolved through time following identity and ethical codes. The structure, the power relations, the attachment to the territory, the ethical guidelines on which the organizations are based, are just a few of the factors that make them powerful. The cultural setting within with the mafia were created is very complex and it is often stereotyped or generalized, leading to misunderstanding or simplification of the characteristics that make the mafia groups more dangerous than other organized criminal groups.

The characteristics of the *mafia* have been studied for decades, to understand how they operate and thereby create effective policies to stop their infiltration into society and suitable punishments for their crimes. The mafia-groups features can be summarized in these categories (Sciarrone, 1998):

- Persistency over time.
- Capacity to adapt to social changes.

- High political influence (in terms of both political actions and power relations): the mafia clan are able to establish agreements with politicians in exchange for votes.
- Capacity to making roots in the territory.
- High availability of economic resources, coming from the illegal businesses (i.e., profit from drug trafficking, money laundering, financial crimes and others).
- Control of the activities of the community, in order to influence the political and institutional life.
- Capacity to search and obtain collaborations with other external actors, thanks to corruption and collaboration of civil society and institutions.

The most prominent mafia behaviours that explain how the groups are securing their influence on the territories whilst, at the same time, allows them to expand into new areas, are “particularism” (*particolarismo*), “familism” (*familismo*) and “clientelism” (*clientelismo*). Particularism is the tendency to take care exclusively of personal interests, often implying the damage of other people’s interests. Familism is extremely strong especially in groups as Cosa Nostra and ‘Ndrangheta. It is based on the idea that elevates familiar bonds as the most important relationship, alienating the family to the rest of the society and thus creating a protective environment for the members of the family. Clientelism creates a system of relations between people with same economic interests, promoting favours and concession among each other, often damaging to other enterprises (Fantozzi, 2007; Wikimafia, n.d.).

The attachment to the territory can be considered the most important element of the mafia. In fact, mafia groups were first created to substitutes the authorities in those areas where the institutions could not reach. The role was to protect the locals’ interests from the State by becoming the brokers but actually creating a clientelist relationship with the locals, establishing a loyalty to the boss through the conspiracy of silence. The tight bond with the territory made corruption easier, as it is easier to reach politicians and potential investors through the creation of clientelist relations. Also, it helps in creating a reputation. But these are assumptions tied to the idea of an older kind of mafia, the one based on merely familiar connections. As Dalla Chiesa explains, it is incorrect to classify the mafia as two different types “the folkloristic old one” and “the new one” according to historical changes and settings. Mafia keeps being mafia, it just adapts and find new a way to camouflage (Dalla Chiesa, 2016, Ch.6). It still kills people, corrupting politicians, threatening businessman and the whole society, creating economic instability and fighting the State. Other important investigators about the mafia explain the necessity of an already damaged institutional system that permitted to the OCG to proliferate: “the mafia (...) is not a cancer that has proliferated by a healthy tissue. It lives in perfect

symbiosis with a myriad of protectors, accomplices, informants, debtors of any kind (...), intimidated or threatened people who belong to all strata of the society”⁵ (Falcone, 1991, p.93).

The expansion of the mafia outside the typical territories (namely Sicilia, Calabria, Campania and Puglia), demonstrates the flexibility of the mafia organizations and their capacity to adapt to the different socio-economic and political context.

In this context, it is relevant to understand the *modus operandi* of the expansion of the ‘Ndrangheta, mainly because it is the most powerful actor in the illegal waste cycle in the North of Italy. This organization is originally based in Calabria and it is considered to be the most powerful at the moment. The reasons that motivated the expansion are economic, but also dictated by the so-called “obligatory residence” in the North, as a punitive sentence. This kind of punishment was implemented in the 1980s, ideally thinking that uprooting the boss from his “natural sociological environment” would decrease his possibility to keep working and would decrease his importance within the organization. The punishment was probably created in a way so to make the “familism” feature of the mafia weaker, but it is possible to argue that it had the opposite effect as it resulted in the permeation of the ‘Ndrangheta also in the North of Italy (Dalla Chiesa, 2016).

The expansion of ‘Ndrangheta in the North of Italy has been constant, and its capacity to adapt to different surroundings make their presence even more dangerous, especially for the political and economic wellbeing of the society. The main goal of the ‘Ndrangheta is to accumulate more profits and power, and it does so by disrupting basic market regulations, so normal enterprises do not hesitate if they find themselves in the possibility to start a business with the mafioso clan. The economic power of the clan increases its prestige, together with the rule of silence which increases its social relevance. The studies about the expansion of ‘Ndrangheta proved their main interests in the business of constructions, where they achieved almost the monopoly of activities such as digging, demolitions, namely of the “cement cycle”, and distributes the jobs among different clans following strict territorial criteria. The monopoly is possible because of the influences they impose, and because of their presence in at least some part of the constructions process in every building facility (Camera dei Deputati & Senato della Repubblica, 2012; Dalla Chiesa, 2016). Therefore, the presence of possibility to permeate the construction sector is one of the characteristics that could explain the presence of the clan in a territory. As it will be explained later in 2.2.2., the permeation in the construction market is an essential part of the illegal waste trade.

The institutional bodies have underestimated the capacity of the ‘Ndrangheta to develop, assuming that they successfully reduced the capacity of the mafia to work only in the territories of

⁵ Original quote: “La mafia (...) non è un cancro proliferato per caso su un tessuto sano. Vive in perfetta simbiosi con la miriade di protettori, complici, informatori, debitori di ogni tipo (...), gente intimidita o ricattata che appartiene a tutti gli strati della società” (p.93).

origins due to the measures that were implemented, such as the obligatory residence. In the context where there is no history of the presence of 'Ndrangheta, the Municipalities often have the perspective that they have been introduced the appropriate measures, for example, according to other general guidelines, to avoid permeation of the groups through corruption and collusion. However, the investigation shows that, as the municipalities do not have an historical knowledge on how to deal with the 'Ndrangheta, it is more likely the system to prevent the mafia's permeation into the business activities is not that efficient, because the Municipalities are not implementing more controls (Dalla Chiesa, 2016).

In Lombardia, particularly, the effective settlement of the groups of 'Ndrangheta was facilitated by both the lack of social memory about the mafia, therefore lacking knowledge of how the clan operate and what can be done to stop them. In fact, there has been a general lack of social movements to denounce and repudiate the presence of the groups, plus the punishment and the measures enforced by the institution had not been strong enough to properly address the issue. The 'Ndrangheta was created in small villages of few thousands inhabitant in the mountains of Calabria, where the most prominent family clan took the power of the whole Municipality, opposing their legislation to the State, through the manipulation of public officials affiliated to the clan, that were able to operate on behalf of the interests of the mafia clan by manipulating policies or giving business concession to the mafia groups. Furthermore, the 'Ndrangheta is known for reinforcing the affiliation bond of its members by creating rituals, rules and behaviours which are bounded by secrecy and by the sacral role of family affiliation. It is from these little towns where the clan are managing the entire network, making deals and managing political connection (Dalla Chiesa, 2016).

The expansion of 'Ndrangheta in the North of Italy can follow two main methods, related to demographic reasons: expansion into small Municipalities or to larger settlements, such as neighbourhoods of big towns. Often, the expansion of the 'Ndrangheta in Lombardia follows the pattern of the territories of origins, composed of small Municipality that can create a network with a parallelism with the towns of origins, meaning with the creation of business connection between the two towns. For example, one clan from Calabria would send its affiliate in one small town to another region and they would establish there to create new business operations and begin to making roots in the new territory. This method would lead to a creation of a small community of people coming from the same town, and it would reinforce their power in the new settlement, whilst they would still follow the rules and guidelines given from Calabria (Dalla Chiesa, 2016).

The permeation of 'Ndrangheta was registered also in areas with high-population density, and it was successful exactly because of the possibilities to hide and merge with the community. In this case, instead of choosing a small municipality, the clan would choose a neighbourhood where they can keep a low profile in the new territories and stay among the people. They may disguise themselves

as carpenters or artisans while managing the whole network. The ability of disguising in the new territory plays an important role in the permeation into society and into business activities. In particular, it became very useful in the grey area between legal and illegal business, such as in the waste trade, where they can operate almost undisturbed (Dalla Chiesa, 2016).

2.2.2 When mafia groups commit eco-crimes: the peculiarities of *ecomafie*

Ecomafie is a terminology created by the environmental association Legambiente in 1994, due to the need to address the environmental crimes committed by mafia-type organization. There are several environmental crimes committed by *ecomafie*: illegal building (“cement cycle”), illegal waste management and disposal. The agricultural environmental crime, called “agromafie”, is the involvement of mafia clan into all the activities regarding the food-chain process, including monopoly of the agriculture market, food distribution and the use of restaurants for money laundering. *Ecomafie* also manage the traffic of exotic animals and wildlife. The particularity of the crime committed by *ecomafie* resides mainly in the characteristics of the criminal organization, using similar methods and *modus operandi* as when committing other types of crimes (Legambiente, 2019b).

The strength of the *ecomafie* relies mainly on the intimidation created by the membership’s relations, achieved by subjugation and the rule of silence (*omertà*), used to commit the crimes. Also, they can have either a direct or indirect control on the activities, obtained through concession of public contracts or other types of authorisations, which provided them of profits and benefits (Bonzanni, 2019; Bonzanni, 2020). Moreover, the *ecomafie* find their strength from (Camera dei Deputati & Senato della Repubblica, 2012p. 26):

- a. The abundancy of cash flow derived from other illegal activities.
- b. The ability to manage rivalry with other enterprises through intimidation. They can either compromise creating a “peace pact” with the other businesses, therefore violence is used only as a final resort; or enhance violent acts to persuade the agreement, but intimidation methods are always present.
- c. The lack of bookkeeping and monitoring in those enterprises that work in the “cement cycle”, which make it easier to create false invoices and documentations.
- d. *Ecomafie* do not follow the rules for proper waste disposal: they use illegal landfills in abandoned areas.
- e. The illegal payments in order to increase loyalty of the other partners (without paying taxes).
- f. The acquisition of a monopolistic position.
- g. The bypass of anti-mafia regulations.

- h. The collection of debts through intimidatory methods.
- i. Following the needs of the mafia boss.

The mafia-type organizations, especially ‘Ndrangheta and Camorra, started to get involved in the illegal waste trade in the 1980s, realizing the existence of several legislative gaps in the waste system, especially in regard to the payment of taxes to dispose of waste (“ecotassa”, see 2.1.3).

The waste sector became extremely profitable for them: the famous quote from a Camorra boss, Perella is “trash is gold for us” (*la monnezza è oro*) (Di Florio, 2020). The enormous value of the illegal waste trade and its relevance explain the interests of criminal groups to be part of the business. The value is proved by the tons of waste that have been sequestered by the police and is under investigation: 55,158,515 tons during the years between 2002 and 2020 (Legambiente, 2019a).

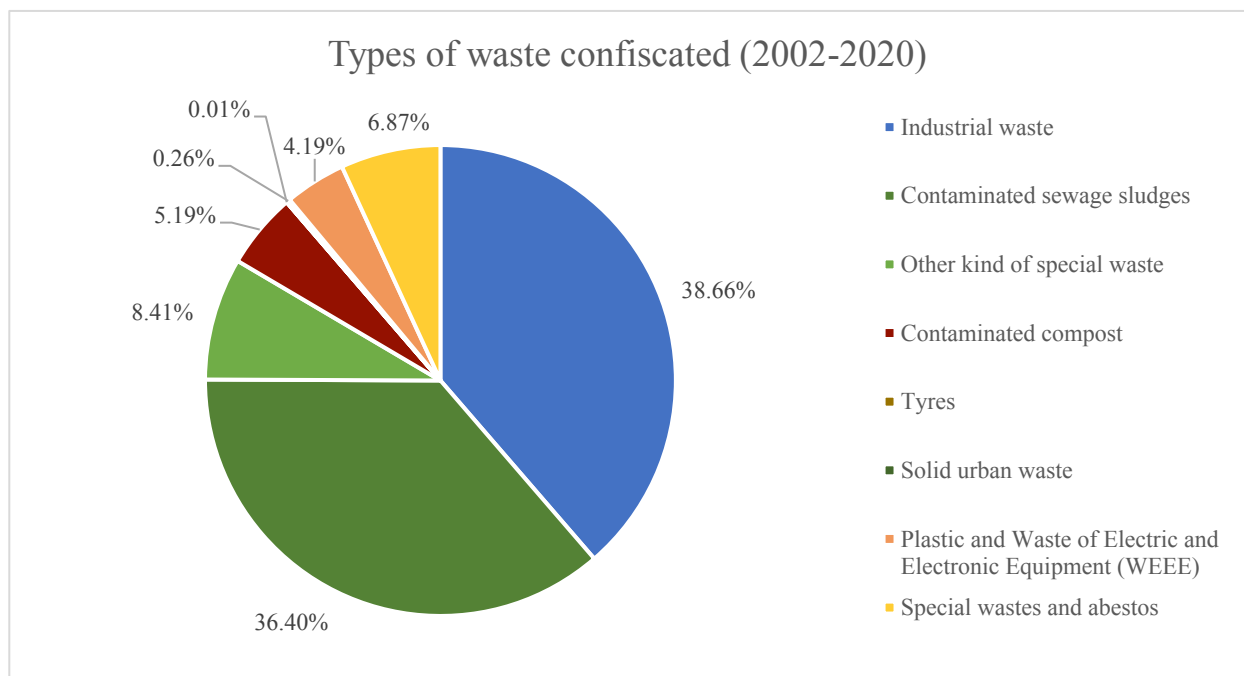


Figure 2: Types of waste confiscated in Italy (2002-2020), for 127 investigations over 490. Total: 55.158.515 ton. Source, Legambiente (2019)

The investigations of the DIA into the *ecomafie* activities related to waste discovered a *modus operandi* able to adapt to different territories as it requires high levels of professionalism and specializations to find the new routes for the trade. The vast majority of activities of illegal waste trade occurred in the region with typical mafioso’s presence due to the compliancy of local institution and the power that the OCG are able to enforce in these territories. The so- called “Land of Fire” is an area in Campania that has been the setting of several dangerous arsons in an area filled by waste disposed illegally (Legambiente, 2018). During the years, *ecomafie* extended the trade and started bringing the illegal waste outside the area of production, reaching the Regions of the Centre and North of Italy, and implemented by the waste produced in the North, creating a sort of Land of Fire in the

Northern regions too. It was possible to operate new routes due to the increasing infiltration of the *ecomafie* in both the legal waste business and by their means of corruption and intimidation to both public authorities and private citizens (Legambiente, 2019a). However, often the routes of the waste follow the ones already used for other types of illegal activities. The *modus operandi* involves the presence of different actors, including both specialized staff and unskilled labour.

The first important step in the waste trade cycle is definitely covered by the producer of waste, namely the businessmen who need to dispose of industrial waste produced by his company. According to the law, the company should classify the different types of the waste following the European Waste Catalogue guidelines and dispose it accordingly. For example, some types of waste need to be treated before being disposed, whilst others have to be disposed of following particular guidelines in order to prevent pollution. Indeed, the companies can choose to save money by disposing of the waste illegally, which will give an advantageous position on the market compared to the other companies that decide to follow the legislations and taxation for the disposal of the waste. The advantageous position is so achieved by means of higher availability of money, which can be used for other activities other than the waste disposal (DIA, 2019, p.584).

The second important actor in the waste cycle is the broker company in charge of finding the most convenient solution for waste disposal, which is normally affiliated to a mafia group. To avoid higher costs, the practice of the so-called “girobolla” is often used. The “girobolla” involves changing the information on the documentations, falsifying the classification of waste either to pay lower taxes or to declare that the waste already undertook a treatment process. The complicity of chemical labs is fundamental for this step, where corrupted technicians are able to declassify the waste to make them compatible with different types of disposal processes, for example, declaring they can be reused, or they can be burned with incinerations. These practices show how legal business can easily be involved in criminal activities also without the intervention of *ecomafie* (Fig.3).

The illicit acts can also occur in other phases of the waste cycle, such as the transportation of waste and its storage, which are also the phases where it is more likely to have infiltration and management by *ecomafie*. The falsification of documents is often used also during the transport of waste, but mainly in storage. These steps often go together: the transport will have to follow the illegal procedures and bring the garbage to the illegal site. The storage sites for the waste can be different according to the area, normally are abandoned excavation sites, building constructions sites, which are often owned by affiliates of ‘Ndrangheta, illegal landfills or abandoned warehouses (DIA, 2019, p.586).

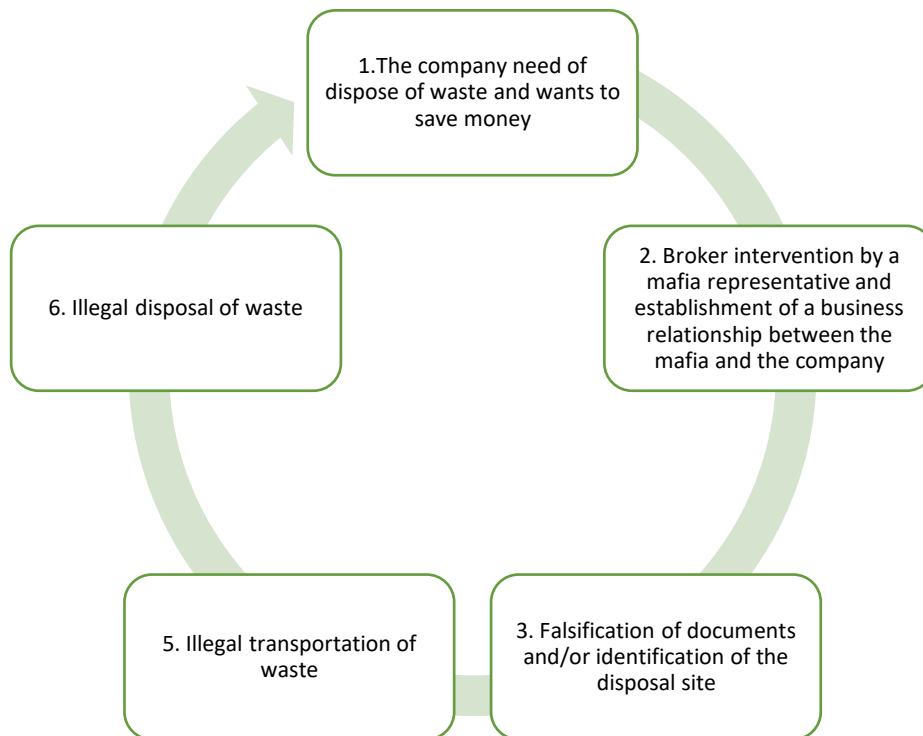


Figure 3: The illegal waste trade cycle

The *modus operandi* of the *ecomafie* in Lombardia is particularly subtle. First of all, the mafia's representative will approach a businessman that is facing financial difficulties, offering counselling for the waste disposal. Then the mafia look for a company to transport waste, which often is a construction company affiliated to them. They acquire the authorizations through corrupted public officers in order to be able to purchase the land and to create the disposal site – generally an excavation pit where it is possible to bury the waste, or a warehouse.

In the last years the number of arsons in landfills and warehouse have been increasing, and it can be related to the growing number of criminal speculations in the waste business. Between 2015 and 2017, 47.5% of arsons of waste happened in the North of Italy. In Lombardia region, the arsons can be connected to the high quantities of waste that is supposed to be disposed of, and burning it is considered the fastest way to do so. It also happened that the waste is supposed to be sent to legal landfills but then it is redirected towards illegal disposal sites, as warehouses (DIA, 2019, p.587). Furthermore, forest arsons in Lombardia could also be related to the waste cycle, as the land affected cannot be immediately restored for agriculture, therefore it is been used for dumping waste from illegal trades (Galullo, 2017).

Obtaining the land to use as an illegal landfill is a crucial step of the waste cycle. It is important to remark that normally the processes of purchasing lands go under strict monitoring procedures from institutions in order to confirm there is no connection with mafia groups. However, the *ecomafie*, have been able to hide their involvement, to the avail of very sophisticated techniques, so that the company are not directly connected to the mafia group, but there is maybe one of their spokesmen in

the board of the company. The *ecomafie* are aware of the methods that State is enforcing to stop their permeation in the legal economy, therefore they are able to find loopholes and to create strategies to continue the illegal trafficking.

The DIA has been recording several cases of attempts to have the public concession of the collection and disposal of urban waste and to be in charge of the restoration activities of polluted sites by mafia-type organizations. It is also common that businessmen become unofficially associated with the mafia groups, through partially collaborating with the criminal group. Yet, the *ecomafie* try to establish their monopolistic role in the market through intimidations towards other companies (DIA, 2019, p.587).

Undoubtedly, it is most uncanny when the businessmen first approach the mafia group, not vice versa, demonstrating the willing and the awareness of accepting the condition of the agreement for the illegal waste cycle. The businessmen's reasons are merely economic, aiming to reducing the waste costs and increasing profits. This new trend puts the businessman on the same ethical and juridical level of the *ecomafie*, other than raising questions about their morality, as they prefer to compromise their company (and, in a bigger picture, the environment) by making deals with criminal groups and putting themselves at risk only for mere profit (Camera dei Deputati & Senato della Repubblica, 2012). It is common that the businessmen understand the agreements with the mafia group as a merely commercial operation, assuming that it works with the same logic as any other partnership where one part can withdraw at any moment from the deal. However, the agreements with the mafia work in the opposite way. First of all, the mafia group is able to create the condition for which its services become essential, so to be able to continue to offer them through the monopoly of the activities. Second of all, the partnership is based on intimidation and corruptive practices which would continue and possibly worsen in case the entrepreneur suggests ending the deal. In this scenario, the only possibility the businessmen have to end the partnership is to denounce it to the authorities (Sciarrone & Storti, 2019).

According to the UN reports, the reasons that stands behind the flourishing of environmental crimes are the gap in the enforcement measures and policies to tackle environmental crimes, caused by the lack of knowledge of the data related to environmental crimes, and of the difficult improvement in the enforcement chain (UN, 2018). These features created a fertile background for the *ecomafie*, which are known for being able to take advantage of weak institutions and to infiltrate into complex networks.

Chapter 3. The new Land of Fire: environmental crimes in the province of Brescia

In this Chapter I will explain the context of the focus of the research: the province of Brescia. Besides its beautiful landscapes and the strategic location in the industrialized northern part of Italy (Fig.4), the province of Brescia has been the unfortunate location of several types of environmental crimes, mainly related to illegal waste trade, and with soil, air and water pollutions. I will describe the most relevant cases of pollution in the area: the PCB pollution of the Caffaro industry, the potential danger of the radioactive waste bunkers and the several cases of landfills – both legal and illegal. I will explain how businessmen became involved in the illegal waste trade in collaboration with organized crime groups. This Chapter is built upon secondary data from different institutions and newspaper investigations. The second part of the Chapter describes the results of the implementation of the Law 62/2015 in the district of Brescia, showing the cases recorded by the DDA of Brescia.

It is important to mention that authorities recorded a consistent number of environmental crimes related to the illegal waste cycle in the province of Brescia, but for the reasons of the research, only the most relevant ones are considered.



Figure 4: Location of the province of Brescia, Italy. Source: Wikipedia. (Retrieved the 13.05.2021 from: https://it.wikipedia.org/wiki/Provincia_di_Brescia#/media/File:Brescia_in_Italy.svg).

3.1 The context of the research: the province of Brescia

The province of Brescia is located in the North of Italy, in the Lombardia Region, connecting the area of Milan with the eastern part of the country (Fig.4). It is known for being the biggest industrialized area of the region, with intensive production of iron, steel, and sand excavation sites.

The landscape of the area is characterized by vast fertile flatlands used as crops fields, mines and sites for marble excavation, such as for the famous Botticino marble, sand, gravel and clay excavation sites. The geographical characteristics of the province, together with the high density of industries, are considered the main causes of air pollution. In fact, Brescia was ranked as the first city in Europe for worst mortality data related to air pollution caused by PM_{2.5}⁶ (IS Global Ranking, 2021).

The Municipality of the city, in collaboration with other local institutions, pays particular attention to the topic, enforcing several measures to both monitoring the pollution and to limit the emissions as much as possible (Osservatorio Aria Bene Comune, 2021). Moreover, the city hosts the biggest waste incinerator in Northern Italy, called “termoutilizzatore” (Fig. 5). It uses the power created by the incineration of waste to generate energy, which is distributed around the town with a system of underground pipes, and its waste management methods, particularly for household waste, are considered to be up-to date (a2a, n.d.-b).

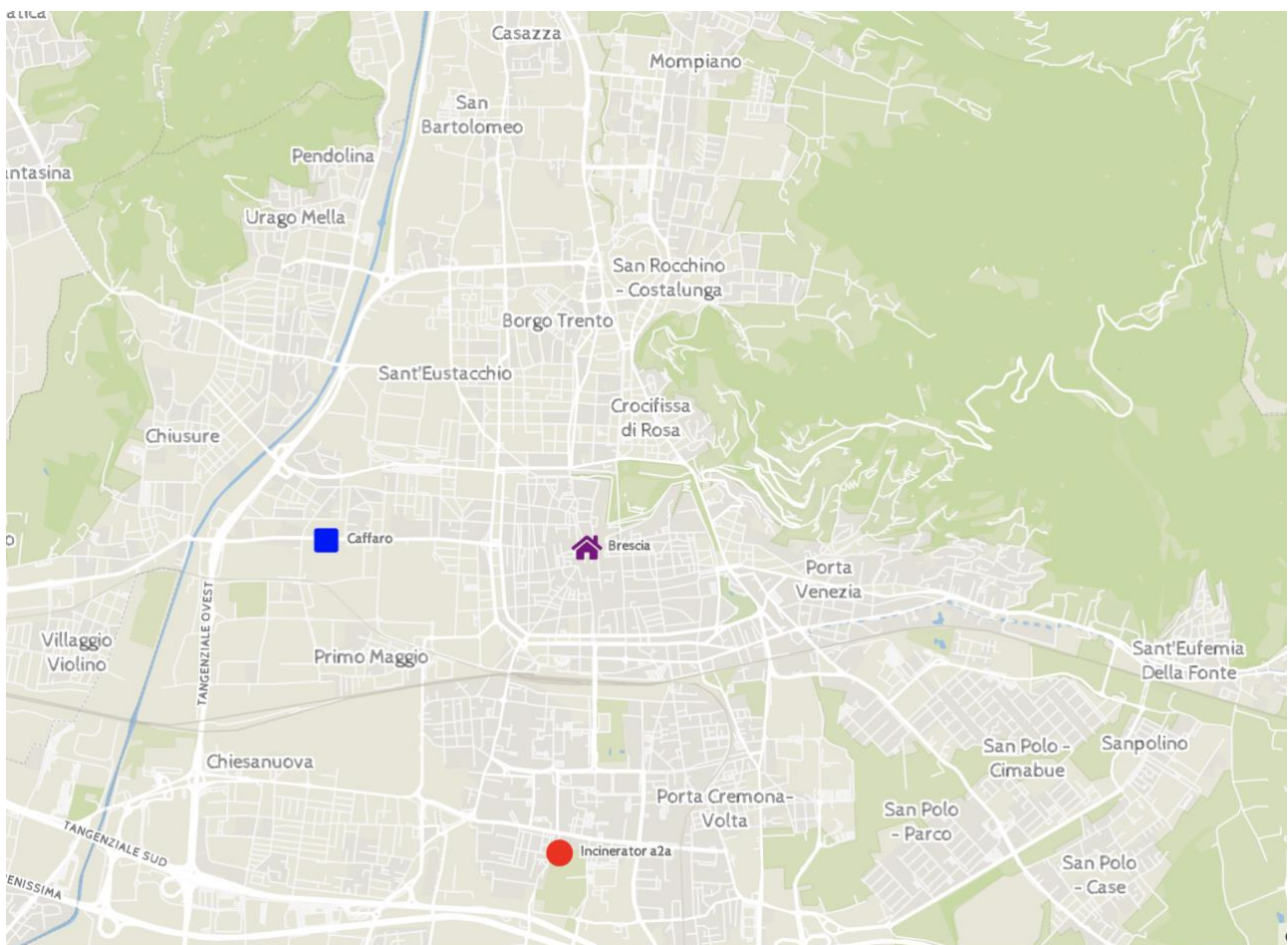


Figure 5: Localization of the Incinerator a2a (red) and the Caffaro factory (blue) in the city of Brescia (purple).

⁶ According to IS Global Ranking, PM 2.5 are “fine particular matter (or PM 2.5), are one of the main air pollutants. They contain a mixture of solid and liquid elements suspended in the air, including particles of dust, metal, cement and organic matter. With a diameter of between 0.1 and 2.5 μm , they can penetrate the respiratory system as far as the pulmonary alveoli (...). The main source of PM 2.5 in cities include traffic, local fuel combustion from household heating, industrial combustions and wood and coal burning” (IS Global Ranking, 2021).

3.1.1 PCB pollution: the Caffaro Case

Environmental topics are a sensitive and known issue in the province, especially those related to pollution, due to some incidents that affected the area. The most famous pollution incident was caused by the Caffaro chemical industry, which area covered by the factory in Brescia is considered a Site of National Interest (“Sito di Interesse Nazionale”, SIN)⁷ because of the environmental damages created (ASL Brescia, 2015; Camera dei Deputati & Senato della Repubblica, 2012). The Caffaro chemical industry was established in Brescia in 1906 and it is located in the southern-west area of the city, in a neighbourhood that is both industrial and residential. The company started with the production of caustic soda, and in 1938 switched to chlorine and its derivatives, including polychlorinated biphenyl (PCB). The polychlorinated biphenyl is an organic chlorine compound classified by the Stockholm Convention Secretariat as a persistent organic pollutant. The PCB is a substance that bioaccumulates in the environment through the food cycle, namely the interconnection of the food chain through different elements as soil, water and microorganisms that are vital to the production of food (U.N., 2001). It is precisely through the food cycle that PCB can affect human’s life, if it is present in what we eat. Due to the characteristic of PCB and to the geographical features of the area, which is characterized by underground water sources that connects to the main rivers, the toxic waste derived from the PCB production infiltrated into the water source and spread until 15km south from the site, contaminating both the water sources and the soil. Caffaro ceased to produce PCB in 1984 and stopped the production of chlorine using mercury in 1997.

The pollution caused by the PCB affected the surrounding crop fields and water sources for irrigation and reached up to 40mt dept (ASL Brescia, 2015), with total perimetral extension of 262 hectare of soil pollution and 2,109 hectare of water sources polluted (ISPRA, 2019, p.114). The investigation about PCB pollution started in 2000 after a journalistic inquiry, which led the authorities to monitor the surrounding areas. The first data showed an uneven distribution of PCB pollution⁸: the population living in the nearest area have shown higher levels of PCB in their blood, due to the consumption of food (such as vegetables, dairy, meat) produced in the fields that were contaminated

⁷ The Site of National Interest, SIN, are those contaminated area that are considered as public dangerous because of their extension and so require restoration interventions. The sites are classified as SIN according to the criteria expressed by the TUA and by the Ministry of Environment. At the current date, the number of SIN in Italy is 41. The delineation of the area considered part of the SIN can decrease within time according to the improvement in the restoration activities, or, on the contrary, because new pollutant are founded (ISPRA, 2019, p.100).

⁸ The International Agency for Research on Cancer explained how the exposition to PCB pollution can have serious risks on human health. The most acute effects are chloracne, which is a skin disease cause by the exposition to chlorinated dioxins, as PCB. The toxic chronical effect of PCB explosion are considered carcinogenic for humans as they can develop different types of tumors, such as melanomas, non-Hodgkin lymphomas, and breast cancer (ASL Brescia, 2015, p. 14).

by PCB. Moreover, the research found a correlation between the PCB levels in the blood and the increasing number of people affected by non-Hodgins lymphoma⁹.

The main issues of the Caffaro case include the bearing of the costs of restoration of the areas, due to the long bureaucracy. Since the new owners of the Caffaro company refused to bear the responsibility of the pollution committed by the previous owners, the Ministry of Environment commissioned the Municipality of Brescia to proceed with the restoration, allocating more than 6 million euros (Camera dei Deputati & Senato della Repubblica, 2012, p.210) for the operation. The PCB disaster is well known among the populations of Brescia, which helped to raise awareness and motivated the creation of several associations¹⁰, aiming to both denounce environmental issues and to advocate the political bodies the issues that the population has been facing.

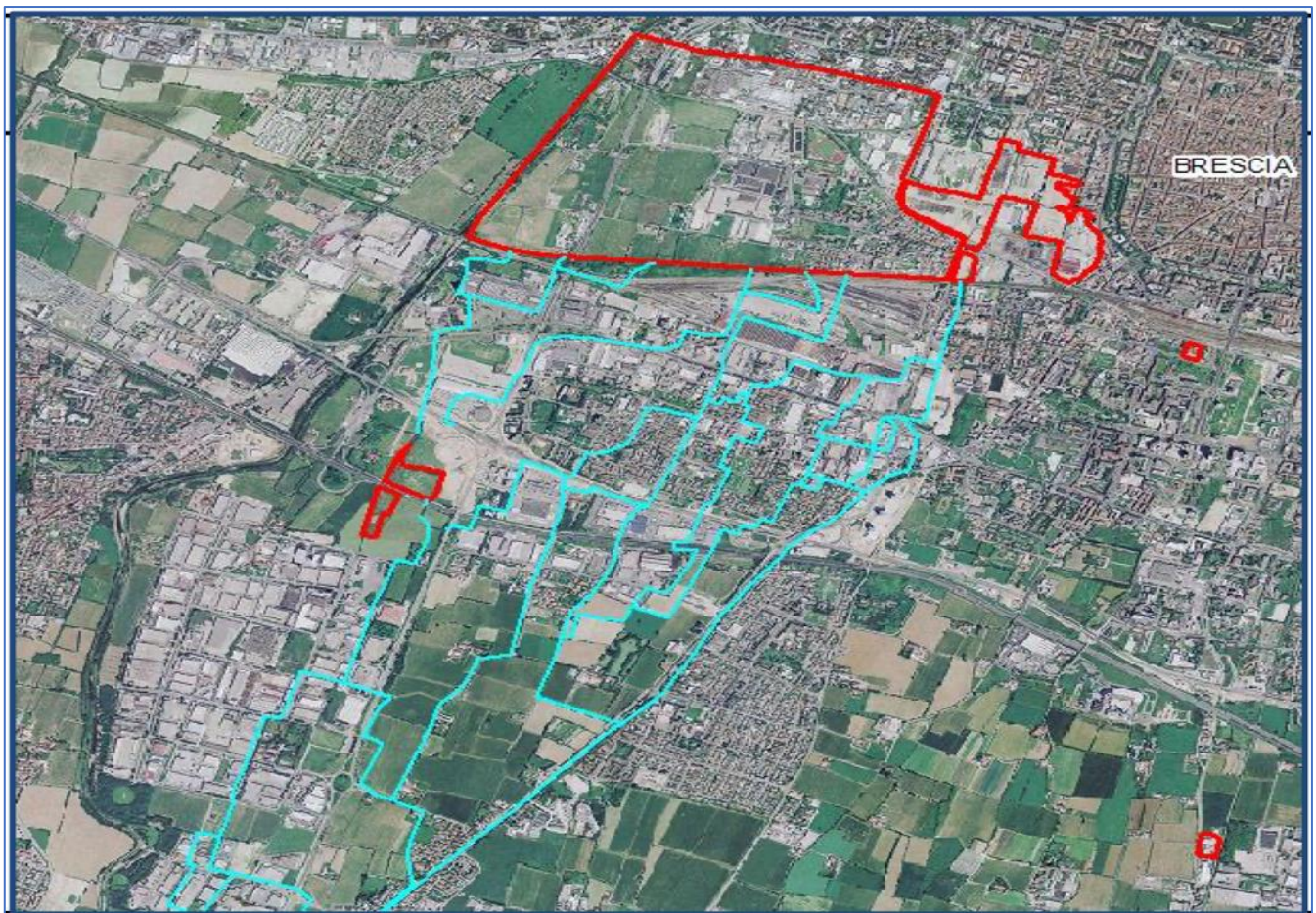


Figure 6: Caffaro site. In red the area where the soil is contaminated by PCB and three landfills; in blue the water sources contaminated by PCB. Source: Regione Lombardia, "Brescia Caffaro", law 179/2002.

⁹ The Non-Hodgkin lymphoma is a type of blood cancer. The research carried out by the local IARC detected a concentration of cases of people affected by the disease that lived nearby the Caffaro factory or were exposed to PCB. (ASL Brescia, 2015, p.39).

¹⁰ One of these groups is called "Basta Veleni" ("Stop Poison"). The association of citizens created a monitoring group, called "Tavolo Basta Veleni Brescia" with the aim of recording the monitoring of the air pollution in the city. Moreover, they are suggesting the Municipalities the action that should be taken to improve the air in Brescia. More informations about Basta Veleni can be found on their Facebook Page "Basta Veleni". Another important actor is the local section of Legambiente Brescia. Smaller local group have been created in the town of Montichiari, aimed to raise awareness to the authorities about how the pollution created by the landfills affects the citizens' life.

3.1.2 Environmental disasters related to the waste cycle and illegal waste trade

Besides the Caffaro case, the province of Brescia has been the location of environmental crimes related to the waste cycle. Indeed, the other side of the fast development of industrial production in Brescia is surely the amount of industrial waste produced. The province of Brescia has the highest average production of hazardous waste compared to regional and national standards, and consequently the highest density of landfills and disposal sites in the whole country for both hazardous and normal waste (Camera dei Deputati & Senato della Repubblica, 2012). In 2012, the Parliament's Commission about Waste registered approximately 110 landfills no longer in use in the province. Approximately 30 landfills are still being used, 95% of which for special non-hazardous waste. The sites waiting for restoration are more than 100, of those 20 are illegal landfills and 80 are small, abandoned industries.

The Ministry of Environment authorized ARPA as the main institutional body to carry on the monitoring and the research about the state of health in the Province. At the moment, there are 147 working disposal sites of different nature registered within the province, which means 13 times over the national average (CROSS, 2019; Redazione BresciaToday, 2020): apparently the implementation of the incinerator did not stop the construction of landfills. In fact, only the 36% of the waste burned in the incinerator is composed of urban waste from households, whilst the rest 64% is special waste from production activities (a2a, n.d.-a). However, a large part of the residual of the waste that is incinerated and cannot be used to produce energy goes to the landfills (a2a, n.d). The amount of waste burned every year by the incinerator is approximately around 735,000 tons but only around 100,000 tons are actually produced in the province of Brescia: the rest has been imported by other parts of Italy (Basta Veleni & Manifesto Costituente, 2021).

The environmental crimes cases in the province of Brescia are several. In this section, I will take into account the most relevant that were documented by institutions and mass media. I created a map of the cases taken into consideration in this chapter (Fig.7), with the aim of giving a visual support that can help the reader understand the high density of cases of pollution in the area. An exhaustive representation of the Province can be found in the Appendix (Fig.10).

The disposal of radioactive or contaminated waste is an issue in Italy. In fact, the country has not appointed a National site for the disposal of contaminated waste. The disposal of radioactive or contaminated waste follows strict national guidelines for the storage and transport of radioactive material. However, due to the fact that nuclear power plants are no longer in use in Italy, the production of radioactive waste is limited to the hospital's waste, from some industries, and the major

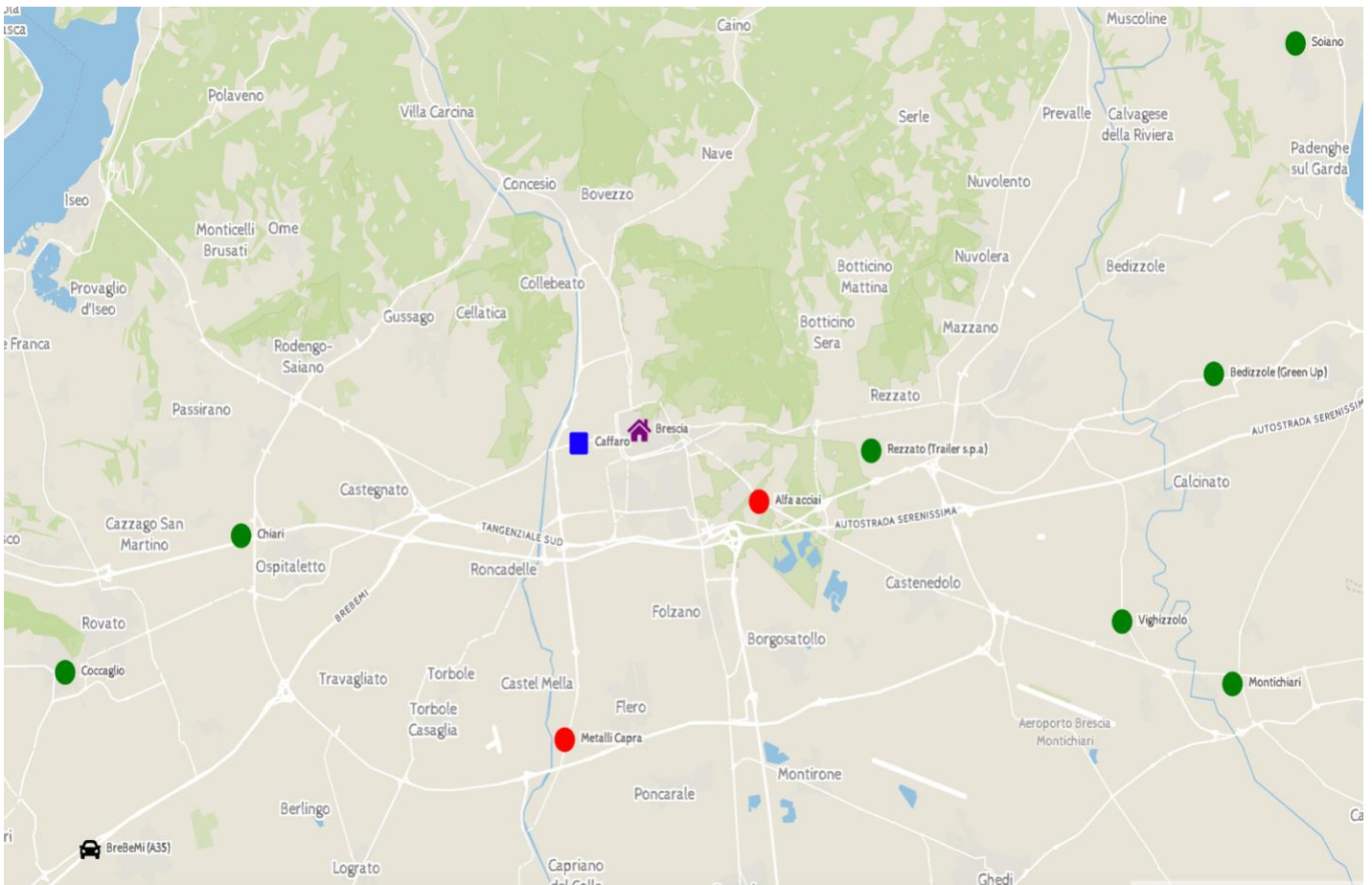


Figure 7: Map of the polluted sites in the province of Brescia, described in this research. Legenda: Caffaro SIN, in the blue square; in companies that caused radioactive pollution. In green the municipalities with cases of pollution. In grey the starting point of A35.

part is still from the nuclear power plants that are being dismantled. For the industries that produce radioactive waste, such as the steel industries, the disposal of it is very complicated and the creation of underground bunker seems to be the most efficient option. Some companies started to build their own private bunker in their properties, but only few have the resources (Legambiente, 2021).

Another issue that makes the province of Brescia achieving the title of Land of Fire of the North is undoubtedly the high density of bunkers with radioactive materials. Because of the intensive production of steel in the province of Brescia, especially in the area of Val Sabbia, there is a concentration of bunker with radioactive material, with nine sites identified (Gabanelli; & Gorlani, 2019). In addition, the province of Brescia has the unfortunate record of the biggest disposal site, the landfill Metalli Capra, located in Capriano del Colle – an area also affected by the PCB pollution-where approximately 85,000 tons of Caesium-137 are buried. Luckily there have not been any incidents in the Metalli Capra factory, but it is in urgent need of interventions that can guarantee the safety of the site. The caesium has been buried there since the 1990s, inside bunker which is not compliant with the new regulations (Legambiente, 2019b, p.110).

The site that has been the setting of radioactive pollution is the company “Alfa Acciai Spa”, Italian leader for the production of steel for reinforced concrete. The company has one branch in a neighbourhood in the south-east of Brescia, which has been polluted with more than 70 tons of wastes

from foundries (Fig.7). The company received radioactive waste and other kinds of waste that contained Caesium-137. The company burned the waste, and following inspections by the authorities only found traces that indicated the presences of Caesium-137 after the waste had already been burned (Camera dei Deputati & Senato della Repubblica, 2012). The last decades witnessed dangerous incidents related to waste, particularly regarding waste disposal, stocking and arsons of landfills or warehouses, sometimes implied with illegal activities and financial crimes. The case of the company “Trailer SPA”, located in Rezzato, shows how personal and political interests are easily correlated. The company was owned by Giuseppe Lancini, which was also the mayor of a neighbour municipality, Vobarno. Lancini, purchased the company using an agreement with the Municipality in 1987, before becoming the mayor. The agreement included a discount on the purchase price with the clause that the property could not be sold for the first 10 years. Moreover, it includes an inspection of the buildings in case of selling the property, to see if the company needs to compensate the Municipality. In 2014, Lancini decided to sell the company. The inspection was made by an employee of the Municipality, demonstrating a strong conflict of interests: Lancini, as the owner, wanted to pay the as less as possible to the Municipality, and as mayor wanted to gain as much as possible. The final agreement was that the company should pay 234.000€ to the Municipality. The company was then sold to Valsir for 5 million €. The conflict of interest could have been avoided by choosing an external monitoring body, such as the Court (Pasinetti, 2016). When Valsir bought the Trailer Spa, Lancini was already mayor of Vobarno and included in the agreement that Valsir was allowed to build a new waste deposit for non-hazardous special waste on the property of the company.

Later the same year, in 2014, a fire broke out in the warehouse of the company, where thousands of tons of waste coming from the South of Italy were illegally stored. The accident was the starting point of the investigations that led to the discovery of an illegal waste trade on national level. It revealed the presence of an organization composed of businessmen, politicians and some actors related to organized crime groups. The complicity of these actors, together with the corruption of some public bodies, made possible the falsification of documents and to send some of the waste to the incinerator, despite the waste was not supposed to be disposed of in that way, whilst the rest of the waste was stored in the warehouse waiting to be transported abroad. The profits for these activities were around 10 million € (DIA, 2019. p.631; Redazione Il Giorno, 2017).

In May 2017, three arsons within few days were registered in the landfills of the company “GreenUp” (previously “Faeco Srl”) in Bedizzole. The company is a branch of the bigger group “Waste Italia Spa”. The landfills of GreenUp were stocking non-hazardous special waste. Due to managing reasons, the company suspended the activities for some months, while waiting for the institutional permission to start working again. The fires happened within these periods of inactivity and can be directed to arsons. In fact, the investigators found out that the security systems were

inactive, and that radioactive material was wrongly and illegally stored (Regione Lombardia, 2020; V.Mor, 2019). Because of the pollution created by the arsonist attacks, the company had to compensate the municipality of Bedizzole of 500,000€. Nevertheless, the arsons did not stop: more accidents happened in 2019, with the consequent responses from the community demanding more security and monitoring of the landfills (Scalfi, 2019).

About 20 km south of Bedizzole, there is another municipality that is covered with landfills, Montichiari (Fig. 7). The excavation caves for gravel are very common in the area; the business of excavation became very profitable, also because of the “second life” that the cave could have as landfills. The Municipality of Montichiari said that they are following the guidelines of the Province to give permissions to the excavation sites and the landfills. However, the area is the location for 21 landfills, 5 of which are still working, 5 are closed and dismissed and 11 were illegal landfills, for a total of 12 million square meters of special waste buried and stored (Forti, 2017).

The (legal) landfills store non-hazardous special waste, and there is only one dedicated only to asbestos, but the peculiarity of the soil in the area permits the permeation of toxic wastes. For these reasons, ARPA Lombardia is monitoring the situation closely (Camera dei Deputati & Senato della Repubblica, 2012, p.197). In 2016, following some incidents of bad smells and air pollution happened in the area, schools had to be closed because the children had eyes irritations and bad coughs, and the population was advised to stay inside with closed windows for few days (BresciaToday, 2016). The investigations were not able to find out what had caused the bad odours and illnesses of the population, but the high concentration of carbon monoxide was found in the blood of the people taken into the hospital. The citizens required investigations by both the municipality and by a public institution such as ARPA Lombardia for clarity of the air pollution event. The institution’s final response was that they could not find the source, and claim it might be from either the landfills exhalations combined with the ones of the construction sites of the nearby highway (Forti, 2017).

The Franciacorta area has also been facing several incidents related to pollution caused by illegal waste disposal. In the town of Coccaglio, a company started to build houses on land that was a dismissed illegal landfill, without properly restoring the area that was polluted with asbestos. The company restored the area only superficially and falsified the documentation. The investigators discovered that the area covered by the abandoned landfill was even bigger than the construction site but were not able to find the owners (Camera dei Deputati & Senato della Repubblica, 2012, p.175).

In the neighbour town of Chiari, the company “Zincature Industriali”, was dumping productions waste in the nearby fields. These activities were done on Saturdays, when the company was supposed to be closed. The waste was dumped into fields, then reaching underground water sources. When the investigators were checking the area, the company was substituting the stored waste in the tanks with clean water, showing that it was still there waiting to be properly disposed of. In the underground

water and soil nearby the area, high concentrations of toxic chemicals such as chrome, nickel, copper, nitrogen, chloride and sulphates were found. Amounts of chromium, known for being cancerogenic, was found in the water sources in amounts above the limitations (Camera dei Deputati & Senato della Repubblica, 2012, p.176).

The involvement of *ecomafie* in the Province of Brescia was confirmed by an investigation of 2019, when several warehouses containing illegal waste were found. The investigation discovered the existence of a criminal organization composed of private businessman actors, politicians and members of the ‘Ndrangheta, precisely the Bellosco clan from Rosarno. They were organizing the trade of solid waste from the South of Italy to be stored and illegally disposed of in several provinces of the North, including Brescia. The warehouse was located near Garda Lake, in Soiano del Garda, and was storing more than 1000 tons of solid waste wrongly classified (Ammendola, 2019; Giorno, 2019).

The second main case with involvement of *ecomafie* was discovered during the construction of the highway A35 “Bre.Be.Mi”, which connects the cities of Brescia, Bergamo and Milan. The investigators discovered the involvement of a ‘Ndrangheta clan in the construction of the road, as one of the companies in charge of the construction of the highway was owned by an affiliate of ‘Ndrangheta. The ‘Ndrangheta company was able to be assigned of the public commission for being part of the construction of the highway through transporting the materials due to the falsification of documents and through using the so-called “presta nome”: this is when a name, which has no affiliation with illegal activity, pretends to be the owner of the company. This was possible also with the compliancy of public institutions: a member of the Council of Lombardia region was accused of corruption (Camera dei Deputati & Senato della Repubblica, 2012, p. 179).

The company owned by the ‘Ndrangheta clan got the task of the transporting materials to build the road, but instead used its trucks to transport waste illegally. The company “Locatelli” was also working in the same location and, to be able to work, accepted an agreement with the criminal organization (*idem*). The Locatelli company was commissioned to use secondary raw material from foundries waste production to build the road. The Italian legislation, in fact, allows using of certain kind of industrial waste for the construction of roads. Thereby the Locatelli, in compliance with the ‘Ndrangheta group, dumped construction material without treating it first, and used that material to build the road. In some areas, the amount of illegal waste used for the road surface was almost 90%, instead of the agreed 2%. Moreover, the investigations discovered that the waste used to build the road surface was not the one declared in the agreements (namely made by secondary raw materials), instead it contained several different types of waste. Other than being accused of illegal waste trade and dumping, the company was accused of fraud. The Locatelli group worked only in the area of Brescia because they knew that a company connected to ‘Ndrangheta were involved in the

construction of the highway, and that the ‘Ndrangheta company already took charge in the construction of the roads in the other areas outside the province of Brescia (*ibidem*, p.180).

The context of the environmental crimes in the Province of Brescia is intricate, especially due to the blurry and thin line of actions that stand between the legal and illegal world. Besides being constituent part of the waste trade itself, which regulations does not discourage illegal activities, the interests in saving money and making profits to the detriment of the environment seems to be far more attractive than preserving public health and the ecosystems. The cases exposed in this part are explanatory for the understanding of the diffusion of environmental crimes in the province of Brescia in those cases that do not necessarily involved the presence of organized crime groups. As a matter of fact, few are the cases where the involvement of *ecomafie* has been proved. The setting prove that several businessmen are inclined to commit environmental crimes for profits, increasing the complexity of the investigations of the phenomena and confirming the need of implementation of the monitoring systems.

3.2 Italian legislation related to environmental crimes. Implementation of the law through the case study of the Prosecutor’s District of Brescia.

The province of Brescia is undoubtedly a strategic point for illegal waste trade activities. The characteristics of the land, together with the high demand for services of waste disposal, create the perfect setting for illegal activities. The entrepreneurs are interested in saving money and disposing of their business’ waste, so it is not surprising that some actors consider doing business with organized crime groups. The presence of mafia-type organizations in the province of Brescia is a relatively recent development and often underestimated by public institutions. The little public institutional concern regarding the presence of mafia is shown by the lack of proper regulations and monitoring done to prevent the permeation of the groups into legal businesses.

Criminal organizations are drawn to the North of the country by the possibilities of business investment, especially within the cement cycle. Brescia has the highest number of infractions of the Region within the construction sector, with 83 cases registered in 2017 (CROSS, 2019, p.15). Construction sites can easily become the perfect setting for dumping illegal waste and for camouflaging the transportation of waste, as explained in Chapter 2. Moreover, the investigators stated that at least 70% of the construction companies in Lombardia can be tied to ‘Ndrangheta groups (Camera dei Deputati & Senato della Repubblica, 2012. p.99). In Italy, it is very common to commission public projects out to private companies, which then subcontract part of the work out to other companies. This mechanism, at first created to maintain market rivalry, is now often permeated by criminal groups: despite strong monitoring and anti-mafia measures, the mafie have learned how

to properly falsify documents to evade monitoring measures. The infiltration of the mafie in the construction market makes possible their involvement in different stages of the illegal waste trade.

In this intricate milieu, it would be wrong to always imply the presence of *ecomafie* involvement in the activities of illegal waste trade recorded in the province of Brescia, with the exception of the already public cases. Nonetheless, it is possible to make the assumption that they could be taking part in some steps of the disposal processes. Studies show that one of the most common regulation evasion practices utilized by mafia is the falsification of documents that classify types of waste (Bonzanni, 2019; DIA, 2019; Legambiente, 2019b). Companies can rely on private laboratories for these tests, and often waste is classified as non-dangerous. Another method is to declare that the waste already undertook a particular treatment before being disposed of, when in reality no test was performed (DIA, 2019; Legambiente, 2019b, p.87). Moreover, the role of corruption and collusion is decisive and commonplace in this sector and it allows the *ecomafie* to commit the illicit activities.

Keeping in mind how mafia clans can infiltrate legal businesses and eventually commit environmental crimes, it is important to verify the findings of the investigations in order to understand the development of these crimes. It is relevant to look at the number of investigations conducted in the context of this research within the province of Brescia. The number of investigations performed in Brescia is key in proving that the province has been affected by several environmental crimes and it requires more attention by the institutions.

As mentioned in Chapter 2, the institution in charge of the investigation of environmental crimes is the Anti-Mafia Investigation District Office, known as the DDA. The DDA of Brescia recorded an interesting trend in charges and arrests over environmental crimes between 2015 to 2019. The data discussed below are provided in Table 3 (Appendix), which shows the number of people or investigations per each article of the Environmental Act (precisely art. 256 comma 3; Art. 256 bis; Art. 257; Art. 259 and Art. 260) and of the Penal Code (namely Art. 452 *bis, ter, quartes, quinquies, sexies, septies, octies and terdecies*)¹¹. The categorization of the number of open investigations related to illegal waste trade crimes according to each article of the environmental legislations was made by the DDA of Brescia with the aim to analyse the effectiveness of the legislation and to study the trend of how environmental crimes related to waste trade has been developing in the province. The data in Table 3 are described according to:

- a) Cases registered in the year (where the responsible was identified).
- b) Number of people investigated.
- c) Cases registered in the year (where the responsible was not identified).

¹¹ The Art.452 of the Penal Code is composed of different paragraphs, denominated in Latin (*bis, ter, quartes, quinquies, sexies, septies, octies, terdecies*...). Each paragraph addresses one type of environmental crime, it defines the sanctions and, if it is necessary, it refers to other article of the Penal Code or of other legislations.

- d) Cases with request of dismissal.
- e) Number of people investigated in procedures with request of dismissal.
- f) Cases with request of dismissal (against unidentified person).
- g) Cases with criminal proceedings.
- h) Number of people charged for the crime.

The cases of unauthorized waste management (Art.256 comma 3, Environmental Act), where the person that committed the crime was identified, had an exceptional peak of 10 cases in 2019, but saw an overall a decrease during the other years. Also in 2019, 15 investigations were opened against unknown individuals who are accused of unauthorized waste management, with a total of 21 people charged for the crime of unauthorized waste management. The highest number of people ever investigated for the crime of unauthorized waste management was recorded in 2018, with 39 cases.

The illegal arsons continue to be a part of unauthorized waste management, besides being regulated by another article, (Art. 256 *bis*, Environmental Act). It was recorded that, during 2019, there was a slight decrease compared to the previous year, with 12 open cases and 15 people investigated, whilst in 2018 they were 15 and 20 respectively. The highest number of charges for illegal waste arsons were recorded in 2019, with 14 people accused of this crime.

Art. 259 of the Environmental Act is about the illegal waste trade and addresses specifically the transport of illegal waste. Cases of illegal waste trade have been decreasing in the last four years, with the highest number of people charged (4) in 2017.

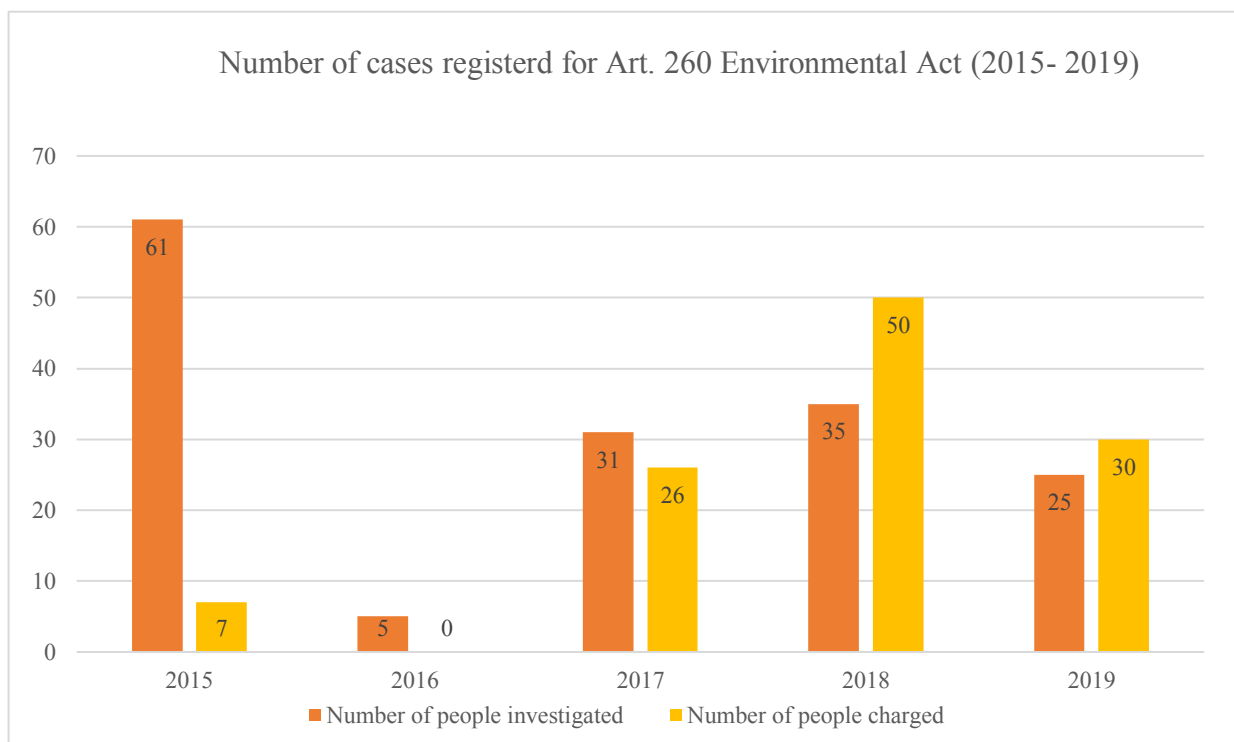


Figure 8: Number of people investigated and charged for art.260 (Environmental Act) per year. Source: DDA of Brescia.

On the other hand, Art. 260 of the Environmental Code addresses the organized activities for illegal waste trade focusing on the entire waste cycle. Undeniably, the numbers registered are quite impressive: in 2015, 61 people were investigated and 7 charged; in 2017, 31 people were investigated, and 26 charged. The highest number of people charged for this crime was in 2018, with 50 (Fig. 8). In 2019, 25 were investigated and 30 charged. The Art. 260 of the Environmental Act was abrogated in 2018 and substituted with Art. 452 *quaterdecies* of the Penal Code¹². Both articles focus on organized activities for illegal waste trade, specifying which activities are considered part of the illegal waste trade cycle. As there data about these two articles (Art. 452 *quaterdecies* and Art.260 of Environmental Act), it is not possible to make a comparison of the trend of the investigations in Italy and in Brescia.

They do not include information about aggrievances if the organized activities are led by (or involved with) a mafia-type organization, as those are addressed by Art.452 *octies* of the Penal Code. The important number of investigations recorded under this article show that organized activities for illegal waste trade often happen with actors that are not necessarily connected to a mafia organization, confirming the role that the blurry division between legal and illegal businesses (Fig. 8).

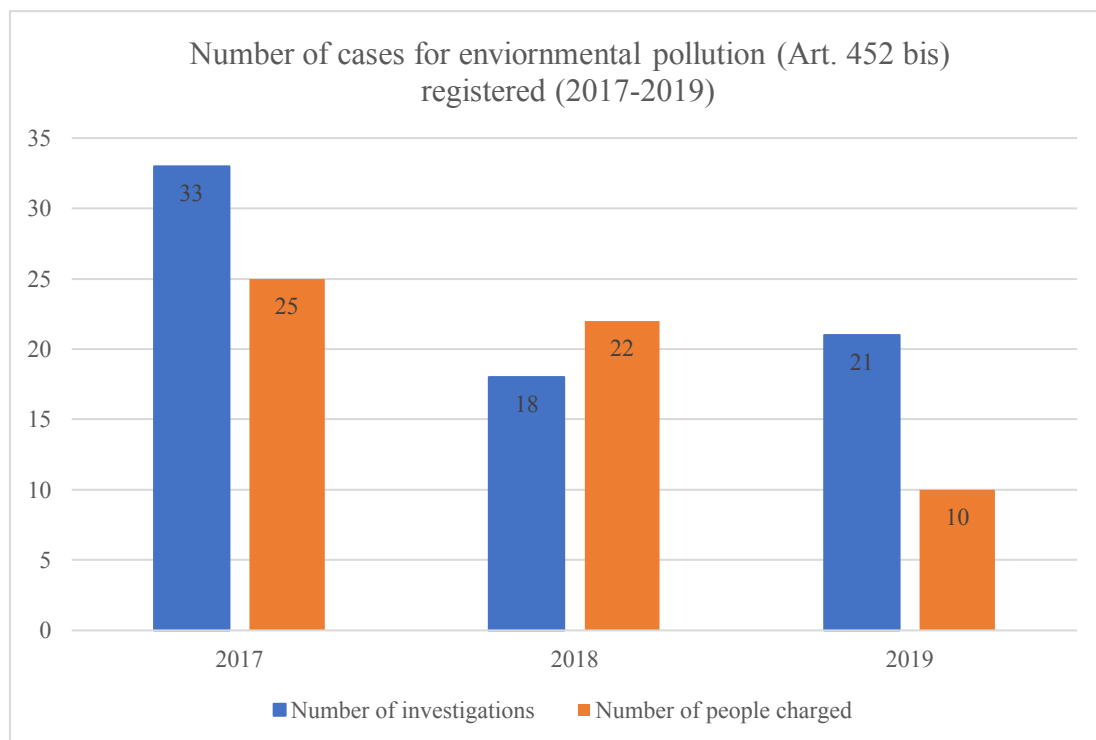


Figure 9: Number of people investigated and charged for environmental pollution (Art. 452 bis Penal Code) per year. Source: DDA of Brescia.

¹² The data provided by the DDA do not included Art.452 *quaterdecies*, as it was added in the legislation only in April 2018. The Art. 452 *quaterdecies* addresses the organized activities of waste trade, include all the activities of the waste cycle. It substitutes art. 260 of the Environmental Act. The inclusion of the article in the Penal Code allows the investigator to persecute it according to the penal law, where the possible punishment include incarceration.

Concerning the crime of environmental pollution, regulated by Art. 452 *bis* of the Penal Code, the number of the cases registered are quite relevant (Fig.9). In 2017, 33 people were investigated and 25 charged; in 2018, 18 investigated and 22 charged, and in 2019, 21 investigated and 10 charged.

The district of Brescia had the highest number of cases of the whole country for environmental pollution, with 76 investigations recorded in 2018 (Table 1). It is also very interesting to notice the number of people investigated for omitted remediation (Art.452 *terdecies* of the Penal Code): 15 in 2016. For the same offence, 7 people were charged in 2018. The numbers of cases of omitted remediation and pollution are interestingly consistent, especially when compared to the national level as showed in Table 1. The purpose of Table 1 is to compare the number of total procedures registered in 2018 the national level by Legambiente to the ones registered in the province of Brescia, by the DDA, categorized for each paragraph of the Art.452 of the Penal Code. The total procedures include ongoing investigations against known individuals and unknown person, but do not included the number of people arrested or denounced (Legambiente, 2019b).

The numbers of procedures in Brescia are relatively high, especially related to the crime of environmental pollution, crimes against the environment, obstructions of controls and omitted remediation, demonstrating the persistence over time of eco-crimes, particularly of those related to the waste cycle. The comparison between the total procedures recorded in Italy and the one recorded only in the district of Brescia by the DDA shows that the province has been a relevant location of environmental crimes. For instance, more than half of the procedures for obstruction of controls occurred in the province of Brescia (13 out of 21) in 2018. Extremely relevant is also the number of cases for omitted remediation: 22 out of 58, confirming how the area is affected by different types of contaminations that still require interventions. Moreover, one case of traffic and disposal of material with high radioactivity was recorded, out of 5 for the whole country.

Table 1: Comparison between the number of cases recorded per each comma of Art.452 Penal Code, on National level and in Brescia district in 2018. Sources: Legambiente (2019 p.60) and Table 3 Appendix.

Paragraphs of Art.452 of the Penal Code	Total procedures – Italy (2018)	Total procedures – Brescia (2018)
Art. 452 <i>bis</i> (environmental pollution)	392	76
Art. 452 <i>ter</i> (death or injuries consequent to the crime of environmental pollution)	15	0
Art. 452 <i>quarter</i> (environmental disaster)	59	0
Art. 452 <i>quinques</i> (crimes against the environment)	83	11
Art. 452 <i>sexies</i> (traffic and disposal of materials with high radioactivity)	5	1

Art. 452 septies (obstructions of control)	21	13
Art. 452 opties (aggrievances: mafia-type organizations)	6	0
Art. 452 terdiecis (omitted remediation)	58	22
Art. 452 quaterdecies (ex art.260, Dlgs 152/2006)	178 n.d.	n.d. <i>112 (art. 260 Dlgs 152/2006)</i>

Regarding the cases of death and injuries related to the crimes of environmental pollution (namely Art. 452 *ter*), there is the need for a conceptualization of the terminology used. Interestingly enough, in the Art. 452 *ter*, the “consequences” of water, soil and air pollution, as well as biodiversity loss, are described as “unwanted consequences by the offender”. The seriousness of the injury is rated according to the prognosis of sick leave (rated as serious or extremely serious in case of death). The understanding of the pollutions as unwanted consequences implies the idea that the offender was not aiming to commit an environmental crime but rather another typology of illicit activities, and that the pollution was just another of the outcomes. The unwanted cases of death or injures consequents of environmental pollution described by Art. 452 *ter* are undoubtedly difficult to determine in the cases of exposure to contamination as it is unclear if other diseases such as tumour are considered under this article. The province of Brescia has been the setting of several cases of contaminations, as exposed in 3.1. However, the number of procedures carried out for the crime of environmental pollution in 2018 are zero in Brescia, compared to the 15 procedures on a national level. The regulation does not include the diseases consequents to contamination, leaving outside the legislation all those cases where the exposure to pollutant caused severe illnesses. Taking as an example the Caffaro case, the responsibilities of the crimes are addressing the pollution and restoration of the areas, but do not include any kind of compensation for the citizens affected by illnesses caused by the exposure to PCV. It is extremely difficult to define that the explosion to PCB was the only cause of the disease and because there is no legislation at the moment to properly tackle this issue (ASL Brescia, 2015).

The most important evidence of the presence of mafia-type organizations was the “Pesci investigation” in 2015, where hundreds of people related to the ‘Ndrangheta clan “Gran Aracri” were arrested (CROSS, 2019, p.20). Studies shows how the permeation of the mafia is possible due to a sort of “substitution effect”, where the local businessman is substituted with a member (or representative) of the mafia clan. Therefore, it became easier for the mafia to commit financial crimes in those types of sectors where the border between legal and illegal is very thin due to a normative gap. The normative gap happens whenever the regulations are not comprehensive of all those factors that could avoid the infiltration of mafia type organizations, and it often coexist with the lack of

monitoring operations. It often occurs during the process of commission of public jobs related to the cement cycle, which, in a broader picture, can cause economic crimes or crimes related to the illegal waste trade, as the example of the involvement of the Locatelli company and the ‘Ndrangheta exposed in Chapter 3 confirms.

The data provided by the investigation of the DDA in the province of Brescia and exposed in Table 3 (Appendix) further demonstrate how environmental crimes has been constantly present in the province of Brescia. Undoubtedly, the effort made by the authorities in tackling the environment crimes has been exemplary, and the enforcement of the new legislations has proven to be effective in the persecution of these crimes. With different actors involved, the number of environmental crimes related to illegal waste trade are consistent. It is possible to notice the relevance of the crimes by combining the numbers of the people charged in Brescia for the crimes of unauthorized waste management, illegal waste arson, for illegal waste trade and for organized activities of waste trade. However, the trend of the overall number of cases where people were charged for the environmental crimes has been variable during the years. This could be explained by the recent reorganization of the responsibilities and the new normative introduction are some of the causes, as explained in Chapter 2.1.2, that justify the discontinuity in the recorded numbers (Germani & Reganati, 2018). Apart from this matter, the number show a continues presence of environmental crimes in the province of Brescia. Some are still under investigation; whilst other cases have been closed because it was possible to identify the offender.

The presence of *ecomafie* in Brescia, as already mentioned, was confirmed by the “Pesci Investigation” carried out in 2015, and by the cases exposed in 3.1, namely the involvement of ‘Ndrangheta in the construction of the highway A35 Bre.Be.Mi where illegal waste was used to construct the road. Unfortunately, it was not possible to find more information about ongoing investigation on *ecomafie* activities, due to privacy reasons. On the other hand, the data collected by the DDA suggest that the majority of the activities of illegal waste trade is carried out by individuals that are not related with *ecomafie*, where different actors are involved, often businessman that try to find the easiest way to both save money and dispose the waste. The phenomenon of businessmen involved in illegal waste trade is thereby increasing and it proves that often the businessmen are able to organize the illegal waste trade without the help of organized crime groups.

Chapter 4. Perceptions of environmental crimes and slow violence

The main interest of this study is to understand how people in the province of Brescia perceive of the issues related to the illegal waste trade and contamination, and to discuss how these perceptions can be related to the concept of slow violence. In Chapter 3, I wrote about the characteristics of the area of the province of Brescia and how it became the unfortunate setting of different types of environmental crimes. Therefore, some questions arose naturally: are people aware of the slow violence that has been happening in the area? How is their awareness? These issues are addressed in the main research question of the chapter: how are environmental crimes related to the illegal waste trade perceived by the population of the province of Brescia?

In this Chapter, I will address the topics of the perception of the seriousness of environmental crimes according to the answer of the participants, as a preliminary conceptualization to address the slow violence discourse. The theme will be discussed in two subsequential stages: the first step will be to analyse the general perception of seriousness of crimes, assessing which feature are considered relevant by the interviewees in the categorization of what makes a crime more or less serious than the other. Secondly, the analysis will shift to environmental crimes specifically, and how the participants consider their seriousness. As a result, the analysis will make it possible to address the discourse of slow violence and victimization related to environmental crimes of illegal waste trade in the province of Brescia, by means of the primary data collected and informed by relevant theoretical literature.

The composition of the discussion will start with the perception of how the respondents understand the environment, followed by the explanations of the concepts of crimes, harm, what is considered to be the wrongfulness of actions and finally the definitions of environmental crimes and the perception of their seriousness. Finally, in the last part of the Chapter, I will talk about slow violence and victimization related to the illegal waste trade.

4.1 Perception of the seriousness of environmental crimes

In a study of how people perceive the environment it is necessary to consider the current and historical human use of the natural environment in the location studied. The environment can be socially understood according to cultural features, depending on how each society develops and lives within the ecosystems. How people live within the environment often has ancestral roots revealed through how the society grow, therefore it is also influenced by industrial development and commodities. The province of Brescia has been particularly affected by industrialization and intense

urbanization, leading to contamination of the ecosystems where the population has been exposed to different kind of pollution during the years. Moreover, the geographical features of the area, characterized of numerous excavation sites, made it possible the proliferation of illegal landfills, as exposed in Chapter 3.

In the interest of the research, it is important to analyse how the population of Brescia discerns the meaning of the environment. In theory regarding environmental governance, three main conceptualizations of nature are identified: nature as capital, nature as a service, and nature as a common good. Nature as a capital is viewed in terms of what can be produced with the natural resources and what can be traded (Vatn, 2015, p.48). Related to illegal waste trade, the application of the concept of nature as a capital concerns the land-use for the landfills or the pollution that is consequent from other types of waste disposal, e.g., with the incineration of waste and production of energy. The ecosystem services of nature are addressed by the idea of nature as a service: the ecosystem can provide services in terms of provision of natural resources; regulating services; cultural services and supporting services. Considering nature as a common good implies that it has to be preserved by actions that could damage the ecosystems (Vatn, 2015, p.50). However, these theories are based on economic perspectives, and fail to address the holistic vision of how people live and perceive the environment.

In the case of this research the interviewed seems to understand the environment in social collective terms, where every human action can affect the living conditions of everyone: the environment is strongly intertwined with the community. Indeed, one common trend among the respondents is that they consider themselves as a whole with the environment, as a “we”¹³. The environment is the place “*where we live*” (R7), in which “we” means “*the whole population*” (R1), “*the community as a whole*” (R14). The collective perception of the environment includes the population, the society with its cultural features, combined together with the ecosystems as one entity. When addressing any harms towards the environment, it is possible to notice a dichotomy between the environment as a communitarian “we”, antagonized by who committed the harm, “they”. This point of view conceives environmental crimes as actions against the collective, against “us”. Interestingly enough, the interviewee never antagonizes the personal perception of the “I” against the “we”: the only moments where they talk about personal and individual perception is related to the action that individuals can do to prevent environmental crimes – addressed in Chapter 5.

It is possible to draft a general understanding of the perception of what is crime according to the sample interviewed. Crime entails activities that are considered illegal and include physical violence

¹³ From here on, all the quotes in Italics refers to the answers of the interviews of my data collection, followed by the respondent’s code. The complete text of the interviews used in the analysis can be found in the Appendix.

or other types of harm. Therefore, crimes are those actions that somehow interfere with the normal course of life and are being punished or regulated by a legal framework. In fact, the interviewees never define what they mean by illegal: its definition is included in the perception that every action against the legislation is wrong. This is shown in the answers responding of what are environmental crimes, which are described as actions that *“compromises the natural course of nature and/or modifies the environment”* (R3), including *“every activity that, illegally, causes damage to the environment as an outcome”* (R7). In the latter definition, for example, there is no specification of what *“illegally”* includes. Other definitions relate to the illegal profits of environmental crimes, meaning both the illegal profits that comes directly from these crimes and those from other illegal activities that surrounds the crime (such as money laundry or corruptions). Anyhow, also in this case, the *“illegal”* is understood as something that is against the law.

Environmental laws generally define the line between the amount of pollution that is considered bearable by the ecosystems whilst bigger amounts are dangerous, therefore illegal. It is possible to assume that in this case, the *“illegal”* are those actions that are not regulated by environmental law (Skinnider, 2011). Nevertheless, some respondents have a more radical perception, and consider as *“illegal”* every action that can somehow damage nature, which is reflected in *“voluntary destruction (of nature) due to wrong actions made by the human”* (R19).

The perception of crimes given by the respondent confirmed the argument of scholars as Hillyard & Tombs (2007), who claim that the concept of crimes is understood as a social construction: in juridical terms, it is how an event is considered a crime that starts the process for its criminalization. The legislations have the power and the role to define the harmfulness of an action or behaviour as it could cause damages towards other human beings. The process of criminalization of an event requires the identification of features as the victims, the kind of violence endured, the harm caused and the social perception of the wrongfulness of the action. In fact, despite not all of the actions considered crimes are inclusive of violence or other kinds of harm, breaking the laws could still create damage in the long term (Hillyard & Tombs, 2007).

Different social groups, other than understanding the concept of environment differently, could also have a distinctive perception of what environmental crimes are depending on their personal exposure (Shelley et al., 2011, p.313). The characteristic of the province of Brescia created a shared understanding among the respondents on the definitions of environmental crimes, which can be resumed as *“all the illegal and harmful activities towards the environment (e.g.: illegal waste dumping, trafficking of exotic animals, extraction of raw materials in protected areas...)”* (R16). These denotations do not include comments regarding the responsibilities of the crimes, as the actions are just considered illegal by definition.

In the case of the illegal waste trade, the harm caused by the contamination that can affect the community is perceived as more relevant than the kind which involved violence. In fact, in the illegal waste trade it is uncommon to register action that could be considered structurally violent, namely brutal and aggressive. Instead, the violence of the illegal waste trade is implicated in its dangerous consequences on the environment. This perception requires a conceptual development of the definition of violence itself as, when applied to illegal waste trade, it changes its meaning. The violence is not the ruthless action itself, but in the outcomes that the event has on the environment. In fact, whenever taken into consideration the several phase of the illegal waste trade, there are only few steps where structural brutal violence could be endured: due to intimidation practices during the negotiations or in case of arsons of waste in the warehouses or other storage facilities.

This interpretation of harm as social harm switches the perspective to the immediacy of the consequences of the action, so that environmental crimes “*can be less violent in the short term but more harmful in the long term*” (R15). Hence, the concepts of time and space are extremely relevant: the community, as a geographical area, can be affected by pollution for a long amount of time. It is specifically the element of time that characterizes one of the main features of slow violence, as it will be further discussed in 4.2.

In this light, the dichotomy between the communitarian “we” and “they”, those responsible of the crimes, is even clearer: environmental crimes are actions that “*affects us all*” (R10), “*the entire population as a whole*” (R1). The concept of community is very strong, indeed “*environmental crimes are often at the expense of the entire community*” (R10), as “*the harm provoked by environmental crimes risk not only to harm the individuals but the whole community in a severe way*” (R16).

Whenever the harm created by crimes indiscriminately affects a part of the population, it is possible to consider it as social harm. Hillyard includes in the category of social harm the physical harm, financial and economic harm, cultural safety harm and emotional and psychological harm. Regarding illegal waste trade, it is possible to address the sphere of social and financial harm, whilst psychological harm would not be relevant for the study, therefore will not be addressed in the research. Cultural safety harm are relevant whenever they consider for cultural safety the “autonomy, development and growth, and access to cultural, intellectual and informational resources generally available in any given society” (Hillyard & Tombs, 2007). In addition to the author’s definition, I believe it is important to relate to the concept of culture and of cultural behaviours that could be affected by deviant attitudes. In social settings where there is a strong presence of mafia clans, in fact, the deviant attitude such as corruption and collusion have been legitimized during the years through an unofficial process that developed them as consuetude.

Environmental crimes can be considered social harm, as pollution “*puts in danger the life of all the citizens*” (R12). It is also possible to find some features of the environmental crimes that connects

to financial harm, where *“corruption (...) shows the weakness of mankind that rather chose to put themselves and the ecosystem in danger just for money or everything that could come with it”* (R3). In the Italian case, harm are caused by corruption and collusion, which have a strong cultural dimension and are considered also a social disorder that can negatively affect the development of the society (Abrate et al., 2014). Therefore, it is possible to address harm to culture and safety in terms of the involvement of organized groups and the widespread corruption, as *“they imply a huge amount of money and they are the symptoms of a high level of corruption in both private and public sectors”* and *“it forces who are involved not to talk”* (R17). The financial, cultural and social sphere are strongly intertwined, especially if the ecomafie are involved.

In this light, different kinds of harm created by the offender define its dangerousness for the society (Hillyard & Tombs, 2007, p.12). The perception of the harm caused by environmental crimes among the respondent depends on the kind of harm and violence used, can be likened with the statement *“it depends on if for violence we mean the aggressive act itself (like a gunshot), or the consequences of the act. In this case it would be different kind of violence with a bigger impact”* (R6). Moreover, physical aggression could be seen as more dangerous in its immediacy as violence towards an individual.

It is possible to find some common features between the perceptions of the severity of crimes given by the interviewed, and the definition of “safety crimes” related to white-collar offences given by Hillyard & Tombs. In fact, white-collar crimes are considered “safe” because they do not include physical aggression, whilst crimes that entails brutality are perceived as more dangerous (Hillyard & Tombs, 2007, p.12). For these reasons, white-collar crimes could be perceived as less dangerous in terms of brutal immediate violence, but more harmful in the long term due to the social consequences they could create such as economic differences that affect the whole society in the long term, for example in the case of tax evasion, which in the long term would affect the population because of the lack of services that the State can provide.

The similarities between environmental crimes (also called by some scholars “green crimes”) and “white collars crimes” relies specifically in the feature of being considered victimless crimes and for enduring a kind of harm that include its dangerousness in its consequences rather than in the specific acts perpetrated. It is important to qualify the idea of victimless crimes in the context of white crimes and green crimes. For example, the action of polluting the soil by pouring a toxic substance it is not violent itself, but it has dangerous outcomes. In white-collar crimes, the act of falsifying a document for tax evasion is not a harmful action itself, but the long-term consequences of tax evasion reflected on the society can be relevant.

Having the knowledge of how different aspects links the understanding of what is comprehended in the concepts of environment and how the conception of crimes is created, it is now possible to

address the perceptions of the seriousness of environmental crimes. However, it is important to clarify that the studies about the perception of the seriousness of environmental crimes are relatively new and develops on concepts of victims and violence, especially from a qualitative research perspective. The most ground-breaking research, through quantitative methods, addresses the public's perception of environmental offences and how they are perceived as serious crimes (Shelley et al., 2011).

In particular, the perceptions of the seriousness of environmental crimes are first and foremost related to their consequences, which are often irreversible and create a shared feeling of powerlessness among society. Unless a particular event or disaster occurs, due to the characteristic of the pollutants it is complicated for the population to detect the geographical extension of the damage. The example of Montichiari is explanatory: the bad smell and the headaches were signals that raised the concerns of the population about air pollution from the landfills, but it is still uncertain either what causes them and the consequences on the ecosystems. Other examples are the effects of the contamination on non-human life that have been discovered with the PCB pollution caused by the Caffaro factory, as the toxic molecules permeate the soil and water sources, eventually contaminating the crops used for agricultural purposes and animal farming (see Chapter 3). The imperceptible element of these pollutants is precisely what makes them so dangerous as their effect are discovered later. Moreover, they make it hard to determine the causal relations between the exposure of the pollutions and the effects on human lives.

The different reasons why some crimes are considered more relevant than others has to do with who are the victims, the amount of violence used and the consequences in the long term (Rosenmerkel, 2001). Therefore, it is crucial to understand the meaning of the concepts of "harmfulness and wrongfulness". Greenfield and Paoli (2013), in their study of the harm caused by crimes, created a framework to address the taxonomy of the bearers of harm and the types of possible harm. The framework aims to empirically address the concept of harm by distinguishing two dimensions, the bearers of the harms and the types of harm. The bearers of the harm could be the private sector entities, individuals, governmental entities or the environment. The types of harm could address physical integrity (including psychological integrity), material interests, reputation and privacy. The crimes are rated according to their severity (from catastrophic to marginal) and how each stage of dangerousness could affect the living conditions of the individuals and of governmental entities.

In the case of this research, the environment is considered as a bearer of the harm, so it is possible to associate the harm with the physical and social dimension. In fact, the functional integrity of the environment, namely the ecosystem services that it provides, could be jeopardized from harms caused by air, water and soil pollutions, destruction of landscapes and inaccessibility to open spaces. Moreover, whether the environment is considered a social space, environmental crimes could produce

social fragmentations (Greenfield & Paoli, 2013). In our case study, the social fragmentations are expressed generally by those comments regarding being a victim of pollution, as if the geographical space of where people live could create a sort of classification of the dangerousness of pollution, for example: *“luckily, I do not live in the area damaged by the Caffaro, but I do believe that the air pollution of Brescia affects me too”* (R1). The previous statement depicts a distancing from the perceptions of being a victim, also confirmed by the secondary data about the environmental engagement: the area that have been affected by known cases of exposition to different types of contaminations also registered a higher involvement of the citizens, compared to other part of the city that are less affected by it. For example, in Montichiari there are several environmental groups of citizens aimed to raise awareness about the landfill problems among both civil society and institutions, namely “Legambiente Montichiari”, “SOS Terra”, “Comitato Civico Solo Montichiari”, “Fratello Chiese”, “Ecovolontari”. The same happened in the area polluted by PCB, with the creation of groups such as “Basta Veleni”. Despite working mainly in the mentioned areas, these associations are also trying to raise awareness and promote dialogue with the institutions and the private sector.

The identification of the victim of crime is central. The common understanding of victim is somebody that suffered a violent act, implying that the victim is normally identified with a human being. The identification of the victim as human has a relevant role in creating the consensus that a violent crime is generally more serious than property crimes, which are generally considered victimless crimes as they do not entail direct violence towards individuals. Doing so, the perceptions that an action that creates a physical harm to a human being is naturally more dangerous than one against a non-human entity, leading to the assumptions that the crime seriousness is strictly related to its violence (Shelley et al., 2011). Indeed, whenever a larger amount of people is considered the victim, it is possible to talk about social harm and to address the society as a victim of crime. However, as implied in the term, the idealizations of social harms do not address the nature. Society is considered one of the bearers of the harm, together with its individuals, the private sectors and the government (Adriaenssen et al., 2020). The harm detected towards the community is particularly important, as a larger amount of people can be affected in different ways: *“the harm provoked by environmental crimes risks not only to harm the individuals but the whole community in a severe way”* (R 17).

The temporal sphere of the damage has a strong role in the perception of the seriousness of environmental crimes, which often cannot be compared to other typologies of crimes *“I think they are another type of crimes because they affect permanently the whole population”* (R1). If the offence creates temporary-physical harm, such as illness to a group of people, the crime is often considered more serious than if there is only one person affected by it (Shelley et al., 2011). In this view, the

concept of victims includes a physical entity that can be affected by some forms of immediate harm. However, the idea of victims changes in case of the so-called victimless crimes.

The academia (Paoli, 2004; Skinnider, 2011) describes environmental crimes as victimless crimes because it is not common to identify any human victim as an immediate and direct consequence of the environmental crime, unless in cases of incidents that results in the death of individuals. The concept of victimless crimes does not correspond with the interviewee's perceptions for two main reasons. First of all, because the interviewees understand the concept of being a victim of environmental crimes not because of the illicit act itself, but because of its consequences: environmental crimes "*have consequences on human life*" (R4), namely health consequences, disruption of nature and ultimately the effect on people's lifestyles. The second reason relates to the understanding of the environment as a collective sphere, which means that environmental crimes do have victims: the community. The concept of community is very strong as "*the consequences associated with environmental crimes affect the community as a whole, without any voluntary or involuntary distinction*" (R14), and "*are often at the expense of the entire community*" (R10).

Environmental governance theory addresses nature as a common good, where natural resources could be overused and became vulnerable. Whenever nature is considered a rival, the singular act of one person can decrease the possibility of availability for others (Vatn, 2015p. 51). It can be applied also to the illegal waste trade whenever one considers the activities of few individuals through the creation of illegal dumping sites; pollution is causing harm to the common good, therefore excluding the rest of the population from the possibility of using and living in the area.

A further issue that influences the perception of the seriousness of environmental crimes concerns the actions that public institutions can take to persecute the crime and restore the damage. Related to environmental issues, the restoration is extremely complicated. According to Adriaenssen (2020), in the policy-making process, the ranking of the seriousness of crimes is being used to allocate the resources to enforce crime control and punishments. In fact, "*environmental crimes can be causes of some damages that cannot be corrected or solved by an arrest or a trial. For this reason, from my point of view, it is a type of criminality that has more relevance with respect to other types of criminality, therefore it needs a different treatment, a more invasive one, as it implies the correction of several actors*" (R3). The previous statement clearly expresses the elements that makes the persecution of environmental crimes challenging, namely the presence of several actors with different interests. Moreover, the perception of the irreversibility of these crimes is a feature that influences the perception of their seriousness, as it assumed a continuity of the harm during a time and a complex process of restoration to the natural status. The issue of restoration of the contaminated landscape becomes relevant too: the "correction" implies the identification of the responsibility of the remediation activities that, as already mentioned, is difficult to verify.

Furthermore, the public's perception of the seriousness of environmental crimes are strictly attached to how the harm is related to the offence, to the offender and the victims. The study of Adriaenssen (2020) about the public perception of the seriousness of crime shows that those crimes that involved harming an individual's physical and psychological integrity are considered more serious, followed by property crimes and crimes with no immediate individual bearers of the harm. The public perception of seriousness of environmental crimes is often evaluated on some specific behaviours or features of the crimes itself. These features include the harmful outcomes of the crime, i.e., instant violence of harmful consequence and on the criminal intent, which can vary according to the premeditation of the crime or on its accidentality. Other features are the perception of the wrongfulness of the action and on the type of harm, which can vary according to individual's opinions (Adriaenssen et al., 2020).

The characteristic of the opinions of the populations of Brescia exposed so far shows that, as it is for the concept of crime itself, environmental crimes can be perceived and considered a social construction. The perception confirms the role of other kind of forces – namely political and economic forces- and how they are relevant to determined what is an environmental crime and how the harm created should be treated (Skinnider, 2011, p.18).

4.1.2 Environmental crimes and health

The awareness of the seriousness of environmental crimes can be related to the consequences of the actions more than to the immediate disaster. Environmental crimes generate several concerns among the population, which besides depending on the personal features – such as the area where people live, family history, personal interests – have some common features. Related to this research, the main concerns explained by the respondents regards people's health and the quality of life, whilst the consequences for the entire population are just a minor concern.

The province of Brescia has the dreadful characteristic of being the setting of numerous stories of environmental pollution of air, soil and water sources. So far, we have seen the most important cases in the province, such as the PCB of the Caffaro case, the pollution caused by illegal waste dumping and by the concentrations of several landfills in a small geographical area. Due to the fact that Caffaro factory is a Site of National Interest because of PCB pollution, the awareness about health issues caused by pollution has been increasing since the 2000s. In fact, after the start of the investigations, the local health institutions had to start monitoring the health of the people nearby the area. The results of this monitoring and these studies showed that those exposed to PCB, especially those who ate products cultivated on the ground that was polluted, have higher chances to have cancer, thyroids problems, and were most likely to get pneumonia or lungs diseases (ASL Brescia,

2015). The concerns of the citizens about the possible contamination of food are well explain by the declaration of Respondent 5, who stated: *“even if the pollution takes place away from where we live, it can affect us when we consume food that grown using contaminated matrices. And it is very difficult to be sure not to consume contaminated products (...)”* (R5). The local health institutions, together with the University of Brescia have carried out several studies about the incidents of PCB on the health of the citizens. Moreover, the Municipality has recently released the first report about air monitoring in the city and the overall situation of the pollution. The data is not very reassuring, even if the situation has been getting better since the introduction of some measures to reduce air pollution in 2015 (Osservatorio Aria Bene Comune, 2021).

The data collected from the survey shows that people are concerned about the consequences that pollution could have on their health. The risks to health are one of the main concerns among the population in Brescia, especially the ones caused by the waste cycle. In fact, it is known that *“the wrong disposal has effects on the environment, on the health and quality of life”* (R4) and *“disposal of waste causes direct damage to health and more or less directly, in general, to the place and environment in which you live”* (R14). The association of the understanding of the environment as a collective “we” is resonating also in relation to health issues: environmental crimes are serious as they could have long-lasting effects on people’s health, which are difficult to cure. It is known among the population the high risks of tumours and respiratory diseases. Because of the health risks, environmental crimes are also considered *“mass-crimes”* (R22*)¹⁴ comparable to mass murders. The correspondence that the respondent made between environmental crimes and mass murders is the only case when it is possible to notice an understanding of environmental crimes related mainly to human beings than to the environment and society as one entity, as other interviewees do. The majority, as explained, correlates environmental crimes as felonies that harm both the humans and the ecosystem and consider those elements as one entity.

On the other hand, it is very peculiar to notice that the public mainly addresses their “own health”, and few of them are concerned about health issues for family members, which is an interesting disparity if compared to the previously mentioned dichotomy between “we, the community and the environment” and “them”, the criminal polluters. Interesting enough, some of the respondent that considered the environment as a “we” and environmental crimes as affecting the whole community, are not concerned about the consequences on the health of their family members, but only on their own health. In addition, they claimed to be aware of the PCB pollution caused by Caffaro. This discrepancy could be explained either by a superficial knowledge of the PCB pollution consequences.

¹⁴ The respondent classified as “RX---” are those that gave relevant answers but do not live in the province of Brescia.

The fundamental role of concerns about people's health is relevant in the scholarly discourse of slow violence. The public's concerns shows that there is some awareness about the consequences of pollution, which will be analysed further in the next section. In case of the province of Brescia, the monitoring of the air, water and soil quality is ongoing, thanks to the joined effort of different public institutions (the municipality, universities, health institutions, and ARPA).

4.2 Victimization and perception of slow violence related to illegal waste trade

The concepts of crimes, environmental crimes, harmfulness and wrongfulness, together with the perceptions of the seriousness of crimes according to the sample of the study are creating the basic knowledgebase to analyse the perception of slow violence related to the illegal waste trade.

As previously mentioned, one of the peculiarities of environmental crimes is to be a sort of collective crimes, where the victims are not individuals but is the whole society, "we". The conceptualization of the seriousness of crimes also entails the number of individuals affected by it: a larger number of victims allows the crime to be perceived as more invasive and dangerous than an individual threat.

The threat of collective harm perceived by the respondent increases the perception of seriousness of the action, and this demonstrate the possible true extent of the number victims of the environmental crimes. It shows that, in the case of environmental crimes, the seriousness of the victimization is rather related to the number of people harmed by the consequences of the crime, than if the same type of harm involve a singular person (Skinnider, 2011). For example, the exposure to pollutants would be considered more serious whenever a consistent number of people are affected by a disease than if only a singular person is affected by the same.

Slow violence is also very complicated to detect as it is not an impulsive act, but neither a mere incident. Often, environmental crimes, are committed whilst knowing the harmful consequences to the environment, but with the hidden hope that nobody will discover them, as the pollution-related violence is generally invisible, imperceptible, painless and sometimes odourless – at least in the short term. The definition of slow violence given in the survey was paraphrased by the one from Nixon (2011, p.2): "a violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attractional violence that is typically not viewed as violence at all".

It is possible to apply the concept of slow violence also to the illegal waste trade and environmental crimes in the province of Brescia, with some adjustments. Nixon often talks about environmental discriminations towards minorities, but this is not the case in the province of Brescia. As argued in the previous Chapters, the choice of the location of the landfills has been done due to

geological features of the territory that is constituted by good quality of soil for excavations and the area is a strategic point of connection with the major industrialized areas of Northern Italy, therefore talking about minority discrimination would lead to a twisted interpretation of the reality.

One of the concerns of the public is that often people have been victims of slow violence without knowing it, due to the lack of information about it: the news rarely talks about these issues if there are no incident or disasters. Several respondents admitted that only after reading the definition of slow violence provided in the survey¹⁵, they were able to consider themselves as victims, due to the exposure to pollutants and for living nearby areas with landfills. It confirms one of the issues of victimization addressed by Skinnider (2011): the author explains some issues of the characteristics of victimization in environmental crimes as often people are not always aware of being victims, or that they become aware later than when the crime has already happened. The connection between information about crimes that entail slow violence and the awareness of being a victim of environmental crimes is extremely strong. The respondents underline the importance of raising awareness about these topics and criticize the fact that, because slow violence is not a spectacular topic, it is rarely talked about in the news, *“I think it is a kind of news that has less impact. That it is why the media talk less about it, but it is needed to raise the awareness about these crimes”* (R6). At the same time, the complexity of the topic is understood, together with some limitations that can explain why this news rarely makes an audience: *“often, the public cannot understand that indirect violence can exist. We are used to different phenomena and it is not easy to make people understand that different elements play an important role for our future”* (R17), and *“for what it concerns the environmental crimes (...) against the public wellbeing (res publica), it is very difficult to make people understand their importance”* (R8).

The lack of visibility of these issues can reflect on the lack of awareness about the pollutants for the ecosystems. Therefore, one could argue that the violence is not endured in the act itself but through its consequences towards the environment, namely the collective “we”. In this light, it became easier for the respondent to understand if they can consider themselves as victim of slow violence related to the illegal waste trade or not. In general, the common answers are *“I am a victim, and we all are. It doesn't matter if the effects are visible or not, the ecosystem has been under attack for far too long”* (R3), and *“for sure I am a victim because the consequences of slow violence involve everyone”* (R4). However, unless people are personally interested in environmental matters, the lack of communication about the issue make it difficult for the population to actually understand if they are

¹⁵ Namely, Q 20: “The kind of violence used by ecomafie in the illegal waste trade is different than in other kind of activities because it does not directly affect people but the environment, and its consequences will last for decades. This is the concept of “slow violence”: an invisible- yet continuous harm that affects environment and people, and which is often out of the spotlight of the media. In fact, is not common to hear about crimes of illegal waste trade. What is your opinion about this?”

victims of slow violence or not, because maybe they are but “not directly”. These perceptions explain why the respondents’ perceptions do not support the idea of environmental crimes as being “victimless crimes”: the conceptualization of “victim” entails more aspects other than direct violence and it can endure through time whenever the harm afflicted continues even after the legal conclusion of the case. As in the Caffaro case, even if the procedure for the restoration of the area already started, those who have been affected by PCB are still paying the consequences.

The public strongly agrees with the need for raising awareness and put these incidents under the spotlight. The lack of interest on the topic from the mass media confirms what Davies (2019) define as epistemic violence, in the cases where the media do not cover the issues, so that it does not reach a wider public. In the province of Brescia, the awareness of being victims of slow violence connected to how pollution is spread, is probably due to the Caffaro case, as it has been the most relevant example in the public discourse of the last decades. It is also interesting to notice how the perception of the victimization actually follows spatial and temporal features: *“we are all victims today for the crimes of yesterday and the future generations will be for the crimes of today”* (R7).

The second important aspect of slow violence concerns the definition of what is considered a violent action, and secondly how different types of violence are perceived by the public. Davies (2019) explains the differences between structural violence and slow violence. Structural violence is silent and has implicit immobility: the harm is immediate, and it can have severe consequences in the long term, but it is used to strengthen social practices. It is also immediate and spectacular. The interviewed also raised the argument of different kinds of violent acts *“it is necessary to understand what violence means”* because *“it depends on if by violence we mean the aggressive act itself (like a gunshot), or the consequences of the act. In the latter case it would be a different kind of violence with a bigger impact”* (R6). On the other hand, slow violence is out of sight and can remain unnoticed, therefore enhancing a longer temporal sphere and a gradual, slow change. As the respondent argues, *“I think slow violence is equal or superior compared to other situations because it is a kind of silent violence, therefore more dangerous”* (R9). Slow violence processes includes gradual deaths through illnesses caused by past actions, accumulating harm over time (Davies, 2018). As Nixon explains, the causalities of slow violence are most likely not to be seen, as they become “light-weight, disposable, with dreadful consequences for the ways they are remembered” (Nixon, 2011p. 13). The interviewed seems to confirm Nixon’s explanation, because *“exactly because is invisible, it represents a severe risk because it is rarely contrasted, and its effects are underestimated”* (R4).

The epistemic violence is thus embedded in the definition of slow violence: being easily forgettable, it is rarely addressed in the public discourse, creating intrinsically greater damages to its victims as nobody else besides them are aware of the impacts and able to take action to solve it (Davies, 2018). It is also extremely complicated to maintain the focus of the public discourse on the

slow violence during a long period of time. An important factor that affects the way information about the illegal waste trade is communicated and is related to the victims. In fact, the absence of immediate victims does not catch the attention of the public: *“actually, because of the absence of immediate victims but mostly on the long term, the impact on the mass media can be less crucial”* (R15).

When applied to the illegal waste trade, slow violence occurs subsequent to the incriminated polluting action due to the characteristics of the pollutants through the release of toxic elements in the landfills, the wrong storage and disposal of waste. However, one could argue that the illegal waste trade is, by definition, a form of slow violence. If one expands the concepts of slow violence to all the actions involved in the waste cycle, starting with business agreements, bargains, corruption, political complicity, which will eventually lead to the pollution of an area, it can be possible to consider the whole illegal waste trade cycle as a slow violence scheme. Doing so, one could include in the concept of slow violence not only the pollution but the social and economic outcomes of the whole process, which, in the long term, will also lead to damages to society. This view refers to the illegal sphere as an obvious setting for different forms of violent actions.

The perception of the seriousness of crimes related to slow violence and illegal waste trade in the province of Brescia has all the features of slow violence developed by Nixon – except that it does not affect minorities by the whole population indiscriminately-, confirming that also in these areas there are several types of ongoing processes of harm towards the environment, affecting both the ecosystems and the inhabitants. Besides being normally aware of the slow violence caused by pollution, the population knows that it is mainly due to past incidents rather than of ongoing issues. However, the population agrees that there is a need for more information about these issues and rely on public institution to improve communication to their citizens.

Chapter 5. *Ecomafie*'s aggravated circumstances and the role of society

In this chapter I will address the crimes lead by *ecomafie* in the illegal waste trade, addressing the perception of the role of corruption in the waste cycle by the respondents of the interviews. I will describe how the perception of the seriousness of environmental crime is influenced by the presence of mafia-types groups. Also, I will address the role of corruption in the activities of *ecomafie* and how it is perceived by the respondent, and I will talk about the grey area where *ecomafie* work. In the second part of the chapter, I will analyse the perception of the role of mass-media in the diffusion of information and news about illegal waste trade and *ecomafie*, and the opinions about the role of the civil society in relations to environmental crimes by referring to the general trend and patterns identified in the interviews.

5.1 The perceptions of the roles of *ecomafie* in the illegal waste trade

5.1.1 *Ecomafie* as an aggravated form of environmental crimes

The perception of the seriousness of environmental crimes can vary according to the particulars of each environmental crime. In the case of the illegal waste trade, the perception of the participants about the seriousness shows a general concern about the consequences created by the pollution. The features that can influence the aggravation of the crime are undoubtedly the identity of both the perpetrators of the crimes and the victims.

In general, the respondents do not address specifically the responsibilities of the crimes. However, the perception can differ whenever a mafia group is involved in eco-crimes. This supposition is guided by the questions “what is the perception of the role of *ecomafia* in illegal waste trade? Is the characteristic of being a mafia-type crime perceived as an aggrievance?”. The questions are supported by the assumption that the same kind of crime committed by another individual with no criminal record is perceived as less serious than if committed by someone related to the mafia group.

The involvement of *ecomafie* as the perpetrator of the crimes has surely a strong influence on the perception of the seriousness of environmental crimes in the illegal waste trade. There are many reasons, but it is mainly due to the known outcomes that mafia activities have on every aspect of society – economic, political and social. Mafia-type organizations are known for their various ways

of intimidation, for the ability to disguise themselves and permeate the markets by creating business agreements with both businessmen and politicians. The public understanding of the mafia activities always assumes the use of direct violence towards individuals, through threats and intimidations which could become more severe depending on the case – leading to murders or terrorist attacks. Nevertheless, violent mafia actions have always been directed towards specific targets, rarely to the whole society. The studies about mafia describe a “specialized use of violence” addressing to the use of direct violence as the last resource: the mafia groups do not want to capture the attention of the authorities and of the public. Therefore, methods of corruption or intimidation are more efficient for their purposes, together with reinforcing the conspiracy of silence and forcing the creation of a co-dependent relationship with the victim. Direct violence is administrated in a controlled way only when it is considered necessary and when there is the approval from the boss (Dalla Chiesa, 2016; Sciarrone, 1998).

According to the interviewees, the perceptions of the mafia’s role is different when committing eco-crimes and can be categorized in three main groups:

- a. Eco-crimes are less dangerous than other crimes due to the different kind of violence entailed.
- b. Eco-crimes are as dangerous as other mafia activities, because the perpetrator is somehow affiliated with the mafia group.
- c. Eco-crimes are more dangerous because their consequences affect the whole society not just individuals.

It is important to remark that the differences in the *modus operandi* do not influence the perceived seriousness of the crimes: “*the enormous gravity of environmental crimes does not devalue nor justify any type of mafia activity. Like the mafia, however, environmental crimes must also be treated according to their severity and importance, which should be a priority*” (R14). It is outstanding how ecomafia activities are considered severe and somehow dishonourable because they take advantage of societies only for personal profits. Also, it is interesting to notice that the perceptions of the different violence of the crimes does not diminish the seriousness of the mafia involvement, which is considered an grievance by all respondents. In fact, the pollution of the environment is considered as relevant as other kinds of crimes, despite the action of polluting is perceived itself as a less violent act compared to others.

According to the sources, illegal waste trade can be classified as a low-risk type of crime: there are fewer chances of being discovered as it is based on financial crimes, except for some incidents, such as the burning of warehouses (Legambiente, 2019a). This means that *ecomafie* crimes can be perceived differently from other kinds of crimes, as they are “*less violent, as often the ecomafie offers to purchase the waste or manage the disposal, offering a lower price than the specialized enterprises*”

(R1). This view focuses on the type of violence used without giving that much consideration of the identity of the criminal but more on the *modus operandi*, where also businessmen are included. Doing so, it is possible to draft the first perception of the thin line between what is legal and illegal, increasing the awareness of how legitimate companies enter the process of the illegal waste trade. The perceptions of the seriousness evaluated on different use of violent acts shows the relevancy of the spectacularism of the violent act compared to invisible and indirect violence. These factors, together with the perceived victimless of the crime, influence the perception of seriousness of crimes, assuming an implicit categorization as more or less serious according to these elements.

The second main category that can be identified is linked with the identity of the perpetrator of the crime. The respondent compared *ecomafie* offences to other kinds of felonies inflicted by the mafia, often compared to homicide. In this way, all crimes committed by the mafia are equally dangerous precisely because of the identity of the perpetrator of the act, “*as the activity of mafia*” (R11). Even if some respondents claim that these different kinds of mafia activities cannot be compared, they describe similar features that make the crimes perceived more relevant due to the mafia involvement: “*they cannot be compared, they have different types of consequences but both lead to dynamics as homicide, intimidation and corruption*” (R17). This opinion shows that the identity of the perpetrator of the crime influences the perception of the seriousness of the action, as it is considered as more dangerous that if the illicit would have been made by a person not involved with organized crime.

On the other hand, some respondents address the seriousness of the crime acknowledging the presence of “honest businessmen”, meaning somebody owning a legal business that is normally not involved with the criminal groups: “*some individuals or business are gaining profit from it (illegal waste trade)*” (R21*), and “*I know that in the long run illegal disposals have been used also outside of the mafia-type activities*” (R3), as “*not only the mafia, but a lot of companies pollutes to protect their profits*” (R22*). The statements seem to draw mainly on general assumptions and on the idea of a deviated commodification of the waste industry: “*I believe, however, that I am a victim of the large companies that run the business illegally without my knowledge*” (R20*). The latter opinion, for example, do not say anything more of what is implied in the statement “I am a victim of the large companies”: a victim of the pollution created? Of the illegal profits? Or a victim of the entire slow-violence process?

The third categorization refers to the consequences of eco-crimes and the victims, as they can be considered more violent because they affect a large group of people, indirectly, whose only fault is living within the vicinity of an area that was chosen to become an illegal landfill. This categorization has been drafted upon the assumption that the offences are committed by organized groups – or they affiliated. It is interesting to notice that in this case, the focus of the perception of the seriousness is

within the consequences of the crime, not in the violence enacted, as *“they are two different kinds of violence. The “classic” mafia activities are known from the popular culture and are made into something spectacular by the mass media and cinema. Everyone in the world knows about those types of crimes. The ecomafie, on the other hand, does not attract a similar interest, therefore those crimes are perceived as minor or less serious”* (R7). The lack of immediate victim is also an important factor, that determines that *“they (environmental crimes) look less violent because rarely people are involved, and because there is no cruelty, they are often unnoticed”* (R2), giving a definition of victimless crimes, shared by few respondents.

The respondents generally draw upon the comparison of the seriousness of crimes, defining environmental crimes less, equal or more serious than other types of crimes. It is interesting to notice how the peculiarity of a crime being committed by mafia-type groups is actually one of the principal features that influence perception of the seriousness of the crime. It led to the awareness that if the same activity is endured by a mafia group is always considered more dangerous and relevant than if it is carried out by someone that is not related to the OCG.

These traits show how much the social and political aspects of the mafia, as explained in Chapter 2, are key in the perception of the crimes and their relevance. *Ecomafie* activities imply corruption, collusion, clientelism, bribes, agreements with local politicians and with waste companies, and in the worst-case scenario, leads to intimidation and physical treats. *Ecomafie* (and mafia in general) do have a social relevance in Italy and are actually perceived as an entity that have negative influences in the wellbeing and development of the society: *“as every violence related to mafia, they are a taboo in a vast part of Italy”* (R10), somehow acknowledging the social settings that justify the conspiracy of silence that stands behind the mafia. Furthermore, whenever the environment is taken into consideration, these perceptions became stronger. From the victim’s perspective, it is interesting to see a shift from the individual victimization of mafioso’s crimes – which are normally targeting one or few individuals -, to the perceptions that eco-crimes related to illegal waste trade have a broader number of possible victims.

The public’s awareness of the presence of ecomafie activities can be classified in three main groups: a) little knowledge, b) marginal knowledge, c) good knowledge. Several respondents recognized to have a little knowledge about the topic *“I know the problem marginally and superficially”* (R7) and admit that this knowledge comes mainly from *“obvious considerations rather than based on sources”* (R4). One explanation to this statement could be the general awareness of the ecomafie involvement in these types of activities as *“the waste disposal is a business, so it is granted that the criminal organizations are looking for profits”* (R4). By defining the waste disposal as a business and therefore assuming the interest of criminal groups to take part in the activities, it is

possible that the respondent supposes the existence of a grey area where the mafia groups and companies can operate.

The respondent that is to be considered to have marginal knowledge about the presence of *ecomafie* are those able to give some examples: *“I know there have been episodes of illegal shipping and disposal of the waste, but I couldn’t say how and where in my region”* (R5), or *“unfortunately the ecomafie reached the province of Brescia too”* (R8). However, in this case several answers are about the Land of Fires in Campania: *“I read some articles about the Land of Fires”* (R13), or *“I know something about the so-called Land of Fire. In some areas in Campania, mafia organizations as Camorra dumped and burned toxic waste or burned the waste that was not disposed”* (R16), (R15).

It is possible to notice that other than “Land of Fires”, the respondents were not able to give specific geographical location of where *ecomafie* crimes took place. In this category are included the answers that are more specific about *ecomafia* activities, for example about transnational illegal waste activities *“with regard to the mafioso intervention involved in the traffic and disposal of waste, I know of the redirection to Africa of large quantities of waste from Italy”* (R14). Despite not being able to give examples from the province of Brescia, the respondents show they have some knowledge about the *modus operandi* of how *ecomafie* operate in the waste cycle, i.e., dumping and burning toxic waste, redirection of waste to other places or lands.

The respondents that have a good knowledge about the presence and activity of *ecomafie* in the province of Brescia were able to give in-depth examples, with a complete description of the whole process:

“I know about a case in the province of Brescia where criminal organizations rented warehouses and used them as storage room for waste. In fact, the organized groups were buying the waste from companies that wanted to save money with waste disposal procedures. Then the criminal group would leave the warehouse unsupervised for years. The majority of damages were due to the acid from the expired batteries that polluted the water sources and the soil underneath the warehouse” (R1).

However, none of the respondents were able to provide the location of the crimes of illegal waste trade, but they only gave a general area. The interviewees manifest an overall concern about the involvement of organized crime groups in the illegal waste trade, together with the complacency of companies. The reasons of these concerns can be found in the structure of mafia-type organization and in the awareness of how they operate to be able to permeate into any kind of business.

The concerns of the public about the involvement of *ecomafie* in the illegal waste trade and the perception of a common victimization of the civil society exposed to the pollutants is relevant in the Antimafia discourse because it seems to involve a larger group of people. The “classic” mafia crimes, as previously mentioned, often targets individuals. On the other hand, eco-crimes related to the illegal

waste trade and pollution concerns a wider group. The perceptions of the risk of victimization of a larger group of people is enlightening and, according to the respondent, it can become an extremely powerful tool for the Antimafia and environmental movements in raising awareness and to require institution's interventions.

5.1.2 Corruption

Among the several characteristics of the *ecomafie* offences related to the illegal waste trade there is a key recurring activity that allows them to operate: corruption. The several studies about the *modus operandi* of the *ecomafie*, together with the documents from the courts show that corruption is the main practice used. The reasons are several and quite obvious: corruption allows the mafioso to achieve a power role in the bargain, whilst the other actors (businessmen, politicians depending on the case) are bound by the agreement of silence and often by a relationship based on clientelism: nobody would be proud if their affiliation with the mafia became public, no less through corruption, because of legal and economic repercussion. Also, corruption, for being a financial crime, can be considered generally harmless, from a point of view of the violence entailed. Another important feature of corruption is that it can easily escape control: it is important to remember that in Italy it is common to use cash, which is more complicated to track. The bribes can be used to achieve favouritisms in trades and deals, for example through the corruption of a laboratory technician, or by convincing the corrupted official to falsify the documents (“giro-bolla”).

The respondent agrees on the relevance of corruption as the first and most important feature that allows the *ecomafie* to operate. It is possible to identify three main uses of corruption, according to the interviews:

- (i) To control and to falsify the information.
- (ii) For an economic gain and to achieve an occulted assertion of power.
- (iii) To launder money.

Obviously, there is a mutual need and request of corruption to both reinforce the conspiracy of silence and to achieve influences on political forces. The results of corruption are clear: “*corruption creates the conditions for the offences*” (R9) through the implementation of deviated behaviour that permits the *ecomafie* to continue to work: “*everything is based on corruption: to spend less money in the waste disposal it is acceptable to give the waste, by paying less and saving, to those who dispose it in a wrong way or don't dispose of it at all*” (R13).

The perception of the respondent of this project confirms the theories of the scholars that demonstrate how corruption actually prevents the State from having a stronger role in the waste trade. The study of D'Amato (2012) for example, show that in the regions with confirmed higher mafioso

presence, the implementation of an urban waste collection system has been less efficient than in other areas of the country (D'Amato & Zoli, 2012).

The respondents share a common concern about corruption and agree about the need of political interventions to prevent corruption. They suggest the introduction of stronger punishment and measures, together with the joining of forces with the mass media to raise awareness about environmental crimes.

5.1.3 The “grey area” where *ecomafie* operates




The use of corruption makes possible to create the mafioso arena where *ecomafie* operate. Undoubtedly, corruption is essential in the grey area between legal and illegal activity. As mentioned so far, the *ecomafia* intervention can occur in just a part of the waste cycle process, and it has been proven that companies can be the first ones that approach *ecomafie* groups in order to establish a business agreement, and saving money from the waste disposal process: “*there are big companies that turn to the mafia to dispose of the toxic waste that comes from their activities to make it disappear, so that it doesn't look like the waste can be produced by them and therefore keep the industry in order*” (R18). Even though, the investigators proved that the reasons why companies may contact the mafia are different than those expressed in the interviews. It seems that the companies want to reduce the costs of waste disposal and avoid controls from the institutions, (Camera dei Deputati & Senato della Repubblica, 2012). Therefore, the agreement between *ecomafie* and companies is mainly driven by profit interests than to greenwashing purposes as expressed in the interview.

According to the elaboration provided by Sciarrone & Storti (2019), the creation of the areas where there is a contact between legal and illegal businesses follow three main processes: cohabitation, permeation and hybridization (Table 2). The cohabitation, sees the co-existence of the illegal and legal activities in the same type of market, mainly happening in informal types of economies. The permeation means a full overlap and interaction between the two markets, which is possible due to normative incompleteness; whilst with the hybridization, a combination and confusion among the enterprises, is possible because of normative incoherence. Despite being present in all of the three processes, according to the data collected it is possible to say that the *ecomafie* in the illegal waste trade are present mainly in the form of permeation and hybridization (Sciarrone & Storti, 2019, Ch.2).

The abilities of the *ecomafie* to navigate almost undisturbed between legal and illegal markets is the results of normative gaps that allow the intrusion of criminal organizations. In fact, the issues in the waste management systems are caused by a general failure in the management and in the political

framework, together with the lack of investments in this sector (D’Amato et al., 2015). These processes, as they create a permanent state of emergency, are central in the creation of the grey area where *ecomafie* work. At the same time, the *ecomafie* are able to create connection and to corrupt professionals, to have influence in the political decisions and to falsify important documents. It is important to note that, however the presence of these groups is known, at the current moment they do not hold the monopoly of the waste cycle.

Table 2: Boundaries between legal and illegal markets. Elaborated from Fig.1.1 from Sciarrone & Storti (2019. Ch.2).

<i>Processes</i>	Cohabitation	Permeation	Hybridization
Principal characteristic of the relations between legal and illegal	Coexistence in the same sector	Overlapping and interactions	Combination and fusion
Typical manifestations	Informal economy	Normative gap	Normative gap
<i>Graphic representation of the processes</i>			

The grey area where the mafia groups operate can be represented in two ways, according to Sciarrone & Storti (2020): the first representations draw the grey area expanding outside the normal mafia group, with different levels of collusion and corruption; whilst the second representation sees the grey area as something where the mafia operates: it is the extension of the illegal activities into the legal activities. In the grey area, the mafia groups are able to make alliances with companies and corrupted businessman and politicians, as the criminal groups often need the professional knowledge to be able to actually infiltrate into legal affairs. The thin layer between illegal and legal businesses in the waste cycle makes the *ecomafie* crimes more likely to become economic and corporate crimes, especially when money laundering and illegal buildings are implied.

The grey area where the *ecomafie* operate is organized following a market-based system of supply and demand. The research of D’Amato et al. (2015) tried to analyse how the presence of organized crime in the waste disposal cycle can influence the system. The results of the study show that the areas where the mafia presence is stronger also have lower number of municipal disposal sites, therefore the illegal waste disposal is more common (D’Amato et al., 2015, p.199) .

As Giovanni Falcone¹⁶ said, “the mafioso that is integrated in the legal economy will never lose his identity” (Falcone, 1991,p. 130). It means that the characteristics of the way to operates of the mafioso will remain the same even in legal settings, as his reputation of being “a man of honor” will always have an influence in the decision-making process so to beneficiate his business. It also means that the other actor that are involved in the business relations are aware of his reputation and of his role: the mafioso does not aim to hide his identity but to use it to gain power.

5.2 Civil society and environmental crime’s awareness

5.2.1 Are we paying attention? The role of mass media in the diffusion of information about environmental crimes.

Environmental crimes often have the characteristic of being silent and invisible: they do not grab the attention of the mass media and they are easily forgettable. The investigation of environmental crimes necessitates a series of professional skills and joint collaborations between different actors, which also requires a lot of time. This can cause delays in investigating and in the identification of the responsible. All of these features are some of the reasons why there is little public attention towards environmental crimes.

The role of information about environmental crimes is an essential element in the slow violence narrative. The interviewees’ perceptions of mass media’s coverage of environmental crimes can be summarized in four main groups:

1. The media don’t talk about environmental crimes.
2. The media sometimes talk about the topic, but not enough.
3. The media rarely talk about the topic, but when they do, it is through in-depth reportages.
4. When the media talk about the topic, they provide satisfactory information.

The interviewees have access to information about environmental crimes through local mass-media, as local TV channels, newspaper, information given by local politicians or environmental groups. Sometimes these news are shared by mass media that have a national coverage, but this is mainly in cases of disasters, and often are shared in the social media and internet. According to the knowledge of environmental crimes, a common association to the term is with the so-called “Land of Fires” (Terra dei Fuochi) which is located in the south of Italy, in Campania region: the knowledge about what happened in the Land of Fires is higher compared to cases in the area where respondent’s

¹⁶ In Italian: “*il mafioso che è inserito nel mondo economico legale non perderà mai la sua identità*”. Giuseppe Falcone (1939-1992) was a judge and prosecuting magistrate brutally killed by the mafia. The investigations and discovering he made during his life became extremely relevant in the studies against the mafia. He is now considered, together with judge Paolo Borsellino, the main icon of anti-mafia movements.

live, showing that the attention of the mass media is higher in cases of environmental disaster, thus ignoring cases that could seem less spectacular. Even if it will not be addressed in this research, the example raises an important hypothetical question: is it necessary, in the Italian case, to reach national media coverage about environmental crimes in order to raise awareness among the citizens? On the other hand, when asking about environmental disasters in the area of Brescia, the most common answer has been the Caffaro case and the PCB pollution, which has been deeply explained in the previous chapter. Still, as mentioned before, the Caffaro case is known on a national level (is a Site of National Interest) due to the gravity of the contamination, therefore the information is easily accessible.

A very interesting pattern in the answers of the survey combines the diffusion of information and slow violence. The respondents address the importance of the timely news report about environmental crimes because “*the knowledge about these facts and the news about them takes too long to be shared (...)*” (R1), which is aggravated by the lack of updating about the facts “*the news is released when the illicit action already took place and then are put into silence because of some interests*” (R2). The latter opinion refers also to the conspiracy of silence, typical mafia behaviour that in this case seems to be used by others with the goal to avoid further scandals. It also expresses a sort of scepticism towards the mass-media and the actors involved in the eco-crimes. Furthermore, the respondent raised the importance of more information about the investigations, obviously without interfering with them. In addition to this, nobody addresses the issue of sharing the information about the responsibility for the restoration of the polluted sites.

The second main topic that arose, is the characteristics of sharing the news about environmental crimes according to the description of the slow violence processes: the lack of spectacularism or immediate harm makes the communication about the crimes more challenging. At the same time, the respondent addresses the inadequacy of the news “*there is a lack of correct information (...) the risks for human health are not being perceived*” (R9). Both the inadequacy of the news and an implied form of “conspiracy of silence” can be related to the concept of epistemic violence (Davies, 2019). Epistemic violence can result from the narrative of slow violence and how it is influenced by both political perspectives and by the media prioritization of certain information rather than others. The epistemic violence occurs also when a topic is addressed but there is a specific choice of the of who is conveying the information, which could affect the overall narration of the issue as it could be biased due to personal interests and personal perception. The biased communication risks to cause a confusing and not completely reliable story. In the words of the author, “ignoring local claims of environmental injustice helps create a self-reinforcing cycle of brutality that is structural, slow, and epistemic” (Davies, 2019, p.13).

5.2.2 Institution's roles and trust

The way communications about environmental crimes are shared has an influence on the opinions and on the building of the trust of the citizens towards institutional bodies. Public institutions are crucial in both sharing information and in improving measures to preserve the safety of the population. In this framework, the understanding of what is considered an institution comprehends institutions as governmental and State authorities and police forces, as part of the system and norms that regulates the society and the wellbeing of the citizens. Apropos of environmental crimes, the action that the individuals could take are few, whilst the institutions could have a stronger voice and actually create measures to contain them.

The civil role of individuals and society in the fight towards environmental crimes can be analysed following four main trends:

- a) Resignation.
- b) Awareness.
- c) Reporting.
- d) Responsibility.

With the category resignation, I refer to the opinion that individuals have little or no power in preventing environmental crimes, because they do not have the tools and the knowledge to do so, which is also perceived by the statement given by R19: *"nothing"*. On the other side, R15 said *"directly I can't do much, maybe I can apport by sharing the news"*, stressing the importance of raising awareness. Concerning what the civil society can do, it is possible to perceive some lack of faith in what kind of influence a common response could have, especially in the cases where environmental associations are not involved.

One shared opinion regards the importance of the individual's contribution in raising awareness about environmental crimes. Individuals can partake in raising awareness by improving their own waste disposal and recycling methods *"follow good practices in the daily disposal of domestic waste"* (R4) but mostly by paying more attention to environmental matters, support environmental associations and participate in the action organized by the civil society. At the same time, the role that the civil society should have is to favour activities that raise awareness: *"first of all these problems should be recognized for their gravity, because there is a lot of ignorance about it. Second of all, it is necessary to talk about how the mafia act, which is probably the most complicated and challenging part"* (R3). The first step in raising awareness is by informing and teaching young generations: *"I think environmental crime should be a topic that the young generation should be sensitized about"* (R10). There are several ways suggested to increase the awareness, such as non-violent protests, meeting and information for businessmen and enterprises, and improving debates

among citizens. The suggestion of informing new generations is crucial, as it is perceived as the most obvious and effective tool to confront the problems of slow violence, pollution and illegal waste trade.

Legally speaking there are some actions that individuals can actually do in order to fight the illegal waste trade: reporting to the institution if they witness or are aware of any illicit action, or if they are victims of intimidations and threats by the OCG. However, this practice becomes very complicated if there is the suspicion that mafia groups are involved, as there is the common perception that there could be severe repercussions for the person that denounced the criminal activity. This is addressed by some respondent: *“be able to denounce without risk of personal retaliations”* (R2), but luckily is the minority. A very interesting opinion is given by R10, who explains that the lack of actions of reporting and the feeling of resignation can be caused by the conspiracy of silence: *“as every violence related to mafia, they are a taboo in a vast part of Italy”*. Anyway, later R10 suggests that individual can report the illicit activities to the authorities.

Despite few people admitting fear of personal retaliation following denouncement, the majority of the respondents seem to be keen to do their part as citizens and report issues. In the last decades, thanks to the joint work of Antimafia associations and institutions, the procedures to denounce illegal activities that involved the mafia became easier and extremely confidential. If individuals who denounce illegal activities are concerned that they could be perceived as weaker voices and more at risk of being ignored by institution or more exposed to retaliations, the associationism of the civil society that want to fight the mafia has been very strong and effective. The civil society should use its power as an aggregated force with a voice to report to the competent authorities, and to continue watching and report any activity that is illegal and should to raise awareness by denouncing the issues through the mass media.

In the category of individual responsibilities, it is possible to find some of the issues already mentioned but addressed in such a way where each person is responsible for improving them. For example, denouncing is considered a responsibility of the individual as a citizen, as it is raising awareness. Also, some interviewees emphasize the role of personal choice in the local political elections: *“to prevent it, I think it is possible to vote for local political parties or individuals interested in the topic and to the good management of waste in the area. When denouncing, it is important to contact the correct authorities in case of illegal activities in waste management”* (R16). The responsibility of the civil society includes the monitoring of the development of the trials and to demand restorations of the polluted sites. Also, the respondents suggest that civil society should be more active in demanding transparent reports, by both the municipalities and companies, about how the waste has been managed and its environmental impact, this should be easily understandable for everyone and this should try to avoid greenwashing. Another interesting perspective that was raised

relates to how the society should recognize the existence of a problem with waste and which behaviours caused it.

To conclude, it is noteworthy that people consider the action taken by the civil society as more incisive compared to individual actions and are keener to individually raise awareness with the purpose of contributing to the cause of the civil society. This aspect can be compared to the conception of the environment as a “we”: in other words, as the environment is the place where “we, the community”, live, it is also the duty of the civil society to protect it by demanding more actions to tackle illegal activities.

Conclusions

The purpose of this research is to study environmental crimes related to the waste trade in the province of Brescia, Italy. To do so, the study addresses the perception of the citizens of the province of Brescia about the seriousness of illegal waste trade crimes, using it as an analytical concept to further apply the theory of slow violence. Moreover, it intends to address the perception of the role of organized crimes groups and to understand how the perception of environmental crimes changes whenever *ecomafie* are involved. Lastly, it inquires into the perceived role of civil society, individuals and mass media in raising awareness of environmental crimes.

The province of Brescia was chosen as a case study because of its historical background of environmental disasters, such as the PCB pollution made by the Caffaro factory. Furthermore, the area is the setting of a significant number of landfills related to activities of waste trades that sometimes take place in illegal waste trade activities. Environmental crimes are surely a topic of interest in the province of Brescia, indeed the transformation of the area into the “Land of Fires” of Northern Italy is becoming a fact more than an assumption or a shared fear. The data about the province clearly show different types of contamination, and it seems that pollution practices continue in spite of past lessons. The exploitation of the land for the creation of waste disposal sites is raising some concerns among the population as it threatens the wellbeing of the citizens. The risks of future environmental disasters demonstrate the need of improving and investing in more controls and infrastructures to prevent the disasters, restore the affected areas and punish the responsible.

I would like to remember to the reader that the pollution cases exposed in this project are only the most relevant of the ones recorded in the province of Brescia. The situation is even worse than the one depicted here: there are other cases of pollution in the water sources caused by industries and I did not include the pollution caused by the dumping of waste from agriculture and livestock industry, which seems to be another relevant cause of contamination in the province of Brescia (Camera dei Deputati & Senato della Repubblica, 2012).

The intricate context of contamination in the province is confirmed by the opinions of its citizens: the majority of the interviewees believe there are ongoing processes of pollution that correspond to the slow violence processes, characterized by the lack of information about them from the institutions and mass media. Furthermore, the majority of the citizens interviewed considered themselves as victim of slow violence processes caused by the exposure to pollution. In this case, the spatial diffusion of the pollution affects the population indistinctly, as the locations of the landfills are normally chosen by geographical and geological factors and by the easy access to permissions by the

local administration, rather than guided by reasons that could be associated with environmental racism. It means that the victims of these slow violence processes caused by the exposures to pollution have the common feature of living in the area, but they cannot be considered marginalized groups or minorities: the exposure affects everyone.

A further topic addressed in the research is the involvement of *ecomafie* in activities of illegal waste trade, and how it influences the seriousness of the environmental crimes. A common opinion is that the involvement of mafia-type organizations in any kind of activities is an aggravated element, that needs tailored measures to be both prevented and stopped. The mere characteristic of collaborating with a mafia group, or being part of it, is considered more serious than if the crime was committed by someone unrelated to the OCG. However, some respondents explain how it does not matter who committed the action: any illegal action against the environment is equally serious.

The last decades saw the increased involvement of businessmen in the operation of illegal waste trade, either by accepting a deal with an *ecomafia* group or by running the operation independently. “*Pecunia non olet*” is a Latin expression that means “money does not smell”, often used to justify the reasons that stand behind bargains with actors whose actions or reasons are considered immoral. *Pecunia non olet* fits perfectly in the illegal waste trade: waste smells, the illegal business is immoral especially when *ecomafie* are involved, but the enormous profits do not stop businessmen to consider it as a bad action, thus making the illegal waste trade the most profitable activity for the *ecomafie*. The initiative of the businessmen to get involved in the illegal waste trade confirms what Giuseppe Falcone said: “*si può benissimo avere una mentalità mafiosa senza essere un criminale*”, which means: “it is possible to have a mafioso mentality without being a criminal” (Falcone, 1991, p.81). Indeed, the willingness of acting in the grey area between legal and illegal, together with the *ecomafie* demonstrates a mafioso mentality that aims to make profits only for greed, at the expense of the entire society.

There has been a lot of effort on the part of the Municipality of Brescia to improve the recycling and re-use of materials, and to properly dispose of household waste. However, the amount of industrial waste produced confirmed the need for more investments in technological research and in managing strategies to implement the re-use of the materials, therefore less waste would need to be buried in the landfills. At the same time, more transparency about the waste cycle is needed: information is the key factor. It also shows the need for more detailed legislation and of a more accurate implementation tailored to the need of each Municipalities. The *ecomafie* demonstrate their ability to infiltrate into any kind of industrial business, but in this case, instead of aiming at individuals, the consequences of their actions are faced by a larger amount of people. Further studies about the slow violence processes in the Province of Brescia could be done by creating focus groups

that interview the citizens living in the area which are most affected by the pollution, addressing the participation in local environmental associations.

One of the characteristics of slow violence processes, as explained in the research, is the lack of information about the exposure to the contaminants, or by a selection of the information shared, which created forms of epistemic violence. The same epistemic violence can be replied to in the lack of information about the *ecomafie*'s involvement in the illegal waste trade. I refer to the main mass media and information sources, which are normally accessible to every citizen on a daily basis, not to just specialized works or for clarifications of institutions or environmental associations. The need for clearer information about *ecomafie* is needed in the public discourse because only by knowing how they operate and what makes them so strong and dangerous it will be possible to stop them. As Felicia Impastato¹⁷ said, “*la mafia non si combatte con la pistola ma con la cultura*”, which means “mafia should not be fought with guns but with culture” (Wikimafia, n.d.-b). This affirmation is even more important whenever we combine the activities of *ecomafie* and the processes of slow violence of pollution resulting from their activities.

There is another relevant element of slow violence that can be depicted and applied to mafia-type activities: being silent and invisible. Certainly, it is the characteristic that makes exposure to pollutant dangerous for humans. As discussed in Chapter 4, the features of the illegal waste trade could be analyzed with the eye of the slow violence theory, thereby the whole illegal waste cycle could be considered permeated by processes of slow violence whenever they are considered as a chain of actions that will lead to pollution and harms towards both the ecosystems and human life. Silence is also a characteristic of the mafia: the conspiracy of silence, *omertà*, is the key element that, together with corruptions and intimidations, form the basis of their activities. Giuseppe Impastato¹⁸, said: “*la mafia uccide, il silenzio pure*”, namely “the mafia kills, so does silence” (Wikimafia, n.d.-c), referring to the conspiracy of silence created by the refusal of people to denounce mafia-type activities. It is important to note that one of the most common answers to the survey when addressing the role of individuals and civil society to fight environmental crimes are raising awareness, denounce and report illicit activities and promote education, considered the only way to fight environmental crimes, showing the willingness of the citizens to stop the injustice and the abusive role of the mafia.

¹⁷ Felicia Impastato (1916-2004) was an activist against the mafia. After her son Giuseppe Impastato was killed by the mafia because of his activities to publicly denounce them, she fought for the rest of her life to find the truth about what happened to her son. Eventually, in 2002 the mafia boss Gaetano Badalamenti was charged with life sentence for the murder as the ordered of the murder together with Vito Palazzolo, who was charged with 30 years of reclusion.

¹⁸ Giuseppe Impastato (1948-1978) was a journalist and activist known for his denouncing radio programs against the mafia boss of his town. His murder was at first considered a terrorist attack, assuming that Giuseppe died while installing a bomb on the rail tracks. It was thanks to the amazing determination of Felicia Impastato and Giuseppe's friends that, in the 2000s the responsible was finally sentenced for the crime. However, the investigations are still ongoing to find the responsible for the misleading investigations.

The activities of the mafia are known among the Italian society, but the preconception that they are limited to certain business sector and specific areas is still widespread. The presence of *ecomafie* in the North, but especially people's perceptions of them, confirm the opposite. The illegal waste trade is proof that the environmental crimes are affecting a larger part of the population: is not anymore, an issue of personal justice, but it has become something bigger, where everyone is involved, thereby calling for the attention of everyone. The idea of "I do not see/ I do not speak/ I do not listen", which is the basis of *omertà*, needs to be radically reversed. Not only about the involvement of *ecomafie*, which surely aggravate the issues, but about environmental crimes in general.

To conclude, in a historical moment where environmental topics are becoming common in the public discourse, this project aims to stress the importance of raising awareness about environmental crimes, which need to be more discussed in every social arena. Every action we take to achieve sustainability can be easily overcome if, on the other side, it is not balanced with the policies that can prevent environmental crimes. The interest of organized groups in the environmental market demonstrates the need for more preventive measures and awareness among civil society and businessmen. For example, the presence of *ecomafie* in the renewable energy market has already been proven (Legambiente, 2019b). The environmental and Antimafia associations demonstrate the willingness of the civil society to commit and participate to raise awareness about environmental crimes and *ecomafie*. The endless fight and involvement in searching for the truth prove that people are tired of injustices and want to work to create a better society. It is imperative that both civil society and authorities take initiatives to tackle the concern about environmental crimes by providing a fair debate about them and overcoming personal interests and profits with the purpose of creating a society where environmental matters are at the centre of attention.

References

Figure Index

Figure 1: Types of environmental crimes committed in 2018. Source: Legambiente (2019, p.36). .24	
Figure 2: Types of waste confiscated in Italy (2002-2020), for 127 investigations over 490. Total: 55.158.515 ton. Source, Legambiente (2019).....	33
Figure 3: The illegal waste trade cycle	35
Figure 4: Location of the province of Brescia, Italy. Source: Wikipedia. (Retrieved the 13.05.2021 from: https://it.wikipedia.org/wiki/Provincia_di_Brescia#/media/File:Brescia_in_Italy.svg).	37
Figure 5: Localization of the Incinerator a2a (red) and the Caffaro factory (blue) in the city of Brescia (purple).....	38
Figure 6: Caffaro site. In red the area where the soil is contaminated by PCB and three landfills; in blue the water sources contaminated by PCB. Source: Regione Lombardia, “Brescia Caffaro”, law 179/2002.....	40
Figure 7: Map of the polluted sites in the province of Brescia, described in this research. Legenda: Caffaro SIN, in the blue square; in companies that caused radioactive pollution. In green the municipalities with cases of pollution. In grey the starting point of A35.	42
Figure 8: Number of people investigated and charged for art.260 (Environmental Act) per year. Source: DDA of Brescia.	48
Figure 9: Number of people investigated and charged for environmental pollution (Art. 452 bis Penal Code) per year. Source: DDA of Brescia.....	49
Figure 10: Map of the Province of Brescia. Source: Province of Brescia	91

Tables Index

Table 1: Comparison between the number of cases recorded per each comma of Art.452 Penal Code, on National level and in Brescia district in 2018. Sources: Legambiente (2019 p.60) and Table 3 Appendix.....	50
Table 2: Boundaries between legal and illegal markets. Elaborated from Fig.1.1 from Sciarrone & Storti (2019. Ch.2).	74
Table 3- Number of environmental crimes cases registered by the Public Prosecutor Brescia between 2015 and 2019. Source: Ministry of Justice, General Directorate of Penal Justice Office I, dept. of statistic data and monitoring, dept. of Brescia. E-mail: biblioteca.aapp.min@giustizia.it ..	92
Table 4 - Survey questions and coding	94

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Appendix

1. Map of the province of Brescia

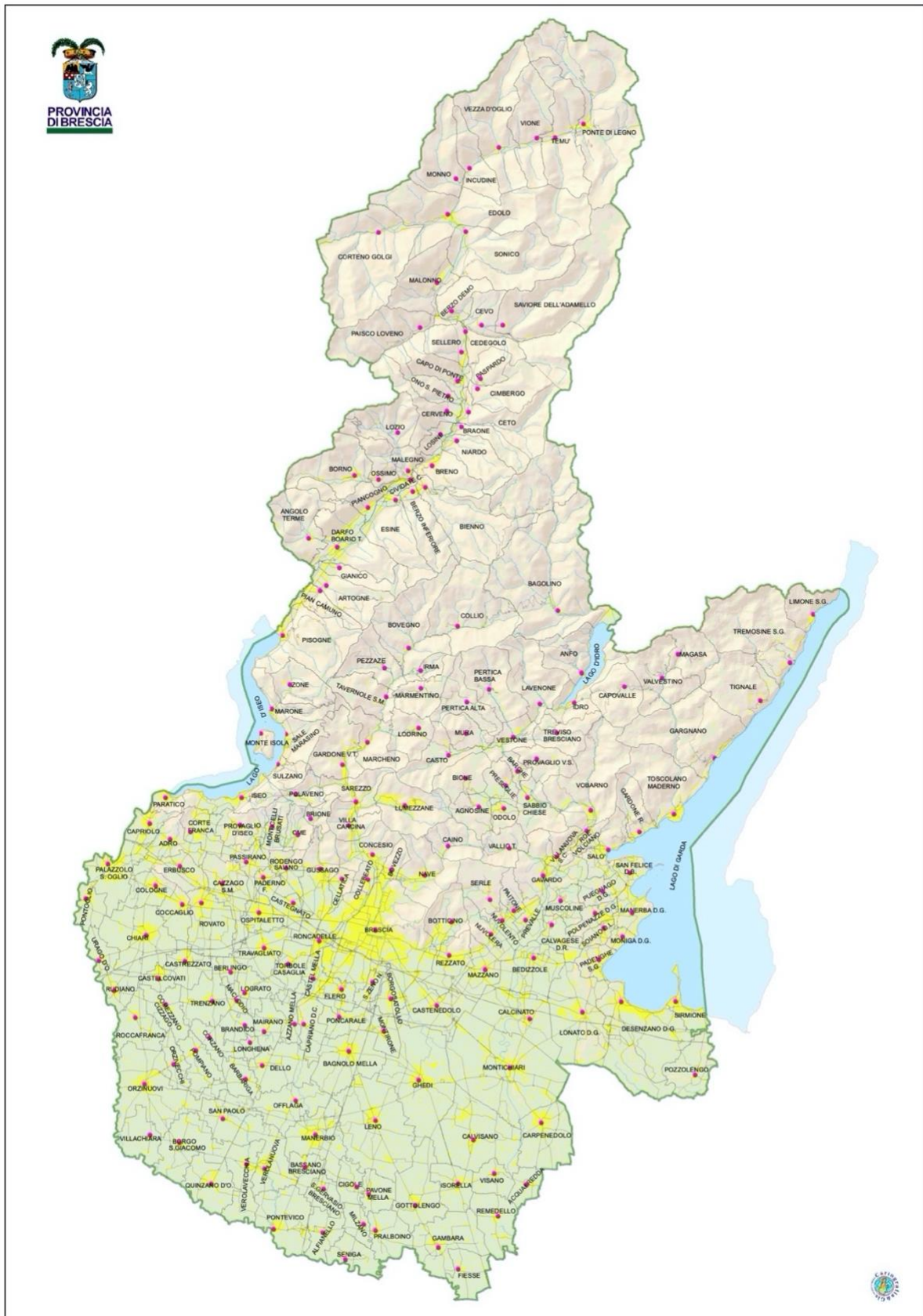


Figure 10: Map of the Province of Brescia. Source: Province of Brescia.

2. Environmental crimes registered by the Public Prosecutor of Brescia (2015-2019)

Table 3- Number of environmental crimes cases registered by the Public Prosecutor Brescia between 2015 and 2019. Source: Ministry of Justice, General Directorate of Penal Justice Office I, dept. of statistic data and monitoring, dept. of Brescia. E-mail: biblioteca.aapp.min@giustizia.it.

	Year	a) Cases registered in the year (identified person)	b) Number of people investigated	c) Cases registered in the year (unidentified person)	d) Cases with request of dismissal (identified person)	e) Number of people investigated in procedures with request of dismissal	f) Cases with request of dismissal (unidentified person)	g) Cases with criminal proceedings	h) Number of people charged for the crime
Art. 256 comma 3, (Environmental Code) unauthorized waste management	2015	8	16	0	1	1	0	2	4
	2016	3	7	2	0	0	1	1	2
	2017	4	8	1	1	2	1	0	0
	2018	9	39	1	3	4	0	5	16
	2019	10	15	15	1	2	1	9	21
Art. 256 bis, (Environmental Code) illegal waste arsons	2015	5	10	0	0	0	0	0	0
	2016	4	15	1	2	12	1	0	0
	2017	5	12	0	1	2	0	1	3
	2018	13	20	4	4	7	3	10	13
	2019	12	15	0	4	4	0	10	14
Art.257 (Environmental Code) site restoration	2015	2	3	0	0	0	0	0	0
	2016	3	3	0	2	3	0	0	0
	2017	1	1	0	0	0	0	0	0
	2018	4	5	0	1	1	0	3	13
	2019	2	2	0	0	0	0	1	2
art. 259 (Environmental Code), illegal waste trade.	2015	6	9	0	0	0	0	0	0
	2016	1	1	1	1	1	0	0	0
	2017	2	2	0	2	2	0	0	0
	2018	0	0	2	0	0	0	1	4
	2019	2	2	2	0	0	1	0	0
Art. 260 (Environmental Code), organized activities for illegal waste trade. (Abrogated in 2018)	2015	13	61	1	1	23	0	1	7
	2016	4	5	3	0	0	0	0	0
	2017	10	31	1	1	2	0	2	26
	2018	10	35	6	0	0	3	8	50
	2019	1	25	2	3	34	1	3	30
Art. 452 bis (Penal Code), environmental pollution	2015	1	4	1	0	0	0	0	0
	2016	1	1	3	0	0	1	0	0
	2017	12	33	9	1	1	1	4	25
	2018	8	18	7	4	8	5	4	22
	2019	8	21	4	4	5	3	3	10
Art. 452 ter (Penal Code), death or injuries consequent to the crime of	2015	0	0	0	0	0	0	0	0
	2016	1	1	1	0	0	0	0	0
	2017	0	0	0	1	0	0	0	0
	2018	0	0	0	0	0	0	0	0
	2019	0	0	0	0	0	0	0	0

environmental pollution									
Art. 452 quater (Penal Code) environmental disaster	2015	0	0	0	0	0	0	0	0
	2016	0	0	0	0	0	0	0	0
	2017	1	1	0	0	0	0	0	0
	2018	0	0	0	0	0	0	0	0
	2019	3	6	1	0	0	0	0	0
Art. 452 quinquies (Penal Code) (crimes against the environment)	2015	0	0	0	0	0	0	0	0
	2016	1	1	1	0	0	0	0	0
	2017	0	0	1	1	1	0	0	0
	2018	2	3	2	0	0	2	1	1
	2019	4	9	0	2	3	1	3	8
Art. 452 sexies (Penal Code) Traffic and disposal of materials with high radioactivity	2015	0	0	2	0	0	0	0	0
	2016	0	0	0	0	0	0	0	0
	2017	0	0	1	0	0	0	0	0
	2018	0	0	0	0	0	1	0	0
	2019	0	0	0	0	0	0	0	0
Art. 452 septies (Penal Code) obstruction of control	2015	0	0	0	0	0	0	0	0
	2016	0	0	0	0	0	0	0	0
	2017	1	2	0	0	0	0	0	0
	2018	1	1	1	1	2	0	1	6
	2019	1	1	0	0	0	0	0	0
Art. 452 octies (Penal Code) aggressions : mafia-type organization	2015	0	0	0	0	0	0	0	0
	2016	0	0	0	0	0	0	0	0
	2017	0	0	0	0	0	0	0	0
	2018	0	0	0	0	0	0	0	0
	2019	0	0	0	0	0	0	0	0
Art. 452 terdecies (Penal Code), omitted remediation	2015	0	0	1	0	0	0	0	0
	2016	5	15	0	1	1	0	0	0
	2017	2	5	2	1	3	1	1	1
	2018	2	3	2	2	3	1	2	7
	2019	2	4	0	1	7	0	1	2

3. Survey questions

The survey was conducted via Nettskjema. The questions are open-ended, with the exception of Q10, Q11 and Q17 that are multiple choice and Q15 that is a scale (1-5). Section 1 is composed of both multiple choice and open-ended questions. Q26 (comments and feedback) is not included in the analysis.

Table 4 - Survey questions and coding

Section	CODE	QUESTION
	Q1	1. Informal consent
Section 1: mapping environmental crimes	Q2	2. Region where you reside
	Q3	3. Province where you reside
	Q4	4. Municipality where you reside
	Q5	5. Age
	Q6	6. Sex
	Q7	7. Level of education achieved
	Q8	8. Job occupation
	Section 2: environmental crimes	Q9
Q10a		10. Do you know of any environmental crime committed in the area you live? A) Forest fires
Q10b		10. Do you know of any environmental crime committed in the area you live? B) Illegal waste trade/disposal
Q10c		10. Do you know of any environmental crime committed in the area you live? C) Soil pollution
Q10d		10. Do you know of any environmental crime committed in the area you live? D) Water source pollution
Q10e		10. Do you know of any environmental crime committed in the area you live? E) Illegal building
Q10f		10. Do you know of any environmental crime committed in the area you live? F) Burning industrial warehouse where waste was stored
Q10g		10. Do you know of any environmental crime committed in the area you live? G) Never heard of it
Q10h		10. Do you know of any environmental crime committed in the area you live? H) Others
Q11a		11. Where did you hear about these accidents/crimes from? A) I witnessed them
Q11b		11. Where did you hear about these accidents/crimes from? B) Local news
Q11c		11. Where did you hear about these accidents/crimes from? C) National news
Q11d		11. Where did you hear about these accidents/crimes from? D) Social network and internet
Q11e		11. Where did you hear about these accidents/crimes from? E) Environmental associations"
Q11f		11. Where did you hear about these accidents/crimes from? F) School/university
Q11g		11. Where did you hear about these accidents/crimes from? G) Never heard of it

	<i>Q11h</i>	11. Where did you hear about these accidents/crimes from? H) Others
	Q12	12. Do you know any specific case? Specify
	Q13	13. Do you think environmental crimes are less or more important than other kind of crimes? Why?
Section 3: illegal waste trade and disposal and involvement of ecomafie	Q14	14. Do you think the media covers environmental crime issues in an adequate way?
	Q15	15. In your daily life, how important is the correct recycling of waste? (grade from 1-5)
	Q16	16. Are you afraid of the consequences that a wrong recycling and disposal could have on your life and on the environment, you live in?
	<i>Q17a</i>	17. Are there consequences that scare you more than others? A) Health issues
	<i>Q17b</i>	17. Are there consequences that scare you more than others? B) Health issue for family members
	<i>Q17c</i>	17. Are there consequences that scare you more than others? C) Pollution of the ecosystem
	<i>Q17d</i>	17. Are there consequences that scare you more than others? D) Water source pollution
	<i>Q17e</i>	17. Are there consequences that scare you more than others? E) Air pollution
	<i>Q.17f</i>	17. Are there consequences that scare you more than others? F) Social consequences (corruption, impunity)
	<i>Q17g</i>	17. Are there consequences that scare you more than others? G) Damages to biodiversity and conservation
	<i>Q17h</i>	17. Are there consequences that scare you more than others? H) Others
	Q18	18. Who do you think should be in charge of the waste cycle (municipality, region, state, privates)? Why?
	Q19	19. Since the 1980s, several organized crime associations are involved in the waste trade. Do you know anything about this issue, and if yes, could you briefly note down what you know?
	Q20	20. The kind of violence used by ecomafie in the illegal waste trade is different than in other kind of activities because it does not directly affect people but the environment, and its consequences will last for decades. This is the concept of “slow violence”: an invisible- yet continuous harm that affects environment and people, and which is often out of the spotlight of the media. In fact, is not common to hear about crimes of illegal waste trade. What is your opinion about this?
	Q21	21. Do you consider yourself a victim of the “slow violence” created by illegal waste trade? Why?
	Q22	22. In your opinion, do you consider the environmental crimes committed by the mafia less or more violent/dangerous than other crimes they commit?
	Q23	23. In your opinion, what do you think is the role of corruption in the ecomafie activities?
Q24	24. What can you do, as a citizen, to prevent/speak up about environmental crimes?	
Q25	25. In your opinion, what should be the role of the civil society to prevent the environmental crimes committed by ecomafie?	
Section 4: conclusions	Q26	26. Comments, feedbacks

4. Interviewer's responses

This section collects the answers of the respondent that were considered in the analysis. The interviews are anonymized and referred to as R1, R2 (...) in the text. Respondents 20, 21 and 22 are identified with (*) as they are not from the province of Brescia, but their insight were considered relevant in the analysis.

Respondent 1

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	18
Q6	Male
Q7	High school diploma
Q8	Railway track worker
Q9	Illegal waste trade and its wrong disposal (into water sources, nearby lands, crop fields and farms); arsons; illegal buildings in dangerous areas or in protected areas.
Q10a	
Q10b	X
Q10c	
Q10d	
Q10e	X
Q10f	X
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	X
Q11d	X
Q11e	
Q11f	X
Q11g	
Q11h	
Q12	Illegal waste trade in Lombardia, Caffaro case.
Q13	I think they are another type of crimes because they affect permanently the entire population as a whole.
Q14	Fairly, but there are a lot of small cases that are not being covered enough.
Q15	4
Q16	Yes, a lot
Q17a	X

<i>Q17b</i>	X
<i>Q17c</i>	X
<i>Q17d</i>	X
<i>Q17e</i>	X
<i>Q.17f</i>	
<i>Q17g</i>	X
<i>Q17h</i>	
Q18	A public institution together with the municipality, with competent and responsible staff.
Q19	I know about a case in the province of Brescia where criminal organizations rented warehouses and used them as storage room. In fact, the OCG were buying the waste from companies that wanted to save money with waste disposal procedures, but then they (the OC) would leave the warehouse unsupervised for years. The majority of damages were due to the acid from the expired batteries that polluted the water sources and the soil underneath the warehouse.
Q20	The knowledge about these facts and the news about it takes too long to be shared, there are no controls that could have prevented the environmental damage. There is the need of an institution that works on several areas of the territories and checks the disposal of every kind of waste.
Q21	Luckily, I do not live in the area damaged by the Caffaro, but I do believe that the air pollution of Brescia affects me too.
Q22	Less violent, because often the ecomafie offers to purchase the waste or manage the disposal offering a lower price than the specialized enterprises.
Q23	Conspiracy of silence (omertà) in the controls and falsification of information.
Q24	Report in case you get to know the existence of certain crimes.
Q25	A bigger responsibility in reporting to the competent authorities also the tiniest mistake in the disposal process.

Respondent 2

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	64
Q6	Male
Q7	High school diploma
Q8	Retired
Q9	All the activities that damage the ecosystem.
<i>Q10a</i>	
<i>Q10b</i>	X
<i>Q10c</i>	X
<i>Q10d</i>	X
<i>Q10e</i>	
<i>Q10f</i>	

<i>Q10g</i>	
<i>Q10h</i>	
<i>Q11a</i>	X
<i>Q11b</i>	X
<i>Q11c</i>	X
<i>Q11d</i>	
<i>Q11e</i>	
<i>Q11f</i>	
<i>Q11g</i>	
<i>Q11h</i>	
Q12	Some
Q13	Important because they involve the community.
Q14	No
Q15	5
Q16	Enough
<i>Q17a</i>	X
<i>Q17b</i>	
<i>Q17c</i>	X
<i>Q17d</i>	X
<i>Q17e</i>	X
<i>Q.17f</i>	
<i>Q17g</i>	
<i>Q17h</i>	
Q18	Local administration with the supervision of a central institution.
Q19	Little
Q20	Unfortunately, the news is released when the illicit already took place, and then is put into silence because of some interests.
Q21	No
Q22	Environmental crimes look less violent because people are rarely involved, and because there is no cruelty, they are often unnoticed.
Q23	Economic gain and occult assertion of power.
Q24	Be able to denounce without risk of personal retaliations.
Q25	To isolate immediately the actor involved and assign sure and severe penalties.

Respondent 3

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	19
Q6	Female

Q7	High school diploma
Q8	Student
Q9	All the actions that compromise the natural course of nature and/or modifies the environment, destroy it and cause irreversible damages to the ecosystem
Q10a	
Q10b	X
Q10c	X
Q10d	
Q10e	
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	
Q11d	
Q11e	
Q11f	
Q11g	
Q11h	
Q12	Caffaro
Q13	Environmental crimes are a category of crimes that is often underrated. Besides being at the same level of the other crimes, they can be causes of some damages that cannot be "corrected" or "solved" by an arrest or a trial. For this reason, from my point of view, environmental crimes are a type of criminality that has more relevance with respect to other types of criminality, therefore it needs a different treatment, a more invasive one, as it implies the "correction" of several actors, not only of an individual. This is because also small daily action could be considered as "crimes" against the environment.
Q14	On a certain level yes, but I think that to open the eyes of the people, the reality of facts has to be shared. It doesn't mean that "mass media-terrorism" is the best solution, but it could help to achieve some results.
Q15	4
Q16	Yes
Q17a	X
Q17b	X
Q17c	X
Q17d	
Q17e	
Q.17f	
Q17g	X
Q17h	
Q18	The States should have it as first interest and guarantee it at 100%.

Q19	Unfortunately, not enough. I know that in the long turn these activities of illegal disposal have been used also outside of the mafia-type activities.
Q20	Besides being invisible, the long-term effects happen. It should be important to continuously invest (conceptually) in people and association that know the problem and make all the efforts they can to act in the proper way. It should also be important to talk about these thematic and show the damages that we are facing (also in apocalyptic terms, if necessary), until everyone will understand the proper way to act.
Q21	I am and we all are. It doesn't matter if the effects are visible or not, the ecosystem has been under attack for far too long.
Q22	The principles of the mafia have the same severity, no matter in which situation they happen. This is because, in this specific case, who wants to rebel cannot do it.
Q23	The corruption is relevant. On one hand it forces who is involved not to talk. On the other hand, it shows the weakness of mankind that rather chose to put themselves and the ecosystem in danger just for money or everything that could come with it
Q24	To report and to participate actively to the activities planned to protect the environment, maybe as local protests. Being aware and informed.
Q25	First of all, these problems should be recognized for their gravity, because there is a lot of ignorance about it. Second of all, is necessary to talk about how the mafia act, which is probably the most complicated and challenging part.

Respondent 4

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Roncadelle
Q5	49
Q6	Female
Q7	High school diploma
Q8	Clerk
Q9	Offences that directly and/or indirectly damage the environment and/or the public health.
Q10a	
Q10b	X
Q10c	X
Q10d	X
Q10e	
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	X
Q11d	
Q11e	

<i>Q11f</i>	
<i>Q11g</i>	
<i>Q11h</i>	
Q12	Yes, for example the pollution of water sources and soil committed by the Caffaro in Brescia.
Q13	They are serious as well because they have consequences on human life, on people's health. The effects are long-lasting and are difficult to fix (remedy/restore).
Q14	Not sufficiently...they limit to talk about the problem only if there are striking facts or news that can catch the interest of the viewers.
Q15	4
Q16	First of all, the wrong recycling has economic consequences. The wrong disposal has effects on the environment, on the health and quality of life.
<i>Q17a</i>	X
<i>Q17b</i>	
<i>Q17c</i>	X
<i>Q17d</i>	X
<i>Q17e</i>	X
<i>Q.17f</i>	
<i>Q17g</i>	
<i>Q17h</i>	
Q18	The municipality...as is directly involved and it should be more aware and responsible in the choices.
Q19	The waste disposal is a business, so is granted that the criminal organizations are looking for profits. It is more an obvious consideration than one based on sources.
Q20	Exactly because is invisible it represents a severe risk because is rarely contrasted and its effects are underestimated. To increase the awareness more information about it is needed.
Q21	For sure I am a victim because the consequences of slow violence involve everyone.
Q22	They are crimes, so they have to be punished. I do not agree to make classifications about criminal behaviours.
Q23	Corruption opens the doors for these kinds of crimes and facilitates its implementation.
Q24	Follow good practices in the daily disposal of domestic waste, pay attention to environmental topic, promote the awareness, because even if these behaviours are invisible, they have extremely harmful consequences; report any illicit behaviours of which you become aware.
Q25	Raising awareness and improve the knowledge and the sense of responsibilities.

Respondent 5

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Castel Mella
Q5	33
Q6	Female

Q7	Master's degree
Q8	Clerk
Q9	Every illicit behaviour that has the harm or pollution of natural resources (water, air, soil, nature) as direct or indirect consequences.
Q10a	X
Q10b	X
Q10c	X
Q10d	X
Q10e	X
Q10f	X
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	X
Q11d	
Q11e	
Q11f	X
Q11g	
Q11h	
Q12	
Q13	In general, I think they are equally important. I mean that they deserve to be properly addressed with investigations that can establish the responsibility and the entity of the damage/pollution and its consequences, also for a middle-long term. I think this is the main issue, because often the consequences become evident a long time after than when the fact happened, so is not easy to establish the entity of the crime (during the initial phase) or the responsibility (if the investigation starts after a while).
Q14	I think that the mass media in Italy prefer spectacular news rather than information and often do not care about some topics. I don't think they are efficient, even if in the last years there has been a bigger media coverage on these topics too.
Q15	4
Q16	A bit, but not too much. I am enough aware and realist. I live in one of the most polluted areas of Europe for several reasons, most of which are historical. I believe that a proper waste management and recycling are important to limit the damages that are already a fact in the territories, and I think that today the awareness of the public and competent authorities are bigger than in the past. So, I am not very concerned about a wrong management now, but I am definitely angry and disappointed about what happened in the past.
Q17a	X
Q17b	X
Q17c	X
Q17d	X
Q17e	X
Q.17f	X

<i>Q17g</i>	
<i>Q17h</i>	
Q18	Good question... it doesn't really matter what institution is in charge of it. It is important that competent and honest people are working there. Knowing the Italian system, I think the most effective way to manage it could be by private groups (that I believe are more efficient), supervised rigorously, with attention and honesty by public entities (technical offices from the Municipality or Province).
Q19	Little in the specific. I know there have been episodes of illegal shipping and disposal of waste, but I couldn't say where and how in my region.
Q20	I agree, related to illegal waste trade the news is scarce. There was something some time ago related to the "land on fire" in Campania but also about that the attention of the mass media is far gone. I believe there's the need of more information, that has sense and is compatible with the ongoing investigations.
Q21	Yes, I believe everyone is: the world is not made of boxes. For example, the transfer of toxic substances from waste that has not been properly disposed of to water and soil. Even if the pollution takes place away from where we live, it can affect us when we consume food that grown using contaminated matrices. And it is very difficult to be sure not to consume contaminated products, considering that for certain substances toxicity is attested only after a long time and that, precisely because is illegal and related to ecomafie, even illegal delivery sites are not always known.
Q22	Less violent therefore less "interesting" for the media.
Q23	I believe that corruption has a fundamental role, and it has to be properly addressed with strong measures, on both a penal level and cultural level, so to fight the ecomafie, but not only them.
Q24	Little, I am not fond for environmental groups, especially when they gather people with little or no scientific knowledge. It is a very technical topic, so I think that citizens simply should behave correctly with proper disposal and recycle of waste, and honestly by reporting in case they knew about any offence, and without personal interests.
Q25	See the previous answer, I think that if we'd had a proper social and cultural level, meaning following the rules and a good education, these environmental crimes would be limited, if not inexistent.

Respondent 6

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	29
Q6	Female
Q7	Master's degree
Q8	Educator
Q9	Illegal waste disposal, abuse of natural resources and exploitation of the soil.
<i>Q10a</i>	
<i>Q10b</i>	
<i>Q10c</i>	X

<i>Q10d</i>	X
<i>Q10e</i>	
<i>Q10f</i>	
<i>Q10g</i>	
<i>Q10h</i>	
<i>Q11a</i>	
<i>Q11b</i>	X
<i>Q11c</i>	
<i>Q11d</i>	X
<i>Q11e</i>	
<i>Q11f</i>	
<i>Q11g</i>	
<i>Q11h</i>	
Q12	Caffaro
Q13	Equally. I think that everything that lacks respect towards the community, people and environment has the same importance because it influences everything else.
Q14	No
Q15	4
Q16	Yes
<i>Q17a</i>	
<i>Q17b</i>	
<i>Q17c</i>	X
<i>Q17d</i>	X
<i>Q17e</i>	X
<i>Q.17f</i>	
<i>Q17g</i>	X
<i>Q17h</i>	
Q18	Municipality and region. I think that most practical act is to monitor closely, and the Italian territory is too vast to have an only way of management.
Q19	Little
Q20	I think it is a kind of news that has less impact. That's why the media talk less about it, but there's the needed to raise the awareness about these crimes.
Q21	We are all victims today for the crimes of yesterday (before), and the future generations will be (the victims) for the crimes of today.
Q22	Depends on if by violence we intend the aggressive act itself (like gunshot), or the consequences. In the latter case it would be a different kind of violence with a bigger impact.
Q23	Undoubtedly it can be a contributing factor of the activities itself.
Q24	I have no idea as a private citizen. I think more monitoring activities are needed, for example regarding the waste disposal of private enterprises, but I don't know as a private.
Q25	Raise awareness among businessmen and enterprises, improve the system with also economic contributions.

Respondent 7

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Botticino
Q5	33
Q6	Male
Q7	Master's degree
Q8	Teacher
Q9	Every activity that, illegally, causes damage to the environment as an outcome.
Q10a	
Q10b	
Q10c	X
Q10d	X
Q10e	
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	
Q11d	X
Q11e	
Q11f	
Q11g	
Q11h	
Q12	
Q13	Extremely important as they are crimes against the ecosystem where we live.
Q14	Very little and not in an effective way.
Q15	4
Q16	Yes, I am aware that it creates a very serious environmental damage.
Q17a	
Q17b	X
Q17c	X
Q17d	X
Q17e	X
Q17f	
Q17g	
Q17h	
Q18	Every citizen should be aware of the duty s/he has to preserve the environment. It is an individual responsibility.

Q19	I know the problem marginally and superficially.
Q20	It would be important to put the topic under the spotlight and raise awareness for the public opinion, but especially for the citizens.
Q21	We are all victim, as the planet where we live is ours and of the future generations.
Q22	They are two different kind of violence. The "classic" mafia activities are known from the popular culture and are spectacularized by the mass media and cinema. Everyone in the world know about those types of crimes. The ecomafie, on the other hand, does not attract a similar interest, therefore those crimes are perceived as minor or less serious.
Q23	I would say fundamental.
Q24	To report, in case one finds out about those cases. And first of all, get informed about a topic that is not known that much.
Q25	The civil society should be able to have a sort of long-term commitment towards the environment so that the protection and the preservation of the environment becomes a known and fundamental topic, instead than an option.

Respondent 8

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Prevalle
Q5	35
Q6	Female
Q7	Master's degree
Q8	Manager
Q9	Everything that damages the environment severely.
Q10a	
Q10b	X
Q10c	X
Q10d	X
Q10e	X
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	X
Q11d	X
Q11e	X
Q11f	
Q11g	
Q11h	

Q12	Case of waste dumping in the province of Brescia. There has been a report investigation on "Report" (Investigative TV show).
Q13	Equal. The environment is a common good.
Q14	No
Q15	5
Q16	Yes, the levels of tumours are very high.
Q17a	X
Q17b	X
Q17c	X
Q17d	X
Q17e	X
Q.17f	X
Q17g	
Q17h	
Q18	Municipality because is the institution closer to their territory.
Q19	Unfortunately, they (the Ecomafie) reached the province of Brescia too.
Q20	Not only for what it concerns the environmental crimes, but also for the other crimes against the public wellbeing (res publica), is very difficult to make people understand the importance of them.
Q21	Yes, the information about Lombardia is clear.
Q22	Equal, I do not like to think that there are different classes of crimes.
Q23	Laundry money and profit.
Q24	Be alert and report.
Q25	Raise awareness about the topic.

Respondent 9

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Prevalle
Q5	60
Q6	Male
Q7	High school diploma
Q8	Clerk
Q9	Everything that goes against the environmental legislations. Also, everything that could be done with a better environmental impact.
Q10a	
Q10b	X
Q10c	X
Q10d	X
Q10e	
Q10f	

Q10g	
Q10h	
Q11a	
Q11b	
Q11c	
Q11d	
Q11e	X
Q11f	
Q11g	
Q11h	
Q12	Yes, untreated sewage spilling.
Q13	They are crimes not only against the environment but also against the humans as they affect the place where we live.
Q14	No, there's a little specific knowledge about the topic and an evident collusion between the politic world and a certain economic sphere.
Q15	5
Q16	Yes, even if the politic objective should be to improve legislation that oblige the producer to create recyclable packaging.
Q17a	
Q17b	X
Q17c	X
Q17d	
Q17e	
Q.17f	X
Q17g	
Q17h	
Q18	Municipality and province, the representative institutions closer to us.
Q19	It is about a very lucrative business. The problem are the controls because our laws about waste are the strictest of Europe.
Q20	There is a lack of correct information for the citizens. The risks for human's health are not being perceived.
Q21	Yes, because despite some exceptions, the institutions are reluctant to take actions.
Q22	It is necessary to understand what violence means. I think slow violence is equal or superior to other situations because it is a kind of silent violence, therefore more dangerous.
Q23	A fundamental role, corruption creates the conditions for the offences.
Q24	I am already active in that sense.
Q25	Teach the young generations but not only. Pressure the institutions.

Respondent 10

Questions	
Q2	Lombardia
Q3	Brescia

Q4	Gavardo
Q5	26
Q6	Female
Q7	Master's degree
Q8	PhD
Q9	Crimes committed against the ecosystem and, by implication, everything that concerns them.
Q10a	X
Q10b	X
Q10c	
Q10d	
Q10e	X
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	
Q11d	X
Q11e	X
Q11f	
Q11g	
Q11h	
Q12	
Q13	Environmental crimes are often at the expense of an entire community, whether local, national or international (and continue over time). However, they are not given the same weight as other crimes that affect more individuals.
Q14	I think that in recent years, because of the ecological movements, we talk about that more than before, but still not enough.
Q15	5
Q16	A lot, but fortunately my municipality is very strict on this issue. Those who do not dispose properly will face sanctions and consequently I hope that this can have a positive impact in the near future on the local ecosystem.
Q17a	
Q17b	
Q17c	X
Q17d	
Q17e	X
Q.17f	
Q17g	
Q17h	
Q18	The State should be responsible for it with guidelines, which can then be tightened by the individual provinces (I do not specifically refer to the regions because of the

	special statutes of the provinces of Bolzano and Trento for example, or the regions with autonomous status) in the most problematic areas.
Q19	Unfortunately, not enough.
Q20	I heard about it before because I am interested in environmental matters. But, as every violence related to mafia, they are a taboo in a vast part of Italy: thanks to some associations is more common to hear about it, but not enough.
Q21	I never thought about it, but after reading what was written before I would say yes.
Q22	I don't believe that is possible to compare it with situations that are against individual or communities (physical and verbal violence, bribe, threats, etc). Surely, they deserve a space in the legislation and mass media, because is something that affects all of us.
Q23	I am afraid is fundamental.
Q24	Inform the authorities in case you witness illicit activities.
Q25	Maybe is unrealistic, but I think environmental crimes should be a topic that the young generation should be sensitized about. Years ago, it seemed impossible to raise awareness about the right way to dispose waste, but the school helped a lot through basic new behaviours and teaching civil education. Of course, at the same time a work with the society and improve of new ideas different from the ones that are going on now is needed.

Respondent 11

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Capriano del Colle
Q5	61
Q6	Female
Q7	Professional diploma
Q8	Retired
Q9	Illegal activities that destroy the environment.
Q10a	
Q10b	X
Q10c	X
Q10d	
Q10e	
Q10f	
Q10g	
Q10h	
Q11a	X
Q11b	X
Q11c	
Q11d	
Q11e	
Q11f	

<i>Q11g</i>	
<i>Q11h</i>	
Q12	Yes
Q13	As the other crimes because they damage the environment and also all the inhabitants of the earth will face dramatic consequences.
Q14	Still too little.
Q15	4
Q16	Yes
<i>Q17a</i>	X
<i>Q17b</i>	X
<i>Q17c</i>	X
<i>Q17d</i>	X
<i>Q17e</i>	X
<i>Q.17f</i>	X
<i>Q17g</i>	X
<i>Q17h</i>	
Q18	Municipality because is more aware of its territory.
Q19	The so-called ecomafie, illegal waste trade, illegal building to gain enormous profit.
Q20	The mass media talks too little about them, but their presence (of ecomafie) is known. I think the State should monitor and act in a more decisive way.
Q21	Yes, because during time, us and who will come after us have to deal with consequences for health and environment.
Q22	As the activity of mafia.
Q23	It permits them (the ecomafie) to continue without any impediment.
Q24	Be informed and supported by associations I can refer to.
Q25	Continue to keep the attention on the problem.

Respondent 12

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	65
Q6	Female
Q7	Middle school diploma
Q8	Clerk
Q9	Pollution of the atmosphere and of hydric sources; waste disposal
<i>Q10a</i>	
<i>Q10b</i>	X
<i>Q10c</i>	X
<i>Q10d</i>	X

<i>Q10e</i>	X
<i>Q10f</i>	
<i>Q10g</i>	
<i>Q10h</i>	
<i>Q11a</i>	X
<i>Q11b</i>	
<i>Q11c</i>	X
<i>Q11d</i>	
<i>Q11e</i>	X
<i>Q11f</i>	
<i>Q11g</i>	
<i>Q11h</i>	
Q12	Caffaro BS, asbestos in Via Triumplina (Brescia) from the Montini factory. Spilling of polluting liquids in the Mella river. In the Southern Italy, dumping of toxic waste.
Q13	Important because it puts in danger the life of all the citizens
Q14	No, not enough
Q15	5
Q16	Yes!!
<i>Q17a</i>	X
<i>Q17b</i>	X
<i>Q17c</i>	X
<i>Q17d</i>	X
<i>Q17e</i>	X
<i>Q.17f</i>	X
<i>Q17g</i>	X
<i>Q17h</i>	
Q18	Regions
Q19	That justice is too slow to intervene.
Q20	I agree, the slow violence is truly invisible and more dangerous than the one made by individuals, it involves entire nations. More awareness with people should be done, to inform them about the current and future risks
Q21	Yes, because despite the reports I can't see any changes, even in the small cases, so it scares me to think about a future without serious and fast interventions.
Q22	More violent, they involve all the citizens.
Q23	Even if they are identified, the guilty people, the corrupt and corrupted, they are not punished.
Q24	Denounce what I witness to the authorities.
Q25	Talking about the issue through TV and newspapers to explain to the citizens the important of a right disposal of waste.

Respondent 13

Questions	
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Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	28
Q6	Female
Q7	Master's degree
Q8	Teacher
Q9	Crimes that among their consequences have the damage to the environment.
Q10a	X
Q10b	X
Q10c	X
Q10d	X
Q10e	
Q10f	X
Q10g	
Q10h	X
Q11a	
Q11b	X
Q11c	
Q11d	X
Q11e	X
Q11f	
Q11g	
Q11h	
Q12	Caffaro and spilling of radioactive substances in the river in Odolo (BS).
Q13	Equal to other offences.
Q14	No
Q15	5
Q16	Yes, a lot
Q17a	X
Q17b	X
Q17c	X
Q17d	X
Q17e	X
Q.17f	
Q17g	
Q17h	
Q18	I don't know who should deal with it specifically. For sure I think it is outrageous that there are laws that states the responsibility of the restoration to the owner even in those cases where is clear that he was not his fault (as for the crop fields around the Caffaro area).

Q19	I read some articles about the "Land of Fires" in Campania, so I know how it works.
Q20	The mass media should talk more about the topic.
Q21	Not directly.
Q22	Equal, comparable to homicide.
Q23	Everything is based on corruption: to spend less money in the waste disposal it is acceptable to give the waste, paying less and so saving, to those who dispose it in a wrong way or doesn't dispose them at all.
Q24	Participate to protests, talk about the problem, support the association and the researcher about mafia and ecology.
Q25	Non-violent protest (march, sit-in, banners, boycotts).

Respondent 14

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Toscolano-Maderno
Q5	18
Q6	Female
Q7	High school diploma
Q8	Student
Q9	I think environmental crimes can be defined as the illegal action aimed to the deterioration and the careless exploitation of the surrounding environment.
Q10a	
Q10b	
Q10c	
Q10d	X
Q10e	X
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	
Q11d	
Q11e	
Q11f	
Q11g	
Q11h	X
Q12	
Q13	Environmental crimes are of enormous importance to society as a whole, precisely because the consequences associated with them affect the community as a whole, without any voluntary or involuntary distinction.

Q14	The media do not talk efficiently about environmental crimes. Unfortunately, it is also a consequence of the lack of consideration that the media (and not only) still have towards the environmental crisis. If the latter were treated in the right way, environmental crimes would also be treated accordingly.
Q15	5
Q16	Certainly, at local and global level, the incorrect recycling and disposal of waste causes direct damage to health and more or less directly, in general, to the place and environment in which you live.
Q17a	X
Q17b	X
Q17c	X
Q17d	X
Q17e	X
Q.17f	
Q17g	X
Q17h	
Q18	As a primary service, the waste cycle should be regulated at State level, perhaps granting regions some degree of autonomy over the technical conduct of the practice.
Q19	With regard to the mafioso intervention involved in the traffic and disposal of waste, I know of the redirection to Africa of large quantities of waste from Italy.
Q20	Unfortunately, despite the fact that today the climate crisis seems to begin to worry a larger part of the population, the idea that the States have about it is below the level we can afford. In this way, not only the mafie have the possibility to carry on the so-called "slow violence", since it doesn't have immediate consequences, therefore doesn't give the impression of producing mayor damages compared to other illicit activities. At the same time the behaviours of the governments towards the environmental crisis are not adequate at all. Consequently, this crisis is being underestimated also by mass media and thus by the society which, in this capitalistic frenzy, cares too little of the long terms effect that a one action have, as it only care about the immediate profit it can gain from the action without thinking. For examples, obtaining one of the several commodities that we have today can lead, in the long run, to exhaust a certain resource. It could lead to several disadvantages that cannot be balanced nor justified by the immediate obtainment of that specific asset.
Q21	We are all victim of the so-called "slow violence" since we all live in the same planet that these activities will keep on destroying.
Q22	The enormous gravity of environmental crimes does not devalue nor justify any type of mafia activity. Like the mafia, however, environmental crimes must also be treated according to their severity and importance, which as has already been argued, is a priority.
Q23	Corruption is the fundamental of every activity lead by mafia, ecomafie included.
Q24	Private citizens do not have the fundamental power that the state has to put an end to or prevent such crimes. It is, however, appropriate, that a citizen that witness an environmental crime, should inform and report the incident and, perhaps, tries to raise awareness.
Q25	It is fundamental that society acquires an adequate knowledge of everything those activities involve.

Respondent 15

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	29
Q6	Male
Q7	Master's degree
Q8	Doctor
Q9	Crimes that have the community as victim through damages to the environment.
Q10a	
Q10b	X
Q10c	
Q10d	X
Q10e	X
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	X
Q11d	X
Q11e	
Q11f	
Q11g	
Q11h	
Q12	Pollution of water sources by the Caffaro industry.
Q13	Often, environmental crimes are more important because they have a wider range of impact on a lot of people.
Q14	When they talk about environmental crimes, yes.
Q15	3
Q16	Not that much about domestic waste, more about industrial ones.
Q17a	X
Q17b	X
Q17c	X
Q17d	X
Q17e	
Q.17f	
Q17g	
Q17h	
Q18	State - it allows a bigger picture/broader view.

Q19	Mostly related to the "Land of Fire" in Campania, where camorra was disposing industrial waste illegally.
Q20	Actually, because of the absence of immediate victims but mostly on the long term, the impact on the mass media can be less crucial.
Q21	Not directly
Q22	They can be less violent in the short term but more harmful in the long term.
Q23	Fundamental
Q24	Directly not that much, maybe apportioning through sharing of news.
Q25	It is fundamental that the society recognizes the problem of waste and how it is created by the "easy" solutions.

Respondent 16

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	28
Q6	Male
Q7	Bachelor's degree
Q8	Student
Q9	All the illegal and harmful activities towards the environment (e.g.: illegal waste dumping, trafficking of exotic animals, extraction of raw materials in protected areas...).
Q10a	
Q10b	
Q10c	
Q10d	X
Q10e	
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	X
Q11c	X
Q11d	
Q11e	
Q11f	
Q11g	
Q11h	
Q12	Caffaro
Q13	I do not believe that environmental crimes are absolutely more important than other crimes. It depends on which crimes are compared with. For sure, the hams provoked

	by environmental crimes risks not to harm only the individuals but the whole community in a severe way.
Q14	Not always, very often the efficacy and quality of the information depends on the professionalism of those that work in a specific communication media. I believe that, in general, the attention towards environmental crimes has been increasing.
Q15	5
Q16	Yes
Q17a	X
Q17b	X
Q17c	X
Q17d	X
Q17e	X
Q.17f	
Q17g	
Q17h	
Q18	I think the best solution would be an agreement on a municipality level to allocate the management of the waste cycle to the company that can best follow the needs of the Municipality. This should be based on the dimension of each Municipality and therefore on the quantity of waste produced.
Q19	I know something about the so-called "Land of Fires". In some areas in Campania, mafia organizations as Camorra dumped and buried toxic waste or burned the waste that was not disposed.
Q20	I think is true that mass media do not talk about it. As I said before, I think that the attention towards environmental issues has been increasing in the last years.
Q21	No, I don't think I am a victim.
Q22	Considered the fact that some typical activities of the mafia include crimes as extortions, thefts, homicides, I believe that environmental crimes can be considered less violent.
Q23	In Italy, due to the enormous role that politics have in the management of waste and in general in the economic activities, I believe that the risk of corruption in the waste management sectors is concrete.
Q24	To prevent it I think is possible to vote for local political parties or individual's interest to the theme and to the good management of waste in the area. To denounce is important to contact the correct authorities in case of illegal activities in waste management.
Q25	At a community level is important to be active and make yourself heard so that the politics is forced to enforce solutions for a good management of waste. Individually, if there is a municipality plan for sort and recycle the waste, follow its instructions.

Respondent 17

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Coccaglio
Q5	28
Q6	Female

Q7	PhD
Q8	Administrative assistant
Q9	All those illegal activities endured from individuals or criminal organizations that can have serious consequences on the environment and on the health of every citizen.
Q10a	X
Q10b	X
Q10c	X
Q10d	
Q10e	X
Q10f	
Q10g	
Q10h	
Q11a	X
Q11b	X
Q11c	
Q11d	X
Q11e	
Q11f	X
Q11g	
Q11h	
Q12	Dumping of toxic waste in the fields in the province of Brescia.
Q13	I believe they can be compared, in scope and size, to other crimes committed by mafia type organization. They affect the wellbeing of the citizens; they imply huge amount of money and they are the symptoms of high level of corruption in both private and public sectors.
Q14	Absolutely not.
Q15	3
Q16	A lot, even if unfortunately, it is not a topic that I focus on that much.
Q17a	
Q17b	X
Q17c	X
Q17d	
Q17e	
Q.17f	X
Q17g	
Q17h	
Q18	Municipality
Q19	I know a little about it. In general, I look for information about the connection between criminal organizations and waste management by myself.
Q20	Often the public cannot understand that indirect violence can exist. We are used to different phenomena and is not easy to make people understand that different elements play an important role for our future.

Q21	Yes, because a lot of relatives of mine and friends have (or had) tumours of similar illnesses which increased a lot due to the high pollution in the area of Franciacorta (in the province of Brescia).
Q22	They cannot be compared, they have different type of consequences but both lead to dynamics as homicide, intimidation and corruption.
Q23	It has a very important role. Corruption and collusion allow to manage the disposal practices in a hidden and uncontrolled way, preventing the State institutions to have a decisive role.
Q24	Being informed, talking about it and denounce.
Q25	First of all, the civil society should raise awareness about what environmental crimes are, improving a discussion and sharing of opinions among citizens. Also in this case, the knowledge is power. Second of all, it is important to pay attention to what is happening on the territory, without only blaming the authorities.

Respondent 18

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Borgosatollo
Q5	28
Q6	Female
Q7	Master's degree
Q8	Freelance
Q9	Those illegal activities that harm the environment.
Q10a	
Q10b	X
Q10c	X
Q10d	X
Q10e	X
Q10f	
Q10g	
Q10h	
Q11a	
Q11b	
Q11c	X
Q11d	X
Q11e	
Q11f	
Q11g	
Q11h	
Q12	Spilling of sewage and noxious liquids in water sources.

Q13	Important because the environment should be able to welcome future generations. Not using the environment in a sustainable way, it means it will not be healthy for our children and grandchildren.
Q14	No, they don't know the real damages in the future. For example, make people understand how the environmental crimes would practically affect future generations.
Q15	5
Q16	Yes, I am sceptical that they actually recycle what they collect with the waste separation process.
Q17a	X
Q17b	X
Q17c	X
Q17d	X
Q17e	X
Q.17f	X
Q17g	X
Q17h	
Q18	Every municipality according to rules of the State and then the regions.
Q19	I don't know anything in the specific.
Q20	I would like to know more about it. Perhaps because of its slowness, as we don't see the damage immediately, we don't notice it.
Q21	We are all victim in this case, the planet is like this also because of us.
Q22	I don't know how to answer as I don't know much.
Q23	Well, certainly big industries that turn to the mafia to dispose of the toxic waste that comes from them. So, to make it disappear so that it doesn't look like it can be produced by them and therefore keep the industry in order.
Q24	Well, when we know something or hear about it, we could talk and denounce.
Q25	I don't know the topic enough to answer this.

Respondent 19

Questions	
Q2	Lombardia
Q3	Brescia
Q4	Brescia
Q5	63
Q6	Female
Q7	High school diploma
Q8	Housewife
Q9	Voluntary destruction due to wrong actions made by the human.
Q10a	
Q10b	
Q10c	X
Q10d	
Q10e	

<i>Q10f</i>	
<i>Q10g</i>	
<i>Q10h</i>	X
<i>Q11a</i>	
<i>Q11b</i>	X
<i>Q11c</i>	
<i>Q11d</i>	
<i>Q11e</i>	
<i>Q11f</i>	
<i>Q11g</i>	
<i>Q11h</i>	X
Q12	Atmospheric pollution of microparticles from the incinerator; pollution in the area of the Caffaro industry.
Q13	Not really!
Q14	No!
Q15	5
Q16	Yes, very much
<i>Q17a</i>	X
<i>Q17b</i>	
<i>Q17c</i>	
<i>Q17d</i>	
<i>Q17e</i>	
<i>Q.17f</i>	
<i>Q17g</i>	
<i>Q17h</i>	
Q18	Obviously, regions and municipalities.
Q19	Little
Q20	Is very difficult to understand who is taking advantage.
Q21	The air in Brescia became very heavy and toxic in the last years.
Q22	I don't know
Q23	Corruption is everywhere.
Q24	Nothing
Q25	It is not possible to fight some ecomafie.

Respondent 20*

Questions	
Q2	Lombardia
Q3	Milano
Q4	Bussero
Q5	28
Q6	Female

Q7	Master's degree
Q8	Business Developer.
Q9	Everything that can undermine environmental respect, conservation of biodiversity and that drain natural resources.
Q10a	
Q10b	
Q10c	
Q10d	
Q10e	
Q10f	
Q10g	X
Q10h	
Q11a	
Q11b	
Q11c	
Q11d	
Q11e	
Q11f	
Q11g	X
Q11h	
Q12	
Q13	They are equally important because they create long term consequences that have effects on the present and future generations.
Q14	I don't think there's enough environmental education. We should integrate inside the education system (starting from primary school) project for sensibilisations and respect of the environment.
Q15	4
Q16	Luckily, in my area there is a good control of the procedures of waste disposing.
Q17a	X
Q17b	
Q17c	X
Q17d	X
Q17e	X
Q.17f	X
Q17g	X
Q17h	
Q18	I believe that the Municipality must first of all control and give the directives, which should be established by the Province and Region. Larger scale control is always difficult, but micro-management is easier to manage.
Q19	I know that the Mafia has always played a leading role in this area, but I am not aware of individual realities close to mine.
Q20	I think it is a pity, we should raise awareness among the new generations, since it will be the future.

Q21	Not in my immediate circle, since there's always been a certain respect and attention to environmental issues. I believe, however, that I am a victim of the large companies that run the business illegally without my knowledge.
Q22	I believe that crimes against people carry a huge weight, but I would not consider environmental crimes any less violent.
Q23	I don't know enough to talk about it.
Q24	if I knew, I would report or report illegal activities to the authorities.
Q25	A lot of education, sensibilization and information.

Respondent 21*

Questions	
Q2	Lombardia
Q3	Milano
Q4	Milano
Q5	55
Q6	Female
Q7	Bachelor's degree
Q8	Health worker
Q9	Illicit activities that harm the environment and the inhabitants. Some individuals or business are gaining profit from it.
Q10a	
Q10b	X
Q10c	X
Q10d	
Q10e	
Q10f	
Q10g	
Q10h	
Q11a	X
Q11b	
Q11c	
Q11d	X
Q11e	X
Q11f	
Q11g	
Q11h	
Q12	
Q13	They are as important as other crimes because have numerous and different consequences on the health of people and environment. They have immediate and long-term effects.
Q14	Not that much
Q15	5

Q16	Enough
Q17a	X
Q17b	
Q17c	X
Q17d	X
Q17e	X
Q17f	X
Q17g	X
Q17h	
Q18	State and municipalities. The state for the ecology politics and for fighting the mafia. The municipality for the local organization of waste cycle
Q19	Very little
Q20	It is not an interesting topic that can grab the attention of the mass media. It is also very possible that the mafie are controlling the freedom of information.
Q21	In this moment not directly.
Q22	Apparently less violent because they act in a sneaky way directly towards people, things or environmental goods.
Q23	For sure important in the environmental policy decisions.
Q24	Special personal attention to the waste cycle. Denounce to association, police and specific institution.
Q25	More consciousness and effort in denouncing illegal situations.

Respondent 22*

Questions	
Q2	Lombardia
Q3	Bergamo
Q4	Clusone
Q5	37
Q6	Female
Q7	PhD
Q8	Unemployed
Q9	Everything that jeopardize the natural balance of the environment is a crime, because in the most cases is committed voluntarily by small or big enterprises of every kind, with the awareness that they are creating and environmental damage.
Q10a	
Q10b	
Q10c	X
Q10d	X
Q10e	
Q10f	
Q10g	
Q10h	

Q11a	
Q11b	
Q11c	
Q11d	X
Q11e	X
Q11f	
Q11g	
Q11h	
Q12	Not in my municipality, but towards the Padania area all those aspects related to intensive farming and the disposal of their organic waste. Monocultures that use pesticides. I am from Veneto region, there is well known the pollution from Pfoa (C8).
Q13	They are MORE important, because we don't talk enough about it and people often forget how serious the situation is. Everyone's health is compromised. Therefore yes, the environmental crimes are a "mass-crime" (mass murder).
Q14	Absolutely not, and absolutely not enough.
Q15	5
Q16	Very much. This is why I am trying to have a zero-waste approach.
Q17a	X
Q17b	X
Q17c	X
Q17d	X
Q17e	X
Q.17f	X
Q17g	X
Q17h	
Q18	This is a million-dollar question. If there wasn't any corruption, I would say public institutions. Besides being managed by public or private entities, there is the need of more monitoring and controls.
Q19	I know that in Veneto (region) they found abandoned warehouse full of waste. I know that some mafia-type organization dumped waste in the sea in Campania (region). But I don't know that much. I can only imagine that the damage is bigger and more serious than what it looks like.
Q20	That is not talked about enough. I think there's a lot of "conspiracy of silence" (omertà).
Q21	Yes. We live in an environment strongly polluted and compromised. Not only the mafia, but a lot of companies pollutes to protect their profits. We don't drink clean water anymore, we don't breathe clean air anymore, we don't harvest in clean soil anymore. What do we have left?
Q22	Maybe it sounds a little bit harsh, but I believe that environmental crimes are the worst because they affect indirectly a large group of people.
Q23	A lot. They say that the waste collection in Rome was blocked by the mafia. The result was a city buried under waste.
Q24	First of all, I try to reduce my production of waste. I try to raise awareness and motivate others to do the rest. I pick up waste that I found in my municipality. If I would find myself in a situation where I am a witness of an ecomafia activity I report them.

Q25	Being aware of how the waste cycle works. Ask for transparency and information in those cases where the waste cycle in the municipality is given in charged to some private company. Ask them to give a report at the end of the year and prove that waste was disposed correctly. If there was any suspicious of mafia involvement, ask for the intervention of the control organisms.
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