I. Introduction

It is widely recognised that humanity stands at a crossroads. The scientific evidence points to the conclusion that the emission of greenhouse gases and the destruction of ecosystems at current rates will have catastrophic consequences for our common environment. Along with political, diplomatic and economic initiatives, international law has a role to play in transforming our relationship with the natural world, shifting that relationship from one of harm to one of harmony.

Despite significant progress, the inadequacies of current global environmental governance are widely acknowledged. National and international laws are in place to contribute to the protection of the natural systems upon which our well-being depends, yet it is apparent that such laws are inadequate and more is needed.

It is against this background that in late 2020 the Stop Ecocide Foundation convened an Independent Expert Panel for the Legal Definition of Ecocide (‘Panel’). It comprises twelve lawyers from around the world, with a balance of backgrounds, and expertise in criminal, environmental and climate law. They have worked together for six months, charged with preparing a practical and effective definition of the crime of ‘ecocide’. The Panel was assisted by outside experts and a public consultation that brought together hundreds of ideas from legal, economic, political, youth, faith and indigenous perspectives from around the globe.

Between January and June 2021 the Panel convened for five remote sessions. Panel sub-groups were tasked with specific research and drafting tasks. A consensus on a core text of a definition of ecocide as an international crime was reached in June 2021.

It is the hope of the Panel that the proposed definition might serve as the basis of consideration for an amendment to the Rome Statute of the International Criminal Court (ICC). The Statute addresses crimes that are deemed to be of international interest and relevance, and the time has come to extend the protections for serious environmental harm, already recognised to be a matter of international concern.

1. See Report of the UN Secretary-General on ‘Gaps in international environmental law and environment-related instruments: towards a global pact for the environment’, 30 November 2018, UN Doc A/73/419.

The inclusion of ecocide in the Rome Statute would add a new crime to international criminal law. This would be the first to be adopted since 1945. It would build on the existing crime of severe damage to the environment during armed conflict, whilst reflecting the fact that today, most severe environmental damage occurs during times of peace, a situation that currently falls outside the jurisdiction of the ICC. This definition of ecocide offers the States Parties to the Rome Statute the opportunity to meet current challenges.

Proceeding to agree a crime of ecocide could contribute to a change of consciousness, in support of a new direction, one that enhances the protection of the environment and supports a more collaborative and effective legal framework for our common future on a shared planet. It offers a new and practical legal tool.

The work has been inspired by earlier efforts, in 1945, to forge definitions of new international crimes, including ‘genocide’ and ‘crimes against humanity’. Ecocide draws from both terms, in form and substance. Taken with these two crimes, and with war crimes and the crime of aggression, we hope that ecocide might take its place as the fifth international crime.

The work draws on a number of other sources. In 1972, at the UN Conference on the Human Environment, Swedish Prime Minister Olof Palme evoked the idea of ecocide as an international crime. The idea was then taken forward by others, including Benjamin Whitaker (1985); there have also been more recent efforts.

The exercise we have engaged in is dedicated to the contribution and memories of two remarkable jurists: British lawyer Polly Higgins (1968-2019), whose pioneering work on ecocide made this initiative possible; and the Australian James Crawford (1948-2021), whose work as a scholar, lawyer and judge at the International Court of Justice contributed to making the protection of the environment a central part of modern international law.
The Panel

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The panel would like to thank Florence Iveson and Julio Prieto for their invaluable assistance.
II. Proposed Amendments to the Rome Statute

To add ecocide as a new crime to the Rome Statute, the Panel recommends the following amendments. We note that consequential amendments may also be required for other provisions of the Rome Statute, such as Article 9, and to the ICC Rules of Procedure and Evidence, and the Elements of Crimes.

A. Addition of a preambular paragraph 2 bis

Concerned that the environment is daily threatened by severe destruction and deterioration, gravely endangering natural and human systems worldwide,

B. Addition to Article 5(1)

e) The crime of ecocide.

C. Addition of Article 8 ter

Article 8 ter

Ecocide

1. For the purpose of this Statute, "ecocide" means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts.

2. For the purpose of paragraph 1:

   a. "Wanton" means with reckless disregard for damage which would be clearly excessive in relation to the social and economic benefits anticipated;

   b. "Severe" means 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;

   c. "Widespread" means 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;

   d. "Long-term" means damage which is irreversible or which cannot be redressed through natural recovery within a reasonable period of time;

   e. "Environment" means the earth, its biosphere, cryosphere, lithosphere, hydrosphere and atmosphere, as well as outer space.
III. Commentary

In developing its work, the Panel has sought to draw, as far as possible, upon existing precedents and authorities in international treaty and customary law, as well as the practice of international courts and tribunals. Particular regard has been placed on practice in international criminal law and the approaches reflected in the Rome Statute. The underlying basis for the recommended amendments is discussed below.

A. A new preambular paragraph

The Panel recommends a new preambular paragraph in the Rome Statute to introduce the concern for environmental harm and its link to natural and human systems. The recommended text offers a normative backdrop for the new crime of ecocide.

The formulation ‘the environment is daily threatened’ is based on the phrase used by the International Court of Justice in its Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons, dated 8 July 1996. The Court here recognised that ‘the environment is under daily threat’ and affirmed that ‘environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn’ and further confirmed that that ‘the general obligation of States’ to ensure protection of the environment forms a part of the corpus of international law.

A new preambular recital is proposed to avoid the need to amend existing recitals. The Panel recommends that this new paragraph be inserted after current preambular paragraph 2, as a new preambular paragraph 2 bis.

B. Amendment to Article 5 (Crimes within the jurisdiction of the Court)

The Panel recommends an amendment to add a new subparagraph (e) to current article 5, paragraph 1, of the Rome Statute to reflect the inclusion of the new crime of ecocide.

The word ecocide combines the Greek ‘oikos’, meaning house/home (and later understood to mean habitat/environment), with ‘cide’, meaning to kill. This draws on the approach taken by the Polish jurist Rafael Lemkin, who invented the word ‘genocide’ in November 1944.

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3. The term ‘ecocide’ appears to have been first used in 1970 by Arthur Galston, an American biologist, at the Conference on War and National Responsibility in Washington DC. In 1972, Olof Palme, Swedish Prime Minister, referred to ‘ecocide’ in his opening speech at the UN Conference on the Human Environment in Stockholm. In 1973, Richard A. Falk drafted an Ecocide Convention, recognizing ‘that man has consciously and unconsciously inflicted irreparable damage to the environment in times of war and peace’. In 1985, UN Special rapporteur Benjamin Whitaker advocated the inclusion of ‘ecocide’ into the definition of ‘genocide’, describing it as ‘adverse alterations, often irreparable, to the environment… whether deliberately or with criminal negligence.’
C. Addition of Article 8 ter, (the core definition of Ecocide)

The Panel recommends that a new crime of ecocide be adopted as Article 8 ter of the Rome Statute.

The structure of the proposed definition is drawn from Article 7 of the Rome Statute, Crimes Against Humanity: the first paragraph sets out the crime, and the second paragraph defines a number of its core elements.

A number of aspects of the proposed definition are drawn from the existing provision of the Rome Statute concerning damage to the natural environment: Article 8(2)(b)(iv). These include:

(i) use of the terms ‘widespread’, ‘long-term’ and ‘severe’ to describe the prohibited damage;
(ii) a proportionality test (‘clearly excessive in relation to the concrete and direct overall military advantage anticipated’); and
(iii) the use of endangerment liability, rather than a requirement for materialization of harm.

The new crime proposed here draws its essential elements from language that is already familiar, having been included in existing international law agreements. However, as proposed, the scope ratione materiae of the new crime of ecocide would develop the existing law by extending the protection of the environment by international criminal law beyond times of armed conflict to times of peace (it might be said that the exercise follows on developments in 1945, when certain prohibitions as war crimes were extended into what would become the prohibitions at all times of genocide and crimes against humanity).

1. Thresholds:

The proposed definition creates two thresholds for prohibited conduct:

First, there must exist a substantial likelihood that the conduct (which includes an act or omission) will cause severe and either widespread or long-term damage to the environment.

The Panel recognises that this threshold may, taken alone, be overly inclusive. There are activities that are legal, socially beneficial and responsibly operated to minimize impacts that nonetheless cause (or are likely to cause) severe and either widespread or long-term damage to the environment. Therefore, the Panel considers it necessary to include a second threshold.

The second threshold requires proof that the acts are unlawful or wanton. This additional threshold draws upon environmental law principles, which balance social and economic benefits with environmental harms through the concept of sustainable development.

With these two thresholds, the prosecution would need to prove a substantial likelihood of causing severe and either widespread or long-term damage through acts or omissions that are either unlawful or wanton.

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4. This prohibition, which applies solely to international armed conflicts, is drawn from Articles 35 and 55 of Additional Protocol I to the Geneva Conventions of 12 August 1949.
2. **Definition of terms:**

a. **‘Severe and either widespread or long-term’**

These terms appear in the two articles of the 1977 First Additional Protocol to the Geneva Conventions (‘API’) concerned with protection of the environment;\(^5\) in Article 8(2)(b)(iv) of the Rome Statute; in the 1976 Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (‘ENMOD’);\(^6\) and in the 1991 International Law Commission draft of an international crime of wilful and severe damage to the environment.\(^7\) While ENMOD uses the disjunctive (‘widespread, long-lasting or severe’), API and the Rome Statute use the conjunctive formulation ‘widespread, long-term and severe’ damage to the environment.

The Panel proposes a mid-point between these two options. The disjunctive ENMOD test is considered to be too low, because the types of environmental damage that could fall within the definition of ecocide should always be ‘severe’: if the harm is not severe, it should not be classed as ecocide. Conversely, the conjunctive test is unnecessarily high, and would likely exclude certain acts whose anticipated consequences are severe and long-term, but not necessarily widespread; or are severe and widespread, but not necessarily long-term.

i. **‘Severe’**

"Severe" means 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.

The term ‘severe’ in ENMOD has been interpreted by the Committee on Disarmament to mean ‘serious or significant disruption or harm to human life, natural and economic resources or other assets’. The military manuals of a number of countries adopt the same definition of ‘severe’ when addressing environmental harm. The Panel considers this to be a sufficient harm threshold for the purposes of the crime of ecocide. The Panel substituted ‘cultural’ resources for ‘other assets’, to make explicit the cultural value of elements of the environment, particularly to indigenous peoples.

The reference to ‘any element of the environment’ is intended to make it clear that it is enough to affect any element encompassed by the definition of the environment, that is, ‘the earth, its biosphere, cryosphere, lithosphere, hydrosphere and atmosphere, as well as outer space’.

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5. Articles 35(3) and 55(1) prohibit the use of ‘methods or means of warfare which are intended, or may be expected to cause, widespread, long-term and severe damage to the natural environment.’ See footnote 4.
6. ENMOD uses the term ‘long-lasting’ (Article 1), rather than ‘long-term.’
7. Draft Code of Crimes Against the Peace and Security of Mankind 1991, Article 26 - Wilful and Severe Damage to the Environment: ‘An individual who wilfully causes or orders the causing of widespread, long-term and severe damage to the natural environment shall, on conviction thereof, be sentenced.’
ii. ‘Widespread’

“Widespread” means 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.

Within the context of ENMOD, the Committee on Disarmament has interpreted ‘widespread’ to mean harm encompassing an area on the scale of several hundred square kilometres. Background material to API similarly focuses only on geographic scale, defining ‘widespread’ as thousands of square kilometres. The Panel is of the view that both interpretations set a threshold that risks being too high, as they would exclude particularly egregious acts of environmental damage that harm thousands of people in a single city or population centre, for example. Furthermore, the requirement of a precise geographic area is inappropriate when dealing with harms to certain climatic systems, which do not have definable areas. The Panel proposes instead that damage extend ‘beyond a limited geographic area’.

The requirement of ‘widespread’ may also be satisfied if damage crosses state boundaries, reflecting the principle of prevention of significant transboundary harm, recognised in international and environmental law.8 Finally, the Panel borrowed from the ICC’s interpretation of ‘widespread’ within Crimes Against Humanity, namely affecting large numbers of human beings.9 This last anthropocentric concept of widespread was adapted for ecocide to include entire ecosystems or species.

iii. ‘Long-term’

“Long-term” means damage which is irreversible or which cannot be redressed through natural recovery within a reasonable period of time.

‘Long-term’ refers to the temporal nature of the damage. The Committee on Disarmament has interpreted the closely related term ‘long-lasting’, the term used in ENMOD, to mean a period of several months or a season, while the background materials to API interpret ‘long-term’ as a period of decades. Both interpretations were considered problematic – one likely too short and the other potentially too long – as well as somewhat arbitrary.

The Panel proposes instead a formulation to include irreversible damage, or in the alternative, damage which cannot be redressed naturally within a reasonable period of time. To note, this standard does not require waiting for the reasonable period of time to elapse before a prosecution could be brought. What constitutes a ‘reasonable period of time’ will depend on the particular circumstances of any situation.

In any event, the ‘knowledge of substantial likelihood’ will be met where it is evident that the damage is likely to be irreversible and carry long term effects, or unable to be redressed in a reasonable period of time.


b. ‘Unlawful or wanton acts’

This second threshold is necessary because not all acts likely to cause severe and widespread or long-term damage to the environment are illegitimate, or even undesirable. International criminal law, like environmental law, must permit legitimate development.

i. ‘Unlawful’

The introduction of the qualifier ‘unlawful’ captures environmentally harmful acts that are already prohibited in law. The Panel considered narrowing this to unlawful under international law. However, this was felt to be too narrow. International environmental law contains obligations for States in treaties and customary law but relatively few absolute prohibitions, and it leaves the bulk of the protection to be formulated at the national level, through national laws.

While the lawfulness of an act under the relevant national law cannot be relied on to permit acts that are unlawful under international law, there is no reason that national illegality – in particular as a matter of domestic criminal law - should not be part of an international law definition.\(^\text{10}\)

ii. ‘Wanton’

“Wanton” means with reckless disregard for damage which would be clearly excessive in relation to the social and economic benefits anticipated.

The term ‘wanton’ is familiar in international criminal law. It appears in the Rome Statute, alongside unlawful, in Article 8(2)(a)(iv) – ‘extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly.’ The commonly accepted meaning of wanton is either intending or in reckless disregard of prohibited consequences.\(^\text{11}\)

The prohibited consequence in this case is damage to the environment which would be clearly excessive in relation to the social and economic benefits anticipated. This introduces a proportionality test into the definition which reflects environmental law principles. Much national and international environmental law involves a balancing of environmental harms against social and economic benefits, which is expressed in the principle of sustainable development, and the Panel was mindful that socially beneficial acts, such as housing developments and transport links, can cause severe and either widespread or long-term damage to the environment.

Similar proportionality tests appear in a number of War Crimes in the Rome Statute, including Article 8(2)(a)(iv) and Article 8(2)(b)(iv), the provision protecting the environment in armed conflict. In these cases, destruction is weighed against military advantage or necessity.

‘Acts’

The Panel has proceeded on the basis that the word ‘acts’ includes single acts or omissions, or cumulative acts or omissions.

\(^{10}\) For example, compliance with national laws may be used to determine elements of certain crimes under Article 7 of the Rome Statute, such as Articles (7)(1)(d) and (e).

\(^{11}\) ICTY, Kordic and Cerkez, Trial Chamber Judgement, 2001: ‘The elements for the crime of wanton destruction not justified by military necessity charged under Article 3(b) of the Statute are satisfied where: (i) the destruction of property occurs on a large scale; (ii) the destruction is not justified by military necessity; and (iii) the perpetrator acted with the intent to destroy the property in question or in reckless disregard of the likelihood of its destruction.’ Paras 346-347. ICTY, Brdanin, Trial Chamber Judgment, 2004: ‘With respect to the mens rea requisite of [wanton] destruction or devastation of property under Article 3 (b), the jurisprudence of this Tribunal is consistent. The destruction or devastation must have been either perpetrated intentionally, with the knowledge and will of the proscribed result, or in reckless disregard of the likelihood of the destruction or devastation.’ Para. 593.
c. ‘Environment’

“Environment” means the earth, its biosphere, cryosphere, lithosphere, hydrosphere and atmosphere, as well as outer space.

The Panel recognises that defining the ‘environment’ (or ‘natural environment’), has proved to be challenging for international law. To date, there is no single agreed definition of these terms. Available definitions vary with regard to their scope, content, and approach. One possible approach was to leave the term ‘environment’ undefined, as the International Law Commission has done in the topic ‘Protection of the environment in relation to Armed Conflicts.’ One benefit of this approach is that, as human understanding of the environment changes, the evolution in knowledge could be taken into account for the purposes of this crime.

The Panel decided to adopt a different approach, taking into account that the criminal law may require greater clarity and specificity than might be the case in general environmental law context. For our limited purposes, therefore, the term has been defined as encompassing ‘the earth, its biosphere, cryosphere, lithosphere, hydrosphere and atmosphere, as well as outer space.’

This definition draws upon scientific recognition of the interactions that make up the ‘environment’.12

3. Mens Rea

Article 30 provides the default mens rea for Rome Statute crimes. With respect to consequence, the default mens rea is as follows: ‘A person has intent where … that person means to cause that consequence or is aware that it will occur in the ordinary course of events.’ While there is some debate regarding the scope of this language, most decisions and commentators have concluded that it requires an awareness of a near certainty that the consequences will occur.

Given the high thresholds for the consequences within the definition of ecocide, the Panel assessed that the Article 30 default mens rea for such consequences was too narrow and would not capture conduct with a high likelihood of resulting in severe and either widespread or long-term damage to the environment. Therefore, the Panel proposes a mens rea of recklessness or dolus eventualis, requiring awareness of a substantial likelihood of severe and either widespread or long-term damage. This mens rea is sufficiently onerous to ensure that only those persons with significant culpability for grave damage to the environment will be held responsible.

12. There are five main spheres on Earth, which interact in complex ways: the lithosphere (the interior and surface of Earth); the biosphere, (that part of the planet that can support living things); the hydrosphere (areas covered with water); the atmosphere (an envelope of gas); the cryosphere (ice at the poles and elsewhere); see Steffen, W., Richardson, K., Rockström, J. et al. The emergence and evolution of Earth System Science. Nature Reviews Earth & Environment 1, 54–63 (2020). (Available at: https://www.nature.com/articles/s43017-019-0005-6).
4. **Endangerment**

Culpability for the crime of ecocide attaches to the creation of a dangerous situation, rather than to a particular outcome. It is the commission of acts with knowledge of the substantial likelihood that they will cause severe and either widespread or long-term damage that is criminalised. The crime of ecocide is thus formulated as a crime of endangerment rather than of material result.

This is the case with a number of crimes in the Rome Statute, notably Article 8(2)(b)(iv), the war crime of intentionally launching an attack in the knowledge that such attack will cause ... widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated. A similar construction appears in the other 'attack' war crimes, Articles 8(2)(b)(i)-(iii). Another example is provided by the crime of Genocide. Under Article 6 of the Rome Statute there is no requirement that the protected group be actually destroyed, in whole or in part. The crime consists in carrying out actions intended to reach that goal.

Endangerment is also key to Articles 35(3) and 55(1) API, which prohibit the use of 'methods or means of warfare which are intended, or may be expected to cause, widespread, long-term and severe damage to the natural environment.'