

ABOUT AMBITUS

The project AMBITUS aims at boosting the operational activities of law enforcement authorities in their combat against environmental crime in the long term, while:

- Deepening the analysis of the environmental crime phenomenon, offering a more accurate knowledge of, for instance, threats and trends, areas and flows, criminal networks and links:
- Developing further cooperation by gathering knowledge, standardising and improving practices and procedures, and establishing more efficient networking mechanisms among member states and with non-EU partners;
- Implementing or supporting operational actions based on intelligence-led investigations and tools while focusing on specific locations, clusters and organised criminal groups (OCGs).

AMBITUS plans to produce detailed reports, summary records & decisions, dedicated tools & training programmes, as well as tailored communication items.

ABOUT THIS REPORT

One component of AMBITUS is dedicated to analysis of action against environmental crime. The ultimate aim of this research is to produce a "handbook" on environmental crime in Europe by the end of the project (expected by year end 2021). This document will contain information on major environmental crimes in the EU, their impact on Europe and their interaction with other offenses, such as organised crime. It will contain an overview of the applicable legislative and judiciary structure, the type of enforcement action and its effectiveness on the local, national and European level. It will feature an analysis of the key issues in addressing environmental crime and a series of policy

recommendations on how to approach these problems in such a delicate time for the European Union, as environmental crimes are dramatically on the rise.+The handbook will be compiled by merging information obtained under the various headings of the research component of AMBITUS. The starting point of this process is the current document - the AMBITUS Preliminary Report – which contains an overview of the abovementioned issues, developed through desk research undertaken by the Istituto Affari Internazionali team charged with analysis. The Preliminary Report will then be expanded using the answers provided by a questionnaire the team is currently sending to Law Enforcement Authorities (LEAs), the judiciary, international institutions, NGOs and think tanks across the EU-27 and outside the Union. The replies will be then discussed in a series of workshops held in at least 18 member states. The information resulting from the guestionnaire and the workshop debates will all be included in an updated version of the Report, thus constituting the final Handbook on Environmental Crime in Europe.

If you would like to participate in this exercise and/or provide information you believe may be useful, please do not hesitate to contact the IAI team:

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Environmental crime is on the rise. A yearly growth rate of 5 to 7 per cent in the number of offenses in recent years has turned this into one of the leading areas of crime.

This is true for both the global and the European stage¹ – the UN now considers it the fourth largest criminal category in the world.² Low risk of prosecution, high revenues and lack of tools on the part of judiciary and law enforcement authorities have motivated organised and non-organised crime to expand into areas such as wildlife and timber trade or waste trafficking.

The EU is at the centre of such worrying trends: as the foremost economic and trading bloc in the world, the European Union is one of the leading destinations or transit hubs for illegal trade linked with environmental crimes. The unique natural resources of member states such as Romania or Poland, and the significant demand for cheap waste disposal in countries such as Italy, Hungary and Germany, make Europe an appealing theatre for traffickers. The consequences of all of this are devastating - not only for the environment, but also for the whole European economy and society, which relies on the fragile natural equilibrium ensured by its ecosystems.

The rise of environmental crime in Europe requires swift action. Yet, despite the EU's strong environmental record, member states and the European Union as a whole are lacking adequate tools to face it. European countries are still missing a common definition of environmental crime and thus a shared list of which offenses are to be

considered in this category. The oftentroublesome heterogeneity of member states' norms and legal systems reaches its maximum regarding environmental crimes, where the same offense falls sometimes under administrative, sometimes under criminal law in different countries, with huge disparities across Europe. While many member states have extremely low penalties for serious environmental offenses, such as wildlife trafficking, lack of data also leads to a widely incomplete picture on the amount of illegal activities and damage done across Europe, further hampering cross-border cooperation. Transnational organised crime thrives in such an environment, and current EU policies should be adapted to take into account these developments.

Yet now could be the time to reverse such trends. The Green New Deal has put an unprecedented emphasis on environmental action, dedicating attention not only to widely addressed sectors such as the energy transition, but also to biodiversity and the fight against wildlife trafficking or illegal logging.

In the past few years, the European Council has repeatedly recognised environmental crime as one of the top security threats for the EU³ and has recently included it as a priority in the EU fight against organised and serious international crime;⁴ institutions

¹ Interpol and UN Environment Programme (UNEP), Strategic Report: Environment, Peace and Security – A Convergence of Threats, December 2016, http://hdl. handle.net/20.500.11822/17008.

² UNEP, The State of Knowledge of Crimes That Have Serious Impacts on the Environment, 2018, http://hdl. handle.net/20.500.11822/25713.

³ Council of the European Union website: *The EU Fight against Organised Crime*, last review on 13 October 2020, http://europa.eu/!fT66hy.

⁴ Europol website: *EU Policy Cycle – EMPACT*, https://www.europol.europa.eu/node/23.

such as Europol⁵, Frontex and Eurojust⁶ have therefore put the issue among their priorities, promoting cooperation among national agencies. It is thus of utmost importance to translate this vision into the tools the EU needs to confront environmental crime.

This preliminary report aims at offering a comprehensive picture of these trends and of environmental crime in Europe; starting from its definition and the main sectors affected, the document continues towards the issues preventing effective action. The final section considers positive new trends and offers four policy recommendations based on our previous analysis.



⁵ Ihid

⁶ Eurojust, Eurojust Single Programming Document 2020-2022, 10 December 2019, https://www.eurojust.europa.eu/eurojust-single-programming-document-2020-2022.



The lack of a shared definition hampers the coordination of efforts against environmental crimes; yet, the heterogeneity of Member States and offenses is one of the key obstacles in finding common ground.

2.1 DEFINITIONS, MAGNITUDE, IMPACTS AND TYPES OF CRIME

For the time being, a universally accepted definition of environmental crimes does not exist. Frequently identified as an "emerging threat" at the EU level due to lack of awareness and treated with limited resources, the area of environmental crimes is broad and multi-faceted, covering a wide range of offences. The mere fact that it is regarded as "emerging" is emblematic of its blurred definition, with only vague reference to the criminalisation of actions that can damage the environment found in many recent EU action plans and strategies.⁸

Commission The suggests that "environmental crime" cover acts which "breach environmental legislation and cause significant harm or risk to the environment and human health",9 and Directive 2008/99/ EC (analysed below) focuses on crimes in relation to pollution, waste, use or release of dangerous substances, protected species and habitats. The extent of coverage appears uncertain and the categorization unclear, not least because overlaps are very common (i.e., the illegal use of fuel oil mixed with waste oil readily causes other environmental damage, such as air pollution).

In 2016, Interpol and UN Environment estimated that environmental crime is currently the fourth most lucrative illegal business globally – amounting to an annual turnover whose estimate ranges between 91 and 258 billion US dollars every year.¹⁰ Although estimates differ and are very broad, environmental crime is generally considered the fourth largest criminal area after drug trafficking, counterfeit crimes and human trafficking.¹¹ It is however extremely difficult to estimate the real dimension of the phenomenon, including in the European Union, where updated data are missing and no evidence of the scale of the problem is available.

Environmental nonetheless crimes are committed in one form or another throughout the EU. They include illegal actions with a harmful impact on the environment - water, air, earth and soil, and flora and fauna in particular.¹² These crimes might aggravate (or be aggravated by) other longer-term problems, such as climate change. Many offenses are of a local nature (i.e., poaching in Malta), whereas others have a transnational component (i.e., trafficking in wildlife, trafficking in electronic waste, timber, etc.), involving several countries, their neighbouring states and other continents (especially Latin America, Africa and Asia).13

⁷ See the IPEC report: EnviCrimeNet Intelligence Project on Environmental Crime (IPEC), Report on Environmental Crime in Europe, 20 February 2015, https://www.europol.europa.eu/node/203.

⁸ For example, in the EU Seventh Environment Action Programme.

⁹ European Commission DG Environment website: *Combating Environmental Crimes*, last update on 29 January 2020, https://ec.europa.eu/environment/legal/crime.

¹⁰ Interpol and UNEP, Strategic Report, cit.

¹¹ European Commission DG Environment, Environmental Compliance Assurance - Guidance Document, February 2019, https://ec.europa.eu/environment/legal/pdf/2019-A4-Consultation-Draft-Environmental-Crime%20Guidance.pdf.

¹² IPEC, Report on Environmental Crime in Europe, cit.

¹³ EFFACE, Environmental Crime and the EU. Synthesis of the Research Project "European Union

However, both levels need to be considered as part of a global threat.

frequently linked "Envicrimes" are other forms of crime (i.e., financial crime, document fraud) or organised crime (such as smuggling, terrorism, money laundering, corruption) - not by chance, there are ongoing discussions at the United Nations Convention against Transnational Organized Crime (UNTOC) level to include environmental crimes. Many environmental offences are committed by organised criminals including local gangs, national and international networks or even corporate organised groups, whose involvement is not easy to detect, not least because member states seem to have different definitions of "organised crime". Environmental crimes are indeed highly lucrative, explaining their rise. According to Europol, the related illegal profits can be as high as in drug trafficking, but with lower sanctions (if applied at all) and detection rates, thus incentivising criminals in committing such offences.14

Especially when touching upon many sectors, the impact of environmental crimes might be very difficult to evaluate. According to the analysis of the EFFACE project, 15 there are three ways to assess such impacts: qualitatively, where the effect is described without putting figures on the impact; quantitatively, where the impact is described with figures referring to the scale of the impact; and lastly, on the basis of this quantified data, proceeding with a financial or health impact analysis of the environmental crime. 16 In any case, as recently reported by the Council, in most

Action to Fight Environmental Crime", Berlin, Ecologic Institute, March 2016, https://www.ecologic.eu/13614.

member states statistics on environmental crimes are insufficient, fragmented and based on multiple individual sources, as they are collected separately by each authority involved in preventing and combating crime, with no interlinking among them.¹⁷

Environmental crimes are also often wrongly perceived as "victimless" 18 because damages are collective and are frequently part of an accumulative process which, while it becomes visible eventually, in the short term is less discernible.¹⁹ Impacts however are huge. Reversible or irreversible environmental may include pollution degradation or disturbance of the ecological balance; species on the verge of extinction and a consequent reduction in biodiversity; contamination of the food chain; and negative impacts on local community livelihood and on sustainable development. Many other social, economic and political frames are also undermined by environmental crimes, such as lower income in the hands of legitimate businesses or loss of tax revenue that has negative effects on societies and services for EU citizens.²⁰ As OCGs further infiltrate this picture committing environmental crimes, the rule of law as well as the reputation of the EU and of its member states are also damaged.²¹

¹⁴ Europol website: *Environmental Crime*, https://www.europol.europa.eu/taxonomy/term/346.

¹⁵ EFFACE stands for "European Union Action to Fight Environmental Crime", a 40-month EU-funded research project ended in March 2016.

¹⁶ EFFACE, *Environmental Crime and the EU*, cit., p. 12 and 13.

¹⁷ Council of the European Union, Final Report on the Eighth Round of Evaluation on Environmental Crime – Information and Discussion at the Council, 15 November 2019, https://data.consilium.europa.eu/doc/document/ST-14065-2019-INIT/en/pdf.

¹⁸ Paul James Cardwell, Duncan French and Matthew Hall, "Tackling Environmental Crime in the European Union: The Case of the Missing Victim?", in *Environmental Law and Management*, Vol. 23, No. 3 (May 2011), p. 113-121.

¹⁹ IPEC, Report on Environmental Crime in Europe, cit.

²⁰ EFFACE, *Environmental Crime and the EU*, cit., p. 12 and 13

²¹ IPEC, Report on Environmental Crime in Europe, cit.

2.2 MAIN ENVIRONMENTAL CRIMES IN THE EU

Environmental offences in the European Union include the improper collection of waste, its transport or recovery; the illegal operation of a plant or activities in which substances are illegally stored and/or dispersed; the possession, killing and/or trade of wild animals; the destruction of plant species; and the production, use and/or trade of ozone-depleting substances.

The geography of environmental crimes is varied but some tendencies within the EU are nonetheless observable. All member states denounce significant issues in waste trafficking, due to the profitability of the business and the need for cheap disposal of both domestic and industrial waste – a tendency which, as Asian countries are blocking waste imports from Europe, is expected to increase. Certain countries' geographical locations and their trade patterns, for example, make them a favourable gateway to European and Asian markets. The forests of Central and Eastern European countries (Romania and Bulgaria in particular) are a valuable prey for illegal logging, and their rich biodiversity is threatened by poachers. This is also the case for member states where migrating species transit (Italy, Spain and Malta among others), often within the Mediterranean Basin. Coastal countries also suffer from illegal fishing, while others with a strong chemical industry (such as the Netherlands or Belgium) have to face crimes regarding water, air and soil pollution. A few member states have also witnessed fraud regarding the EU Emission Trading System (Poland and Cyprus, for instance).

As stated, one of the key sectors affected by envicrime is the waste industry, where according to EUROPOL it is particularly easy for criminals to challenge honest players.²² Illegal waste disposal and shipment is one of the cases considered under article 3 of

Directive 2008/99/EC, and until 2013 waste trafficking was the key focus of concern of envicrimes in the EU. Illegal international waste shipment indeed still constitutes, emblematically, up to 25 per cent of all waste shipments according to the Commission.²³ An investigation reveals that the EU ships large amounts of toxic electronic waste to developing countries,²⁴ especially towards Africa and the Asia-Pacific. According to the European Environmental Bureau, the annual revenues in the EU for illicit hazardous waste trafficking range between 1.5 billion and 1.8 billion euro while for illicit non-hazardous waste trafficking they range between 1.3 billion and 10.3 billion euro (a wide range, also highlighting the difficulties in making such estimates).²⁵ Illicit maritime consignments of hazardous and other wastes transported from waste-exporting regions (Europe) to the Asia-Pacific region have occurred frequently in the recent past (i.e., the 7,000 tonnes of illegal waste netted in 2014 thanks to the joint operation Demeter III in European countries and China).26

Illicit waste disposal is another part of the problem. Cases are found basically everywhere throughout Europe: illegal disposal of toxic waste in disbanded open pits has been frequently discovered in Brandenburg, Germany.²⁷ Other notable cases include the "Land of Fires" in Campania, Italy, where systematically, since the end of the 1980s, toxic waste has been illegally

²³ European Commission DG Environment website: *Waste Shipments*, last update on 12 October 2020, https://ec.europa.eu/environment/waste/shipments.

²⁴ By the Basel Action Network.

²⁵ European Environmental Bureau, *Crime and Punishment*, Brussels, March 2020, p. 5, https://eeb.org/?p=101230.

²⁶ Ieva Rucevska et al., *Waste Crime – Waste Risks*. *Gaps in Meeting the Global Waste Challenge*, A UNEP Rapid Response Assessment, Nairobi/Arendal, UNEP/GRID, 2015, http://hdl.handle.net/20.500.11822/9648.

²⁷ EFFACE, Environmental Crime and the EU, cit.

burnt and buried.²⁸ The 2018 Chinese ban on plastic waste imports further increased pressure on European disposal.

Annually, the global trade in endangered species is estimated to be worth billions of euro - the EP for example estimates that illegal wildlife trade ranges between 8 and 20 billion euro each year globally.²⁹ Even though the EU has a legal framework (EUWTR) which sets out strict arrangements for trading in wildlife products, the Union faces new challenges emanating for example from the growth of e-commerce, and remains a major destination market for illegal wildlife or its products³⁰ - with around 2,500 seizures of wildlife products made every year in the EU according to the most recent data available from the Commission (2014). The major ports and airports of the EU are important transit points for those trafficking activities.31 Rare species are included in such illegal trade - for instance birds, coral or fish - trafficked within the EU or brought across EU borders.

Illegal logging and associated trade also represents a crucial problem. Member states worked on the issue back in 2003 with the Forest Law Enforcement Governance and Trade (FLEGT) Plan at the European level. Illegal logging constitutes a major issue in several member states (i.e., Romania, where illegal practices are destroying ancient forests and national parks, including Natura 2000 areas, with NGOs reporting that more than 20 million m³ are logged illegally each

year³²). Amongst other recent examples is the legal battle between the EU and Poland over the logging of Białowieża Forest.³³

EnviCrimeNet considers that the differences between pollution, contamination degradation are often blurred.34 Illegal activities relatable to pollution are primarily linked to waste management and waste dumping. Water is one major element involved: waste dumping, illegal wells or ponds, marine pollution or the contamination of surface water are at the basis of problems impacting ecosystems and the overall food chain. One interesting case reported by the European Environmental Bureau is Doñana, an important wetland where over 1,000 illegal wells and 1,700 suspicious irrigation ponds were drilled to support the growing (and often also illegal) agriculture.35 Soil is another (and connected) element. Its contamination puts ground water at risk and can affect human health and the environment; this normally arises from the illegal use of pesticides or the discharge of waste. Forms of illegal pollution and contamination might also be a consequence of illegal mining or processing of hydrocarbon and natural resources. The unlawful production, import, export, placing on the market or use of ozone-depleting substances is also considered a criminal offence. Amongst the most recent cases, the Spanish Guardia Civil discovered a company and an organised crime group involved in the illegal export of ozone-depleting substances, with ten tonnes of the banned

²⁸ Giacomo D'Alisa et al., Victims in the "Land of Fires": Case Study on the Consequences of Buried and Burnt Waste in Campania, Italy, EFFACE project, January 2015, https://efface.eu/node/828.

²⁹ Rosaleen Duffy, *EU Trade Policy and Wildlife Trade*, Brussels, European Parliament, December 2016, https://www.europarl.europa.eu/thinktank/en/document.html?reference=EXPO_STU(2016)578025.

³⁰ Ibid.

³¹ European Commission, *The EU Approach against Wildlife Trafficking* (COM/2014/064), 7 February 2014, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52014DC0064.

³² Save Paradise Forest, *Data Kept Secret from Romanian Forest Inventory Reveals a Catastrophic Level of Illegal Logging*, 29 November 2018, https://www.saveparadiseforests.eu/?p=3555.

³³ Arthur Neslen, "Poland Violated EU Laws by Logging in Białowieża Forest, Court Rules", in *The Guardian*, 17 April 2018, https://www.theguardian.com/p/8efga.

³⁴ IPEC, Report on Environmental Crime in Europe, cit

³⁵ Read more in European Environmental Bureau, *Crime and Punishment*, cit., p. 7.

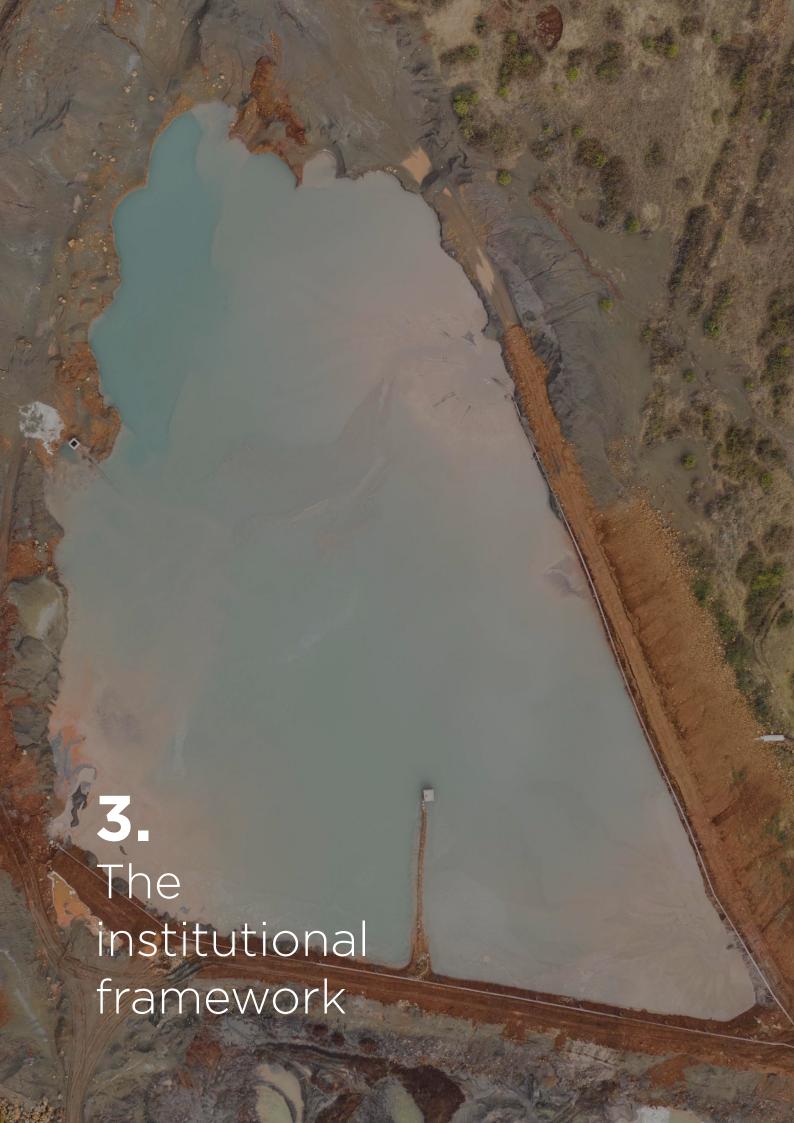
R-22 gas being smuggled from the EU.³⁶

Many and varied other types of environmental offences are perpetrated, including shipbreaking (see, for example, the Seatrade Case in the Netherlands³⁷) or carbon market frauds that in the past have involved several member states such as Poland, France, Cyprus or Lithuania.



³⁶ Europol, How a Company Earned Up to €1 Million Illegally Trading Ten Tons of Ozone-Depleting Substances, 5 April 2019, https://www.europol.europa.eu/node/3358.

^{37 &}quot;Dutch Shippers Sentenced for Having Ships Demolished on Indian Beach", in *Reuters*, 15 March 2018, https://reut.rs/2HCrlgr.



A number of international organisations are involved in fighting environmental crimes in Europe, yet the role of national authorities remains dominant. A more ambitious involvement of the EU is needed on several fronts.

3.1 ACTORS AND INSTITUTIONS INVOLVED IN THE FIGHT AGAINST ENVIRONMENTAL CRIMES

A great variety of actors and institutions are involved at various stages (i.e., regulatory level or enforcement) in the fight against environmental crime in the European Union. Action against environmental crimes is usually led by three main entities on the national, European and international stages: law enforcement agencies, the judiciary and civil society. These include all relevant actors responsible for designing, monitoring, investigating, prosecuting and sanctioning environmental crimes.

At the international level, UN convention (including CITES, Marpol, bodies Basel conventions) are flanked by UN organisations particular UNODC, (in UNECE, UN Environment, UNICRI) and other Ols or regional organisations (such as the World Customs Organisation or OSCE) and international inter-governmental organisations (Interpol). At the European level, all regulatory and legislative bodies are involved (Commission, Parliament and Council), as well as courts and agencies (i.e., Europol, Eurojust and Frontex). At the national level, regulatory bodies, administrative authorities, prosecutors, courts, customs, police and civil society bodies are involved at different levels and degrees depending on the member state considered. These actors are supported by NGOs and networks that operate horizontally across all levels.

Several bodies of the EU are involved in ensuring compliance with the legislative framework and providing support to

member states. DG Justice is responsible for the development and monitoring of implementation of the Environmental Crime Directive (ECD) – see below. It provides judicial training and develops instruments for mutual cooperation on criminal matters regarding environmental crime. DG Environment deals with improving inspections in member states, can initiate infringement proceedings if member states do not properly implement the EU environmental legislation and works on the implementation of legislation.38 Especially when it comes to cross-border environmental crime, Eurojust (judicial cooperation), DG Home and Europol (police cooperation) are crucial to advise member states and help them share relevant information. Europol supports member states in fighting environmental crimes and supports national enforcement authorities by collecting, analysing and spreading relevant information for the case. It investigates together national enforcement with authorities or within joint investigation teams but is not allowed to conduct operations independently of member states. The Serious and Organised Crime Threat Assessments – tasked by the Council to Europol and part of the EU's multi-annual policy cycle for organised and serious international crime established in 2010 - advises EU decisionmaking on major organised crimes. Their recommendations are used to define priorities which are then translated into fouryear Multi-Annual Strategic Action Plans and yearly operational action plans on each threat - both approved by the Standing Committee on Operational Cooperation on Internal Security. In cooperation with Europol, also Interpol channels are used for information exchange in support of enforcement agencies.³⁹ Interpol has in the past advised jurisdictions on environmental crimes, for example suggesting establishment of National Environmental Security Task Forces.⁴⁰ Some member states have already developed specialised units, as in France (OCLAESP), Spain (SEPRONA) and Italy (CUFA), while others are in the process of creating new ones with the support of the AMBITUS project itself (Belgium, Romania and Hungary among them).

Eurojust is a EU agency dealing with judicial cooperation in criminal matters, supporting the activities of national authorities and easing their cooperation. It can request member States to investigate a case or institute a prosecution and set up joint investigation teams of several member states in cross-border cases, but it lacks decision-making power with regard to national authorities. Other than Europol, other networks and bodies do support judicial cooperation, as the European Judicial Network and the European Public Prosecutor's office.

Frontex is the European Border and Coast Guard Agency. It promotes, coordinates and develops European border management in line with the EU fundamental rights charter and the concept of Integrated Border Management. Frontex focuses on preventing cross-border crimes and helps identify trends in cross-border criminal activities by analysing data on the EU's borders and beyond. It supports the coordination and sharing of information between border authorities and member states, and it shares any relevant intelligence gathered during its operations with the appropriate national authorities and Europol. Frontex also produces vulnerability assessments to evaluate the capacity and

readiness of each member state to face challenges at its external borders. Moreover, the agency coordinates and organises joint operations and rapid border interventions to assist member states at the external borders.

Europol is the European Union's law enforcement agency. It supports member states in the fight against serious and organised forms of crime such as terrorism and cybercrime, in order to ensure an effective and coordinated response. For this purpose, it also collaborates with non-EU partner states and international organisations. Europol serves as a support centre for law enforcement operations, as a hub for information on criminal activities and as a centre of expertise for law enforcement. Regular reports assessing crime terrorism in the EU are produced to give partners deeper insights into the crimes they are tackling. Europol is also home to a number of specialised bodies and systems that ensure a flexible and innovative response to criminal activities, using the most up-todate methods and tools, as well as offering partners fast, secure and linked information.

Actors and institutions are frequently supported NGOs by the work of (fundamental for their awareness campaign role), by investigative journalists (specialised in reporting illicit behaviours) and by environmental enforcement networks.⁴² In some instances, NGOs might detect environmental crimes and might also cooperate with police bodies by providing training and capacity building, or assist officials in the investigation and submission of information relevant to specific cases/ issues. NGO activists have proved crucial for condemning certain behaviours and calling for urgent action in many and different cases of environmental crime – such as the criminal developments in Romanian forests⁴³ or the

³⁹ Ibid., p. 22.

⁴⁰ IPEC, Report on Environmental Crime in Europe,

⁴¹ EFFACE, Environmental Crime and the EU, cit.

⁴² Ibid., p. 20.

⁴³ Save Paradise Forest, International NGOs Condemn the Assassination of Romanian Forests and

illegal fishing and trade in Malta and Spain.44

Environmental enforcement networks including government and non-government enforcement and compliance practitioners promote effective implementation enforcement of environmental law, help share information and experience among members, build contacts across jurisdictions, assist with practices and procedures, etc. At the EU level, the European Network for the Implementation and Enforcement of Environmental Law, the European Network of police experts for Environmental Crime (EnviCrimeNet, an informal network), the European Network of Prosecutors for the Environment and the European Union Forum of Judges for the Environment are the main examples.45

Cooperation among EU agencies includes the collaboration between Europol and the European Anti-Fraud Office (OLAF) in fighting the sale and market availability of certain counterfeit products (even if OLAF's activities are not criminal investigation, even if they may lead to a criminal investigation (. In 2019, for example, 550 tonnes of goods were seized in an operation targeting the illegal trade of pesticides. OLAF also cooperates with third countries on preventing, detecting and combating fraud and irregularities that also concern the environment – i.e., with China on pesticides. although patterns of cooperation are little documented.

In the past, specific cooperation tools to facilitate information sharing among

law enforcement officials have also been established – such as the EU-Twix Report that facilitates information exchange on illegal wildlife trade in Europe and has been used particularly in the context of transboundary crimes.⁴⁸

3.2 THE EU LEVEL

The debate on environmental crimes and the need to address them better has grown widely in the last decade. Environmental criminal law has evolved in Europe since the 1970s⁴⁹ and EU institutions have been trying to build an *ad hoc* framework for the last two decades.⁵⁰

More recently, in 2015 the EU Agenda on Security raised attention on the issue, highlighting the link between environmental crimes and serious and organised cross-border crimes;⁵¹ in 2016 the EC published an EU Action Plan to combat wildlife trafficking;⁵² in 2017 the Council in its conclusions recognised the need to address environmental crimes among the priorities of the EU in the fight against organised and

Call for Action against Illegal Logging, 28 October 2018, https://www.saveparadiseforests.eu/?p=5102.

⁴⁴ European Environmental Bureau, *Crime and Punishment*, cit.

⁴⁵ See more about their role in EFFACE.

⁴⁶ OLAF, "OLAF Plays Major Role in Seizure of Over a Thousand Tons of Dangerous Counterfeit Pesticides", in *OLAF Press Releases*, No. 18/2020 (5 June 2020), https://europa.eu/!wN44Fh.

⁴⁷ Ibid.

⁴⁸ Victoria Mundy-Taylor, Illegal Wildlife Trade and the European Union: An Analysis of EU-TWIX Seizure Data for the Period 2007-2011, A TRAFFIC Report prepared for the European Commission, October 2013, https://ec.europa.eu/environment/cites/pdf/reports/Analysis%20of%20EU-TWIX%20seizure%20 data%202007-2011.pdf.

⁴⁹ For an interesting overview, see: Michele Faure, "The Development of Environmental Criminal Law in the EU and its Member States", in *Review of European Community and International Environmental Law*, Vol. 26 No. 2 (July 2017), p. 139-146.

⁵⁰ European Commission DG Environment, Combating Environmental Crimes, cit.

⁵¹ European Commission, *The European Agenda on Security* (COM/2015/185), 28 April 2015, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52015DC0185.

⁵² European Commission, *EU Action Plan against Wildlife Trafficking* (COM/2016/87), 26 February 2016, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:87:FIN.

serious international crime between 2018 and 2021;⁵³ and in 2018 the Commission published an EU action plan to improve environmental compliance and governance, including the area of environmental crime.⁵⁴

Currently, the EU provides a legislative framework relating to the criminal law of the member states and to administrative environmental law, then to be transposed and implemented by member states. The EU has in place a criminal legal framework on the protection of the environment (Directive 2008/99/EC) and on ship-source pollution (Directive 2009/123/EC). In particular, these instruments provide a comprehensive set of minimum rules requiring various types of conduct that are harmful to the environment to be criminalised.

The most important EU instrument in relation to environmental crimes is the Environmental Crime Directive (ECD)⁵⁵ and its annexes (Directive 2008/99/EC). The Directive builds upon Directive 2004/35/EC, which lays down rules on environmental liability as regards preventing and remedying environmental damage. The ECD "obliges Member States to provide for criminal penalties in their national legislation in respect of serious infringements of provisions of Community law on the protection of the environment".⁵⁶

53 Council of the European Union, Council Conclusions on Setting the EU's Priorities for the Fight against Organised and Serious International Crime between 2018 and 2021, Brussels, 19 May 2017, https://data.consilium.europa.eu/doc/document/ST-9450-2017-INIT/en/pdf.

54 European Commission, *EU Actions to Improve Environmental Compliance and Governance* (COM/2018/10),18January2018,https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0010.

55 European Parliament and Council of the European Union, *Directive 2008/99/EC of 19 November 2008 on the Protection of the Environment through Criminal Law*, OJ L 328, 6 December 2008, p. 28–37, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32008L0099.

56 Ibid., point 10.

To achieve this objective, the Directive establishes a common set of offenses that member states must criminalise; approximates the scope of liable perpetrators, especially by requiring that legal persons can incur liability; requires that member states extend criminal liability also to inciting, aiding and abetting such offenses; and approximates criminal sanctions by requiring all member states to ensure effective, proportionate and dissuasive criminal penalties for environmental crimes.

In particular, article 2 lists a series of vague definitions and article 3 lists the most relevance offences including: the discharge, emission or introduction of materials into air, soil or water; the collection, transport, shipment, recovery or disposal of waste; the operation of a plant in which a dangerous activity is carried out; the production, processing, handling, use, holding, storage, transport, import, export or disposal of nuclear materials or other hazardous radioactive substances; the killing, destruction, possession or taking of specimens of protected wild fauna or flora species; trading in specimens of protected wild fauna or flora species or parts or derivatives thereof; and the deterioration of a habitat within a protected site.

The ECD was enacted at a time (2008) when the then European Community did not have the competence introduced by the Lisbon Treaty to harmonise criminal sanctions which explains general terms like "effective, proportionate and dissuasive" used to describe the appropriate penalties (see article 5). Following the entry into force of the Lisbon Treaty in 2009, it became possible to establish minimum rules with regard to the definition of criminal offences or sanctions, if the alignment ("approximation") of criminal laws is essential to ensure the effective implementation of a given policy. In 2015, the European Commission announced that it would consider the need to further align criminal sanctions in the area of environmental crime.

Relevant studies have been conducted to assess the level of implementation of the Directive in member states and emphasising the many loopholes of the legislation. In 2016 the Council invited the Commission to monitor the effectiveness of EU legislation in the field of countering environmental crime,⁵⁷ also choosing it as subject of the 8th Mutual Evaluation round. The cycle was finalised in November 2019.⁵⁸

Directive 2005/35/EC and Directive 2009/123/ EC contain minimum rules requiring the criminalisation of ship-source discharge of polluting substances into the waters. Illicit ship-source discharge of polluting substances should be regarded as a criminal offence as long as it has been committed with intent, recklessly or with serious negligence and results in deterioration in the quality of water. Also in this case, details of sanctions are not prescribed, although the Directive calls for "effective, proportionate and dissuasive" sanctions.59 The new directive on port reception facilities for the delivery of waste from ships (2019/883/EU) states that the Commission should look into the revision of Directive 2005/35/EC on shipsource pollution and on the introduction of penalties for infringements, extending the directive's scope.

The key piece of legislation on illegal timber is the EU Timber Regulation (EUTR), part of the abovementioned FLEGT. The EUTR is applied EU-wide, but countries are responsible for

57 Council of the European Union, Council Conclusions on Countering Environmental Crime, Brussels, 12 December 2016, https://data.consilium.europa.eu/doc/document/ST-15412-2016-INIT/en/pdf.

defining what is to be considered legal timber and what not. Illegal logging is however not included in article 3 of the Directive 2008/99/ EC.

Other relevant pieces of EU legislation include the Environmental Liability Directive⁶⁰ whose purpose is to establish a framework for environmental liability (the "polluter pays" principle) and aiming at ensuring that the financial consequences of certain types of harm caused to the environment are borne by the economic operator who caused this harm. As part of the Circular Economy Action Plan, a package of legislative proposals on waste entered into force in July 2018.

EU legal instruments implement several international environmental agreements. The abovementioned ship-source pollution directiveforexampleimplementstheMARPOL Convention 1973/1978. 61 The European Union is competent for the adoption of common conditions granted under the Convention on International Trade in Endangered Fauna and Flora (CITIES). The Basel, Rotterdam and Stockholm Conventions which include the EU are at the forefront of global action to track and manage the transboundary flows of hazardous waste: through the EU waste shipment regulation, for example, the EU has implemented the Basel Convention. 62 The Convention on Long-Range Transboundary Air Pollution, signed on behalf of the European Economic Community in 1979, is the main international legal framework for cooperation on reducing and preventing air pollution and its adverse effects upon human health and the environment in the

⁵⁸ Council of the European Union, *Final Report* on the Eighth Round of Evaluation on Environmental Crime, cit.

⁵⁹ EFFACE, *Environmental Crime and the EU*, cit., p. 25.

⁶⁰ European Commission DG Environment website: *Environmental Liability*, last update on 26 August 2020, https://ec.europa.eu/environment/legal/liability.

⁶¹ EFFACE, *Environmental Crime and the EU*, cit., p. 25.

⁶² European Parliament and Council of the European Union, *Regulation (EC) No 1013/2006 of 14 June 2006 on Shipments of Waste*, OJ L 190, 12 July 2006, p. 1-98, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32006R1013.

UNECE region.

The EU also uses trade policy instruments to improve the implementation of multilateral environmental agreements such as CITES, whose provisions are found in the EU's Free Trade Agreements with third countries, for example. The EU collaboration with third countries particularly affected by certain problems is also a reality. For example, the EU has established a bilateral cooperation mechanism with China on Forest Law Enforcement and Governance in order to fight illegal logging together.

Access to justice in environmental matters "is intrinsic to EU environmental law, and draws on fundamental principles of EU law that are reflected in the provisions of the EU Treaties, the Aarhus Convention and secondary legislation as interpreted in case-law of the CJEU", as stated in the Commission notice on the topic, prepared in 2017.⁶³

3.3 THE NATIONAL LEVEL

All member states are now compliant with the ECD Directive but the many different bodies and legal traditions result in different investigation, enforcement and implementation practices.

While the ECD Directive indicates to the member states what sort of illegal activity should be criminally sanctioned, it is up to each member state to choose how to incorporate the directive in their criminal law, opening to significant differences.

Differences at the national level are evident in investigation and enforcement methods. In most jurisdictions the police (which

63 Read all relevant info here: European Commission, *Commission Notice on Access to Justice In Environmental Matters*, OJ C 275, 18 August 2017, p. 1-39, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C:2017:275:FULL.

includes border guard or gendarmerie forces) together with customs authorities, public prosecutor offices and, sometimes, specialised police agencies for economic crime and revenue agencies, are competent for the investigation on environmental crimes. Depending on the jurisdictional size, regional or local forces and agencies may also investigate cases and various administrative agencies and inspectorates might act as supervisory authorities.

Another difference member among states regards where the instruments of environmental criminal law can be found. Some incorporate the most important criminal provisions in a penal code. In other cases, provisions on environmental crimes can be found in an environmental code. Elsewhere, criminal provisions can be found in sectoral regulation such as a member state's waste statute. A number of countries do not employ ad hoc techniques such as observation, infiltration or telephone tapping in severe cases of environmental crime. In other member states (i.e., Sweden) there are special enforcement departments dealing only with environmental investigations however this does not automatically imply adequate resources are provided.65

A very useful tool to understand how member states are organised in terms of institutions and laws on environmental crime is the so-called Environmental Implementation Review aiming at addressing the causes of implementation gaps and consisting of a two-year cycle of analysis and discussions between the European Commission, EU member states and stakeholders. It is a tool to help deliver the benefits of EU environmental law and policies to businesses and citizens through better implementation. Country reports are drafted every two years

⁶⁴ IPEC, Report on Environmental Crime in Europe, cit., p. 10.

⁶⁵ European Environmental Bureau, *Crime and Punishment*, cit., p. 5.

in each EU member state. Disparities are found in both the type and the severity of transposition and enforcement practices in member states⁶⁶ – including (i) only imprisonment, (ii) imprisonment and fine, (iii) imprisonment or fine, (iv) imprisonment and/ or fine, (v) imprisonment with or without fine and (vi) only (criminal) fine.⁶⁷

A number of good practices to tackle environmental crime can be found in different many areas (enforcement, prevention, etc.). In Denmark, for example, the government makes available reports with overviews of administrative warnings and the application of sanctions, beyond publishing statistics on environmental crimes.⁶⁸ Following a 2011 report by the Environmental Protection Agency giving quidance to strengthen inter-agency cooperation, the Danish Attorney General drew up guidelines on the prosecution of environmental crimes. These guidelines aim to coordinate the roles of the police, the relevant administrative authorities and the prosecuting authority. Finland has produced a yearly report on environmental crime since 1998, with detailed statistics on environmental offences.69 The country has a nationallevel working group for the coordination

of preventative work against environmental crime and 17 regional-level working groups. France has now assigned a full-time engineer to OCLAESP, which has now four additional and specialised regional groups linked to the central office (Marseille, Bordeaux, Metz and Cavenne in French Guyana). In Germany the federal Statistical Office publishes annual reports on prosecutors' activities including on environmental crimes.⁷⁰ The German Environment Agency has carried out a research project on the status quo with regard to tackling environmental crime as well as on opportunities for development, with the contribution of landers. In Sweden there is easily accessible information on how citizens can report environmental crimes or crimes related to nature to the police, also with a dedicated section on the police website.71 To combat environmental crime in general, there are cooperation mechanisms set up between the Swedish Police, customs authorities, the Agriculture Agency, the Swedish Coast Guard and the Swedish Chemicals Inspection. Specific information on cooperation related to wildlife crimes is available. Spain has created a police unit (SEPRONA - Guardia Civil) to combat environmental crime and a specialised Environmental Prosecution Authority, and Italy has created specialised environmental police forces to deal with environmental crime (Comando Carabinieri per la Tutela dell'Ambiente). Country reports might help in understanding the good practices as well as the challenges of each member state.⁷²

⁶⁶ EFFACE, "Pros and Cons of Harmonising Criminal Sanctions on Environmental Crime", in *European Policy Briefs - EFFACE*, No. 17 (March 2016), https://efface.eu/node/949.

⁶⁷ Núria Torres Rosell and Maria Marquès Banqué, Study on the Implementation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law, SEO/BirdLife/European Network against Environmental Crime (ENEC), May 2016, https://www.eufje.org/images/docPDF/Study-onthe-implementation-of-Directive-2008_99_ENEC_SEO_BirdLife_May2016.pdf.

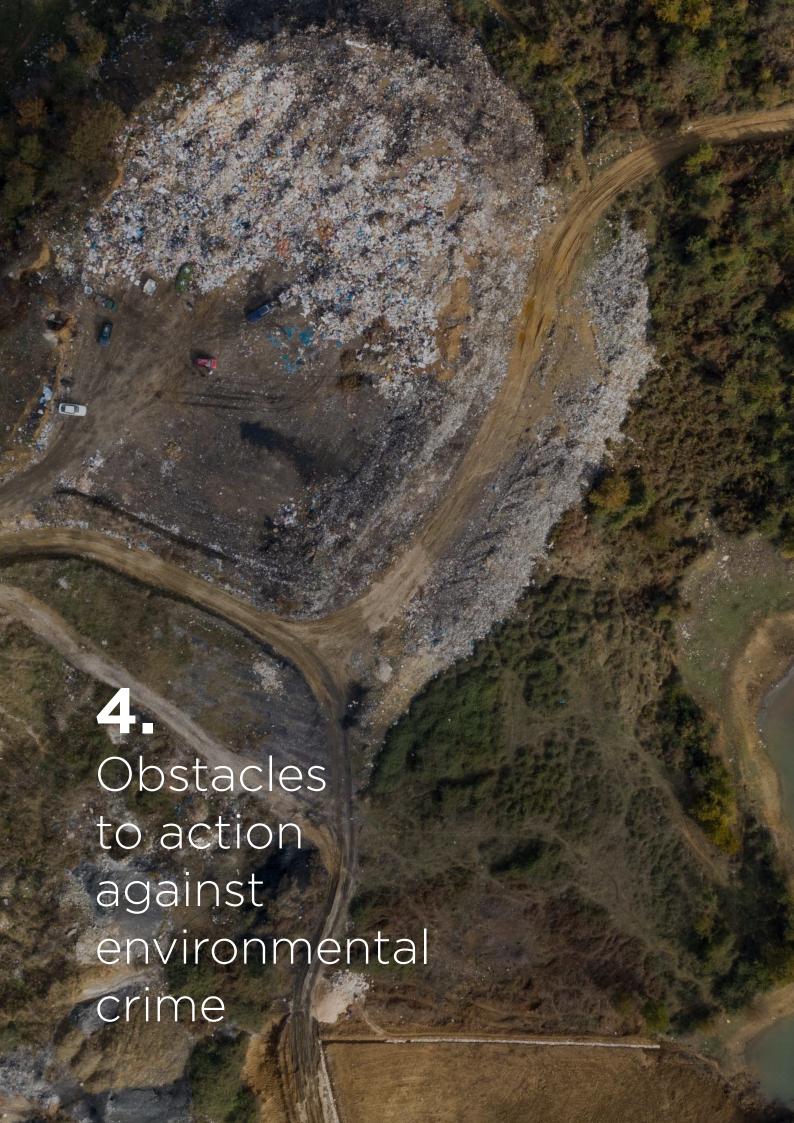
⁶⁸ European Commission, *The Environmental Implementation Review 2019: Country Report Denmark* (SWD/2019/134), 4 April 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019SC0134.

⁶⁹ European Commission, *The Environmental Implementation Review 2019: Country Report Finland* (SWD/2019/136), 4 April 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019SC0136.

⁷⁰ European Commission, *The Environmental Implementation Review 2019: Country Report Germany* (SWD/2019/137), 4 April 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019SC0137.

⁷¹ European Commission, *The Environmental Implementation Review 2019: Country Report Sweden* (SWD/2019/117), 4 April 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019SC0117.

⁷² For an overview of country reports, see: European Commission DG Environment website: *Policy Findings and Country Reports*, last update on 14 September 2020, https://ec.europa.eu/environment/eir/country-reports.



Compared to other offenses, many are the obstacles faced in addressing environmental crime. While some are caused by an inadequate legislative framework, some on insufficient operative tools, the lack of a common framework remains one of the key issues to address.

4.1 FINDING COMMONG GROUND

Despite the evident impact of environmental crimes on Europe and the many political declarations in the past years focusing on the importance of addressing them,⁷³ action against envicrime in the EU still remains hindered by a number of issues related to the current legislative and operative frameworks. The specific features of environmental crime, such as the often low visibility of the heavy damage inflicted to territories and to populations' health, further undermines the efforts by LEAs and by the judiciary across Europe.

The main obstacle to action against envicrime on the EU level remains the lack of a common definition – or a definition at all – across member states. Although marking a significant step towards regulating an area of criminal law which has been disregarded for decades, the abovementioned ECD leaves significant room for interpretation to policymakers and judges⁷⁴ and it only partially covers the range of conduct related to envicrime.

Most member states have thus failed so far to deliver a national definition of environmental crime: among the member states most active on the issue, the French criminal code does not provide any specific characterisation for envicrime,⁷⁵ if we exclude the very limited notion of "Ecologic Terrorism" under articles 421 and 422 of the Criminal Code. Similarly, the comprehensive Italian "Codice" dell'Ambiente" (Environmental Code), both in its original 2006 text⁷⁶ and in the latest, 2019 update, does not include any definition of this sort. Law 68 of 2015 introduced into the Italian criminal code the notion of "Delitti contro l'ambiente" (crimes against the environment), improving the overall framework, listing a series of critical offences and also addressing the involvement of organised crime, yet failing to provide a comprehensive definition including, for instance, wildlife trafficking.⁷⁷

Even the metric used in the Directive to define whether a conduct constitutes a criminal offence is unclear, as the text considers actions that are "unlawful and committed intentionally or with at least serious negligence" — again leaving significant room for interpretation. Consequently, same kinds of offence are often treated in a

⁷³ Catherine Bearder, "How Environmental Crime Became an EU Security Priority for 2018-21", in *Euractiv*, 17 October 2017, https://www.euractiv.com/?p=1183886.

⁷⁴ Directive 2008/99/EC, cit.

⁷⁵ Floriana Bianco, Annalisa Lucifora and Grazia Maria Vagliasindi, *Fighting Environmental Crime in France: A Country Report*, Study in the framework of the EFFACE research project, February 2015, https://efface.eu/node/836.

⁷⁶ Italy, Decreto legislativo 3 aprile 2006, n. 152: Norme in materia ambientale, https://www.gazzettaufficiale.it/atto/serie_generale/caricaDettaglioAtto/originario?atto.dataPubblicazioneGazzetta=2006-04-14&atto.codiceRedazionale=006G0171.

⁷⁷ Annamaria Villafrate, "I reati ambientali", in *Studio Cataldi*, 4 April 2018, https://www.studiocataldi. it/articoli/29860-i-reati-ambientali.asp.

⁷⁸ Directive 2008/99/EC, cit.

different manner depending on the country considered, and key issues such as illegal disposal of waste could represent a major criminal offence in some member states, while facing only administrative sanctions in others. This has a number of consequences, including the delocalisation of environmental crimes towards member states that have smaller sanctions (and usually less stringent controls). In the case of transnational crimes, such a significant heterogeneity among national regulations on the same topic further hinders the ability of LEAs and the judiciary to coordinate and to prosecute offenders.

4.2 MISSING LEGISLATIVE TOOLS

In addition to the lack of a common, comprehensive definition, addressing environmental crimes in the EU is also undermined by an inadequate legislative framework dedicated to the issue in most member states. Generally speaking, this problem builds on the fact that environmental crime did not receive a dedicated focus in Europe until the past decade. 79 Rather, it was only considered in relation to other offences. Such a lack of specific attention was only partially addressed by the 2008 Directive on the EU level, while on the national side only some member states have delivered specific documents (such as the Italian Law n.68 of 2015) and only for selected topics. Again, this has a number of consequences; the use of advanced investigating techniques, such as wiretapping, is in some member states only allowed when envicrime is associated to other offences (in Belgium, for instance), even regarding core issues such as waste trafficking.80 Missing legislative tools also concern insufficient clarity in legal definitions, thus leading to overlaps between administrative and criminal procedures and penalties. In the case of waste trafficking, for instance, several EU authorities have underlined the problem caused by the unsuitability of evidence gathered through administrative procedures for use in judicial proceedings.⁸¹

An insufficient legislative focus on envicrime also translates into fines that are often significantly lower than the impact of the offence. In the case of violation of CITES, Greek law establishes penalties ranging from 587 to a maximum of 14,674 euro; in Malta, the range is even lower – 497 to 4,967 euro.82 This goes largely against the provisions of the 2008 Directive itself, which states that offences against the environment must be "punishable by effective, proportionate and dissuasive criminal penalties."83 Yet, the again very generic definition has supported the insufficient implementation of the Directive in many member states, especially in sectors such as the protection of biodiversity. In the case of the protection of birds, member states such as Bulgaria or the Czech Republic treat illegal killings as minor offences, even when the crime is systematic, heavily damaging to the environment or particularly cruel - an issue worsened by the lack of implementation of other pieces of legislation, such as the Biodiversity Act.⁸⁴ As environmental crimes are particularly lucrative and have often only a medium-term visible impact (on, for instance, the capacity of fish stocks to replenish), strong administrative sanctions could instead represent a key measure for action against envicrime.

⁷⁹ European Environmental Bureau, *Crime and Punishment*, cit.

⁸⁰ Council of the European Union, *Final Report on the Eighth Round*, cit., p. 14.

⁸¹ Ibid.

⁸² Matthew Hall and Tanya Wyatt, *Tackling Environmental Crime in Europe*, LIFE-ENPE Report, Bristol, Environment Agency Horizon House, March 2017, https://www.environmentalprosecutors.eu/sites/default/files/document/Cap%20and%20 Gap%20report_FINAL_Print.pdf.

⁸³ Directive 2008/99/EC, cit., article 5.

⁸⁴ Torres Rosell and Marquès Banqué, *Study on the Implementation of Directive 2008/99/EC*, cit.

Another missing element in the legislative framework is the ability to criminally prosecute corporations for environmental crimes. This is another provision already contained in the 2008 Directive (specifically in article 6), yet most member states have so far failed to define the application of such responsibility.85 In the case of the Dieselgate scandal, for instance, criminal prosecution in the US has not yet been matched by a similar approach in Germany, where both administrative and criminal responsibility are still subject to debate, more than four years after the discovery of the fraud.86 Transnational crimes involving offshore corporations and extra-EU countries further complicate the issue.

4.3 MISSING OPERATIVE TOOLS

Action against envicrime is also hindered by an often incomplete approach to the issue by member states, or lack of a dedicated avenue of action. None has so far delivered a strategy against environmental crime, even if some member states have started the process of structuring a framework for some of the most relevant offences, such as waste crime, building on EMPACT activities and dedicated Internal Security Fund (ISF) findings.87 Yet, a lot remains to be done: this inadequacy leads to a lack of vision, of coordination and to frequent overlaps not only between different European countries, but also among domestic authorities and institutions.88 This is particularly evident in sectors where different agencies are involved, as in the case of waste or wildlife trade, where

police authorities, environmental agencies, customs and other authorities often play a role concurrently.⁸⁹

Even when national laws are detailed and the space for interpretation by local authorities is limited, the lack of an enforcement strategy eventually leads to very limited effects of such legislation. Many member states have reported a significant discrepancy between the methodology, the number and the reporting of environmental inspections – a key part of enforcing environmental law,90 which also relates to the lack of consolidated data on envicrime. Most of the leading studies on the issue in the past decade, such as the EFFACE project, the Study on Environmental Governance and the eighth General Evaluation,⁹¹ have highlighted that statistics in most member states "are insufficient, fragmented and based on multiple individual statistical sources".92 This translates into the impossibility of composing a complete or reliable picture of the extent of these offences, since often methodology varies and information overlaps or is missing, increasing the difficulty of defining adequate national measures (and ultimately an effective strategy).

This also affects the transparency of action against environmental crime, since information on cases, on follow-ups to investigations and also on cooperation among member states is often not available online and not easily accessible to the general public. Such lack of data is also a key issue

⁸⁵ European Environmental Bureau, *Crime and Punishment*, cit.

⁸⁶ Christina Goßner, "First Dieselgate Ruling by Germany's Top Court Set to Flag Legal Clarity", in *Euractiv*, 25 May 2020, https://www.euractiv.com/?p=1469937.

⁸⁷ Council of the European Union, Final Report on the Eighth Round of Evaluation, cit.

⁸⁸ IPEC, Report on Environmental Crime in Europe, cit.

⁸⁹ EFFACE, Environmental Crime and the EU, cit.

⁹⁰ Martin Nesbit et al., Development of an Assessment Framework on Environmental Governance in the EU Member States. Final Report, Luxembourg, Publications Office of the European Union, May 2019, https://op.europa.eu/s/omAH.

⁹¹ Ibid.; EFFACE, Environmental Crime and the EU, cit.; Council of the European Union, Final Report on the Eighth Round of Evaluation, cit.

⁹² Council of the European Union, *Final Report on the Eighth Round of Evaluation*, cit.

on the global level; indeed, even the latest estimate by UNEP and Interpol on natural resources stolen because of environmental crime (one of the few available estimates) impressively ranges from 91 to 258 billion US dollars – an indication of the lack of accurate information on the issue.⁹³

The lack of a member state focus on environmental crimes is also reflected in the absence of a dedicated budget on the national level in most countries. Although this does not always equate with underfunding in all member states for action against envicrime, it negatively influences the proper allocation of resources towards key activities, such as capacity building and training. Indeed, the number of environmental laws, the frequent overlaps between the regional, national and European level, the significant space for interpretation and the complexity of many cases require a significant level of specialist training for judges, prosecutors and the police, which most member states are missing.94 This is particularly evident when dealing with offences related to sectors involving particularly complex legislation, such as treatment of chemicals. In addition to specialist training, several reports have called for the establishment of dedicated units (both in LEAs and in the judiciary), building on the positive examples of, for instance, the Spanish Servicio de Protección de la Naturaleza, the Guardia Civil department of environmental crime.95

4.4 OBSTACLES DERIVED FROM SPECIFICS OF ENVIRONMENTAL CRIMES

Action against envicrime is not only hindered by insufficient legislative or operative frameworks, but also by specific features of such offences which make them less visible and more difficult to address than other crimes.

Environmental crimes are, first of all, less detectable than most personal or property offences; some, for instance, are either the result of an accumulative process (e.g., illegal fishing), or their effects are visible only some time after the offence has taken place (e.g., contamination of land due to illegal waste disposal). In the case of the industrial area of Portoscuso, in the Italian region of Sardinia, it took decades to recognise a significantly higher rate of cancer and pulmonary diseases and to link to extensive pollution from several plants in the area above all the aluminium smelting factory Eurallumina. Although industrial activities started between the 1960s and the 1970s, early reports highlighted the issue only in the late 1990s and early 2000s. A prohibition on eating the heavily contaminated dairy products from a vast area surrounding the town was established only in 2012,96 and the Eurallumina management was brought to court with the accusation of environmental disaster only in July 2018.

While a few environmental crimes could be conspicuous, as in the case of oil spills, it is also true that it is not always possible to directly link the crime to offenders – or even to prosecute them. The Romanian Carpathian Mountains contain the last remaining virgin forests in Europe, which are largely protected as national parks

⁹³ Christian Nellemann (ed.), *The Rise of Environmental Crime. A Growing Threat to Natural Resources, Peace, Development and Security,* A UNEP–Interpol Rapid Response Assessment, Nairobi, UNEP, 2017, http://hdl.handle.net/20.500.11822/7662.

⁹⁴ Matthew Hall and Tanya Wyatt, *Tackling Environmental Crime in Europe*, cit.

⁹⁵ Ibid.; Eurojust, *Strategic Project on Environment Crime. Report*, November 2014, https://www.eurojust.europa.eu/strategic-project-environment-crime.

⁹⁶ Stefano Deliperi, "Portoscuso, meglio un cancro che un disoccupato in casa", in *Il manifesto sardo*, 16 December 2019, https://www.manifestosardo.org/?p=30278.

and Natura 2000 areas. Nevertheless, it is estimated that two-thirds of these forests may have been lost in the past decade due to illegal logging. Opaque practices, namely the use of intermediate actors and third-party log yards that are unable to trace timber origin, allow the laundering of illegal logs that then enter the timber market. This issue of timber traceability has so far prevented an effective corporate accountability and liability. Only recently the Austrian industry leader Schweighofer has been accused of having long benefitted from this system, profiting from the exploitation of protected forests, and is currently under investigation.

Envicrime is also deeply linked to the territory, and collaboration with local communities is thus fundamental. Such a task is however not always easy to achieve, especially when the population directly or indirectly benefits from environmental crimes and has little or no economic alternative, when it mistrusts LEAs or when corruption is diffused among local authorities. In the case of Portoscuso, for instance, the illegal disposal of waste and the contamination of the area have been hidden also by the local political class and by the unions, pushed by a population which feared the unemployment ravaging one of the poorest areas of Italy.97 The devastating illegal logging in primary forests in Romania has been allowed also by widespread corruption on both the local and the national level, as well as by the connivance of the population, which obtained jobs as lumberjacks and received small profits in exchange for turning a blind eye on both the illegal exploitation and the intimidation (and even murder) of foresters.98 As we will

discuss in the next section, the presence of environmental crime further complicates the relation between LEAs and the local population.

Transnationality is another key element preventing full, effective action against envicrime – in many cases the most relevant. Indeed, in a globalised world and in an open-border Europe most environmental crimes are transnational or have at least a transnational element, as they are perpetrated by international companies or pushed by interests in a different country than where the crime is taking place, as in the case of the role of the Austrian company Schweighofer in Romanian illegal logging.99 Waste crime is also often associated to waste trade, particularly for hazardous materials, even if the recent Chinese ban on import of plastic trash has led to a surge also in its illegal shipping from the EU to South-East Asian countries. 100 Transnationality is indeed an issue for action against envicrime, concerning both extra-EU trade (particularly wildlife and waste crime) and intra-EU trade.

Transnationality complicates action against envicrime in a number of ways; coordination among member state institutions is more complicated than the already hard coordination at the domestic level, also because of the often very heterogeneous national legislation on such matters. The lack of statistics and of consolidated information undermines the ability to understand the whole picture of often interconnected issues among member states, such as waste trade. National interests in the exploitation of fragile resources, such as fish stocks, often leads to underreporting of illegal activities. This was

⁹⁷ Gruppo d'Intervento Giuridico Onlus, *Situazione* ambientale e sanitaria di Portoscuso: ognuno si assuma le proprie responsabilità fino in fondo, 3 June 2017, https://wp.me/p1y3IX-4At.

⁹⁸ Laurence Lee, "Romania Government Accused of Allowing Illegal Logging in Forests", in *Al Jazeera*, 1 February 2019, https://aje.io/6v4e6; Shaun Walker, "Violence Escalates as Romania Cracks Down on Illegal Timber Trade", in *The Guardian*, 8 January

^{2020,} https://www.theguardian.com/p/cgkv7.

⁹⁹ European Environmental Bureau, *Crime and Punishment*, cit.

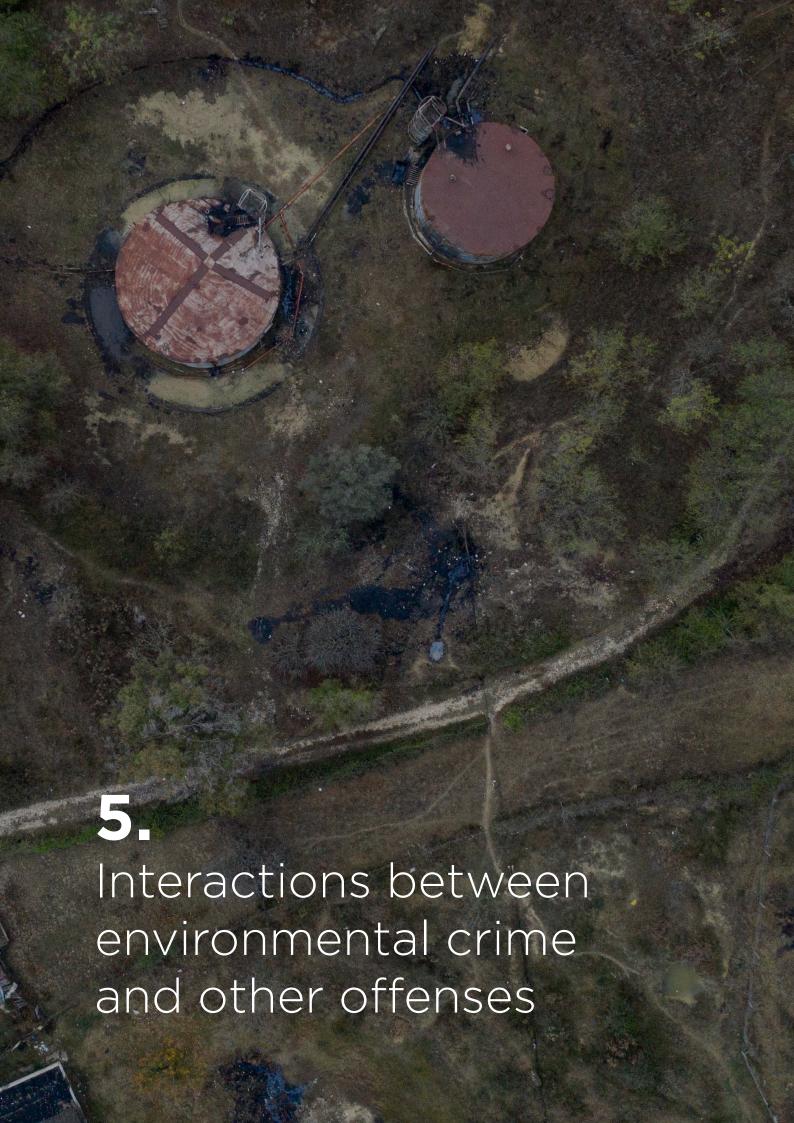
¹⁰⁰ Elisa Murgese, "Illegal Trafficking of Plastic Waste: The Italy–Malaysia Connection", in *IAI Commentaries*, No. 20|16 (April 2020), https://www.iai.it/en/node/11458.

the case, for instance, for the ILVA aluminium plant in Italy; emissions and pollution strongly exceeding legal limits for decades, with significant damage to the health of the surrounding population, has been tolerated because of the interest on the part of the state in keeping employment high in the area. 101 As shown by the positive results brought by tools such as Joint Investigation Teams and the prosecutors networks developed by the Baltic Marine Environment Protection Commission (HELCOM) and the Southeast European Law Enforcement Centre, 102 international cooperation is key for future successful action against envicrime. For such collaboration to successfully expand, it will be however necessary to finally agree on a unique European definition of environmental crime, and on common guidelines for judges, prosecutors and the police on the EU level.



¹⁰¹ European Environmental Bureau, *Crime and Punishment*, cit.

¹⁰² Council of the European Union, *Final Report on the Eighth Round of Evaluation*, cit.



The spike in environmental crimes has also been supported by new trends, such as the digitalisation, and favoured the expansion of the role of Organised Crime Groups.

5.1 ORGANISED CRIME

By definition, environmental crime is fertile ground for the involvement of Organised Crime Groups (OGCs). It is a high profit, low risk offense which, unlike others (drug crime, fraud), offers growing opportunities in a wide range of sectors, from waste trafficking to illegal logging. It is also often a low-visibility crime, which suits the recent trend of OGCs to keep a low profile (particularly on the international level) and thus better infiltrate institutions and communities. The 2007-2009 economic crisis (and now possibly the recession caused by the COVID-19 pandemic) has also economically weakened many communities across Europe. The lack of alternatives for income has made environmental crime more appealing and the infiltration of OGCs easier thanks to their offers of jobs and compensation.¹⁰³

The still remarkable economic disparities among several European member states, intensified by these crises, have also made countries with a significant endowment of natural resources and smaller income (such as Romania) an easier target for OGCs with access to richer neighbours and to their finance (Italy and Germany, for instance). 104 Generally speaking, environmental crime is particularly rewarding for well-structured organisations, able to connect the local and the international levels – two features common to most OGCs. This allows them to make a margin out of the difference between

OGCs' illicit activities concern most sectors of environmental crimes listed in section 2, even if some are of particular interest. Waste trafficking is one of the most common offenses because of the possibility of international trade, the complexity of regulations and the growing desire by many companies to save money on disposal, which is becoming increasingly expensive due to tighter environmental regulations.¹⁰⁷ Illegal trade of

the high price customers are willing to pay for the realisation of the offence (to receive illegally harvested timber or to dispose of toxic waste, for instance) and the relatively low contribution asked by impoverished local communities. The complex structure of OGCs also allows them to take advantage of the lack of coordination and the frequent overlaps among domestic and international institutions on environmental Transnational environmental crime is indeed the core of OGCs' involvement in this sense, since it is easy for them to avoid prosecution by slipping through different definitions of environmental and of organised crime across member states. It is however common to find both a local and an international component in the offense; in the famous abovementioned Italian case of the "Terra dei Fuochi", OGCs illegally disposed of toxic waste coming from both Italy and other countries. 105 The same OGCs involved in the case have used Italy as a transit location for special waste coming from other EU countries and then destined to extra-European destination for illegal disposal (Africa, Asia). 106

¹⁰³ Europol, *Exploring Tomorrow's Organised Crime*, 2 March 2015, https://www.europol.europa.eu/node/202.

¹⁰⁴ European Environmental Bureau, *Crime and Punishment*, cit.

¹⁰⁵ Noecomafia website: *I rifiuti,* https://www.noecomafia.it/?p=526.

¹⁰⁶ Ibid.

¹⁰⁷ Europol, Trash Worth Millions of Euros, 18

natural resources is another growing area of interest for OGCs, particularly regarding timber; forest crime ranked third among EU transnational offenses in 2017 and the involvement of organised crime from several member states (including Germany and Austria) is evident, particularly in the Danube-Carpathian region.¹⁰⁸

OGCs are however also familiar with less known types of environmental crime; in 2017 Europol and Spanish and French LEAs uncovered a traffic in ozone-depleting refrigeration fluids worth a million euro.¹⁰⁹ The 5 billion euro 2009 Carbon Market fraud uncovered by Europol similarly witnessed the involvement of an organised EU-wide criminal structure.¹¹⁰

The fight against organised crime has been a priority for the EU for the past decade, but instruments against organised environmental crime remain inadequate. Directive 2008/99/EC does not mention the issue in any way; although enviroime has been included in the priority list of the Council conclusions enhancing financial investigations to fight serious and organised crime of June 2020, this has not yet been translated into any dedicated measures on the topic¹¹¹ – similarly

September 2019, https://www.europol.europa.eu/node/3654.

108 WWF, WWF's Cooperation with Interpol to Prevent Forest Crime in Central and Eastern Europe featured on ARTE TV, 7 February 2019, http://wwf.panda.org/wwf_news/?359251.

109 Europol, *How a Company Earned up to €1 Million...*, cit.

110 Ashley Seager, "European Taxpayers Lose €5bn in Carbon Trading Fraud", in *The Guardian*, 14 December 2009, https://www.theguardian.com/p/2dv42; Aline Robert, "Multi-billion EU Carbon Market Fraud Operated from Poland", in *Euractiv*, 18 July 2016, https://www.euractiv.com/?p=1021808; Euractiv with AFP, "Jail Terms for French Carbon Trading Scammers", in *Euractiv*, 14 September 2017, https://www.euractiv.com/?p=1174913.

111 Council of the European Union, Council Conclusions on Enhancing Financial Investigations

to what happened to calls for action against organised environmental crime by the European Parliament and other institutions in previous years.¹¹² The legal basis for such provisions already exists, specifically in article 83 of the Treaty on the Functioning of the European Union, which also addresses organised crime and allows for the possibility to "establish minimum rules concerning the definition of criminal offences and sanctions in the areas of particularly serious crime with a cross-border dimension".113 The lack of an explicit mention of environmental offences again gives large space for interpretation on how to address organised environmental crime. This issue could be partially solved by officially adding the topic to the Treaty (by a unanimous decision of the Council),114 even if the problem is rooted in the EU approach of considering, at the same time, envicrime as a kind of organised crime, and vice versa. A dedicated approach to organised environmental crime as a specific issue would instead offer much clearer guidelines to member states on how to fight what is probably the most damaging, transnational and dangerous aspect of environmental crime in the Union.

5.2 DOCUMENT FRAUD AND CYBER CRIME

Document fraud is an offense frequently associated to environmental crimes, because it allows violations, such as wildlife trafficking,

to Fight Serious and Organised Crime, Brussels, 17 June 2020, https://data.consilium.europa.eu/doc/document/ST-8927-2020-INIT/en/pdf.

112 Teresa Fajardo del Castillo, *Organised Crime* and *Environmental Crime: Analysis of EU Legal Instruments*, Study in the framework of the EFFACE research project, February 2015, https://efface.eu/node/846.

113 Consolidated Version of the Treaty on the Functioning of the European Union, in Official Journal C 326, 26 October 2012, http://data.europa.eu/eli/treaty/tfeu_2012/oj.

114 Teresa Fajardo del Castillo, *Organised Crime and Environmental Crime...*, cit.

to appear as a perfectly legal activity. The ease of document fraud around environmental regulations often derives from the complexity of the required paperwork, the poor working knowledge of local enforcement authorities, and overlaps between national, European and international regulations. In the case of the European Timber Regulation for instance, different wording on matters of shared competence with the CITES Convention has led to uncertainty over which species are covered by the Regulation and which are not; this in turn has offered a loophole to import species that the EUTR originally expected to cover.¹¹⁵ Furthermore, as the number of documents needed to trade timber has increased (due to the overlap of CITES and EUTR requirements), the ability of LEAs to check for fraud and thus to enforce environmental regulations has proportionally decreased. 116 In this sense, overregulation could promote, rather than decrease, environmental crime, mostly by making forged permits harder to detect.

While timber trade is a key area for such forgery – according to Interpol and UNEP there were at least 30 ways to launder illegal wood in 2014¹¹⁷ – other sectors are also affected, such as waste trafficking and fisheries. In the case of trawlers, document fraud doesn't only hide environmental crimes, since illegal fishing is often associated with drug, human or firearms trafficking.¹¹⁸

Document fraud is also particularly relevant for the ivory trade, as this is the most common way to introduce illegal ivory into the EU – truly a plight for African elephants. Despite supposedly strict controls, an Avaaz–University of Oxford study found that circa one fifth of ivory objects traded in the EU originate from animals killed after the global trade ban of 1989.¹¹⁹ This still widespread illegal trade has thus reinforced calls for an outright ban on ivory trade in the EU, following similar decisions by the US and China.¹²⁰

Cybercrime is another tool for many environmental offenses, particularly wildlife trafficking. The anonymity granted by the web in general but also offline chats and virtual private networks offers an easy way to directly connect poachers and buyers. This not only concerns navigation through the deep web, but also the use of mainstream social networks such as Facebook or Instagram. In only two years, the Coalition to End Wildlife Trafficking Online, which connects companies such as Alibaba to experts from Traffic, WWF and IFAW, has removed more than 3 million listings regarding endangered species from mainstream platforms. 121 Anonymous payment methods further ease the illicit trade of species, such as prepaid cards, cryptocurrencies and hawalas.

¹¹⁵ Jade Saunders and Rosalind Reeve, *The EU Timber Regulation and CITES*, London, Chatham House, April 2014, https://www.cifor.org/knowledge/publication/4503.

¹¹⁶ Liz Womack et al., *The Interplay between CITES and EUTR/FLEGT*, Discussion document for the Joint EUTR/CITES Expert Group meeting, Cambridge, UNEP-WCMC, 2019, https://ec.europa.eu/environment/forests/pdf/UNEP-WCMC%202019%20 The%20interplay%20between%20CITES%20and%20 EUTR%20FLEGT_FINAL.pdf.

¹¹⁷ Christian Nellemann (ed.), *The Rise of Environmental Crime*, cit.

¹¹⁸ Mike Beke and Roland Blomeyer, *Illegal, Unreported and Unregulated Fishing: Sanctions in the*

EU, Brussels, European Parliament, July 2014, https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU(2014)529069.

¹¹⁹ AVAAZ, *Europe's Deadly Ivory Trade*, July 2018, https://earthleagueinternational.org/?p=6283.

¹²⁰ Euractiv with AFP, "Pressure Mounting on EU to End Ivory Trade", in *Euractiv*, 22 August 2019, https://www.euractiv.com/?p=1367671.

¹²¹ Traffic, WWF and IFAW, Offline and in the Wild. A Progress Report of the Coalition to End Wildlife Trafficking Online, February 2020, https://www.ifaw.org/resources/offline-and-in-the-wild-report.



The increase in environmental crimes in Europe requires swift and effective action to counteract the spike in consolidated threats and the rise of new dangers. Increasing awareness on the part of both institutions and the general public, together with the new technological, institutional and political trends, show that we also have the tools to lead such a battle.

6.1 NEW TECHNOLOGIES

Digital tools are becoming one of the key instruments in action against environmental crime. Earth observation (EO) through satellites has already been employed in environmental cases for at least ten years now, building on previous EU experience in the use of satellites by European farming regulators. 122 The diffusion of cheaper nanosatellites and the increased accuracy of EO performed by the European Space Agency through its Copernicus programme now offer a great availability of data; among its key activities, Copernicus itself lists issues such as prevention of illegal fishing or the monitoring of oil spills. 123 Such potential uses have been at the centre of projects such as CybELE, which won the Copernicus Masters 2018 Competition. 124 Its aim is to prepare reports on environmental crimes through the free data gathered by the Sentinel satellites (especially 1, 2, 3 and 5), which the project team would then make readily available for law firms and insurance companies working on such cases. Satellite pictures have also

proved to be particularly effective in the early identification of oil spills, and in tracing their origin.¹²⁵

EO information could be further enhanced by drones, which are now cheaper and benefit from a much larger autonomy as well as quality and variety of cameras. In particular, the use of infrared cameras has been associated to astronomy software which, via light detection, has managed to automatically identify the heat signature of animals and poachers.¹²⁶ Drones and EO have also been used to counteract illegal fishing, using software that detects the kind of ship operating in restricted or protected areas.¹²⁷ The employment of drones has however encountered a few legal obstacles on the European and global level; the use of unmanned vehicles for environmental purposes has been indeed restricted in many member states because of legislation focusing on the technology itself, rather than on the specific usage, particularly in relation to privacy laws. 128 Paradoxically, the

¹²² European Commission DG Environment, "Environmental Compliance Assurance and Combatting Environmental Crime", in *Science for Environment Policy Thematic Issues*, No. 56 (July 2016), p. 19-20, https://ec.europa.eu/environment/integration/research/newsalert/pdf/environmental_compliance_combatting_environmental_crime_56si_en.pdf

¹²³ European Commission, *Copernicus. European Eyes on Earth*, Luxembourg, Publications Office of the European Union, 2015, https://op.europa.eu/s/omAT.

¹²⁴ Copernicus Accelerator website: *CybELE – Satellites for Environmental Justice*, https://accelerator.copernicus.eu/?p=2163.

¹²⁵ Marios Krestenitis et al., "Early Identification of Oil Spills in Satellite Images Using Deep CNNs", in Ioannis Kompatsiaris et al. (eds), *MultiMedia Modeling. MMM 2019. Lecture Notes in Computer Science*, Vol. 11295 (2019).

¹²⁶ Marco Margaritoff, "Astronomers and Ecologists Are Using Drones to Prevent Animal Poaching", in *The Drive*, 4 April 2018, https://www.thedrive.com/tech/19889.

¹²⁷ Marco Margaritoff, "ATLAN Space Develops Al Drone Software to Identify Environmental Crimes", in *The Drive*, 15 August 2018, https://www.thedrive.com/tech/22898.

¹²⁸ Gregory McNeal, "Drones and Aerial

employment of drones has sometimes faced more legal or bureaucratic obstacles than traditional surveillance with manned vehicles, despite those being far more intrusive.¹²⁹

Technological novelties however go beyond drones and EO; under the umbrella of the LIFE programme, satellite tagging of juvenile birds has allowed easier detection of cases of poaching or wildlife crime. 130 Online databases, such as the HELICON, or a deeper analysis of poaching and poisoning cases, as in the Spanish LIFE VENENO NO project, has proved fundamental to understanding the situations and the causes in which offenses against bird and wildlife occurred in Europe.¹³¹ Such tools have also positively matched the work done on the field with local communities, also through the development of apps aimed at easing the registration and monitoring of offenses. Generally speaking, the digitalisation of documents and the quick analysis of large databases are two of the key tools made available by emerging technologies, particularly in areas such as fishing, waste trafficking and timber or wildlife trade, where large data are now available. 132

6.2 INSTITUTIONAL AND POLITICAL CHANGES

From an institutional perspective, the topic of environmental crime has become increasingly integrated in a series of collaboration projects among European LEAs, the judiciary, Europol, Eurojust,

Surveillance: Considerations for Legislatures", in *Brookings Reports*, November 2014, http://brook.gs/2bsDX2b.

129 Ibid.

130 European Commission DG Environment, LIFE & Wildlife Crime, Luxembourg, Publications Office of the European Union, 2018, https://op.europa.eu/s/omAU.

131 Ibid.

132 David Higgins, "Environmental Crime Requires High-Tech Solutions", in Trend Magazine, 12 June 2017, https://pew.org/37rLDv4.

Frontex and other agencies. In particular, the European multidisciplinary platform against criminal threats (EMPACT) has managed to include this among its priorities in its second policy cycle (2018–2021).¹³³ Its aim is to improve intra-European cooperation on serious crimes, and it has already brought some results, leading to 148 arrests and 6,825 inspections in 2019.134 However, such collaboration started relatively late, as environmental crimes were not even listed among the priorities in the EU's 2013-2017 policy cycle. 135 Despite being included as one of the ten priorities of the current cycle, the magnitude and recent growth of the issue requires a dedicated focus, and possibly a dedicated platform, both of which are still missing. The limited attention that envicrime is still receiving from the general public, LEAs and the judiciary, and the fragmentation of initiatives and competencies are indeed two of the major drawbacks preventing successful action on the European level.

The ambitious European Green Deal proposed by the von der Leyen Commission could be the chance to reverse the situation. The plan indeed extends the substantial work done by the previous Commission on energy and climate matters to a wider range of topics, proposing a coherent and circular approach to sustainability. This more ample vision has already included the issue of environmental crimes in the December 2019

¹³³ Council of the European Union, Council Conclusions on Setting the EU's Priorities for the Fight against Organised and Serious International Crime between 2018 and 2021, cit.

¹³⁴ Council of the European Union, *EU Policy Cycle* to Tackle Organised and Serious International Crime 2018/2021 – EMPACT - Implementation Monitoring - Factsheets of Results 2019, Brussels, 5 May 2020, https://data.consilium.europa.eu/doc/document/ST-7623-2020-INIT/en/pdf.

¹³⁵ Council of the European Union, *The EU Policy Cycle to Tackle Organised and Serious International Crime*, Brussels, Publications Office of the European Union, 2014, https://www.consilium.europa.eu/media/30232/qc0114638enn.pdf.

Communication introducing the European Green Deal, which indeed states that the plan's aim is also to "protect, conserve and enhance the EU's natural capital, and protect the health and well-being of citizens from environment-related risks and impacts" and to "promote action by the EU, its Member States and the international community to step up efforts against environmental crime" 136

This new approach then appears in the 2030 Biodiversity Strategy published in May 2020, which envisages a revision of the EU Action Plan against Wildlife Trafficking, as well as a review and possibly a revision of the Environmental Crime Directive, both by 2021.137 Although offering only a general reference to the topic, the Communication containing the Biodiversity Strategy already touches on some critical points of the Environmental Crime Directive, such as the possibility of "expanding its scope and introducing specific provisions for types and levels of criminal sanctions" as well as involving the European Anti-Fraud Office (OLAF) in monitoring illicit trade.¹³⁸ The Strategy also strongly focuses on the implementation and enforcement of legislation – an approach which is common to the European Green Deal as a whole, and which is particularly welcomed in relation to envicrime, considering the paucity of action by member states in this dimension.

6.3 POLICY RECOMMENDATIONS

Generally speaking, the inclusion of environmental crimes in such a wide, highly visible framework as the European Green

136 European Commission, *The European Green Deal* (COM/2019/640), 11 December 2019, p. 2 and 23, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0640.

137 European Commission, *EU Biodiversity Strategy* for 2030. Bringing Nature Back into Our Lives (COM/2020/380), 20 May 2020, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0380.

138 Ibid.

Deal could be the chance not only to step up efforts, but also to radically change the EU's approach on this front. However, in order to be successful, this new vision should address the main issues currently affecting the action of LEAs and the judiciary, and the perception by the general public. In particular, it will be necessary to:

- Recognise the gravity of environmental crimes and act accordingly. Both European and national authorities should start considering environmental crimes independently, rather than in relation to other crimes, and enact sanctions proportionate to the true nature of the offense. New legislation should take into consideration key questions such as the criminal liability of companies, while dedicated resources should be allocated among the judiciary and LEAs to address environmental cases.
- **Provide** European common environmental framework against crime. The lack of a common definition of envicrime hampers coordinated efforts among member states, as does the absence of guidelines on the kind and gravity of sanctions to be applied. The heterogeneity among European countries also extends to data collection and analysis, thus making it difficult to understand the true extent of environmental crimes, particularly those with a transnational component. This could be solved through the launch of an EUwide framework on environmental crimes, ideally containing tools such as a new, more detailed Environmental Crimes Directive and European databases on key topics such as waste trafficking or wildlife crime.
- Understand the evolution of offenses and offenders. The spike in environmental crimes has also been followed by a change in the kinds of crime committed, in the offenders involved and in the technologies employed. Policymakers on the European and national level should thus take into consideration the more relevant role of OCGs, the importance

of cybercrime and the possibility offered by digitalisation in action against envicrime.

Provide visibility political and commitment to the fight against environmental crimes. The low visibility of envicrime has played in favour of offenders and organised crime, while lack of political attention has resulted in poor implementation of existing European legislation. Thus, it is now necessary to exploit the European Green Deal momentum to increase the ambition of policymakers, raise awareness among the general public, improve coordination among member states and push national governments for the correct implementation of both old and new measures. This will be key to face the rise in environmental crimes, but also to achieve many of the ambitious results the European Green Deal is aiming at.





AVAAZ, Europe's Deadly Ivory Trade, July https://earthleagueinternational. 2018, org/?p=6283

Catherine Bearder, "How Environmental Crime Became an EU Security Priority for 2018-21", in Euractiv, 17 October 2017, https://www.euractiv.com/?p=1183886

Mike Beke and Roland Blomeyer, Illegal, Unreported and Unregulated Fishing: Sanctions in the EU, Brussels, European Parliament, July 2014, https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL STU(2014)529069

Floriana Bianco, Annalisa Lucifora and Grazia Maria Vagliasindi, Fighting Environmental Crime in France: A Country Report, Study in the framework of the EFFACE research project, February 2015, https://efface.eu/ node/836

Paul James Cardwell, Duncan French and Matthew Hall, "Tackling Environmental Crime in the European Union: The Case of the Missing Victim?", in Environmental Law and Management, Vol. 23, No. 3 (May 2011), p. 113-121

Consolidated Version of the Treaty on the Functioning of the European Union, in Official Journal C 326, 26 October 2012, http:// data.europa.eu/eli/treaty/tfeu_2012/oj

Council of the European Union, Council Conclusions on Countering Environmental Crime, Brussels, 12 December 2016, https:// data.consilium.europa.eu/doc/document/ ST-15412-2016-INIT/en/pdf

Council of the European Union, Council Conclusions on Enhancing Financial Investigations to Fight Serious and Organised Crime, Brussels, 17 June 2020, https://data. consilium.europa.eu/doc/document/ST-8927-2020-INIT/en/pdf

clusions on Setting the EU's Priorities for the Fight against Organised and Serious International Crime between 2018 and 2021, Brussels, 19 May 2017, https://data.consilium.europa.eu/doc/document/ST-9450-2017-INIT/ en/pdf

Council of the European Union, EU Policy Cycle to Tackle Organised and Serious International Crime 2018/2021 – EMPACT - Implementation Monitoring - Factsheets of Results 2019, Brussels, 5 May 2020, https://data.consilium.europa.eu/doc/document/ST-7623-2020-INIT/en/pdf

Council of the European Union, The EU Policy Cycle to Tackle Organised and Serious International Crime, Brussels, Publications Office of the European Union, 2014, https:// www.consilium.europa.eu/media/30232/ qc0114638enn.pdf

Council of the European Union, Final Report on the Eighth Round of Evaluation on Environmental Crime – Information and Discussion at the Council, 15 November 2019, https://data.consilium.europa.eu/doc/document/ST-14065-2019-INIT/en/pdf

Giacomo D'Alisa et al., Victims in the "Land of Fires": Case Study on the Consequences of Buried and Burnt Waste in Campania, Italy, EFFACE project, January 2015, https://efface. eu/node/828

Stefano Deliperi, "Portoscuso, meglio un cancro che un disoccupato in casa", in Il manifesto sardo, 16 December 2019, https:// www.manifestosardo.org/?p=30278

Rosaleen Duffy, EU Trade Policy and Wildlife Trade, Brussels, European Parliament, December 2016, https://www.europarl.europa.eu/thinktank/en/document.html?reference=EXPO STU(2016)578025

Council of the European Union, Council Con- EFFACE, Environmental Crime and the EU.

Synthesis of the Research Project "European Union Action to Fight Environmental Crime", Berlin, Ecologic Institute, March 2016, https://www.ecologic.eu/13614

EFFACE, "Pros and Cons of Harmonising Criminal Sanctions on Environmental Crime", in *European Policy Briefs - EFFACE*, No. 17 (March 2016), https://efface.eu/node/949

Euractiv with AFP, "Jail Terms for French Carbon Trading Scammers", in *Euractiv*, 14 September 2017, https://www.euractiv.com/?p=1174913

Euractiv with AFP, "Pressure Mounting on EU to End Ivory Trade", in *Euractiv*, 22 August 2019, https://www.euractiv.com/?p=1367671

Eurojust, *Eurojust Single Programming Document 2020-2022*, 10 December 2019, https:// www.eurojust.europa.eu/eurojust-single-programming-document-2020-2022

Eurojust, *Strategic Project on Environment Crime. Report*, November 2014, https://www.eurojust.europa.eu/strategic-project-environment-crime

European Commission, Commission Notice on Access to Justice In Environmental Matters, OJ C 275, 18 August 2017, p. 1-39, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C:2017:275:FULL

European Commission, Copernicus. European Eyes on Earth, Luxembourg, Publications Office of the European Union, 2015, https://op.europa.eu/s/omAT

European Commission, *EU Action Plan against Wildlife Trafficking* (COM/2016/87), 26 February 2016, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:87:-FIN

European Commission, EU Actions to Improve Environmental Compliance and Governance (COM/2018/10), 18 January 2018,

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0010

European Commission, *The EU Approach against Wildlife Trafficking* (COM/2014/064), 7 February 2014, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX-:52014DC0064

European Commission, EU Biodiversity Strategy for 2030. Bringing Nature Back into Our Lives (COM/2020/380), 20 May 2020, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0380

European Commission, *The Environmental Implementation Review 2019: Country Report Denmark* (SWD/2019/134), 4 April 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019SC0134

European Commission, *The Environmental Implementation Review 2019: Country Report Finland* (SWD/2019/136), 4 April 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019SC0136

European Commission, *The Environmental Implementation Review 2019: Country Report Germany* (SWD/2019/137), 4 April 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019SC0137

European Commission, *The Environmental Implementation Review 2019: Country Report Sweden* (SWD/2019/117), 4 April 2019, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019SC0117

European Commission, *The European Agenda on Security* (COM/2015/185), 28 April 2015, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52015DC0185

European Commission, *The European Green Deal* (COM/2019/640), 11 December 2019, https://eur-lex.europa.eu/legal-content/EN/

TXT/?uri=CELEX:52019DC0640

European Commission DG Environment, "Environmental Compliance Assurance and Combatting Environmental Crime", in *Science for Environment Policy Thematic Issues*, No. 56 (July 2016), p. 19-20, https://ec.europa.eu/environment/integration/research/new-salert/pdf/environmental_compliance_combatting_environmental_crime_56si_en.pdf

European Commission DG Environment, Environmental Compliance Assurance - Guidance Document, February 2019, https://ec.europa.eu/environment/legal/pd-f/2019-A4-Consultation-Draft-Environmental-Crime%20Guidance.pdf

European Commission DG Environment, *LIFE* & *Wildlife Crime*, Luxembourg, Publications Office of the European Union, 2018, https://op.europa.eu/s/omAU

European Environmental Bureau, *Crime and Punishment*, Brussels, March 2020, https://eeb.org/?p=101230

European Parliament and Council of the European Union, *Directive 2008/99/EC of 19 November 2008 on the Protection of the Environment through Criminal Law*, OJ L 328, 6 December 2008, p. 28–37, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CEL-EX:32008L0099

European Parliament and Council of the European Union, *Regulation (EC) No 1013/2006 of 14 June 2006 on Shipments of Waste*, OJ L 190, 12 July 2006, p. 1-98, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CEL-EX:32006R1013

Europol, *Exploring Tomorrow's Organised Crime*, 2 March 2015, https://www.europol.europa.eu/node/202

Europol, How a Company Earned Up to €1 Million Illegally Trading Ten Tons of Ozone-Depleting Substances, 5 April 2019, https://www.europol.europa.eu/node/3358

Europol, *Trash Worth Millions of Euros*, 18 September 2019, https://www.europol.europa.eu/node/3654

Teresa Fajardo del Castillo, *Organised Crime* and *Environmental Crime*: *Analysis of EU Legal Instruments*, Study in the framework of the EFFACE research project, February 2015, https://efface.eu/node/846

Michele Faure, "The Development of Environmental Criminal Law in the EU and its Member States", in *Review of European Community and International Environmental Law*, Vol. 26 No. 2 (July 2017), p. 139-146

Christina Goßner, "First Dieselgate Ruling by Germany's Top Court Set to Flag Legal Clarity", in *Euractiv*, 25 May 2020, https://www.euractiv.com/?p=1469937

Gruppo d'Intervento Giuridico Onlus, Situazione ambientale e sanitaria di Portoscuso: ognuno si assuma le proprie responsabilità fino in fondo, 3 June 2017, https://wp.me/p1y3IX-4At

Matthew Hall and Tanya Wyatt, *Tackling Environmental Crime in Europe*, LIFE-ENPE Report, Bristol, Environment Agency Horizon House, March 2017, https://www.environmentalprosecutors.eu/sites/default/files/document/Cap%20and%20Gap%20report_FINAL_Print.pdf

David Higgins, "Environmental Crime Requires High-Tech Solutions", in *Trend Magazine*, 12 June 2017, https://pew.org/37rLDv4

Intelligence Project on Environmental Crime (IPEC), Report on Environmental Crime in Europe, 20 February 2015, https://www.europol.europa.eu/node/203

Interpol and UN Environment Programme (UNEP), Strategic Report: Environment, Peace and Security – A Convergence of Threats, December 2016, http://hdl.handle.net/20.500.11822/17008

Italy, Decreto legislativo 3 aprile 2006, n. 152: Norme in materia ambientale, https://www.gazzettaufficiale.it/atto/serie_generale/caricaDettaglioAtto/originario?atto.dataPubblicazioneGazzetta=2006-04-14&atto.codiceRedazionale=006G0171

Marios Krestenitis et al., "Early Identification of Oil Spills in Satellite Images Using Deep CNNs", in Ioannis Kompatsiaris et al. (eds), MultiMedia Modeling. MMM 2019. Lecture Notes in Computer Science, Vol. 11295 (2019)

Laurence Lee, "Romania Government Accused of Allowing Illegal Logging in Forests", in *Al Jazeera*, 1 February 2019, https://aje.io/6v4e6

Marco Margaritoff, "Astronomers and Ecologists Are Using Drones to Prevent Animal Poaching", in *The Drive*, 4 April 2018, https://www.thedrive.com/tech/19889

Marco Margaritoff, "ATLAN Space Develops Al Drone Software to Identify Environmental Crimes", in *The Drive*, 15 August 2018, https://www.thedrive.com/tech/22898

Gregory McNeal, "Drones and Aerial Surveillance: Considerations for Legislatures", in *Brookings Reports*, November 2014, http://brook.gs/2bsDX2b

Victoria Mundy-Taylor, Illegal Wildlife Trade and the European Union: An Analysis of EU-TWIX Seizure Data for the Period 2007-2011, A TRAFFIC Report prepared for the European Commission, October 2013, https://ec.europa.eu/environment/cites/pdf/reports/Analysis%20of%20EU-TWIX%20seizure%20data%202007-2011.pdf

Elisa Murgese, "Illegal Trafficking of Plastic Waste: The Italy–Malaysia Connection", in *IAI Commentaries*, No. 20|16 (April 2020), https://www.iai.it/en/node/11458

Christian Nellemann (ed.), The Rise of Environmental Crime. A Growing Threat to Natural Resources, Peace, Development and Security, A UNEP–Interpol Rapid Response Assessment, Nairobi, UNEP, 2017, http://hdl. handle.net/20.500.11822/7662

Martin Nesbit et al., Development of an Assessment Framework on Environmental Governance in the EU Member States. Final Report, Luxembourg, Publications Office of the European Union, May 2019, https://op.europa.eu/s/omAH

Arthur Neslen, "Poland Violated EU Laws by Logging in Białowieża Forest, Court Rules", in *The Guardian*, 17 April 2018, https://www.theguardian.com/p/8efqa

OLAF, "OLAF Plays Major Role in Seizure of Over a Thousand Tons of Dangerous Counterfeit Pesticides", in *OLAF Press Releases*, No. 18/2020 (5 June 2020), https://europa.eu/!wN44Fh

Aline Robert, "Multi-billion EU Carbon Market Fraud Operated from Poland", in *Euractiv*, 18 July 2016, https://www.euractiv.com/?p=1021808

leva Rucevska et al., *Waste Crime – Waste Risks. Gaps in Meeting the Global Waste Challenge*, A UNEP Rapid Response Assessment, Nairobi/Arendal, UNEP/GRID, 2015, http://hdl.handle.net/20.500.11822/9648

Jade Saunders and Rosalind Reeve, *The EU Timber Regulation and CITES*, London, Chatham House, April 2014, https://www.cifor.org/knowledge/publication/4503

Save Paradise Forest, Data Kept Secret from Romanian Forest Inventory Reveals a Catastrophic Level of Illegal Logging, 29 November 2018, https://www.saveparadiseforests.eu/?p=3555

Save Paradise Forest, International NGOs Condemn the Assassination of Romanian Forests and Call for Action against Illegal Logging, 28 October 2018, https://www.saveparadiseforests.eu/?p=5102

Ashley Seager, "European Taxpayers Lose €5bn in Carbon Trading Fraud", in *The Guardian*, 14 December 2009, https://www.theguardian.com/p/2dv42

Núria Torres Rosell and Maria Marquès Banqué, Study on the Implementation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law, SEO/BirdLife/European Network against Environmental Crime (ENEC), May 2016, https://www.eufje.org/images/docPDF/Study-on-the-implementation-of-Directive-2008_99_ENEC_SEO_BirdLife_May2016.pdf

Traffic, WWF and IFAW, Offline and in the Wild. A Progress Report of the Coalition to End Wildlife Trafficking Online, February 2020, https://www.ifaw.org/resources/offline-and-in-the-wild-report

UN Environment Programme (UNEP), *The State of Knowledge of Crimes That Have Serious Impacts on the Environment*, 2018, http://hdl.handle.net/20.500.11822/25713

Annamaria Villafrate, "I reati ambientali", in *Studio Cataldi*, 4 April 2018, https://www.studiocataldi.it/articoli/29860-i-reati-ambientali.asp

Shaun Walker, "Violence Escalates as Romania Cracks Down on Illegal Timber Trade", in *The Guardian*, 8 January 2020, https://www.theguardian.com/p/cqkv7

Liz Womack et al., *The Interplay between CITES and EUTR/FLEGT*, Discussion document for the Joint EUTR/CITES Expert Group meeting, Cambridge, UNEP-WCMC, 2019, https://ec.europa.eu/environment/forests/pdf/UNEP-WCMC%202019%20The%20in-

terplay%20between%20CITES%20and%20 EUTR%20FLEGT_FINAL.pdf

WWF, WWF's Cooperation with Interpol to Prevent Forest Crime in Central and Eastern Europe featured on ARTE TV, 7 February 2019, http://wwf.panda.org/wwf_newsresearch/20140424EUTimberRegulationCITESSaundersReeve.pdf

Save Paradise Forest, Data Kept Secret from Romanian Forest Inventory Reveals a Catastrophic Level of Illegal Logging, 29 November 2018, https://www.saveparadiseforests.eu/en/kept-secret-data-from-romanian-forest-inventory-reveals-catastrophic-level-of-illegal-logging/

Save Paradise Forest, International NGOs Condemn the Assassination of Romanian Forests and Call for Action against Illegal Logging, 28 October 2018, https://www.saveparadiseforests.eu/en/letter-from-romanian-european-and-internation-al-ngos-condemning-the-killing-of-romanian-forest-defenders-as-illegal-logging-continues/

Ashley Seager, "European Taxpayers Lose €5bn in Carbon Trading Fraud", in The Guardian, 14 December 2009, https://www.theguardian.com/business/2009/dec/14/eu-carbon-trading-fraud#:~:text=The%20 fraud%20involves%20a%20criminal,carbon%20permits%20in%20the%20ETS.&text=The%20criminal%20then%20starts%20buying,on%20with%20the%20VAT%20added

Núria Torres Rosell and Maria Marquès Banqué, Study on the Implementation of Directive 2008/99/EC on the Protection of the Environment through Criminal Law, Centre d'Estudis de Dret ambiental de Tarragona Universitat Rovira i Virgili – European Network against Environmental Crime (ENEC), May 2016 https://www.eufje.org/images/docPDF/Study-on-the-implementation-of-Directive-2008_99_ENEC_SEO_BirdLife_May2016.pdf

UN Environment, The State of Knowledge of Crimes That Have Serious Impacts on the Environment, United Nations Environment Programme, 2018, https://wedocs.unep.org/bitstream/handle/20.500.11822/25713/knowledge_crime_envImpacts.pdf?sequence=1&isAllowed=y

UNEP, Waste Crime – Waste Risks, Gaps in Meeting the Global Waste Challenge, Norway, Birkeland Trykkeri AS, 2015, https://www.unenvironment.org/resources/report/waste-crime-waste-risks-gaps-meeting-global-waste-challenge-rapid-response

Annamaria Villafrate, I reati ambientali, Studio Cataldi, 4 April 2018, https://www.studiocataldi.it/articoli/29860-i-reati-ambientali.asp#:~:text=Inquinamento%20ambientale,della%20flora%20o%20della%20fauna

Shaun Walker, "Violence Escalates as Romania Cracks Down on Illegal Timber Trade", in The Guardian, 8 January 2020, https://www.theguardian.com/world/2020/jan/08/violence-escalates-as-romania-cracks-down-on-illegal-timber-trade

Liz Womack et al., The Interplay between CITES and EUTR/FLEGT. A Discussion Document for the Joint EUTR/CITES Expert Group Meeting, Cambridge, UNEP-WCMC, 2019, https://ec.europa.eu/environment/forests/pdf/UNEP-WCMC%202019%20The%20interplay%20between%20CITES%20and%20 EUTR%20FLEGT_FINAL.pdf

WWF, WWF's Cooperation with Interpol to Prevent Forest Crime in Central and Eastern Europe Featured on ARTE TV, 7 February 2019, https://wwf.panda.org/our_work/our_focus/forests_practice/?359251/ISF-ARTET-V#:~:text=Forest%20crime%20is%20a%20 growing,in%20the%20Danube%2DCarpathian%20Region



