



ECOCIDE AND ENVIRONMENTAL POLICIES

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Abstract

Ecocide (ecological crime) represents a type of hidden crime, the facts discovered, reported, administratively or criminally investigated and punished by the authorities being few in number, and the sanctions being insignificant, although environmental crimes occupy the fourth place in international illegal activities, being outranked only by drug trafficking, counterfeiting of money and art objects and human trafficking and registering a constant growth of 5-7% per year. These have become some of the most profitable organized crime activities worldwide, significantly affecting both the environment and human health. Environmental policy represents the totality of environmental objectives and priorities, regulatory methods and their implementation tools, designed to ensure the sustainable use of natural resources, prevention, reduction or mitigation of environmental quality degradation. The documents that form the basis of the European Union's environmental policy are the Environmental Action Programs. So far, eight Environmental Action Programs have been developed, the eighth one being adopted in 2022 and will be the basis of environmental policies until 2030. Environmental policy instruments are basic mechanisms at the disposal of democratic governments, supranational structures, through which the attitude and behavior of the population and economic agents can be influenced in the direction favorable to achieving the objectives and the set goals. Three types of instruments have been developed: legislative, technical and economic-financial, to which is added a set of "helping instruments" that respond to new trends and environmental protection strategies. Romania adopted for the first time the "National Strategy on Education for the Environment and Climate Change 2023 - 2030", which proposes an education that promotes a sustainable lifestyle, through the development of eco-social skills, taking into account the familiarization of young people with the natural and socioeconomic problems caused by of climate change, but also with ways to improve the response to it.

Keywords: ecological crime; environmental crime; environmental policies; environmental action programs; environmental policy instruments

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1. Context

Ecological crime (ecocide) ranks fourth among international illicit activities, after drug trafficking, counterfeiting of money and art objects and human trafficking, having a constant growth rate of 5-7% per year and being one of the most profitable and attractive organized crime activities worldwide, significantly affecting the environment and human health.

Real, hidden ecological crimes are much more important than those discovered, reported, investigated administratively or criminally and punished by the competent national authorities, the sanctions being insignificant.

The study "How environmental crime affects the EU's financial interests, economic recovery and Green Deal objectives¹" reveals that environmental crime in the European Union (EU) is more profitable than cocaine trafficking.

2. The Dimensions of the Ecocide Phenomenon

According to a report by the United Nations Environment Program (UNEP) and Interpol (June 2016)², ecological crime has reached a record, with losses estimated at 258 billion dollars, of which: forestry crimes and illegal cutting of trees: 51-152 billions of dollars; fisheries-related crimes: between \$11-24 billion, corresponding to 11-26 million tonnes diverted from legal trade and contributing to overfishing; illegal mining: \$12-24 billion.

In the EU, annual revenues from the illegal traffic of non-hazardous waste reach the level of 1.3-10.3 billion euros, from the traffic of hazardous waste - 1.5-1.8 billion euros, and the volume of illegal trade in rare species of flora and fauna, threatened with extinction, is 20 billion euros per year, constituting the second illegal market in the world, after that of drugs.

In the period 2018-2021³, through police operations, 829 people were arrested in the EU, the total value of the confiscations being 8.3 million euros and consisting of:

¹ The study was presented in the European Commission and belongs to prof. dr. Michael G. Faure, professor of comparative and international environmental law in Maastricht and dr. Kévine Kindji, researcher at the European Institute for Transnational Legal Research in Maastricht.

² <https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:52021PC0851&from=EN>.

³ <https://www.consilium.europa.eu/ro/infographics/eu-fight-environmental-crime-2018-2021/>.

167,452 tons of waste, the income generated by the illegal waste market being 4 -15 billion euros per year; 1,174 tons of e-waste, one ton of smart phones containing a hundred times more gold than a ton of gold ore; 32,007 m³ of wood, illegal deforestation causing deforestation, whose economic value is six billion euros per year, representing 15-30% of the world trade in wood; 639 ivory objects, elephant poaching increasing the risk of their extinction, ivory being obtained from Africa and trafficked through Europe to Asia; 4.6 tons of juvenile European eel - 350 million juvenile specimens per year, worth three billion euros, the specimens being sold mainly in Asia, for consumption; 355 reptiles, worth 800,000 euros, thousands of reptile species from all over the world being threatened due to trafficking and being used mostly in the fashion industry or as pets.

Ecological crime/Environmental crime/Ecocide does not yet have an official legal definition, but it can be conceptualized as the socially dangerous act, committed with guilt, which consists of: polluting the natural or artificial environment, disrupting the activity of preventing, reducing or removing pollution, endangering the life and health of people, animals and plants (Duțu, 2013, p. 87) or causing great damage to the national economy, which leads to endangering the quality of the environment, constituting a threat to society's interests in the field of environmental protection; ecomafia designates the perpetrators of these crimes when their methods are those of organized crime.

3. Responsible Institutions and National Regulations

Environmental supervision and the promotion and achievement of environmental protection are ensured by the Ministry of the Environment, Water and Forests - the competent authority at national level, the National Environmental Guard - the institution specialized in detecting and sanctioning violations of the law in the field of environmental protection and the National Agency for Environmental Protection - the institution specialized department of the central public administration, subordinate to the Ministry of Environment, Water and Forests, with competences in the implementation of policies and legislation in the field of environmental protection.

The most important legal regulations regarding environmental crimes are found in the Penal Code and in the Emergency Government Ordinance (EOG) 195/2005 on environmental protection.

GEO 92/2021 on the waste regime repealed both Government Decision no. 235/2007 regarding the management of used oils, as well as Law no. 211/2011 on the waste regime, a normative act that grouped criminal provisions from various environmental sectors, the purpose of the repeal being to remedy situations of legislative overlap, signaled by the European Commission (EC). The repeal measures did not involve decriminalization, given that all the provisions that did not create overlaps were taken over in the framework of other existing normative acts, by amending them: GEO 195/2005 on environmental protection, GEO 57/2007 on the regime of protected natural areas, conservation natural habitats, wild fauna and flora, Law 86/2006 on the Romanian Customs Code, Law 211/2011 on the waste regime, Law 107/1996 – Water Law.

In this legislative context, environmental policies can work with environmental protection legislation and enhance its role.

4. The Concept of Environmental Policies

The environmental policy represents the totality of environmental objectives and priorities, regulatory methods, instruments for their implementation, designed to: ensure the sustainable use of natural resources; preventing, reducing or mitigating environmental quality degradation.

The basis of the EU's environmental policy is the Environmental Action Programs (EPA), their legal basis being found in art. 192, par. 3 of the Treaty on the Functioning of the European Union. So far, eight MAPs have been drawn up, of which the eighth, adopted on March 29, 2022, will form the basis of environmental policies until 2030¹.

Environmental policy instruments are basic mechanisms at the disposal of democratic governments and supranational structures, with an impact on the attitude and behavior of the population and economic agents, in the direction of achieving the set objectives and goals. Three types of instruments have been developed: legislative, technical, economic-financial, but also support instruments, responding to new trends and environmental protection strategies (Petrescu-Mag and Petrescu-Mag, 2022, p. 39).

European Regulations are constituted by the European Green Pact², with the objective of achieving climate neutrality in all relevant European policies and

¹ <https://www.consilium.europa.eu/ro/press/press-releases/2022/03/29/council-adopts-8th-environmental-action-programme/>.

² https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_ro.

strategies, at the level of all sectors of activity, as well as by the New EU Strategy on Adaptation to Climate Change (2021)¹, having as main objectives: improving knowledge on the impact of climate change, intensifying adaptation planning and climate risk assessment, accelerating adaptation measures, increasing resilience to climate change on the European continent.

5. Ecological Problems²

The air. Human activities related in particular to industry, energy production, domestic heating, agriculture and transport, involve pollutant emissions, which represent the main environmental health problem in the EU, according to the World Health Organization, generating serious diseases such as: bronchial asthma, problems cardiovascular and lung cancer. Excessive nitrogen air pollution and acid rain damage the environment and ecosystems, being costly to the economy, leading to lost working days and high healthcare costs: around 330 billion euros per year. 300,000 premature deaths per year are caused by fine particles in the EU, with the EU target to reduce deaths by at least 55% by 2030.

Environmental noise (noise pollution) is the second environmental cause of health problems, being also determined by road, rail and airport traffic, industry and construction. Prolonged exposure to ambient noise leads to serious diseases, including cardiovascular diseases, decreased cognitive performance, severe neurosis, sleep disorders, tinnitus, statistics reporting 12,000 premature deaths per year in the EU, 22 million people with chronic neuroses and 12,500 cases of students with learning disabilities, the effects of noise exposure being costly to the economy.

Water faces pollution from industrial chemicals, pesticides, nutrients and pharmaceuticals, climate change, in the EU only 40% of surface waters achieve good ecological status.

Soils and land are being degraded dramatically in Europe and around the world: 60-70% of soils are unhealthy and 50 billion euros are lost annually due to soil degradation.

Nature and biodiversity. Globally, nature is being destroyed faster than ever. Ecosystems and the services they provide are under pressure from urban sprawl,

¹ https://ec.europa.eu/clima/eu-action/european-green-deal/european-climate-pact_ro.

² <https://environment.ec.europa.eu/topics/>.

intensive agriculture, pollution, invasive species and climate change. In the EU, 81% of habitats are in poor condition.

The circular economy. The extraction and processing of resources generated the loss of biodiversity in proportion to 90%; the impact of products on the environment is determined up to 80% in the design phase; the current rate of use of circular materials in the EU is only 11.8% and the current linear economy is increasing its demands on limited natural resources.

Plastic materials. 26 million tons of plastic waste are generated annually in Europe, 80% of marine litter is plastic, 87% of Europeans are concerned about the impact of plastic products on the environment.

Urban area. The quality of life in urban areas depends greatly on the quality of the environment, air and water, access to nature and biodiversity, noise pollution levels and the ability to keep temperatures low in the face of global warming. Cities consume the most resources and there are many environmental challenges, but they also offer opportunities to tackle environmental issues, with people living closer together, managing and sharing resources efficiently, using circular economy principles, reducing the need for private transport motorized and living in more energy efficient buildings.

Waste and recycling. Five tons of waste is produced annually by an average European, of which only 38% is recycled, and more than 60% of household waste ends up in landfills in some EU countries.

6. Policies of the European Union¹

The Action Plan towards Zero Pollution for Air, Water and Soil (2021) is based on three pillars: ambient air quality standards, reduction of air pollution emissions and emission standards for key pollution sources, aiming at: decreasing the number of premature deaths and illnesses caused by air pollution and reducing pollution pressure on ecosystems and biodiversity. The strategy for sustainable and intelligent mobility envisages reducing emissions in the transport sector by 90% by 2050, through the large-scale adoption of sustainable transport solutions.

The European Climate Law (2021) legislated climate neutrality objectives and the intermediate target for reducing greenhouse gas emissions, including a proposal to change the current trajectory of greenhouse gas emissions by 55% by 2030, compared

¹ <https://eur-lex.europa.eu/legal-content/>.

with the 1990 level, considering the transformation of the energy system, including buildings, transport and industry through their decarbonisation.

EU policy on noise pollution aims to monitor environmental noise in Europe to help achieve the vision of zero pollution by 2050. EU rules address noise pollution from primary sources, outdoor noise sources and underwater noise affecting marine animals, the EC's policy objective being the decrease in the share of people bothered by transport noise by 30% by 2030.

The water framework Directive provides for access for all Europeans to sufficient and good quality water, long-term sustainable management, reduction of water pollution and protection of freshwater and saltwater ecosystems.

The EU soil and land Strategy (2021) includes measures and actions to protect, restore and sustainably use soils, achieve healthy soils by 2050, improve the soil monitoring framework, develop the knowledge base and support soil research, increase awareness of the vital importance of soils. The EC will introduce a new law on soil health, which will provide a comprehensive legal framework for its protection.

The EU biodiversity Strategy 2030¹ aims to restore it by 2030, containing specific commitments and actions to protect nature and reverse ecosystem degradation, building on existing nature laws. "Natura 2000" is the largest coordinated network of protected areas in the world, built by the EU, with the target of 30% of land and sea being protected by 2030.

The New EU Forest Strategy for 2030 (2021) emphasizes supporting the socioeconomic functions of forests; protecting, restoring and expanding them; sustainable management and strategic monitoring to adapt to climate change and increase forest resilience.

EU circular economy policy. The New European Bauhaus (2021)² initiative translates the European Green Pact into a cultural and creative dimension aimed at accelerating the transformation of different economic sectors, to give all citizens access to circular goods with lower carbon emissions. The circular economy will help decouple economic growth from resource use, protecting Europe's natural resources and boosting sustainable development, reducing the consumption footprint and doubling the rate of use of circular materials over the next decade; will reduce

¹ https://ec.europa.eu/environment/strategy/biodiversity-strategy-2030_ro.

² https://ec.europa.eu/commission/presscorner/detail/en/ip_21_4626.

pollution, emissions and pressure on natural resources to help the EU become the first climate-neutral continent.

EU plastics policy aims to reduce marine litter, greenhouse gas emissions, dependence on imported fossil fuels, transform the way plastics are designed, used and recycled in the EU, accelerate the transition to a sustainable, circular economy and efficient use of plastics resources, supporting more sustainable and safer consumption and production patterns for plastics, creating new opportunities for innovation and competitiveness and driving change.

EU policy on the urban environment. The EC funds a wide range of projects and initiatives focused on environmental law, and cities have a crucial role to play in achieving the European Green Deal's goals of delivering a low-carbon, resource-efficient, sustainable and resilient society.

The EU policy on waste and recycling aims to: improve waste management, stimulate innovation in recycling and limit its storage. The European Green Deal fosters the transition to a circular, modern, resource-efficient and competitive economy by extracting high-quality resources from waste. The waste framework Directive is the EU's legal framework for waste treatment and management, which introduces an order of preference for management called the 'waste hierarchy'.

The European Research Strategy 2020–2024 (2020)¹ places research and innovation at the heart of Europe's ambitions to achieve full climate neutrality and resilience in 2050.

7. National Strategy on Environmental and Climate Change Education 2023-2030

Romania has undertaken at the national and international level to increase the population's awareness of climate change and environmental problems through education. According to the "Doha Program for 2022-2031", our country commits to act firmly to protect the environment and against climate change, developing and implementing training programs at all levels and joining the "Action for Climate Empowerment ACE"².

According to art. 65, par. (6²), from the National Education Law (LEN) 1/2011, with subsequent amendments and additions, the Ministry of Education, in

¹ https://ec.europa.eu/info/sites/default/files/rtd_sp_2020_2024_en.pdf.

² Term adopted by the United Nations Framework Convention on climate change.

collaboration with the Ministry of Environment, Water and Forests, are the institutions responsible for the development of this strategy, approved by the Government of Romania on of January 18, 2023 and transposed into school programs starting with the 2023-2024 school year. Changes have been made to the LEN to include environmental skills among the key skills that determine the student's training¹. It is a moment of utmost importance for Romanian education, being the first time that Romania adopts a national strategy dedicated to education for the environment and climate change - a programmatic document that constitutes a link between education and environmental law, establishing clear actions to increase the level of education and awareness in among children and young people, regarding sustainable development and environmental responsibility.

The basis lies in the Report of the Presidential Administration "Education on climate change and the environment in sustainable schools", a continuation of the "Educated Romania" Project (Presidential Administration, 2021), the operationalization of which was included as a commitment in the National Defense Strategy for the period 2020-2024.

The objectives and strategic targets of the "Educated Romania" Project were assumed by the Government of Romania through the Memorandum, the project promoting respect for the environment in the series of values that are the basis of the education system and provides for the correlation of learning objectives with public policies and with the major objectives of the system of education, which include environmental education, sustainability and climate change mitigation.

The National Strategy has four directions of action: (1) implementation of a national educational program for environment and climate; (2) identifying, promoting and facilitating solutions for the creation and use of educational resources; (3) creating, developing and supporting the rehabilitation of infrastructure for sustainable schools; (4) the training of human resources involved in education regarding the environment and climate change, in order to promote a culture of sustainability at the level of educational institutions.

The targets assumed by Romania until 2030 are: improving education, awareness and human and institutional capacity regarding the mitigation of climate change; adaptation, mitigation and early warning; intensifying efforts to achieve the transition to a "green" economy, resilient to climate change and to integrate climate

¹ ISE Description of European Key Competences. <https://www.ise.ro/wpcontent/uploads/2015/04/Competente-cheie-europene.pdf>.

change adaptation measures in vulnerable economic, social and environmental sectors, in accordance with EU policies.

8. Conclusions and Recommendations

Considering the size of the ecocide, but also the numerous unintentional ecological problems, it is necessary to adopt and apply strong legislative provisions and sanctions at national and international level, coherently harmonized and coordinated, as well as measures aimed at combating tax havens and an increase in financial support, proportional to the seriousness of the threats generated by ecological crime to sustainable development, economic-fiscal advantages and alternative livelihoods for the people at the end of the criminal chain.

9. Bibliography

Duțu, M. (2013). *Introduction to Environmental Criminal Law*. Bucharest: Hamangiu.

Government Emergency Ordinance no. 195 of December 22, 2005 regarding environmental protection, published in Official Monitor no. 1196 of December 30, 2005.

Government Emergency Ordinance no. 57 of June 20, 2007 regarding the regime of natural protected areas, conservation of natural habitats, flora and fauna, published in Official Monitor no. 442 of June 29, 2007.

Government Emergency Ordinance no. 92 of August 19, 2021 regarding the waste regime, published in Official Monitor no. 820 of August 26, 2021.

<https://ec.europa.eu/>.

<https://environment.ec.europa.eu/topics/>.

<https://eur-lex.europa.eu/legal-content/>.

<https://www.consilium.europa.eu/ro/infographics/fight-against-organized-crime-2018-2021-results/>.

ISE Description of European Key Competences. Available at: <https://www.ise.ro/wpcontent/uploads/2015/04/Competente-cheie-europene.pdf>.

Law no. 107 of September 25, 1996. The Water Law, published in Monitorul Oficial no. 244 of October 8, 1996.

Law no. 211 of November 15, 2011 regarding the waste regime, published in Monitorul Oficial no. 220 of March 28, 2014.

National Education Law no. 1 of January 5, 2011, published in Official Monitor no. 18 of January 10, 2011.

Petrescu-Mag, R.-M. and Petrescu-Mag, I.-V (2022). *Environmental legislation and policies*. Cluj-Napoca: Bioflux.

***(2021). *Presidential Administration. Educated Romania*. Available at: www.romaniaeducata.eu.

The Customs Code of Romania, adopted by Law no. 86 of April 10, 2006, published in Official Monitor no. 350 of April 19, 2006.

The New Criminal Code of Romania, adopted by Law no. 286 of July 17, 2009, published in Official Monitor no. 510 of July 24, 2009.