Working Group on the National Criminalisation of Ecocide

February 12th, 2025

MANUAL FOR A NATIONAL CRIMINALISATION OF ECOCIDE

ECOCIDE LAW ADVISORY

De Roos

“The rules of our world are laws, and they can be changed. Laws can restrict or they can enable. What matters is what they serve. Many of the laws in our world serve property – they are based on ownership. But imagine a law that has a higher moral authority, a law that puts people and planet first. Imagine a law that starts from first do no harm, that stops this dangerous game and takes us to a place of safety…”

Polly Higgins

PREFACE

Dear reader,

The concept of the criminalisation of ecocide — the large-scale destruction of our living environment — is again at the forefront of worldwide attention. Thanks to the tireless campaigning of people like Scottish lawyer Polly Higgins (1968–2019), the idea resurfaced around 2009 after being dormant for about twenty years.

Ecocide is one of those concepts that, once you grasp its logic, you cannot unsee it. At least, that's how it was for me, and I hope it is the same for you. Simply put, ecocide is the murder of nature. And yet, that type of murder isn't a crime under any existing law. Not yet.

This needs to change.

During my time as a member of the Dutch parliament, I was fortunate to work with a talented group of people to introduce a legislative initiative aimed at criminalising ecocide. We learned a great deal from that process, not least from the thoughtful responses we received, including from the Dutch Council of State.

Now, we have a new opportunity.

In April 2024, the European Union published the revised ECD. Member States now have roughly two years to incorporate the directive into national law. The opportunity lies in Article 1, which clearly states that the directive has a minimum harmonisation intent, leaving significant room for national adaptation.

This opportunity could not come at a more crucial time. Recently, scientists issued yet another urgent warning about the looming threat of irreversible climate disaster. Of the 35 planetary vital signs that scientists use to track climate change annually, 25 are at record extremes.

You have the chance to make your implementation of the ECD a powerful tool in the fight against the ongoing war on nature — a war that, tragically, we are winning at an unprecedented scale. And if we win, we are all lost.

We already know the challenges associated with criminalising ecocide; we've been discussing them for years.

This manual focusses on solutions for those challenges. And should you choose to make a stronger and more ambitious law, this manual provides solutions for this.

On behalf of the Working Group,

Lammert van Raan

Chair of the Working Group

COMPOSITION

of the Working Group

This manual is based on discussion by the Working Group on the National Criminalisation of Ecocide (The **Working Group**) which consists of the following legal professionals:

Vincent Delbos, member of the European Committee for the Prevention of Torture elected and Honorary Inspector-General of the Ministry of Justice in France (retired), lecturer at Sciences Po Paris.

Michael Faure, Professor of International and Comparative Environmental Law at Maastricht University and Professor Comparative Private Law and Economics at Erasmus University Rotterdam.

Laura Guercio, member of the Council of the European Law Institute, member of the Management Board of the European Fundamental Rights Agency and assistant lawyer at the International Criminal Court.

Stefaan Van Hecke, member of the Federal Parliament and Parliamentary Group Leader for the Green Party in Belgium.

Véronique Jaworski, Professor in Private Law and Criminal Sciences, specialised in environmental and criminal law at the University of Strasbourg.

Ingeborg Koopmans, Public Prosecutor Environmental Crime at the Functional Department of the Dutch Prosecutor's Office.

Sjoerd Lopik, Climate & Sustainability Lawyer and Partner at De Roos Coöperatief and PhD fellow on Climate Criminal Law at Leiden University.

Kate Mackintosh, Executive Director of the UCLA Law Promise Institute Europe, former Deputy Chair of the Independent Expert Panel for the Legal Definition of Ecocide. Co-Founder 'Ecocide Law Advisory'.

Laura Monnier, Environmental and Criminal Lawyer and former Legal Head of Greenpeace France.

Hermann Ott, Lawyer & Consultant, Founder and former Managing Director of the Germany Office for ClientEarth and Professor at University of Sustainable Development in Eberswalde.

Fausto Pocar, Professor at the University of Milan, Former President of the International Criminal Tribunal for the former Yugoslavia and former member of the UNCHR and Institut de Droit International.

Darryl Robinson, Professor of International Criminal Law and Human Rights at Queen's University and former advisor to the Chief Prosecutor of the International Criminal Court.

Richard J Rogers, Executive Director of Climate Counsel and former Deputy Chair of the Independent Expert Panel for the Legal Definition of Ecocide. Co-Founder 'Ecocide Law Advisory'.

Julia Thibord, Environmental Lawyer, former Head of Strategic Litigation at Pollinis, former Associate Legal Officer at the International Criminal Tribunal for the former Yugoslavia.

Marine Yzquierdo, Environmental Lawyer and Board Member of Notre Affaire à Tous.

CHAPTER 1

Introduction

The scope of the manual

1. On 20 May 2024, the Directive (EU) 2024/1203 of the European Parliament and the Council of 11 April 2024 on the protection of the environment through criminal law (the Environmental Crime Directive, **ECD**) of the European Union (**EU**) entered into force. The ECD obliges EU Member States to adopt certain environmental criminal laws, including an offence for 'ecocide-like' cases, within two years. This project seizes this moment to support effective and comprehensive criminalisation of serious environmental harm within the EU.

2. This manual is designed to equip politicians, lawmakers, and legislative drafters with practical options to implement the ECD's ecocide-like crime in their national legislation, should they wish to do so. This could be done as a stand-alone crime, or as part of a broader set of provisions.

The ecocide movement

3. The world is facing multiple ecological crises requiring urgent political action, including legislation aimed at environmental protection. One important part of such legislation is the criminalisation of the most serious forms of environmental harm, often referred to as ecocide. It is not surprising, then, that discussions around this issue have gained momentum in various countries in recent years.

4. Discussions regarding a criminalisation of ecocide have been ongoing in the international criminal law domain for several years now. A milestone was the 2021 definition of ecocide as formulated by Independent Expert Panel for the Legal Definition of Ecocide (**IEP**), which was convened by the Stop Ecocide Foundation. This definition provided a basis for the 2024 proposal to have ecocide included as a fifth crime in the Rome Statute of the International Criminal Court.

5. Recently, the discussion has spread from international to national criminal law systems. For example, Belgium criminalised ecocide in 2024. Several other countries, from the Netherlands to Mexico, Brazil to Scotland, are all considering new legislation to tackle ecocide. In France, an initiative to criminalize ecocide began in 2019 and led to the adoption of an ecocide law, albeit different from the initial intent. While these laws were initiated in different jurisdictions, the politicians, law makers and legislative lawyers in those jurisdictions faced similar challenges and dilemmas. These challenges are the subject of this project.

Structure of the manual

6. Debates surrounding ecocide in legislative proposals and academic research are mainly centred around five issues. We have defined these as the building blocks of a criminalisation of ecocide. These building blocks are:

- Unlawfulness;
- *Mens rea*;
- Threshold of environmental harm;
- Offence of infringement vs. offence of endangerment; and
- Extraterritorial jurisdiction.

These building blocks are introduced, defined and discussed in the following chapters, which also offer options to implement these building blocks in a crime of ecocide.

7. Although the aforementioned elements are discussed in isolation in the manual, they are closely interconnected and mutually reinforcing. Lawmakers should consider these building blocks in relation to one another and assess their national laws in a holistic manner.

8. The manual considers the liability of natural persons. For the attribution of liability to legal persons, lawmakers should seek to align with their national criminal law systems.

9. The ECD does not require EU Member States to criminalise ecocide as an individual offence. Instead, the ECD mandates the criminalisation of specific environmental harms and includes a more serious 'qualified offence' for ecocide-like cases, when the harm reaches a higher threshold. Member States could follow this integrated approach in their national legislation but also have the option to adopt ecocide as an individual crime. This manual provides guidance for both options. Legislators may also choose whether or not to explicitly incorporate the term 'ecocide' into their national legislation.

The ECD

The ECD is a legal framework aimed at enhancing environmental protection throughout the EU. Member States must criminalise at least the environmentally harmful conduct outlined in the Directive, and are at liberty to go further. It classifies offences into a two-tier system, based on the severity of their impact on the environment.

The first tier addresses “serious infringements of Union law concerning protection of the environment”, which are specified in Article 3(2) ECD.

Twenty environmental offences are listed; either defined by a specific outcome, like significant environmental damage or harm to individuals, or by a failure to adhere to legal requirements. To qualify as a first-tier offence, the conduct must involve an unlawful act, such as the violation of EU environmental rules or corresponding national legislation, and be committed with either intent or serious negligence.

The second tier established by Article 3(3) ECD are ‘qualified criminal offences’. These offences occur when the conduct listed in Article 3(2) is intentional and causes:

“*(a) the destruction of, or widespread and substantial damage which is either irreversible or long-lasting to, an ecocystem of considerable size or environmental value or a habitat within a protected site, or;*

(b) widespread and substantial damage which is either irreversible or long-lasting to the quality of air, soil or water.”[1]

According to preambular paragraph 21 of the ECD:

“Those qualified criminal offences can encompass conduct comparable to “‘ecocide’, which is already covered by the law of certain Member States and which is being discussed in international fora.”

According to the ECD, such cases must be penalised more severely because of their large impact on the environment.

The Working Group

10. The Working Group consists of a diverse group of legal experts, including academics, judges, prosecutors and environmental lawyers. The Working Group was initiated by Lammert van Raan, who also acted as its chair. Sjoerd Lopik and Lisette van der Linde acted as the secretaries of the Working Group. Kate Mackintosh and Richard J Rogers of Ecocide Law Advisory were also involved in the organisation and the setup of the Working Group. Ecocide Law Advisory and De Roos provided various forms of support to the Working Group, including legal advice, research assistance, and strategic guidance.

1. Article 3(3) sub a-b ECD.

11. This manual represents the collective outcome of discussions held by the Working Group between October 2024 and January 2025. However, the views expressed herein do not necessarily reflect the opinions of every individual member of the Working Group.

CHAPTER 2

Unlawfulness

Introduction

12. Human interaction with the environment is often destructive to a degree, and much of this destruction is tolerated. In setting the threshold for where destructive activity becomes criminal, some jurisdictions require harmful acts to be unlawful, meaning already prohibited by existing law, such as environmental regulations applicable in the territory.

13. The alternative route is to create autonomous environmental crimes which, because of the seriousness of their consequences, do not depend on the prohibited acts breaching existing legal provisions. In such cases, the unlawfulness of the act is established by the defined elements of the offence.

14. One challenge for a general autonomous environmental offence is that humans cannot survive without having some impact on the environment, which is why a nuanced consideration of environmental principles is usually needed. Those principles seek to secure both environmental protection and human well-being and are applied in an impact assessment and approvals process. Several options are outlined below to address the problem of inappropriate approvals, while also respecting environmental principles.

Unlawfulness in the ECD

15. The ECD requires all offences to be unlawful, providing that "*in order for conduct to constitute an environmental criminal offence under this Directive, it should be unlawful*".

16. Unlawful conduct is further defined as conduct which breaches EU law, or national law implementing EU law, aimed at: preserving, protecting and improving the quality of the environment, protecting human health, a prudent and rational utilisation of natural resources, or promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change. The element of unlawfulness is also incorporated in the definition of qualified criminal offences in Article 3(3) ECD.

17. In implementing the crime of ecocide in national law, then, lawmakers may wish to follow the route set out in the ECD and include the criteria of unlawfulness in the definition of the crime. In these cases, the scope of the term becomes critical. Must harmful acts breach an environmental regulation in order to be unlawful, or can it be some other domestic law? And what is the significance of international human rights law relating to the environment?

18. One dimension of the discussion on the element of unlawfulness relates to the presence of a valid permit. If an actor has a permit to carry out a particular activity, should they be shielded from criminal responsibility? This issue is sometimes referred to as *administrative dependency*, meaning that the criminal nature of the offence depends on whether the perpetrator has breached administrative law. In that regard, it should be noted that the process of issuing administrative authorisations is far from perfect, often leading to unforeseen and serious environmental harm.

19. In this regard, the ECD states that:

> "c*onduct shall be unlawful even where it is carried out under an authorisation issued by a competent authority of a Member State if such authorisation was obtained fraudulently or by corruption, extortion or coercion, or if such authorisation is in manifest breach of relevant substantive legal requirements*."

20. The meaning of '*substantive legal requirement*' is of high importance, but the ECD does not define this term. Preambular paragraph 10 of the ECD explicitly excludes '*breaches of procedural requirements or minor elements of the authorisation*'. One could argue the term refers to all legal norms or principles that encompass material legal responsibilities, which could be laid down in environmental authorisations, but also in constitutional law, human rights law, or treaties. Others may argue that the term 'substantive legal requirements' encompasses solely environmental law provisions and was included to explicitly exclude minor and immaterial breaches of administrative provisions.

General recommendations

21. The ECD's minimum harmonisation approach leaves Member States room to decide whether or not to include criteria such as 'unlawful', which narrow the scope of the offence.

However, if terms like ‘unlawful’ and ‘substantive legal requirements’ are included in national laws, it is essential they be clearly defined, and that the balance between any authorisation and criminal law be sufficiently fleshed out to ensure legal certainty. Member States should also interpret these terms in such a way that ensures the level of protection envisaged by the ECD.

22. Issues of legality or legal certainty arise if an actor can be prosecuted for an act for which an environmental authorisation was issued. In some EU Member States, such as the Netherlands, the principles of legality and legal certainty were amongst the concerns raised by political parties, legal scholars and governmental bodies when considering domestic ecocide law.

Solutions

1. Defining ‘unlawful’ and ‘substantive legal requirements’

23. *Unlawfulness*. The first solution that the Working Group has identified is to opt for a literal transposition of the requirements of the ECD, thus requiring acts to be ‘unlawful’ in order to qualify under Article 3(3) ECD. As the ECD allows room for national lawmakers to further define unlawfulness, this still permits some flexibility.

24. To ensure consistency within domestic law, the Working Group recommends that the national definition of unlawful also include, at a minimum, breaches of any (national or international) legal norm that contribute to the protection of the environment, rather than being restricted to legislation giving effect to EU law. The ECD’s narrower definition — focusing on breaches of (laws giving effect to) EU law — reflects the EU’s limited legislative competence in this domain.

25. *Substantive legal requirements*. Under the ECD, harmful conduct may still be ‘unlawful’ when carried out under an authorisation, if the authorisation is in manifest breach of relevant ‘substantive legal requirements.’

26. For Member States seeking a more protective application of the new law, national lawmakers could consider adopting an explicit, broad interpretation of ‘substantive legal requirements’. The concept could then encompass a wide range of legal norms, such as environmental law, criminal law, human rights law and/or general principles of environmental law that impact a behaviour or safeguard a fundamental interest.

27. To enhance legal certainty, lawmakers could develop a definitive list of legal norms covered under 'substantive legal requirements'.[2] Another option would be to leave the exact definition up to judicial interpretation and case-by-case assessments (in this scenario, legal clarity must be balanced with maintaining flexibility). It should be borne in mind that criminal law – whether domestic or international – is traditionally to a significant extent built through precedents, and is not always defined in a very specific way.

2. Expanding the ECD list of circumstances in which authorisations have no shielding power

28. National lawmakers could also opt for a clearly defined list of circumstances in which an authorisation does not shield a person from criminal liability, adding onto the list of unlawful behaviour outlined in article 3(1), third paragraph of the ECD and expanding the list of circumstances that would constitute unlawful behaviour.[3]

29. The ECD list could be expanded to cover additional situations, such as:

- Withholding information on environmental risks that would reasonably have influenced the authorisation decision imposed upon them (even if that information was not specifically requested);
- Failing to notify authorities about a change in circumstance that is reasonably expected to be fundamental for the supervision or the continuation of their authorisation;
- Failing to employ appropriate measures to prevent or mitigate harm caused by the activities of that potential violator;
- Knowingly acting on an authorisation that no longer meets substantial requirements aimed to protect the environment, due, for instance, to time lapse and/or administrative negligence, to new scientific or technical knowledge, and/or to the likelihood of substantial environmental or health damage;
- Engaging in conduct or acting on authorisation that is in manifest breach of fundamental rights such as the right to life or the right to a healthy environment;
- Demonstrating reckless disregard for damage which would clearly be excessive in relation to anticipated social and economic benefits of the authorisation imposed upon them; and/or
- Knowingly acting on the basis of an authorisation that is so unreasonable that no reasonable decisionmaker could have granted it.

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2. As an example, one could refer to the concept to German administrative law. In German law, the concept of 'administrative obligations' is key to establishing (un)lawfulness of a certain act. These obligations are then defined in Section 330d(1) no. of the Strafgesetzbuch (Penal code) as duties arising from: (i) legal provisions, (ii) court decisions, (iii) enforceable administrative acts, (iv) conditions, or (v) public law contracts, aimed specifically at preventing environmental hazards or harm to humans, animals, plants, water, air, or soil. A similar approach could be followed in the context of 'substantive legal requirements'.
3. As cited above in paragraph 19 of this manual.

30. It should be noted that providing a list of unlawful conduct will likely lead to prolonged debates over the precise wording of each circumstance listed. Lawmakers could consider this factor in their law-making strategies.

31. As an alternative, lawmakers could consider expanding the definition of the already stipulated circumstances in the ECD rather than adding additional circumstances. For those situations, unlawfulness could then be established by a literal transposition of the ECD. Such an approach may be less controversial.

32. National lawmakers could consider the introduction of such a list as either an exhaustive list of circumstances or as an illustrative, non-exhaustive list. A non-exhaustive list would allow for flexibility in the application of the law, while also providing potential violators and regulators with additional guidance on actions to be considered unlawful. However, from a legality perspective, it is problematic if it is unclear which other situations, besides the examples provided, would be criminalised by the national law.

3. Prescribing parameters of environmental authorisations

33. Lawmakers might also consider stipulating explicit standards for environmental authorisations, ensuring they are fit for purpose. For example, authorisations could require periodic compliance reviews, prompt reporting of any unforeseen or significant harm, and/or mandatory disclosure of new scientific developments. Lawmakers could provide that an authorisation will not shield potential violators from criminal liability if these criteria are not met. This solution could be implemented regardless of which of the pathways listed above are followed.

4. Introducing an autonomous environmental crime of ecocide

34. The last option that the Working Group considered entails the introduction of an autonomous environmental crime. In such an approach, the harmful acts would not need to contravene another law, rather, the crime itself creates the unlawfulness. Holding an environmental authorisation is not a defence against a charge of ecocide in these cases, and lawmakers should clearly indicate this in environmental authorisations.

35. An autonomous environmental crime provides the highest level of protection for the environment. However, as was stated previously in this chapter, such an approach has disadvantages in the context of legal certainty. This may cause the offence to be hard to enforce in practice, which would limit the practical value of the criminalisation. In addition, a simple threshold of harm might not be sufficiently nuanced to take into account the impact on the environment of legitimate human activities.

Further readings

A. Di Landro, 'Models of Environmental Criminal Law, between Dependence on Administrative Law and Autonomy', *European Energy and Environmental Law Review* 2022/31.

M. G. Faure, 'The Creation of an Autonomous Environmental Crime through the New EU Environmental Crime Directive', *EU Crim* 2024/2.

D. Robinson, 'Ecocide: A Call to Discuss Some Hard Conundrum', ejiltalk.org, 28 November 2024.

J. Thibord, 'Directive 2024/1203 relative à la protection de l'environnement par le droit pénal: un nouvel élan pour la reconnaissance du crime d'écocide', *La Semaine Juridique* Edition Administrations et Collectivités Territoriales, no. 43-44, 28 Oct. 2024.

You can find an annotated bibliography of ecocide-related publications at ecocidelaw.com/bibliography.

CHAPTER 3

Mens rea

Introduction

36. *Mens rea* refers to the criminal intent or awareness a suspect has regarding the wrongfulness of their actions. It plays a crucial role in most criminal offences because it defines the mental state of the person committing the crime. The term, which translates from Latin as 'guilty mind', helps differentiate between intentional or knowingly wrongful actions and those that are accidental.

37. In cases of environmental harm, particularly involving corporate actors, the issue of *mens rea* becomes more complex. Potential violators rarely aim to cause environmental damage as their primary goal; rather, harm is often a byproduct of profit-driven activities. The *mens rea* can frequently be established for the act itself — such as the deliberate discharge of a pollutant into the air — but not necessarily for the environmental harm that follows. Consequently, lawmakers and courts must carefully articulate which elements of an environmental crime require *mens rea*, and at what level.

38. The different levels of *mens rea* vary across legal systems. To avoid confusion, we seek to align with the terms *dolus* and *culpa* as used in civil law systems. With *dolus directus*, the perpetrator foresees and desires the harmful consequence. *Dolus indirectus*, on the other hand, is when the perpetrator acts with knowledge, causing a situation of harm that is practically certain to arise but without the specific intention to cause that harm. *Dolus eventualis* is when the perpetrator anticipates the possibility of a harmful consequence but proceeds with the act regardless, accepting the risk of the harm materialising, whilst *culpa* refers to acting at fault or with negligence.

Mens rea in the ECD

39. Article 3(1) ECD states that the offences in Article 3(2) ECD require 'intention'. This same *mens rea* is required for the qualified, ecocide-like offence established by Article 3(3) which refers to conduct listed in Article 3(2) which must be "intentional".

40. The preambular paragraph 26 of the ECD defines 'intention' in the following way:

> "*Where this Directive provides that an unlawful conduct only constitutes a criminal offence where it is carried out intentionally and causes the death of a person, the notion of 'intention' should be interpreted in accordance with national law, taking into account relevant case law of the Court of Justice of the European Union (the 'Court of Justice').*
>
> *Therefore, for the purposes of this Directive, 'intention' could be understood as the intention to cause the death of a person, or it could also cover a situation in which the offender, despite not wanting to cause the death of a person, nevertheless accepts the likelihood of causing it, and acts, or refrains from acting, voluntarily and in violation of a particular obligation, thereby causing the death of a person.*
>
> *The same understanding as regards the notion of 'intention' should apply where unlawful conduct described in this Directive, which is intentional, causes serious injury to any person, or the destruction of, or widespread and substantial damage which is either irreversible or long-lasting to, an ecosystem of considerable size or environmental value or a habitat within a protected site, or causes widespread and substantial damage which is either irreversible or long-lasting to the quality of air, soil, or water*."

41. Article 3(4) ECD states that some of the offences listed in Article 3(3) ECD shall also constitute criminal offences when committed with 'serious negligence' instead of 'intention'. On the notion of 'serious negligence', preambular paragraph 27 of the Directive states the following:

> "*With regard to the criminal offences defined in this Directive, the notion of 'serious negligence' should be interpreted in accordance with national law, taking into account relevant case law of the Court of Justice. This Directive does not require the introduction in national law of the notion of 'serious negligence' for each constituent element of the criminal offence, such as possession, sale or offering for sale,*

> *placing on the market and similar elements. In such cases, it is possible for Member States to decide that the notion of 'serious negligence' is relevant for elements of the criminal offence such as the protection status, 'negligible quantity', or the 'likelihood' of the conduct to cause substantial damage*."

42. From the wording of the ECD, it seems that the concept of 'intention' includes *dolus eventualis* as the required *mens rea* for the qualified offence in Article 3(3) ECD. However, several offences listed in the ECD are defined by both the act and the consequence of that act, such as Article 3(2)(a):

> "*the discharge, emission or introduction of a quantity of materials or substances, energy or ionising radiation, into air, soil or water which causes or is likely to cause the death of, or serious injury to, any person or substantial damage to the quality of air, soil or water, or substantial damage to an ecosystem, animals or plants*".

43. In those cases, it is unclear whether the required *mens rea* applies solely to the wrongful act itself or extends to the resulting harm caused by that act. The ECD does not provide any further guidance on this issue.

General recommendations

44. Lawmakers should clearly indicate whether the required *mens rea* is directed towards the act or consequence, where these are separately defined. This is especially important as the ECD lacks clarity on this aspect. If it is unclear what acts the *mens rea* applies to, the law will lack legal certainty and may be unworkable for prosecutors. The Working Group therefore recommends that lawmakers lay out the mens rea requirements clearly in the law and explanatory memorandum. In this manual, we have assumed that the required *mens rea* for the act itself is *dolus directus* or *dolus indirectus*. In the solutions listed below, we specifically discuss the *mens rea* to be applied to the consequences of the acts. This interpretation aligns most closely with the wording of preambular paragraph 26 of the ECD[4], and reflects the approach taken by the IEP.[5]

4. As cited above in paragraph 40 of this manual.
5. The IEP suggests "*with knowledge that there is a substantial likelihood*" of harm, a standard similar to *dolus eventualis*.

45. The choice of *mens rea* closely relates to other chapters of this manual – for example, if the thresholds of harm in the crime are lower, the *mens rea* might need to be set higher. Lawmakers might find it essential in that case that crimes were committed knowingly or willingly (*dolus directus or dolus indirectus*), and not just recklessly or with negligence (*culpa*).

Solutions

1. Adopting intention as the required *mens rea*

46. The first option is to require a form of dolus for the consequences of the criminalised conduct. Reading Article 3(3) with preambular paragraph 27 of the ECD, it seems that the required *mens rea* for the qualified offence is *dolus eventualis*. (NB: Other conduct as mentioned in Article 3(4) ECD requires serious negligence as a minimum, but these offences do not constitute ecocide.)

47. For lawmakers, it is imperative to draft a provision that, in terms of *mens rea*, both complies with the requirements of the ECD and reflects the applicable legal concepts in their own criminal law system. In systems where intention is interpreted narrowly and does not include *dolus eventualis*, lawmakers should be aware that applying only *dolus directus* or *dolus indirectus* will be too narrow and will not reflect the minimum requirements of the ECD. As the ECD follows the approach of minimum harmonisation, Member States should offer at least the protection set out in the Directive. This means that lawmakers should reflect upon the existing *mens rea* concepts in their legal systems and choose, at a minimum, the *mens rea* that reflects *dolus eventualis*.

48. Additionally, requiring *dolus indirectus* or *dolus directus* for consequences may be ineffective. Companies rarely act with the deliberate aim of causing environmental harm. Rather, such harm typically arises as a (often foreseen and sometimes avoidable) byproduct of their intended economic activities.

2. Adopting (serious) negligence as the required *mens rea*

49. Another solution is to adopt negligence, or culpa, as the required *mens rea* for the consequence, so a lower standard that that prescribed by the ECD. This standard, which does not require establishing what the perpetrator knew at the time, would ease the burden of proof for prosecutors, particularly given that environmental harm often manifests years after the event. Also, requiring culpa for ecocide-like cases could reflect a condemnation of environmental wrongdoing that is a result of acting negligently or with a lack of care for the environment, when the perpetrator knew or “should have known” the consequences of his act.

50. Negligence, being the lowest threshold and so capturing the widest range of harmful acts, would amount to the most protective solution for national lawmakers. However, it may be argued that adopting negligence as the applicable *mens rea* may inappropriately broaden the scope of criminal liability, potentially risking overcriminalisation. Adopting an intermediary level of *mens rea* such as 'objective recklessness' or 'serious negligence' could be a more suitable option. Opting for 'serious negligence' would mean aligning with the choice made in the ECD for several other environmental crimes. Having the same standard for most crimes in the ECD may enhance legal certainty.

Further readings

I. Bienfait, 'Unpacking the mens rea of ecocide: Can the ICC adopt a lower fault standard for crimes against the environment?', *Criminal Law Forum* October 2024.

K. J. Heller, 'Skeptical Thoughts on the Proposed Crime of "Ecocide" (That Isn't)', *opiniojuris.org*, 23 June 2021.

M. Karnavas, 'Ecocide: Environmental Crime of Crimes or Ill-Conceived Concept?', *opiniojuris.org*, 29 July 2021.

D. Robinson, 'Ecocide – Puzzles and Possibilities', *Journal of International Criminal Justice* 2022/2.

You can find an annotated bibliography of ecocide-related publications at ecocidelaw.com/bibliography.

CHAPTER 4

Threshold of environmental harm

Introduction

51. It is generally understood that not every form of environmental damage can be classified as ecocide. The term is reserved for grave offences resulting in the most serious harm, affecting the quality of air, soil, or water for example in large or environmentally significant ecosystems or protected habitats. Therefore, ecocide has been defined as acts that cause severe, widespread, and/or long-term environmental damage, drawing on prohibitions of environmental harm in international humanitarian law. The IEP defines those three elements as follows:

- Severe. "*Damage which involves very serious adverse changes, disruption or harm to any element of the environment, including grave impacts on human life or natural, cultural or economic resources*."
- Widespread. "*Damage which extends beyond a limited geographic area, crosses state boundaries, or is suffered by an entire ecosystem or species or a large number of human beings*."
- Long-term. "*Damage which is irreversible or which cannot be redressed through natural recovery within a reasonable period of time*."

Threshold of harm in the ECD

52. Article 3(3) ECD states:

"Member States shall ensure that criminal offences relating to conduct listed in paragraph 2 constitute qualified criminal offences if such conduct causes:
a) the destruction of, or widespread and substantial damage which is either irreversible or long-lasting to, an ecosystem of considerable size or environmental value or a habitat within a protected site, or

b) widespread and substantial damage which is either irreversible or long-lasting to the quality of air, soil or water."

The ECD does not provide for definitions of those terms but further indicates:

"In assessing whether the damage or likely damage is substantial, [...] one or more of the following elements is taken into account, where relevant:

a) the baseline condition of the affected environment;
b) whether the damage is long-lasting, medium-term or short-term;
c) the extent of the damage;
d) the reversibility of the damage."

53. The ECD thus opts for a conjunctive approach, establishing a qualified offence for conduct that causes (i) 'substantial', (ii) 'widespread' and (iii) 'irreversible **or** long-lasting' damage. It should be noted that whilst Member States are required to criminalise at least the acts set out in the ECD, they are at liberty to create a broader crime. Therefore, Member States are free to introduce a (qualified) ecocide-like offence that requires only certain combinations of these three elements.

54. The terminology used in the ECD differs slightly from the IEP. For example, the ECD uses 'substantial' where the IEP uses 'severe', which implies a potentially lower threshold. The ECD provides little guidance on the definition of these terms, which opens up possibilities for national interpretations.

A. Defining the terms used in the ECD

55. The first choice lawmakers must make regarding the threshold of environmental harm relates to the definitions that were set out in the ECD. Lawmakers could either opt for a literal transposition of the ECD, or for more specific definition of the terms.

Solutions

1. Literal transposition of the ECD

56. It could be argued that Article 3 ECD, when read in conjunction with the preamble, provides a sufficiently clear definition of qualified criminal offences, allowing for direct transposition into domestic criminal law. Such an approach would leave the interpretation and application of these terms to the courts, enabling them to assess and analyse the specifics based on the circumstances of each case.

57. This approach would ensure flexibility and allow for adaptability to societal changes and evolving social, economic, and political needs over time. For enhanced legal clarity, lawmakers may consider providing (fictitious) examples of ecocide-like cases in the explanatory memorandum.

2. Further defining the terms used in the ECD

58. The ECD also leaves room for national lawmakers to further define the terms 'widespread', 'substantial', 'irreversible' and 'long-lasting', if they desire to do so. National lawmakers could then choose to align with the definitions formulated by the IEP. Further defining the terms used in the ECD may prove more workable for prosecutors, giving clear parameters to build effective cases.

59. One issue that lawmakers may wish to address is the question of what should be classified as 'long-lasting' even when using the IEP definition of 'a reasonable period of time'. The French ecocide law qualifies long-term as seven years or more.[6] Looking at the international law precedents on prohibited environmental harm in armed conflict or for hostile purposes, the Committee on Disarmament defined 'long-lasting' as a period of months, approximately a season in its commentary to the ENMOD Convention.[7] In the commentary to Additional Protocol I to the Geneva Conventions of 1949 (**API**), long-term was interpreted to mean decades.[8] Different interpretations thus lie far apart. Lawmakers could consider introducing measurable parameters into their criminalisation. However, these parameters may be criticised as arbitrary and may unduly restrict the definition of 'long-lasting' under certain circumstances and/or impose an impossible evidentiary burden on the prosecutor and the plaintiffs. Another option could be to explicitly set out how the criteria of long-lasting should be assessed by prosecutors and judges.

6. It should be noted that this specific element of the French ecocide law has been severely criticised as seven years (or whatever the duration is) is difficult to establish in advance.
7. Annex tot the 1976 Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (**ENMOD**), Understanding Relating to Article 1, under b.
8. Additional Protocol I to the Geneva Conventions of 1949 (**API**), article 35 & 55.

60. Moreover, the term 'irreversible' may prove difficulties as some ecosystems that were thought of to be irreversibly damaged may, beyond the scale of a human lifetime, gradually recover. To avoid legal debate on the (proof of) irreversibility of damage, lawmakers could opt to define 'irreversible' as "*the disappearance of a habitat within a protected site, a species or an ecosystem or the disappearance of, or serious change in, the essential characteristics or functions of the atmosphere, the oceans, ground or surface water, soils, an ecosystem or a species*". In any case, while the term 'irreversible' may raise some debate, it is not expected to pose a decisive obstacle to ecocide prosecutions, due to its function as an alternative criterion to 'long-lasting' in the ECD.

General recommendations

61. The Working Group advises national lawmakers to give further clarity to the definitions of the terms used in the ECD, whether by following the IEP definitions, offering more measurable clarification, or by giving (fictious) examples of ecocide-like cases in the explanatory memorandum.

62. If national lawmakers choose to further define the terms at stake, they are bound by clear limits. Any definition must not only capture the behaviour prohibited in the ECD, but also serve its object and purpose, ensuring better environmental protection and a more effective environmental criminal law.

B. Conjunctive versus disjunctive approach

63. The second choice lawmakers must make regarding the threshold of environmental harm relates to the combination of threshold criteria. The ECD opts for a conjunctive approach of the three threshold criteria by requiring environmental harm to be 'widespread', 'substantial', and either 'irreversible' or 'long-lasting'. There is, however, ongoing debate in the ecocide movement regarding whether these terms should be applied conjunctively, or if a disjunctive, or combined approach is warranted. Lawmakers could opt for a more protective approach than the ECD, criminalising a broader swathe of conduct that meets only one or two of the criteria.

64. While the ENMOD uses a disjunctive test ('widespread, long-lasting or severe'), API and the war crime in the Rome Statute [9] use the conjunctive formulation of 'widespread, long-term and severe' to constitute the required environmental harm. The IEP has recommended a third approach, requiring damage to always be severe and either widespread or long-term.

9. Rome Statute Article 8(2)(b)(iv).

Solutions

1. Literal transposition of the ECD

65. The first solution is to follow the minimum requirements of the ECD, taking a conjunctive approach. This would mean that environmental harm must be all three: 'substantial', 'widespread', and 'long-lasting' or 'irreversible', to qualify as ecocide. This approach ensures that ecocide is reserved for the most serious cases and avoids the risk of overcriminalisation. Moreover, this approach could incentivise companies or parties to mitigate the damage promptly, thereby avoiding fulfilment of the 'long-lasting' criterion.

66. The approach that the ECD has followed has an important disadvantage: the requirement of proving all three criteria could exclude significant cases where harm is substantial but not widespread or long-lasting. Insisting on the fulfilment of all three requirements might delay urgent action against harmful practices, even when 'substantial' or 'widespread' harm is already evident. Moreover, the evidentiary burden of proving long-lasting damage in uncertain cases may limit the effectiveness of the ecocide offence.

2. Following the IEP's recommendation

67. A second solution involves adopting a more flexible framework, where an act qualifies as ecocide if it is 'substantial' and either 'widespread' or 'long-lasting'/'irreversible'.

68. This model, that was recommended by the IEP, lowers the evidentiary threshold, making it easier to prosecute cases of clear environmental harm that do not meet all three criteria. The approach could also allow for quicker responses to emerging threats, as prosecutors do not need to wait for harm to escalate to meet all criteria. Furthermore, it broadens the scope of accountability, ensuring that more acts of significant environmental harm can be addressed under ecocide laws.

69. A downside to this approach is that the gained flexibility leads to a risk of overcriminalisation, potentially encompassing acts that, while harmful, do not rise to the level of ecocide. For example, harm that is 'widespread' but temporary might be captured under this model, diluting the gravity of the ecocide offence. If damage is 'substantial' and 'widespread' but easily reversible, should it be criminalised? Or, if damage is 'substantial' and 'irreversible' but only to a limited area, should polluters be shielded from criminal liability?

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You can find an annotated bibliography of ecocide-related publications at ecocidelaw.com/bibliography.

CHAPTER 5

Offence of infringement or endangerment

Introduction

70. In criminal law systems, a distinction can be made between infringement and endangerment offences. An infringement offence involves an actual and immediate violation of legal norms. In contrast, endangerment offences criminalise actions that pose a risk of harm, regardless of whether the harm materialises.

71. Endangerment offences can be further divided into abstract and concrete categories. An abstract endangerment offence is a criminal provision that penalises conduct deemed inherently hazardous, without requiring any evidence that actual harm or a tangible risk has materialised. A concrete endangerment offence is a criminal provision that penalises conduct only when it creates a clearly identifiable and demonstrable risk of harm, rather than merely being hazardous in theory. In other words, it focuses on a tangible, quantifiable likelihood of harm arising from the act. When discussing the criminalisation of ecocide in national law systems, lawmakers must choose to formulate ecocide as either an infringement or (abstract or concrete) endangerment offence.

Offence of infringement or endangerment in the ECD

72. The ECD formulates Article 3(3) – the Article that describes the ecocide-like qualified offence – as an infringement offence. The lesser offences listed in Article 3(2) of the ECD are framed as either concrete endangerment or infringement offences.

Solutions

1. Literal transposition of the ECD

73. The first option for lawmakers is to stick with the implementation of the literal text of the ECD. This would involve criminalising ecocide only when ‘substantial’, ‘widespread’, and ‘long-lasting’ damage has occurred and can be directly attributed to a specific perpetrator. Such an approach would minimise

legal uncertainty and avoid the complexities associated with criminalising risk. Additionally, through the concept of criminal attempt, prosecutors could, to a certain extent, hold environmental polluters accountable for actions that have not yet resulted in harm.

74. However, following the approach of the ECD has several drawbacks. First, it could lead to fragmentation, as there is a growing international consensus – reflected in documents of both the IEP and the European Law Institute (**ELI**) – that endangerment offences should be incorporated into a crime of ecocide. Sticking only to infringement offences could result in inconsistencies, especially given the international momentum toward recognising the importance of preventing environmental harm before it materialises.

75. Moreover, the effectiveness of an ecocide-like infringement offence may be limited due to the time span before damage materialises in environmental cases, and the evidence-related issues that could occur.

2. Introducing an endangerment offence

76. Lawmakers could also consider introducing ecocide as an endangerment offence. This offers a number of advantages. Establishing causality in environmental crimes is often complex, and this could be alleviated by establishing ecocide as an endangerment offence. In addition, restricting criminalisation to materialised harm may contradict the preventive objectives of environmental law. By focusing on endangerment, lawmakers could address risks proactively, offering more effective protection for the environment. This is particularly important in the context of ecocide, as it represent the most severe form of environmental crime—one that demands proactive measures to prevent it before irreparable damage occurs. Finally, an infringement-based approach could lead to issues of 'moral luck,' wherein the criminal outcome depends on whether harm occurred. This reliance on uncertain factors could lead to unjust outcomes, especially in cases where harm is delayed or unforeseen.

77. This approach would also align with the international approach to ecocide laws represented by the IEP and ELI proposals, as well as the 2024 proposal to include ecocide in the Statute of the International Criminal Court (see above).

78. To avoid a risk of overcriminalisation with an endangerment offence, a high threshold of harm is important (see chapter 4 of this manual).

79. However, a key disadvantage of the endangerment approach lies in the difficulty of determining risk. This is especially the case given the uncertainty of many factors, such as future policies or technological development, that may affect the ultimate outcome.

80. If opting for an endangerment offence, lawmakers are advised to set out criteria for determining the seriousness of the required risk. Lawmakers should also consider whether this risk should be direct, indirect, or immediate. The Working Group recommends that lawmakers indicate the required magnitude of the risk, in order for criminal liability to be established.

81. When introducing an endangerment offence for ecocide, lawmakers may consider including the materialisation of harm as an aggravating factor.

3. Introducing separate infringement and endangerment offences for ecocide

82. A last possible approach for lawmakers is introducing both infringement and endangerment offences for ecocide-like cases into their national laws. Both of these offences would then constitute a qualified offence under Article 3(3) ECD, potentially with different levels of penalty. This dual approach would allow for the criminalisation of both actual harm and the mere risk of harm. Such a distinction can be justified by several considerations.

83. The new offences of endangerment and ecocide would form a two-stage enforcement process, with two distinct offences, based on the following reasoning. First, for situations that create a serious risk of ecological disasters, there would be a specific offence of 'endangering the environment.' This is an endangerment offence: it applies regardless of whether actual damage has occurred. The goal of this offence is to serve as a deterrent, preventing more serious environmental crimes from happening. If prevention measures fail and actual harm occurs, the second stage of enforcement comes into play. This stage addresses the most severe environmental offences, culminating in the crime of ecocide as the ultimate penal response.

84. There are different advantages to such an approach. First, it could be argued that the materialisation of harm in ecocide, as the most serious environmental crime, should not be treated merely as an aggravating factor. A distinct and autonomous infringement offence may be, both legally and symbolically, more suitable in that respect. Second, the principle of proportionality in European law suggests that risk-taking without harm should not be punished as severely as actions causing damage. If lawmakers opt for a separate offence for infringement and endangerment, maximum sentences could be differentiated to reflect this concept. Lastly, separating an endangerment and an infringement offence for ecocide may be beneficial for its social and political acceptance, especially if the term 'ecocide' is used in the legal framework. This term has serious connotations. Lawmakers may consider applying the term restrictively and, thus, solely for infringement offences.

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CHAPTER 6

Extraterritorial jurisdiction

Introduction

85. The principle of state sovereignty traditionally limits a state's jurisdiction to its territory and citizens. However, environmental harm frequently transcends borders, impacting multiple countries or the global ecosystem. This raises the question of whether, and in which ways, states should be able to assert extraterritorial jurisdiction to address acts of ecocide.

86. The exertion of extraterritorial jurisdiction brings both advantages and challenges. On the one hand, it can prevent potential violators from exploiting regulatory gaps in countries with weaker environmental protections, thereby avoiding a 'race to the bottom' where states reduce environmental standards to attract investment. As EU environmental laws become more stringent, potential violators frequently move their most polluting activities to regions with more lenient regulations. This externalises environmental harm and increases the likelihood of ecocide occurring outside EU borders. Such incidents are often tied to actions conducted by, or for the benefit of, EU-based corporations.

87. On the other hand, the exertion of extraterritorial jurisdiction can provoke accusations of judicial imperialism, potentially infringing on the sovereignty of other nations and constraining their industrial and economic development.

Extraterritoriality in the ECD

88. The ECD establishes both mandatory and optional grounds for jurisdiction in Article 12, providing Member States with a framework to address cross-border environmental crimes. Under Article 12(1) ECD, Member States must establish jurisdiction where:

> *"a) the offence was committed in whole or in part within its territory* [aligning with the territoriality principle];
>
> *b) the offence was committed on board a ship or an aircraft registered in the Member State concerned, or flying its flag* [extending the territoriality principle to flagged vessels and aircraft];

c) the damage which is one of the constituent elements of the offence occurred on its territory [addressing harm to vital environmental interests whilst reflecting the principle of territoriality]*; or*

d) the offender is one of its nationals [based on the active personality principle]."

[text between brackets added]

89. Article 12(2) ECD allows Member States to extend jurisdiction further, where:

"*a) the offender is a habitual resident in its territory,* [an extension of the active personality principle of Article (12)(1)(d) ECD];

b) the offence is committed for the benefit of a legal person established in its territory [an extension to legal persons of the active personality principle of Article 12(1)(d) ECD];

c) the offence is committed against one of its nationals or its habitual residents [invoking the passive personality principle]; *or*

d) the offence has created a severe risk for the environment on its territory [potentially addressing threats to a state's ecological stability]."

[text between brackets added]

Solutions

1. Literal transposition of the ECD

90. The mandatory provisions of Article 12(1) ECD provide a baseline for prosecuting environmental crimes, ensuring consistency across Member States. These provisions align with established jurisdictional principles, such as territoriality, active personality and the protective principle. By adhering to these requirements, Member States can address most scenarios of ecocide of concern.

91. The Working Group does recommend that Member States, at a minimum, maintain consistency with their existing domestic laws. For instance, where environmental criminal laws already permit extraterritorial jurisdiction over certain environmental offences, this framework should be extended to ecocide.

2. Implementing the optional provisions of the ECD

92. Article 12(2) ECD enables Member States to close jurisdictional gaps by expanding their reach in specific cases and address environmental cross-border acts and harm more effectively. The Working Group notes that certain grounds in Article 12(2) ECD are regularly used in environmental criminal law systems, including the grounds listed in Article 12(2)(a) and (c).

93. The jurisdictional ground in Article 12(2)(b) ECD, which is already enshrined in various EU decisions and directives (including Article 8(1)(c) of Council Framework Decision 2004/757/JhA of 25 October 2004 laying down minimum provisions on the constituent elements of criminal acts and penalties in the field of illicit drug trafficking and Article 9(1)(c) of Council Framework Decision 2008/913/JhA of 28 November 2008 on combating certain forms and expressions of racism and xenophobia by means of criminal law), is probably the most far-reaching one. The Article introduces a benefit-based ground for jurisdiction, allowing States to prosecute offences that benefit legal entities established in their territory. Preambular paragraph 51 of the ECD underscores the need for benefit-based jurisdiction as essential for the effective criminalisation of ecocide. By targeting offences committed 'for the benefit of' entities within a Member State, this provision addresses corporate practices that shield liability. Examples include cases where (i) corporate structures shield potential violators from direct criminal liability (i) supply chain exploitation by an EU-based company results in ecocide, (ii) outsourced harmful acts result in ecocide, and (iii) environmental crimes are facilitated financially or logistically.

94. As an alternative to Article 12(2)(b) ECD, Member States could apply the EU competition law concept of an 'economic unit' to hold parent companies criminally liable for the actions of their subsidiaries. By holding parent companies liable for the actions of their subsidiaries under certain conditions – such as unitary management and decisive influence – Member States can pierce the corporate veil and ensure accountability for environmental harm.

3. Exerting universal jurisdiction

95. For the most serious environmental crimes, lawmakers could consider introducing a universal jurisdictional ground for ecocide, aligning it with offences such as genocide and crimes against humanity. Universal jurisdiction emphasises the profound impact of ecocide, and the universal interest in its repression. Moreover, extending universal jurisdiction to ecocide would recognize its status as a trans-territorial crime that threatens universal values, such as universal human rights and the rights of future generations.

96. Some Member States, such as Germany, have a more progressive approach to adopting universality principles than others. Extending the universality principle to ecocide could be more fitting for those countries, as it would fit in better with their general approach. Additionally, if and when ecocide becomes an international crime within the ICC's jurisdiction, this will provide a stronger basis for the exertion of universal jurisdiction.

97. While universal jurisdiction enhances accountability, it poses significant challenges. The ECD does not explicitly recognize the possibility of universal jurisdiction for ecocide, nor does it explicitly forbid its application. Its application remains controversial due to sovereignty concerns and the lack of an internationally accepted definition, and may spark legal debate. Lawmakers should weigh the benefits of supporting global accountability against these challenges.

Further readings

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AFTERWORD

Dear reader,

Thanks to the efforts of fifteen legal experts, numerous meetings and fruitful interactions between very diverse legal fields, you, lawmaker, now have a way forward to shape the ECD into a sharp instrument to protect the environment. Not only in the 'here and now' of your jurisdiction, but also for future generations and peoples elsewhere.

It has been an exhilarating journey for all of us involved, and now it is your turn.
The ECD offered the opportunity, but the manual gives you clear options over the five areas to difficult challenges you are facing should you want to do more than a straightforward transposition. Thereby recognizing nature itself as a legally protected good, having value in itself, that deserves much more governmental protection.

By applying this manual, you make use of the experience and insights of some of the best legal minds around. And if this manual is not enough of a pathway, there is always the possibility of specific targeted advice by making use of consultation by Working Group members, Ecocide Law Advisory and De Roos.

Furthermore, over the next 18 months there are groups of lawmakers, academics, students and NGO's in the various European countries who will be already busy with the transposition. A whole new network will be available, and we will make sure these networks will be connected to you. When insights are developed (e.g. after a review of experts) new editions of this manual may be published as open source.

As I stated in the foreword, the ECD could not have come at a more crucial time, and by the same token, the same goes for your transposition.

"*We are at war with nature*," says Canadian astrophysicist Hubert Reeves, "*if we win we are lost*." "*Humanity is at war with nature, we urgently need to make peace again*," says UN chief Guterres.

With the criminalisation of ecocide, you are taking part in an historic process as well as joining a crucial peace initiative.

On behalf of the Working Group,
Lammert van Raan

Many thanks to:

urgenda
SAMEN SNELLER DUURZAAM