

XV International Scientific Conference

**“ARCHIBALD REISS DAYS”**

*Belgrade, October 30–31, 2025*

**THEMATIC CONFERENCE PROCEEDINGS**

**INVESTIGATING AND PROVING  
CONTEMPORARY FORMS OF CRIME:  
SCIENTIFIC APPROACHES**

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University of Criminal Investigation and Police Studies

University of Criminal Investigation and Police Studies

Belgrade, 2026

**Publisher**

UNIVERSITY OF CRIMINAL INVESTIGATION AND POLICE STUDIES  
Belgrade, 196 Cara Dušana Street (Zemun), Serbia

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*The conference and the publication of the Thematic Conference Proceedings were supported by the Ministry of Science, Technological Development, and Innovations of the Republic of Serbia.*

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ISBN 978-86-7020-539-0

ISBN 978-86-7020-190-3

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# INVISIBLE HARMS, ELUSIVE JUSTICE: UNMASKING THE EVIDENTIARY AND LEGAL CHALLENGES OF ENVIRONMENTAL CRIME PROSECUTION

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## ABSTRACT

**Purpose:** The paper explores the multifaceted challenges associated with detecting and proving environmental crime in Serbia, set against the backdrop of evolving European standards and good practices. It aims to identify legal, procedural, and institutional weaknesses that hinder effective enforcement. Despite its growing prevalence and severe ecological and societal impact, environmental crime remains chronically under-investigated and under-prosecuted worldwide and in Serbia.

**Design/Method/Approach:** The paper combines doctrinal legal research with comparative legal methodology. It examines Serbia's case law, legal instruments, prosecutorial practices, and institutional setup in Serbia and compares these with selected European models. Sources include legal instruments, policy documents, interviews with practitioners, and data from enforcement agencies.

**Findings:** The research reveals persistent weakness in Serbia, including vague definitions of environmental crimes, lack of prosecutorial specialization, poor use of environmental forensics, and limited cross-sector coordination. The low number of indictments and convictions points to an enforcement gap. In contrast, good European practices demonstrate the value of multidisciplinary investigative teams, specialized environmental units with prosecution services, and the use of scientific expertise to establish causality and harm.

**Originality/Value:** The paper offers a focused, context-specific analysis of Serbia's challenges in prosecuting environmental crime, enriched by comparative insights from the EU. It provides actionable recommendations, including legislative amendments, capacity building for prosecutors and inspectors, and the adoption of mechanisms for joint investigation and expert collaboration.

**Keywords:** environmental crime, criminal justice, prosecution, forensic evidence, capacity building.

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## INTRODUCTION

Environmental crime has emerged as one of the most pressing yet under-addressed forms of criminality in the contemporary era. Activities such as illegal logging, mining, and waste trafficking are no longer marginal issues but constitute a vast and lucrative criminal economy. According to the Financial Action Task Force (FATF), these crimes generate staggering illicit proceeds, estimated between USD 110 and 281 billion annually.<sup>2</sup> They are often linked to other serious offences, including corruption, tax crimes, and human trafficking, demonstrating their embeddedness within broader networks of organized crime.

Encompassing a wide range of unlawful acts that cause significant harm to the environment, human health, and the rule of law, often with transboundary implications that makes it both a national and international concern. Despite its gravity, environmental crime remains notoriously difficult to prosecute effectively. It is generally a low-risk, high reward crime, enforcement actions lag far behind the scale of the damage and the financial flows involved.<sup>3</sup>

In Serbia, as in many jurisdictions, it is often treated with low institutional priority, leading to low detection rates, scarce indictments, and even fewer convictions (WWF-Adria Serbia, 2022: 56). Limited prosecutorial specialization, evidentiary hurdles, and systemic weaknesses further exacerbate the enforcement gap. Against this background, this article examines the systemic, legal, and evidentiary obstacles to effective prosecution of environmental offenses in Serbia, situating them within the broader European context and drawing lessons from comparative examples to highlight potential pathways for reform.

## THE LEGAL LANDSCAPE: AMBIGUITY AND FRAGMENTATION

Environmental criminal law in Serbia is characterized by a fragmented normative framework. Although the Criminal Code of Serbia (Criminal Code – CC, Official Gazette RS, 85/2005, 88/2005, 107/2005, 72/2009, 111/2009, 121/2012, 104/2013, 108/2014, 94/2016, 35/2019, 94/2024) includes a chapter on criminal offences against the environment (Articles 260–281 CC), many of these provisions are either vaguely worded or lack clear enforcement parameters (Škulić, 2024: 1057). For instance, the offence of “environmental pollution” (Article 260) does not require proof of actual harm but only “endangerment,” which is rarely interpreted consistently by courts. Phrases such as “endangerment,” “considerable damage,” or “violation of regulations” are not sufficiently defined by either statute or jurisprudence, which generates interpretative uncertainty and legal inconsistency.

An additional challenge arises from the proliferation of misdemeanours and commercial offences within Serbia’s environmental legislation (Kostić, 2025: 8). Many acts that could potentially constitute environmental crimes under the Criminal Code are instead prosecuted as misdemeanours, often resulting in relatively minor penalties such as fines, warnings, or short-term operational suspensions. based on the Law on Environmental Protection (Official Gazette RS, 135/2004, 36/2009, 72/2009, 43/2011, 14/2016, 76/2018, 95/2018, 95/2024 – Another Law), the Law on Waters (Official Gazette

<sup>2</sup> See: <https://www.fatf-gafi.org/content/dam/fatf-gafi/brochures/Money-laundering-from-environmental-crime-handout.pdf>

<sup>3</sup> See UNODC and INTERPOL assessment: <https://www.interpol.int/Crimes/Environmental-crime/Pollution-crime> and [https://www.unodc.org/unodc/frontpage/2024/April/explainer\\_-what-are-crimes-that-affect-the-environment.html](https://www.unodc.org/unodc/frontpage/2024/April/explainer_-what-are-crimes-that-affect-the-environment.html)



RS, 30/2010, 93/2012, 101/2016, 95/2018, and 95/2018 – Another Law), the Law on Waste Management (Official Gazette RS, 36/2009, 88/2010, 14/2016, 95/2018 – Another Law and 35/2023), among others. Similarly, certain forms of environmental harm are addressed under the regime of commercial offenses, where liability is primarily corporate and sanctions are financial.<sup>4</sup> This overlapping of legal instruments creates enforcement fragmentation, encourages forum shopping, and can undermine the deterrent effect of criminal law. The environmental harms are more often processed as misdemeanours, thereby limiting the deterrent effect of criminal sanctions and marginalizing prosecutorial engagement (Kostić, 2025: 9). Scholars have warned that such a system risks underestimating severe environmental harms and relegating them to the realm of administrative regulation rather than criminal justice (Faure, 2017: 332). This creates what some scholars have termed “normative leakage” (Faure, 2010), whereby conduct that should trigger criminal accountability is diverted to more lenient administrative proceedings.

This complex penal framework often overlaps with criminal law provisions, creating confusion about which enforcement path should be pursued. In practice, many cases that might merit criminal investigation are instead resolved through misdemeanour proceedings, which typically result in minor fines and carry limited deterrent effect.

This situation stands in contrast to evolving European standards (Drenovak-Ivanović et al. 2015: 51). The EU Environmental Crime Directive 2024/1203 requires member states and candidate countries to ensure that environmental crimes are punishable by effective, proportionate, and dissuasive criminal penalties (Stojanović, Bodrožić, 2025: 12).<sup>5</sup> The growing importance of environmental crime is further confirmed by the fact that it is included in the list of offences subject to EU instruments of mutual recognition, such as the European Arrest Warrant (EAW), and falls within the jurisdiction of Europol and Eurojust (Matic Bošković, 2022a: 60). Serbia, while aligning many sectoral laws with the EU *acquis*, has yet to fully transpose these requirements into the criminal law framework (European Commission, 2024: 17).

Recent reforms, such as the 2024 amendments to the Law on Environmental Impact Assessment and the Law on Strategic Environmental Assessment, have sought to improve coherence and align national procedures with EU expectations (CEE Legal Matters, 2025). However, without parallel criminal law reform and greater prosecutorial capacity, enforcement gaps are likely to persist.

Serbia's environmental criminal law is hindered by substantive vagueness, fragmented enforcement pathways, and an overreliance on misdemeanour sanctions. To close the enforcement gap, reforms must focus on statutory precision, institutional specialization, and a recalibration of the normative hierarchy between misdemeanour and criminal accountability mechanisms.

## EVIDENTIARY CHALLENGES: PROVING ENVIRONMENTAL HARM

One of the core obstacles in prosecuting environmental crime lies in the complex task of establishing causality and quantifying harm. Unlike many conventional criminal offences, environmental crimes often manifest through diffuse, cumulative, and long-term processes, making it difficult to directly

<sup>4</sup> The catalogue of criminal offences from the secondary criminal legislation in the field of environmental protection can be compiled by analysing the penal provisions of laws relating to environmental protection, as listed on the website of the Ministry of Environmental Protection, available at [https://www.ekologija.gov.rs/sites/default/files/inline-files/Spisak\\_propisa\\_iz\\_oblasti\\_ZZS\\_-\\_230217.pdf](https://www.ekologija.gov.rs/sites/default/files/inline-files/Spisak_propisa_iz_oblasti_ZZS_-_230217.pdf), as well as by reviewing the penal provisions of other laws that define commercial offences and misdemeanours in the mentioned field but are not included in the Ministry's list.

<sup>5</sup> Directive (EU) 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law and replacing Directives 2008/99/EC and 2009/123/EC.



link a specific act or omission to a concrete and measurable environmental harm (Faure, 2017: 340). The temporal and spatial dispersal of environmental damage, such as the gradual contamination of watercourses, incremental soil degradation, or long-term biodiversity loss, poses significant challenges. These diffuse and cumulative harms complicate efforts by law enforcement and the judicial system to attribute responsibility to clearly identifiable actors, undermining effective prosecution (Faure & Svatikova, 2012: 256). This stands in sharp contrast to the more immediate and tangible harms associated with traditional offences, where causation is often more straightforward to establish.

From a doctrinal perspective, Serbian criminal procedure requires a high standard of proof, which in environmental cases demands robust and scientifically grounded evidence. In practice, this often necessitates the use of sophisticated environmental forensic techniques, including hydrological and air dispersion modelling, geospatial mapping, isotopic tracing, and ecological risk assessments. These tools are crucial not only for establishing the occurrence and extent of damage but also for demonstrating the causal nexus between the conduct of a suspect and the harm caused (White, 2013).

However, Serbia lacks an institutionalized system for environmental forensic capacity within its prosecutorial and investigative structures. This deficiency manifests in several ways. Prosecutors frequently rely on laboratory analyses conducted by state institutions, however the updated list of accredited laboratories is not easily available. At the same time, prosecutors lack sufficient financial resources to engage private laboratories, which further limits their access to timely and reliable expertise (Kostić, 2025: 33). Independent expert testimony, often indispensable for strengthening prosecutorial cases, is rarely sought due to both budgetary constraints (Matić Bošković & Kostić, 2024: 16) and uncertainty over admissibility. Moreover, existing procedural rules do not sufficiently accommodate the complexity of environmental scientific evidence, resulting in frequent challenges to its validity and reliability during trial.

There is a systemic gap in institutional capacity, since there is no dedicated forensic environmental unit within the prosecution service and no structured training for prosecutors on interpreting and presenting scientific data in court (Kostić, 2025: 13). In many instances, evidence gathering is heavily dependent on environmental inspectors, whose own capacity is uneven and whose reports may not meet the forensic standards necessary for successful prosecution (Matić Bošković, 2022b: 42). The absence of multidisciplinary investigative teams, integrating prosecutors, environmental inspectors, forensic scientists, and technical experts, has resulted in a persistent disconnect between the legal and scientific dimensions of environmental enforcement. Without integrated expertise, environmental law enforcement remains fragmented, with legal processes often failing to fully reflect the technical realities on which effective prosecution depends.

Often, the failure to successfully prosecute environmental crimes frequently arises not from institutional and evidentiary constraints but rather from the absence of unlawful conduct (Uhlmann, 2014). This evidentiary gap is compounded in Serbia by the lack of continuous training for prosecutors on interpreting and presenting scientific data and by limited opportunities for cross-sector cooperation with environmental inspection services, universities, and research institutions.

## INSTITUTIONAL WEAKNESSES: LACK OF SPECIALIZATION AND COORDINATION

Comparative experiences from EU member states demonstrate that bridging the enforcement gap requires both structural and procedural reforms. The establishment of specialized environmental prosecution units, staffed with prosecutors trained in environmental law and supported by forensic scientists, has significantly improved enforcement in countries such as the Netherlands (Tak, 2008: 51).



However, Serbia does not have specialized prosecutorial units for environmental crime. Environmental offences are generally handled by public prosecutors with broad jurisdiction, whose primary caseloads are dominated by conventional criminal matters. Consequently, many lack the necessary technical knowledge or procedural experience to manage complex environmental cases that demand both legal and scientific expertise (Matić Bošković & Kostić, 2023: 85). This absence of specialization directly affects the ability to identify investigative priorities, formulate effective prosecutorial strategies, and interpret complex expert evidence.

The shortage is exacerbated by the limited capacity and engagement of environmental inspectorates, which serve as frontline actors in detecting environmental violations. These bodies are frequently understaffed, under-resourced, and equipped with outdated monitoring technologies (Nicović, 2025: 34). Such structural deficiencies diminish the overall responsiveness of the enforcement chain and undermine prosecutorial effectiveness.

Comparative European experience offers a stark contrast. In several EU member states, most notably Italy and the Netherlands, specialized environmental prosecution offices operate in close partnership with dedicated police units and technical agencies, forming integrated enforcement frameworks (UNEP & INTERPOL, 2016). These arrangements enable the establishment of multidisciplinary investigative teams in which prosecutors, environmental experts, forensic scientists, and inspectors collaborate from the outset of the investigation (Billiet & Rousseau, 2017: 288). The benefits of such models allow for early evidence preservation, ensure that complex forensic requirements are identified at the start, and facilitate consistent legal qualification of environmental harm.

In Serbia, by contrast, the enforcement landscape is characterized by fragmented and siloed operations, and there is a persistent lack of structured inter-agency coordination mechanisms (Matić Bošković, 2022b: 87). Information exchange between prosecutors, environmental inspectorates, police units, and environmental agencies is often ad hoc and reactive rather than systematic. As a result, investigations suffer from delays in evidence collection, duplication of efforts, and, in particularly problematic cases, the expiration of statutory limitation periods before prosecutions can be initiated. These coordination gaps undermine both the deterrent effect of environmental law and public confidence in environmental justice.

The experience of EU jurisdictions with specialized and integrated structures underscores the potential gains Serbia could achieve by reforming its institutional architecture for environmental crime prosecution. Establishing dedicated environmental prosecution units, coupled with formalized protocols for cross-sector collaboration, would not only address existing capacity gaps but also enhance the consistency, efficiency, and credibility of environmental enforcement. Without such reforms, the country risks perpetuating a system in which environmental offences remain chronically under-investigated and under-prosecuted, despite their significant ecological and societal impact (Kostić & Matić Bošković, 2025: 62).

## ENFORCEMENT DEFICIT: LOW PROSECUTION AND CONVICTION RATES

Empirical data from the Supreme Public Prosecutor's Office (SPPO) and judicial statistics confirm a persistent enforcement gap in the prosecution of environmental crime in Serbia. Between 2006 and 2017, environmental offences constituted less than 1 percent of all criminal indictments, with even fewer cases resulting in final convictions (Jović et al., 2021). The problem is not merely quantitative but qualitative, most prosecuted cases involve low-level misdemeanours or negligence-based offences,



such as illegal hunting or minor forestry violations, rather than organized, corporate, or transnational environmental crime, despite the acknowledged prevalence of such activities in high-impact sectors like mining, waste management, and construction.

More recent data from the SPPO's *Report on the Work of Public Prosecutor's Offices in Combating Crime and Protecting Constitutionality and Legality* (2024) reinforce this conclusion. In both 2023 and 2024, public prosecutors received a significantly higher number of criminal reports than the number of indictments filed or convictions rendered in cases concerning environmental offences.<sup>6</sup> While 2023 saw a slightly higher volume of reports, indictments, and convictions than 2024, the data point to a consistent attrition rate between initial reports and successful prosecutions.<sup>7</sup>

For instance, in 2024, the largest share of criminal reports concerned forest theft (1,610 reports, including cases carried over from previous years). Yet, of the 1,610 total forest theft reports handled that year, only 297 resulted in indictments and 229 in convictions. Similarly, for the offence of illegal processing, disposal, and storage of dangerous substances, 303 reports (including cases carried over from previous years) led to 131 indictments and 110 convictions, representing a relatively higher conviction-to-indictment ratio but a modest conversion rate from total reports to convictions. These disparities illustrate how the success of environmental prosecutions is closely tied to the quality, timeliness, and completeness of evidence provided to prosecutors, a challenge repeatedly underscored in interviews with public prosecutors from basic public prosecution offices.

The lowest number of reports in 2024 related to high-risk but complex offences such as illegal construction of nuclear facilities (1 report, no indictment), illegal construction and commissioning of facilities and plants that pollute the environment (3 reports, no indictment), transmission of infectious diseases in animals and plants (4 reports, no indictment), and environmental damage (20 reports, no indictment). In each case, the absence of prosecutions raises concerns about the adequacy of evidence gathering and the technical capacity to substantiate charges. Prosecutors frequently noted deficiencies in cooperation with competent inspections, insufficient technical equipment for environmental investigations, and a lack of secure facilities for storing hazardous substances as evidence, all of which contribute to evidentiary weaknesses (Matić Bošković, 2022b: 83).

The 2023 data reveal similar trends. That year, the largest number of criminal reports again concerned forest theft (979 reports, 319 indictments, 287 convictions), followed by environmental pollution (203 reports, 131 indictments, 137 convictions), killing and abuse of animals (162 new reports, 34 indictments, 34 convictions), and illegal processing, disposal, and storage of dangerous substances (165 new reports, 87 indictments, 54 convictions). Strikingly, the number of criminal reports for environmental pollution in 2023 was nearly seven times higher than in 2024 (203 vs. 31), suggesting either a change in reporting patterns or a decline in detection rates.

A key structural issue is that the majority of environmental crime reports originate from the police, with inspection bodies contributing only a marginal share. For example, in 2023, out of 203 reports of environmental pollution, 168 were filed by the police and only 10 by other state authorities. The lack of obligations for inspection bodies in special laws to submit criminal reports, combined with insufficient knowledge of relevant criminal law provisions, appears to limit their proactive role in criminal enforcement. By contrast, comparative examples underscore the important role that inspections can play, as they possess specialised expertise and cooperate closely with the police in gathering evidence (Faure & Heine, 2005: 11). In addition, the data show that several reports are submitted by injured

<sup>6</sup> See the Supreme Public Prosecutor Office, *Report on the Work of Public Prosecutor's Offices in Combating Crime and Protecting Constitutionality and Legality for 2024, March 2025*: <http://www.vrhovnojt.gov.rs/docs/Izvestaj-VrhJT-za-2024-godinu.pdf>

<sup>7</sup> See Supreme Public Prosecutor Office, *Report on the Work of Public Prosecutor's Offices in Combating Crime and Protecting Constitutionality and Legality for 2023, March 2024*: [http://www.vrhovnojt.gov.rs/docs/SKM\\_95824041013280.pdf](http://www.vrhovnojt.gov.rs/docs/SKM_95824041013280.pdf)



parties, which is similar to the practice in comparative examples where complaints by private parties to the prosecutor's office represent only a very small fraction of the overall case intake (Billiet & Rousseau, 2017: 289).

The enforcement deficit is further compounded by the inadequacy of penalties. Sanctions imposed by courts are frequently minimal, often limited to conditional sentences or administrative fines (Alimpić, 2022: 1327). Such penalties fail to reflect the gravity of ecological harm and lack the deterrent effect essential to environmental criminal law. This undermines the preventive function of the law and may contribute to the perception of environmental crime as a low-risk, high-reward activity.

Ultimately, the combined effect of under-reporting by key administrative actors, insufficient investigative specialization, weak evidentiary frameworks, and lenient sentencing practices creates a systemic environment in which environmental offences are rarely prosecuted to their full extent. This reality not only diminishes the deterrent effect of criminal law but also erodes public confidence in the capacity of the justice system to safeguard environmental integrity. Comparative European experience, where higher prosecution and conviction rates are achieved through specialized units, multidisciplinary investigative teams, and structured cooperation between police, prosecutors, and inspections (UNEP & INTERPOL, 2016), suggests a clear pathway for reform in Serbia.

## COMPARATIVE INSIGHTS

Best practices from EU jurisdictions demonstrate that effective environmental crime prosecution hinges on three pillars: specialization, inter-agency cooperation, and scientific integration. Norway (*National Authority for Investigation and Prosecution of Economic and Environmental Crime*)<sup>8</sup> and North Rhine-Westphalia in Germany (Central Office for the Prosecution of Environmental Crime in North Rhine-Westphalia)<sup>9</sup> have adopted centralized systems for environmental investigation and prosecution, providing technical expertise directly to prosecutorial teams. These centralized forensic hubs allow for rapid evidence analysis, reduce procedural delays, and improve the admissibility and probative value of scientific findings in court. Across these models, the establishment of robust data-sharing mechanisms and centralized reporting systems has facilitated more proactive enforcement strategies, shifting the prosecutorial approach from reactive case handling to strategic crime prevention.

Spain provides an especially informative example for Serbia. At the national level, the *Unidad de Medio Ambiente y Urbanismo* (Unit for the Environment and Urban Planning)<sup>10</sup> operates within the State Public Prosecutor's Office, handling exclusively environmental and urban planning offences. Approximately 800 prosecutors in Spain are dedicated to environmental crime suppression, and their work is supported by the specialized training of the Civil Guard in environmental enforcement (WWF Spain, 2022: 26). This prosecutorial focus has yielded a high number of indictments and successful case resolutions, including the dismantling of corruption networks linked to environmental offences. The Unit's functions are defined by the *Organic Statute of the Public Prosecutor's Office* and include direct intervention, or the issuance of binding instructions to delegated prosecutors, in cases deemed of special importance by the State Prosecutor. Its jurisdiction spans offences related to territorial planning, protection of historical heritage, conservation of natural resources and biodiversity, animal welfare, and forest fire prevention.

8 See: <https://www.okokrim.no/oekokrim-in-english.549343.no.html>

9 See: <https://polizei.nrw/en/article/environmental-crime>

10 See: <https://www.fiscal.es/-/medio-ambiente>



The Spanish model's organizational strength lies in its coordinated structure – the unit is led by a coordinator for the environment and urban planning, who supervises specialized environmental prosecution departments across Spain, collects regular reports, and unifies prosecutorial criteria through the issuance of guidelines.<sup>11</sup> This networked approach ensures consistency in prosecutorial practice, enhances legal certainty, and facilitates specialized knowledge exchange. Importantly, the Coordinator can recommend to the State Prosecutor the issuance of general instructions or, where necessary, the temporary reassignment of prosecutors from specialized departments to priority cases (WWF Spain, 2022: 27).

In Serbia, where the number of public prosecutors is limited and the creation of a specialized prosecutorial office for environmental crime poses significant institutional and resource challenges, the Italian example offers a pragmatic alternative. Italy has not established a separate environmental prosecution office; instead, it strengthened coordination by requiring that investigations into the most serious environmental crimes be reported to regional Prosecutors General and the Anti-Mafia Prosecutor (Italian Environmental Network of Prosecutors General).<sup>12</sup> While these bodies do not direct investigations, they play a supervisory role by monitoring practice, identifying inconsistencies, and promoting shared protocols. Moreover, Italy's approach illustrates the advantages of embedding environmental crime enforcement within broader strategies addressing organized crime and corruption, recognising the interconnections between illicit environmental activities, financial crime, and money laundering.

For Serbia, these comparative experiences underscore the value of institutionalizing environmental specialization within the prosecution service. While the establishment of a dedicated national environmental prosecutor's office might be resource-intensive, the creation of specialized departments, staffed by prosecutors with a demonstrated interest and expertise in environmental protection, could offer a feasible and impactful reform. The Council of Europe's Consultative Council of European Prosecutors (CCPE) has explicitly emphasized that environmental crimes are "complex offences" requiring multidisciplinary approaches and regular reviews of legal and procedural frameworks to remain effective (CCPE, 2022). Without such structural reforms, Serbia's environmental enforcement is likely to continue underperforming in both deterrence and prosecution outcomes. Coupled with formalized cooperation protocols between prosecutors, inspectorates, police, and independent scientific institutions, such a model would not only improve case outcomes but also help close the persistent prosecution gap documented in Serbian practice.

## CONCLUSION

The article demonstrates that environmental crime prosecution in Serbia faces persistent structural, procedural, and evidentiary challenges that significantly undermine the effectiveness of the criminal justice response. Despite the existence of a substantive legal framework for environmental protection, the enforcement gap remains substantial, as reflected in the low proportion of environmental offences among total indictments, less than 1 percent between 2017 and 2022, and conviction rates are even lower.

The data further reveal that the majority of criminal reports, often over 90 percent, are submitted by the police, while other state bodies, such as environmental inspectorates, play only a marginal role in initiating criminal proceedings. This reflects both the absence of legal obligations for certain inspection authorities to submit criminal complaints in their specific legislation and a broader lack of familiarity with the criminal law dimensions of environmental protection. The result is an over-reliance on police detection and a missed opportunity to capitalise on the preventive and investigative potential of other regulatory actors (Kostić, 2024: 217). Practitioners report chronic under-resourcing, limited

11 See: <https://www.fiscal.es/web/fiscal/-/medio-ambiente?assetCategoryId=36757>.

12 See: [https://www.procuracassazione.it/resources/cms/documents/Fimiani\\_Heraklion.pdf](https://www.procuracassazione.it/resources/cms/documents/Fimiani_Heraklion.pdf)



prosecutorial specialization, procedural hurdles in admitting technical evidence, and weak coordination with inspectors and technical agencies (Matić Bošković, 2022b: 79).

This deficit is compounded by a lack of prosecutorial specialization, insufficient integration of scientific expertise into case preparation, and fragmented cooperation among key actors, including prosecutors, environmental inspectorates, and police authorities. The findings align with earlier assessments in comparative practice, which stress that environmental offences, due to their complexity, require tailored investigative strategies, robust interagency coordination, and access to specialized forensic support (Bisschop & van Wingerde, 2022).

In order to address these shortcomings, Serbia must embark on a strategic reform path that strengthens institutional capacity at multiple levels. The establishment of dedicated prosecutorial units for environmental crime, whether at the national or appellate level, would provide a focal point for expertise, facilitate consistency in prosecutorial approaches, and enable more effective supervision of complex cases. Comparative experiences from Spain demonstrate that prosecutorial specialization, when coupled with formalized cooperation protocols and integration with specialized law enforcement bodies, can markedly strengthen enforcement and, in some cases, uncover broader criminal networks. Enhanced investigation capacity and improved inter-agency coordination in Spain, particularly through Nature Guardians, contributed to a 110 percent increase in the detection of environmental offences, illustrating the effectiveness of this integrated approach.<sup>13</sup>

Reforms should also prioritise the institutionalisation of environmental forensics as an essential investigative tool. Centralised laboratories, independent expert networks, or formal partnerships with academic institutions could provide prosecutors with the scientific evidence necessary to establish causality and quantify harm, two of the most significant evidentiary barriers. As observed in Norway and Germany, embedding technical expertise within prosecutorial workflows can significantly enhance the admissibility and persuasiveness of evidence presented in court (UNEP, 2018; Sina, 2015: 75).

Equally important is the strengthening of cross-sectoral coordination. The lack of effective coordination between prosecutors, inspectorates, and police in Serbia results in procedural delays, loss of evidentiary value, and in some cases the expiry of statutory limitation periods. Drawing on Council of Europe recommendations (CCPE, 2022), Serbia should formalise inter-agency working arrangements through memoranda of understanding, joint investigation protocols, and regular joint training exercises (Alimpić, 2022: 1330). Such arrangements would not only improve the quality of evidence at the indictment stage but also contribute to preventive monitoring and early detection of offences.

Finally, these institutional reforms must be accompanied by a cultural shift in enforcement priorities. Environmental crime should no longer be treated as a marginal or low-priority category but rather recognised for its significant ecological, economic, and societal impacts. Aligning Serbia's enforcement practices with evolving EU standards, including those envisaged in Directive (EU) 2024/1203 on the protection of the environment through criminal law, would also strengthen the country's alignment with its EU accession obligations (Gudin, 2024: 342). This alignment requires not only legislative harmonisation but also enforcement and demonstrable progress in prosecution rates, sentencing severity, and deterrence outcomes (Faure & Lu, 2024: 324).

In sum, closing the environmental crime prosecution gap in Serbia will require a multifaceted reform strategy, establishing prosecutorial specialization, institutionalising access to scientific expertise, and embedding coordination mechanisms across enforcement agencies. These measures, underpinned by comparative best practices and international standards, would not only enhance prosecutorial effec-

<sup>13</sup> See: [https://environment.ec.europa.eu/news/natures-guardians-enhancing-effectiveness-and-efficiency-response-environmental-crime-2024-03-14\\_en#:~:text=Notably%2C%20there%20has%20been%20a%2062%25%20reduction,Spain%20and%20an%2087%25%20increase%20in%20Portugal](https://environment.ec.europa.eu/news/natures-guardians-enhancing-effectiveness-and-efficiency-response-environmental-crime-2024-03-14_en#:~:text=Notably%2C%20there%20has%20been%20a%2062%25%20reduction,Spain%20and%20an%2087%25%20increase%20in%20Portugal).



tiveness but also reinforce public confidence in the state's capacity to protect the environment as a public good. Without such determined action, Serbia risks perpetuating a cycle of under-enforcement in which environmental harm remains invisible to justice.

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