

In the last two decades the scope of transnational environmental crime, especially waste trafficking, has expanded and become increasingly profitable. Since the perpetrators of environmental crime can generate significant profits with minimal risks, the area is attractive for organized criminal groups, which see exceptional 'business' opportunities in it (i.e., criminal enterprise). In the past the environmental crime has become transnational, when the organized groups took the advantage of liberalization and globalization of the world economy.

The case study of organised environmental crime in Slovenia revealed that its specialty is the countries' spatial placement in the transition zone between the Western and Eastern Europe and the border between North and South. It is known as a transit country of organized crime groups. This applies to environmental crime as well, within the last three years growing illegal transport of waste from Western Europe to the East and trafficking of animal and plant species in the opposite direction. In addition to individual cases of waste shipping with the incomplete documentation, waste trafficking in Slovenia was characterized by: 1) various cases when Italian Mafia is paying Slovenian farmers to dump waste in the sinkholes in their fields in Primorska region; and 2) 'relocation of industrial production' from developed countries (Lafarge Cement case).

The trade with waste is an international form of environmental crime; therefore planned response on a global level is necessary. It will remain a profitable business as long as the financial costs of environmental protection for the offenders will outweigh the benefits and as well as sanctions and penalties will be 'ridiculously' low compared to a gained profit. For a successful fight against transnational environmental crime in Europe and

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worldwide greater cooperation and information sharing is needed; transfer of information, experience and intelligence sharing, and knowledge exchange.

### 1. INTRODUCTION

Environmental destruction is closely connected with functioning of modern societies, characterized by the concept of economy – maximisation of the production and profit. The liberalization and globalization of the world economy have caused a problem of growth of trash production and an issue of its disposal. It did not last very long that waste management and disposal became a profitable business and very soon organized crime groups discovered a new opportunity for profit. The school case of organized criminal enterprise is waste management businesses of the Italian Mafia families in the U.S. in 1980s. However, despite the huge publicity of the 'scandals' and very large caused damage, when the waste covered and contaminated the whole coast of New York and other cities (White, 2008; Elliott, 2009), society was not able to detect and prevent the transfer of the same *modus operandi* to Italy and its spread throughout Europe in 1990s. Nowadays, waste trafficking is just one of the transnational environmental crime forms. What is more, it is estimated as the top five most profitable organized crime 'businesses' (Interpol, 2010; Liddick, 2011).

In the present paper *environmental crime* is understood as every temporary or permanent act or resigned activity, determined and defined as deviant by the (inter)national legislation, which causes any form of harm (an artificial change, worsening, burden, degeneration or destruction) to one or more of eight elements (air, water, soft soil, mineral materials, human species, animal species, plant species, and microorganisms) that compound the natural environment or interrupt the environments' natural changes. The violator could be anyone or every one of us (corporations, companies, groups, individuals, state, etc). Thereby, the primary motives for environmental crime are profit and human development. In the nowadays modern globalized society with the developed industrial system, oriented in market economy, environmental crime occurs under the influence of the social conditions and circumstances (i.e., environment as a resource for survival) and economical factors (i.e., environment as a resource for profit).

From the criminological and criminal justice perspective, green criminology<sup>3</sup> tries to explain the reasons for committing criminal acts against the environment. Therefore, it plays an important role at addressing environmental crime issues, using empirical

<sup>&</sup>lt;sup>3</sup> In the last two decades we have seen the development of green criminology and increase of the conducted research studies of environmental crime phenomena. However, as stressed by White (2003: 293): "One cannot simply choose the specific environmental issues and expect from it to meet all aspects of criminological theory and practice.". In the real world it is just the opposite; criminology has to accommodate to the nascent phenomenon of deviance.

knowledge, research results and experiences. Green criminology is a social study that uses multidisciplinary and interdisciplinary approach at research of the environmental crime, environmental harm, environmental legislation, environmental regulations, environmental protection measures and public responses to caused violations. It is based on critical criminological conviction to defend the environment as one of the basic human good and human right. The research agenda of green criminology is based on the assignment to study the known forms of deviant behaviour against the natural environment. It observes the dynamics between the human and the natural environment, especially human behaviour and acts towards one or more elements of the natural environment. Thereby, criminological discussions on (transnational) environmental crime are related to the questions how this form of crime is demonstrated in real life, how this form of crime can be measured, explained, deterred, prevented, etc. What is more, in the last decade, transnational environmental crime represents a growing part of criminological research focus and discussion.

Over the past years the environmental crime has become transnational, when organized groups took the advantage of liberalization and globalization of the world economy (Elliott, 2009), which is affecting the society and consequently causing changes of the criminal activities; increase of 'new' more profitable crime, such as cyber-crime, environmental crime, etc. The purpose of the present paper is to present an analysis of the in Slovenia detected transnational environmental crime forms with the special emphasis on waste trafficking (the case of Italian mafia and Slovenian farmers in Primorska region and the case of waste incineration in Lafarge Cement factory). The special challenge is the countries' spatial placement in the transition zone for organized crime groups between the Western and Eastern Europe and the border between North and South. In the conclusion the suggestions for possible ways of responding to waste trafficking are discussed.

## 2. TRANSNATIONAL ENVIRONMENTAL CRIME - A PROBLEM OF THE CONTEMPO-RARY SOCIETY

Environmental crime occurs when individuals or corporations intentionally violate environmental laws and regulations because of profit and power. When these activities lead to cross-border or global environmental impacts, they can be characterized as international or transnational environmental crime (Brack, 2002: 143). Environmental crime can according to the criterion of *who* is the perpetrator be divided in the following classification: 1) *environmental crime of an individual;*<sup>4</sup> 2) *environmental crime of the rich and powerful;*<sup>5</sup> 3) *environmental crime of particular groups*<sup>6</sup>; and 4) *environmental crime by the state or the ruling authorities*<sup>7</sup>, and organized crime can be 'connected' with all four mentioned environmental crime forms. The suggested classification and described relation is presented in Figure 1 below.



Figure 1: Environmental crime forms.

<sup>&</sup>lt;sup>4</sup> Although we talk about small, there can be equally damaging actions resulting from a lack of sociocultural values and traditions and reflect the personality of the individual. The profit imperative, though very small, cannot be completely excluded. These crimes are illegal waste dumps in the woods, directing waste water from household septic tanks in the village ditches, (conscious) improper use of pesticides and fertilizers, trafficking of rare plant and animal species, road (and other) traffic, and other human actions that are environmentally harmful, which are committed from the reasons of human comfort and prestige. <sup>5</sup> This form of environmental crime which includes corporate environmental crime, white-collar environmental crime, occupational crime and illegal industrial pollution (illegal dumping of toxic waste, improper storage of toxic waste, the risks in the workplace in mines and factories (asbestos, mercury, etc.), release of toxic substances in factories, etc.).

<sup>&</sup>lt;sup>6</sup> Environmental crime of particular groups comprises harmful acts against the environment caused by each group with its business and management (societies and local communities by organizing various musical events and parties that cause noise or result in improper separation and disposal of waste; a church or local communities with lighting of churches and cultural buildings; some sports clubs, such as motorcycle, aircraft and hang gliders clubs, causing noise and air pollution; small businesses or productions, such as small cars landfill sites or small businesses with improper storage or handling with these materials, or hazardous spills of harmful materials, etc.).

<sup>&</sup>lt;sup>7</sup> In Slovenia this form of environmental crime is rarely present in the actually visual form (military operations, etc.). It is much more potential in the form of omission of the act, when the State, as owner or supervisor, 'overlooks' the violations and knowingly endangers its citizens (e.g., hazardous emissions exceeded substances in deprived areas or major cities, where the State is ignoring the present situation).

Organized crime is the most interesting among all forms of crime, as well as the most dangerous and the most sophisticated form of crime. With its skilful operation and artful infiltration the organized crime has been 'challenging' the police and other law enforcement and criminal justice agencies, and others, including criminologists, for several decades. Watson (2005: 207) notes that a large part of environmental crime is highly organized and high-profit activity of organized crime. Since the perpetrators of environmental crime can generate significant profits with minimal risks, the area is definitely attractive to organized crime groups, which see exceptional 'business' opportunities in it. In Italy involvement of organized crime groups in environmental crime, especially waste trafficking, is known as *Ecomafia* (Massari 2004). Organized criminal groups pay particular attention to specific criminal activities in environmental crime, which include: illegal disposal of waste, illegal advertising and criminality associated with rare or wild animal and plant species.<sup>8</sup> Situ and Emmons (2000: 69) describe the typical criminal organizations such as corporations, which have infiltrated into the multitude of environmentally sensitive industries, and now exercise a significant proportion of environmental crime acts. When talking about the 'criminal enterprises', everywhere around the world the problem of hazardous waste disposal controlled by the organized crime groups stands out. International waste trafficking is one of the most profitable 'businesses' at the moment.<sup>9</sup> A prime example of such operation (and power) is a garbage disposal problem in Naples, controlled by the Italian mafia Camorra and illegal hazardous waste disposal in Campania, controlled by the Italian mafia 'Ndrangheta. Their profit goes up to millions of Euros and caused environmental harm goes up to environmental disaster (not only completely destroyed natural habitats, but also several dozens of people suffering different diseases, especially various forms of cancer, caused by hazardous waste).

In case of environmental crime, organized crime groups focus particular attention on specific criminal activities, which are (Hayman in Brack, 2002; Elliott, 2009; Schmidt, 2004; Watson, 2005; Situ and Emmons, 2000; White, 2011; Muratbegović and Guso, 2011; Liddick, 2011; Šikman, 2011): 1) illegal trade in animal and plant species; 2) illegal trade in ozone-depleting substances, hazardous chemicals and harmful pesticides; 3) illegal transport and trading of various types of toxic, radioactive and other hazardous waste; 4) illegal, uncontrolled and unreported fishing; 5) illegal logging

<sup>&</sup>lt;sup>8</sup> When classifying a crime of smuggling of rare animal and plant species, one encounters in the overlapping areas, because this form of crime was initially defined solely as an international crime, but over the years became more and more organized, so it can be classified as a form of organized crime as well. If one would like to be completely accurate, this form of crime should be classified as international organized crime of trafficking with animal and plant species.

<sup>&</sup>lt;sup>9</sup> For example, illegal international trade in endangered species of fauna and flora is by type of execution and earnings compared to the trade in drugs and arms, because it is a very well-organized form of crime and often the same groups of perpetrators are involved. Dobovšek and Goršek (2007: 48) point out that the crimes against the endangered plant and animal species belong to the hidden forms of criminality, which are usually the domain of organized crime groups that take place near or inside the (respected) business companies, forests, remote and quiet parks and other living environments. This type of crime contains a number of characteristics of white-collar crime, as well as traditional property crime.

and trade of wood, when it is harvested, transported, bought or sold in contravention of national legislation; 6) biological piracy and transport of controlled biologically or genetically modified materials; 7) illegal disposal of oil and other wastes into the seas and oceans; 8) carbon emission trade and 9) illegal exploitation of mineral raw materials and fuel smuggling in order to avoid paying taxes and to avoid the control of carbon emissions. A specific and increasingly common form of environmental crime, which involves large corporations and even countries, is the so called 'migration of dirty industries' from the home countries, where environmental standards have risen and become stricter, to developing countries, where development of environmental protection legislation is still in progress.<sup>10</sup>

Elliott (2009: 56-57), as an expert on organized environmental crime, points out that the environmental crime has rapidly expanded and become transnational, when the organized criminal groups took the advantage of economic liberalization and globalization of the world economy. The result was an increase in frequency and volume of cargo and shipments, reduced border control and easier transfer of funds through the global financial and banking systems, which offered more opportunities for so called 'money laundering' and transfer of the profits into legitimate businesses and enterprises. And as with any other 'businesses' of organized crime, the criminal networks expanded to the leaderships of large corporations, companies and political leaders in organized environmental crime as well. Consequently transnational environmental crime has become increasingly widespread and profitable. What is more, representatives of corporations and businesses have transferred their own risk onto the organized criminal groups, which instead of the owners take care of the 'disappearance' of the superfluous waste, which is problematic for them. . Furthermore, the only link between corporations and criminal groups is a cash transaction for accomplished work and even that is often hidden and fragmented.

The transnational environmental crime occurs when organized crime groups infiltrate in the economic spheres, or when they 'merge' with corporate environmental crime with the sole purpose of creating income on both sides (Bačić, 1999). As such, transnational environmental crime has characteristics of a specific type of business organization (called an organized criminal enterprise) and by plan penetrates into various fields of entrepreneurship, especially through corruption and intimidation, or on the other hand by offering opportunities for enrichment. Above described organization of the organized crime business enables the establishment and creation of criminal groups all around the globe. Despite the fact of being small and generally

<sup>&</sup>lt;sup>10</sup> The relocations of heavy industries from the developed West to developing countries are very often. Europe is no exception (well-known are cases of Balkan countries and the German takeover of Slovene factory Tosama, that turned into the sale of machinery from the factory, which would then be hired (according to some media reporting best Slovene machines were exchanged with decrepit old machinery from Germany).

transit country for organized crime groups, Slovenia is no exception when talking about transnational environmental crime, as demonstrated in the following chapter.

## 3. TRANSNATIONAL ENVIRONMENTAL CRIME IN SLOVENIA

Since independence in 1991, Slovenia has witnessed changes in political, economical and social level, in universal human values, and increasingly complex developments that affect the changing of society and, consequently, criminal activity. Slovenia is a parliamentary republic, near the top of economically developed countries in transition, with the old mining and industrial tradition (which is currently being modernized) and service industries. The crop and livestock production is somewhat trivial, since it covers only about 20 percent of the territory of the state that has 20,273 square kilometres. Recently, growth in the number of agricultural holdings employing organic farming has been observed.<sup>11</sup> Two-thirds of the country is covered by forests (from 1993 to 2005, forested areas have increased by 17%). The share of land for roads is increasing (from 1993 to 2005, the percentage of land for roads increased by 150%) (Hren et al., 2011: 28). Slovenia has an interest in sustainable development and to increase the energy of production from renewable resources.<sup>12</sup> In recent years, we witnessed a restructuring of waste disposal and recycling (in 2002 in municipal landfills 84% of all municipal waste were deterred, in 2009 only 69%) (Hren et al., 2011: 29-30).

Unique to Slovenia are the still largely intact nature, rich water resources and forested land. Slovenia is known for bringing together diverse worlds, from the Alps to the Dinarides, and the Pannonian to the Karst. The speciality of Slovenia remains its spatial placement in the transition zone between the Western and Eastern Europe and the border between North and South, what makes it known as a transit country for organized crime groups. Criminal groups usually store their 'precious cargo' only in our territory. Most often the illegal shipments are directly transported through the country. Transnational environmental crime is no exception; particularly dangerous are illegal transportations of waste from Western Europe, carried out by Romanian and Bulgarian citizens after they join the European Union and the consequent abolition of borders and border control for them. The question, how many such 'cargo' ends in Slovenian forests and caves, is an issue that draws attention of the experts in the field of criminology and criminal justice.

<sup>&</sup>lt;sup>11</sup> As it is typical in the transition countries, the structure of the economy between 1991 and today has dramatically changed. The share of agriculture in GDP has declined by more than half, from 5.7 percent of GDP in 1991 to 2.4 percent in 2010. Besides, also the share of industry and construction has greatly reduced (in 1991 44% of GDP was generated by industry and construction, in 2010 only 31% of GDP). On the other hand, the proportion of service activities rose significantly (from 50% in 1991 to 67% in 2010) (Hren et al., 2011: 48-49).

<sup>&</sup>lt;sup>12</sup> In 2009, 30 percent of the total electricity generated was produced from renewable energy, where the highest percent of energy is produced by hydroelectric stations (Hren et al., 2011: 29).

Meško and Flander (2011: 228) emphasize that in the last period penal legislation and sentencing policy are getting harsher in spite of the fact that the crime rate has not risen in recent years. Similar trends are observed in the field of environmental crime. In Slovenia the number of environmental crime cases in general is not increasing (in average 145 environmental crime cases per year) and several times a year police, the Inspectorate of the Republic of Slovenia for Environment and Spatial Planning and other inspection services as well as the public prosecutor's office face very different examples of transnational environmental crime. Most often detected are illegal waste disposal, waste shipments with incomplete or false documentation and waste transportation from west to east.

In Slovenia environmental protection made an important progress in the last decade (Meško, Sotlar and Eman, 2012) and successfully follows the rapid changes and the overall development and progress of the modern society. The main problem of environmental crime is the dimension of the committed violations<sup>13</sup> and bad visibility of the caused consequences.<sup>14</sup> Slovene police investigates an average of 145 cases of crimes against the environment per year, what actually is a small number compared to the other offences.<sup>15</sup> What is more, the percentage of the organized crime in the average of 145 environmental crimes is relatively low; approximately five to ten detected organised environmental criminal acts per year. However, it is necessary to emphasize that the so called 'grey - undetected field' of this form of organized crime is as big and unknown as the other organized crime forms. When dealing with environmental crime, the Slovenian police and other governmental agencies most often face the following forms of organized environmental crime:

<sup>&</sup>lt;sup>13</sup> From the review of the database of the Inspectorate of the Republic of Slovenia for the Environment and Spatial Planning (2004-2010) and police crime database (2002-2010) results, that for Slovenia most typical forms of deviations against the environment are: water pollution (intensive agriculture; industrial emissions, unregulated discharge of waste water); air pollution (traffic; industrial emissions); soil pollution (hazardous waste, illegal dumps, intensive agriculture, waste oils and motor fuels); waste management (communal and industrial waste, hazardous waste, waste oils and motor fuels, asbestos waste); illegal trafficking with animal and plant species and minerals and fossils; import, export and unlawful acquisition or use of radioactive or other hazardous substances; environmental degradation and destruction of forests; animal torture and illegal hunting; pollution with the electromagnetic radiation; light pollution; and driving in the natural environment with bicycles and motor vehicles, and motor slides.

<sup>&</sup>lt;sup>14</sup> Environmental crime acts usually leave behind a remote and unpredictable consequences, therefore it is difficult to prove the existence of immediate danger and even more difficult to prove the causation and the guilt of the perpetrator.

<sup>&</sup>lt;sup>15</sup> Although in the Republic of Slovenia the police detects only in the average 145 environmental crimes a year, which is not an excessively high number (actually it is a very small number compared to the classic crime, where the average number is around 58,500 crimes a year (Police, 2002-2010)), but still also this group of crime deserves the same rate of dedication and the same technical competences of the investigators.

#### 1) The illegal trade in animal and plant species

Slovenia has become a prominent importer of exotic animals and plants and is therefore contributing its share in the impoverishment of flora and fauna on other continents. Most often the whole shipments of protected species, their skin, limbs or other parts of the bodies are seized at the airport Jože Pučnik Brnik or already at the background checks of the cargo destined to Slovenia form other airports. For the Slovenian territory the transit of killed endangered species of birds (smuggled from Croatia, Serbia and Montenegro usually to Italy) is typical. In majority of cases the perpetrators of these acts are Italian hunters and the birds are intended primarily for the purpose of culinary speciality. Most of these cases are detected at the international border crossing Obrežje (Dobovšek and Goršek, 2007). Furthermore, Slovenia is located at the intersection of four bio-geographical regions: the Dinaric, Alpine, Pannonian and Mediterranean region, thus connecting the eastern and western European countries and is also a link between the Central European, Balkan and Mediterranean region. Slovenia is a country with a diverse and relatively well-preserved fauna and flora with over 850 species specific for this region. . Certain components of Slovenian natural environment (e.g., cave fauna) are unique even by international standards (Bolješič, 2002). Unfortunately it is only a matter of time, when one of the crime bosses will desire to have a salamander (Proteus anguinus) in his personal collection in the private zoo on his property.

## 2) The illegal trade of ozone-depleting substances, hazardous chemicals and harmful pesticides;

In 1993 in Slovenia the so called Colombian affair with waste disposal happened. The Slovene company C&G was in charge of the waste disposal produced by companies Sava and Krka. In the standard procedure of waste manufacture the waste was exported to France, where hazardous chemicals would be properly and safely recovered. The situation got complicated when France refused the waste (Vilfan, 1997) due to unknown reason. C&G company managed to get the licence for export to Colombia. Two shipments of hazardous waste amounted to 575 hazardous barrels (97 tons). The situation got complicated again, when the Colombian authorities refused the waste, because their analysis showed variations in concentration of the substances listed in the costumer declaration. In June 1994 the ship Triglav had to leave Colombia with a full cargo. The ship tried to unload the toxic cargo in Ecuador and later in Peru, but eventually returned to Slovenia. In December 1994 the waste was transported to France and destroyed in accordance with environmental standards (Meško and Klenovšek, 2011).

# *3) The dumping, illegal transport and trading of various types of hazardous or toxic, radioactive and other wastes;*

Despite the small quantities of produced waste compared to global scale, Slovenia has also taken over the role of export, import and transit country (Meško and Klenovšek, 2011). In the Primorska region police discovered some cases of waste dumped into the sinkholes in pastures. The investigation revealed that farmers, owners of the pastures, were paid by Italian organized crime groups to dispose the waste on their land. Compared to the border with Italy, the border with Austria is not so problematic because of the high mountain area. On the opposite, the problems represent normally and fast transitive, with forests covered borders with neighbouring countries (i.e., Croatia and Hungary) in lowlands.

## 4) The illegal felling and trade in timber;

In Slovenia several cases of illegal cutting in the forests and timber trade by organized criminal groups were detected (Policija 2008-2010). Caused damage is usually noticed by forest owners when they visit their land after the damage was already done. For criminal groups particularly interesting are remote forest near the border, for example the highlands Gorjanci area, the area along the river Mura and disputed border with Croatia, deserted hills of Goričko area at the Hungarian border, etc.

## 5) The illegal exploitation of mineral resources, where most of these excavations of materials is done without the appropriate licenses and opencast mining.

In the so-called 'weekend actions' campaign perpetrators on the land (fields, meadows, etc.) remove the top layer of humus and carry out the uncontrolled extraction of raw materials (mostly gravel) to a depth of about five meters. The excavated gravel is by trucks transported to different construction sites or landfills. When the excavation of gravel is finished, the pit is lavished with construction or other waste (sometimes hazardous waste of salonite plates, oils and lubricants). Above the waste in the pit the primarily excavated humus, which was deposited in the vicinity, is disposed and this way the illegal excavation is hidden. In such cases the perpetrators have double profit, since they first get the gravel and then they also get rid of the waste for free. The illegal mineral excavations are sometimes committed by smaller municipalities, especially during the works on macadamized roads (Viler Kovačič, 2004; Markovič, 2006; IRSOP, 2004-2010).

Although all above described forms of transnational environmental crime are equally important from the environmental justice perspective and represent a daily challenge for the investigators and researchers, in the continuation problem of dumping, illegal transport and trading of waste in Slovenia will be discussed.

#### 3.1 Waste trafficking in Slovenia

Waste trafficking is one of the most profitable forms of transnational environmental crime. "Waste can be defined in numerous ways" (Meško and Klenovšek, 2011: 80), but usually descriptions are depending on waste's environmental impact, its form or properties (Massari and Monzini, 2004) and most often legal definitions (White, 2011). Defining waste as hazardous and non-hazardous is very often but also controversial and broadly unaccepted (huge differences between countries' national legislations). One of the attempts to achieve the unified list was the Basel Convention on the Control of Transboundary Movements of Hazardous Waste and Their Disposal (1989), which divides waste into two groups: 1) List A (hazardous waste); and 2) List B (non-hazardous waste). From nowadays perspective of a modern, constantly changing society, both lists should be constantly supplemented. Second, similar attempt is European Commission waste list (White, 2011: 72), published in the European Waste Catalogue (European Environmental Agency, 2012).

To be able to tackle the waste trafficking issue in detail, we have to be aware that this is not just a simple act, but we actually talk about the process which has different parts. Massari and Monzini (2004) described three phases of waste trafficking: 1) transferring waste from its origin to a waste management firm; 2) waste storage and transit (waste is treated in different ways to deceive further inspection); and 3) dumping of waste at the destination sites, presented in Figure 2 below. Another issue is the pre-phase, the so-called collecting or searching the waste (which from the criminal enterprise perspective can also be called 'a waste management promotion and service supply'). A closer look reveals that different detected cases cover only one or more of the above described waste trafficking phases. By our opinion the understanding of the entire process makes the detection, investigation and researching of the individual cases much easier, as demonstrated in the case of Slovenia.



Figure 2: Process of waste trafficking in phases (summarised after Massari and Monzini, 2004)

In Slovenia the illegal waste disposal is representing approximately 50 percent (in year 2010 55% (IRSOP, 2010)) of all violations reports, where the individual cases of waste shipping with the incomplete documentation prevail. Despite the high percentage of illegal waste disposal offences, the actual number of waste trafficking cases with the involvement of organized crime groups remains unknown. Slovene police forces detect up to five cases of waste trafficking per year (Policija, 2002-2010), although the cases of illegal transit of prohibited substances and hazardous waste from west to east in recent five years have importantly increased. Some of these waste shipments are discovered together with stolen tools, appliances or vehicles, therefore they are not recorded as cases of waste trafficking. Similarly, the two selected cases of waste trafficking that occurred in the past decade on the Slovenian territory and are presented in the continuation show, how easily waste trafficking passes into the ordinary way of living or business operation:

1) The case of Italian Mafia paying to Slovenian farmers for dumping waste in the sinkholes in their fields in Primorska region:

In Slovenia police is most often faced with the danger of cross-border environmental crime at the internal borders. Since the European Union membership in 2004 the border controls were abolished and border crossing is free. Organised criminal groups are taken advantage of such situation. In the Primorska region police discovered several cases of waste dumped into the sinkholes in pastures or buried in the fields. The investigation revealed that farmers, owners of the pastures, were paid by Italian organized crime groups to dump or bury the waste on their land. We can only speculate how large the share of illegally disposed waste is, which the Italian mafia secretly transported across borders at night, and how many Italian, Slovenian or other foreign owners of the factories have 'hired' the organized group to illegally dispose their waste, resulting in the production and whose lawful processing or storage is very expensive.

2) The case of irregular waste incineration at cement factory Lafarge Cement Trbovlje:

The waste incineration case, presenting the final destination in the process of waste trafficking – the 'dumping' (in our case incineration) of waste at the final destination site, goes back to the year 2002 when the French company Lafarge Perlmooser AG bought the factory. Since then the cement production in Trbovlje was modernized and became profitable. According to the factory owner's statements the company decreased hazardous omissions into the environment. Everything was just fine until the factory started to use waste<sup>16</sup> as alternative fuel in the cement production in

<sup>&</sup>lt;sup>16</sup> The waste incineration can result in adverse impacts on the environment and human health if not performed according to strict regulations. The European Union legislation is very precise what types of waste can be used as alternative energy sources. Furthermore, control and measurement of emission limits, the

2007. The inhabitants of Trbovlie and surrounding villages noticed changes in the air, caused by waste incineration (e.g. smoke, stench, difficulty in breathing), and established civil initiative named Eko krog to fight against the environmental pollution. The additional reason for such reaction was the increase of the reported health issues. The results of chemical analysis of air and water emissions, conducted by the inhabitants, to a high degree differ from the official company results. The dispute continued and grew into the protests and legal requirements of the population to stop or prohibit the waste incineration. During the process in court the inhabitants had an insight to all official documents and discovered that the representatives of the Lafarge Cement company in their application for environmental permits for the waste incineration submitted an application to allow them a few times larger pollution with hazardous substances, as permitted according to the Slovenian national legislation (e.g. in case of hazardous waste incineration from 2- to 4-times (100-300%) larger pollution with carcinogenic heavy metals and up to 25-times (2400%) larger pollution with carcinogenic organic compounds). Such extent of incineration would enable them to use more different sorts of waste and thereby increase the factories' profit.

Actually surprising is the finding that Slovenian Environmental Agency issued a negative reply and rejected only a part of the proposal. Whereby, the Agency issued a positive reply to the second half of the request and allowed the pollution with organic compounds, despite the fact that such behaviour was against the national environmental protection legislation. Beside the suspicion of corruption and issuing illegal licences under the influence of Slovenian governmental officials in the year 2007, a few years later, in 2011, a case of forgery of official data measurements, conducted by the licensed institute was revealed. The payer of the ordered emission measurements was the factory Lafarge Cement (Dnevnik.si, 2012).

Besides the emphasized waste trafficking issue, the presented case is just one among many stories of movements of production industry from West to East where the environmental protection legislation is not so strict or is still forming. The violations of national environmental protection legislation and involvements in corruption, bribery and falsifying of documents about pollution measurements analysis are unfortunately more or less common practice. Furthermore it has to be noted that other companies normally pay for the incineration of their waste; therefore the profit of the factories that collect and re-use waste is double. From the environmental justice perspective, in both presented cases the inhabitants of surrounding areas are the victims whose health and sometimes even lives are endangered due to the waste trafficking and illegal disposals. For them it is very important that police and other agencies successfully detect and deter or prevent such cases of environmental crime

activity of incineration and co-firing can be performed only by organization with the appropriate license (Eko krog, 2012).

against the environment committed by the organized crime groups and white-collar criminals.

### 4. DISCUSSION

Environmental crime has become attractive for organized criminal groups primarily because of the opportunities for big earnings and demands in the marketplace due to the desired comfort, prestige and profits of modern society. Liberalization and globalization and the consequent abolition of borders, reduction of border controls and easier transfer of funds through the global financial and banking system (Elliott, 2009) have just offered more opportunities for the so called money laundering and its diversion of legitimate business. In case of waste trafficking and frauds, we are dealing with the combination of the transnational environmental crime and whitecollar crime, which benefits from exploiting offers given by organized crime groups to dispose the waste for much more favourable price compared with the legal environment-friendly disposal of waste. Usually the waste is transported from the company and illegally disposed in first possible place.

Environmental crime will remain a profitable business as long as the financial costs of environmental protection for the offenders will outweigh the benefits (Watson, 2005). Considering this cognition it is necessary to seek new solutions for the fight for the preservation of the nature and new measures against environmental crime. The trade with waste is an international form of environmental crime; therefore cooperation and planned response on a global level is necessary. For a successful fight against transnational environmental crime transfer of information, experience and intelligence sharing is necessary. Whereby, it has proven to be an effective method for detecting waste trafficking and seizing of illegal waste shipments (Meško and Klenovšek, 2011).

Presented cases of waste trafficking in Slovenia showed that each individual case of discussed transnational environmental crime is different. To be able to find proper responses and solutions, such cases have to be analyzed and studied separately. All responses to (transnational) environmental crime have a common goal - the preservation and conservation of nature. In this process it is important to connect all three levels: non-state, national and supranational. Therefore, it is necessary to: 1) strengthen the (inspection) supervision of factories and corporations; 2) reduce the cost of processing waste in accordance with environmental standards that companies will not have to look for cheaper ways offered by organized criminal groups; 3) increase the powers of the inspectorate agencies and environmental protection agencies (as done in the U.S.); 4) establish a special investigation and/or prosecution team for the deterrence and prosecution of the transnational environmental crime on the national level; 5) increase the penalties for all forms of deviance against the environment; 6) enable the easier work of investigators (e.g., education, training and necessary equipment); and 7) introduce the obligatory repairment of the damage

caused to the environment together with socially useful work in the field of environmental protection for all violators of environmental legislation.

Any fact written above is better than a denial and pretending that everything is right and that environmental crime due to a small number of cases is not worth to be mentioned or to receive the necessary attention of the criminal justice authorities. What is more, the change of our behaviour is inevitable. Meško and Klenovšek (2011: 97) emphasize that *"the life cycle of products should not end with its shipment to "somewhere" but with complete recycling,"* although sustainable development with planned waste recycling still remains only a desired goal of the modern society.

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