



**EFFECTIVITEIT VAN
STRAFRECHTELIJKE SANCTIES
BIJ ERNSTIGE MILIEUDELICTEN**



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Effectiveness of criminal sanctions for serious environmental crimes

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Summary *Effectiveness of criminal sanctions for serious environmental crimes*

Research topic

Environmental crime refers to violations of environmental laws and regulations and constitutes a complex problem, which can cause extensive damage to nature, animals, and human health. Annual revenues from environmental crime are estimated to range between 110 and 281 billion dollars worldwide. The Netherlands is no exception: violations of environmental legislation include, for example, manure fraud, illegal discharges, the dumping of hazardous substances, and improper waste processing. Previous research shows that, despite its significant impact, environmental crime receives relatively scarce attention compared to other forms of crime. Detection and prosecution are complex, as environmental harm is often not immediately visible and the environment itself cannot file a complaint.

Since the recognition of the right to a clean, healthy, and sustainable environment by the United Nations, environmental crime has also been framed as a human rights issue. Criminal law enforcement is currently in a transitional phase. The revised EU Environmental Crime Directive obliges Member States to expand criminalisation and to introduce effective, proportionate, and deterrent sanctions. The Netherlands has two years to implement this directive. However, as the legislative proposal for its implementation has not yet reached the stage where it can be debated in the House of Representatives, it is uncertain whether this deadline will be met.

At the national level, the Hagen and Sneller motion, adopted in parliament, is particularly relevant. This motion requested the government to explicitly stipulate in the Economic Offences Act (*Wet op de economische delicten*, WED) that sanctions imposed in response to environmental crime must be effective, proportionate, and deterrent. The current study follows from the commitment made by the responsible ministers, in response to this motion, to commission research on this issue. Against this background, the current study examines the effectiveness of the Dutch criminal justice practice in cases of serious environmental offences, difficulties in sanctioning, and opportunities for improvement. Environmental legislation is enforced through a dual-track system, allowing both administrative and criminal law responses. The complexity of enforcement in the environmental domain is not only due to this combination of instruments of administrative and criminal law, but also to the involvement of multiple ministries, regulatory enforcement agencies, special investigative services, and other actors. In practice, a wide range of organisations deal with environmental crime, including Regional Environmental Agencies, Special Investigative Services (the Dutch Food and Consumer Product Safety Authority and the Human Environment and Transport Inspectorate), the Police, the Strategic Environmental Chamber, National Public Prosecutor's Office for Financial, Economic and Environmental Offences and the Judiciary. Previous studies have shown that fragmentation, poor coordination, administrative dependence, limited information sharing, inefficient criminal case handling, and a lack of deterrence seriously hinder enforcement. Economic and political interests further negatively affect the prioritisation of environmental enforcement.

Research questions

The study seeks to provide insight into four sub-themes:

- (1) the legal framework for imposing criminal sanctions in response to serious environmental offences;
- (2) the (conditions for) effectiveness of criminal sanctions in the environmental domain;
- (3) current sanctioning practices and difficulties experienced therein; and
- (4) resulting directions for improvement.

The current study therefore addresses the following research questions:

1. What legal possibilities does criminal law offer to impose sanctions in response to serious environmental offences?
2. Which criminal sanctions in response to serious environmental offences are the most effective in which circumstances?
3. Which criminal sanctions are currently demanded and imposed in practice in response to serious environmental offences, and which difficulties are experienced by the actors involved in applying these sanctions?
4. How can the effectiveness of criminal sanctions for serious environmental offences be enhanced, and what role could a possible amendment to the Economic Offences Act (WED), as proposed in the Hagen and Sneller motion, play in this regard?

This study focuses on criminal sanctions—both punishments and measures—imposed in response to serious environmental offences involving substantial or irreversible harm and a calculating or criminal attitude on the part of the offender. This delineation aligns with the National Environmental Enforcement Strategy (Landelijke Handhavingstrategie Omgevingsrecht, LHSO) and with the perceptions of the professionals interviewed in Dutch environmental enforcement practice.

Research methods

Multiple research methods were employed to answer the research questions. First, a legal analysis was conducted to map the criminal sanctions available under general and special criminal law for responding to serious environmental crime. Second, 15 focus groups were held with a total of 75 professionals working in the Dutch environmental domain. Participants included professionals from regional environmental agencies and water authorities (as enforcement officers/inspectors), national inspection bodies and specialised investigative services (as supervisors or investigators), the police (intelligence and tactical units), the Bar, the Public Prosecution Service, the Judiciary, and two involved ministries (Justice and Security; Infrastructure and Water Management). Members of the Strategic Environmental Chamber and the National Environment Chamber were also interviewed. In addition to 12 focus groups conducted within individual organisations, three mixed focus groups were held, bringing together professionals from various participating organisations. Third, a quantitative analysis was conducted using Public Prosecution Service data to map the progression of criminal cases concerning serious environmental offences throughout the criminal justice system. Although this approach yielded a large and diverse range of perspectives, a limitation of the study is that its empirical findings on the effectiveness of criminal sanctions rely on the perceptions of participants rather than on an independent, objective assessment of effectiveness.

Findings

Legal framework

The current legal system offers a wide range of sanctions that can be imposed in response to serious environmental offences. In addition to administrative sanctions, these include criminal sanctions, which are the focus of this report. The Dutch Criminal Code distinguishes between principal penalties, additional penalties, and measures. While penalties primarily have a retributive character, measures are mainly aimed at prevention and/or restoration, although in practice this distinction is not always clear-cut. The most severe penalty is imprisonment, which can only be imposed on natural persons. For individuals, disqualification from exercising a particular profession is also relevant. For corporations, financial (pecuniary) sanctions—such as fines, compensation orders, and confiscation of unlawfully obtained benefits—are particularly important. The legal analysis shows, however, that appropriately determining the sentence (in particular the level of fines or confiscation orders) is not straightforward, as this often requires in-depth insight into complex corporate financial structures.

In addition to financial sanctions, the law provides other criminal sanctions for corporations aimed at restricting, influencing, or terminating business activities, such as suspension of operations, placing the corporation under guardianship or shutting down the business. Criminal sanctions may also be imposed conditionally, obliging corporations or individuals to comply with specific instructions during a probationary period. However, in order to effectively use these instruments—which in theory can substantially affect business operations—knowledge of often complex business processes is required. This complicates the execution of the sanctions as well as the supervision of compliance. Despite the broad range of available criminal enforcement options, the use of preventive and/or restorative criminal sanctions remains limited, with the majority of sanctions being of the pecuniary kind. It remains to be seen whether the revised EU Environmental Crime Directive, which obliges Member States to introduce stricter penalties and expand criminalisation of illegitimate behaviour, will change this. Indeed, the directive stipulates that, in exceptional cases, even conduct that falls within activities covered by a permit may be criminalised. The proposal for Dutch implementing legislation, the government suggests introducing new criminal offences and increasing certain maximum penalties. In its advisory opinion, the Council of State notes, among other aspects, that the proposal does not address the need to increase enforcement capacity. Without a significant boost in capacity, it appears unrealistic to expect an increase in the number of criminal cases that can be handled.

Effectiveness of criminal sanctions

The focus groups reveal that respondents spontaneously identify only a limited number of sanctions as effective. Measures such as forfeiture, compensation, and withdrawal from circulation were rarely mentioned, suggesting that they play a limited role in practice or are not salient to enforcement actors. Respondents emphasise that effectiveness depends not only on the nature or severity of sanctions, but especially on general conditions such as the likelihood of detection, the likelihood of sanctioning, and procedural speed. A low detection probability and lengthy procedures undermine preventive effects, while disproportionately severe sanctions imposed on well-intentioned companies may be counterproductive. Sanctions perceived as effective include community service orders, due to their symbolic and practical impact (“time is money”) and the potential for creative implementation. The (conditional) suspension of business activities is also viewed as effective, although respondents point to implementation problems and the risk of unequal application between small and large companies. Conditional sanctions are valued for their preventive potential, particularly when special conditions directly influence compliance behaviour (e.g. adapted working practices). Confiscation of unlawfully obtained benefits is considered highly effective, as it removes the financial incentive for environmental crime and targets offenders where they are most motivated: financial gain. At the same time, respondents note practical obstacles, including a lack of expertise and the time-consuming nature of determining illegal profits. Restoration orders (Article 8 WED) are also seen as potentially very effective, as they directly address environmental harm and create financial incentives for compliance. Yet they are rarely applied. Reasons include insufficient information about the nature and extent of damage, uncertainty about already completed restoration, and weak enforcement.

Furthermore, respondents point out that the effectiveness of criminal law is not limited to imposed sanctions, but also derives from the broader enforcement context. Actions such as interrogations, seizures, and enforcement campaigns can have strong preventive effects by increasing visibility and compliance pressure. Respondents also stress the importance of collateral effects of criminal sanctions, such as reputational damage, loss of certifications or permits (e.g. through Bibob procedures), and consequences for financing, subsidies, or insurance. Visibility, enforceability, and extra-criminal consequences appear to be more influential than severity of sanctions alone.

Mixed views emerged regarding the effectiveness of certain sanctions. Respondents are critical of fines, despite their widespread use, noting that fines are only deterrent if they are sufficiently high relative to a company’s financial resources, imposed swiftly, and accompanied by a realistic detection probability—conditions that are often absent in practice.

Custodial sentences are rarely mentioned and are seen mainly as having a symbolic signaling function towards senior management; their general deterrent effect is questioned. Opinions on professional disqualification are mixed: it may be effective but is perceived as easy to circumvent and weakly enforced. Disclosure of judgments is seen by some respondents as powerful due to reputational damage, although its impact depends on media attention. Corporate guardianship is rarely applied due to legal and practical difficulties. Personal sanctioning of de facto managers may have a deterrent effect but also risks organisational paralysis and entails substantial effort to prove.

Sanctioning practice and difficulties

The third research question concerns sanctioning practices and experienced difficulties. Focus group findings indicate that while the legal framework provides sufficient sanctioning options, structural and organisational problems impede effective criminal enforcement of environmental law.

In practice, fines are imposed most frequently, followed by community service orders and (conditional) custodial sentences. Potentially effective sanctions such as temporary shutdown of a corporation, confiscation measures, and restoration orders are only applied to a limited extent, mainly due to lack of expertise and capacity, and practical obstacles to implementation.

A key bottleneck is the low likelihood of detection and sanctioning. Environmental crime is difficult to detect, inspections are infrequent and often announced, supervision is fragmented and risk-based, and non-environmental investigative services do not always recognise environmental offences. Even when violations are detected, sanctioning does not always follow according to respondents, partly due to the reluctance of enforcement and political interference.

Poor cooperation constitutes another major obstacle. Fragmentation, interdependencies between agencies, and staff turnover result in inconsistent collaboration that often depends on individual commitment and relations. Information sharing is hampered by privacy concerns and weak links between supervision and investigation. Judges report lacking crucial information—such as data on corporate finances and the extent of environmental harm—which complicates appropriate sentencing.

Delays throughout the criminal justice chain further undermine effectiveness. Lengthy procedures weaken preventive effects and may lead to reduced penalties. Causes include extensive requests from defence lawyers and the use of special investigative methods, combined with general capacity constraints across the criminal justice system. The environmental domain is similarly affected by the overall burdening of the criminal justice chain. Respondents indicate that capacity is insufficient across all stages of the criminal justice system.

A further structural bottleneck concerns the complexity of environmental legislation and the associated need for legal and financial expertise. Environmental criminal cases require extensive preparation, and it takes actors—from inspectors to judges—a lot of effort to master the substantive content, particularly at the appellate level. The problems identified in this study are consistent with earlier findings regarding insufficient cooperation, limited information sharing and lengthy case processing times.

Finally, respondents note that the harms addressed by environmental criminal law are not always well understood, by the public or by professionals. This is due to the fact that actual damage has not always occurred, to the absence of immediately visible harm, and to the often technical nature of environmental regulation and its courtroom application.

Practical recommendations

The analysis demonstrates that environmental criminal law offers a sufficient set of legal instruments; however its effectiveness is primarily constrained by implementation problems, limited capacity, and the underutilisation of the available sanctions.

In our view, the amendment to the Economic Offences Act proposed in the Hagen and Sneller motion would not add value in terms of effectiveness. The requirement that sanctions be effective, proportionate, and deterrent is directed at the legislator, who must ensure sufficient judicial discretion. That said, improvements in sentencing practice are needed. We recommend developing **sentencing guidelines for environmental criminal cases** to provide judges with better reference points for aligning sanctions with offence severity and offenders' financial resources. Financial resources should be a key consideration, as proportional financial sanctions require insight into corporate solvency. The same applies to preventive sanctions: what do they actually cost the company in practice? Informed sentencing requires better and timely information on a corporation, which must be gathered during investigations—necessitating additional capacity.

Greater use should also be made of the **existing arsenal of criminal sanctions**. In practice, the standard fine is used too often, while sanctions such as restoration orders or confiscation may be more effective. These sanctions require more preparation and expertise, again underscoring the need for **additional capacity across the criminal justice system**. Increased capacity across the criminal justice system could also shorten case durations and contribute to more timely and effective sanctioning.

The feasibility of rarely used but potentially effective sanctions (such as temporary shutdown of a corporation or corporate guardianship) should be improved by clarifying and better regulating practical requirements. **Improvements in information provision and cooperation** are also necessary. Active monitoring of sanctioned companies is currently lacking, limiting insight into recidivism. Structural information exchange between prosecutors, inspectors and investigators—such as feedback on case outcomes—could enhance future case quality.

Finally, effectiveness could be strengthened by consistently **foregrounding environmental interests** at all stages of the enforcement chain, in communication with the public and with procedural parties. Given the technical nature of environmental law, prosecutorial narratives in court are often technical as well, which may obscure the protected interests and harms involved. Investment in training, knowledge exchange, and specialised bodies—such as the national Economic Offences Chamber—could improve the articulation of environmental harm and lead to more consistent and meaningful sentencing.

Conclusion

This study confirms that criminal enforcement in the environmental domain is inadequate. Although the available sanctioning framework is legally sufficient, practical problems— such as capacity shortages, lengthy procedures, inadequate information provision, and difficulties in execution—severely constrain its application. More effective enforcement of environmental crime therefore requires removing these barriers. This would not only help prevent or mitigate environmental harm and enhance the preventive effect of sanctions, but also strengthen public trust in law enforcement and regulatory compliance. Achieving more effective environmental criminal enforcement ultimately depends on the implementation of the recommendations of this and previous studies.