Unleashing Ecocide: Conscripting International Prosecutors into the Fight Against Climate Change

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I. Introduction

Climate change is the problem that will define the twenty-first century. As industrialization and technological advances accelerate economic globalization, countries increase domestic natural resource extraction for industrial use as a means of economic growth. Yet, the pursuit of economic growth often comes at the expense of the environment because environmentally harmful natural resources allow for quick economic growth and are cheaper to extract and use than

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environmentally friendly natural resources.¹ Therefore, self-interested domestic economic growth policies need to be weighed against the manifesting harms of climate change.

To hold those who willfully harm the environment to account, international law and the United Nations ("UN") stand as a potentially unifying bulwark against actors acting irrationally, malevolently, or on the Machiavellian belief that their harmful actions will produce a net benefit to their populace. The UN was founded to maintain international peace and promote human rights; however, the UN has not been used effectively to protect the environment and mitigate climate change. Mitigation of climate change and protection of human rights are naturally intertwined, and the enforcement of laws to protect both humanity and the climate is within the UN's purview.² Although climate change mitigation efforts have focused on pushing national and corporate actors to adapt their behavior and minimize emissions, there exists no formal mechanism at the international level to hold actors criminally liable for environmentally harmful behavior.

The UN's objective is to "establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained."³ To achieve this objective, the UN settles disputes between states in the International Court of Justice and addresses War Crimes, Crimes Against Humanity, Crimes of Aggression, and Genocide in the International Criminal Court ("ICC"). The UN derives its power to pursue its objective in these courts through consideration and ratification of treaties and resolutions by its member states in the UN General Assembly and various sub-commissions.⁴ One such treaty is the Rome Statute, which established the ICC, its jurisdiction and power to prosecute, and the crimes that ICC prosecutors may pursue. International prosecutors use the powers of the Rome Statute to prosecute perpetrators of the most serious crimes to humanity. Prosecutors also use the corresponding publicity from these prosecutions to influence national governments' prioritization of human rights. Crimes against the environment are often intertwined with crimes that threaten the collective wellbeing of humanity, but currently there is no law that authorizes international prosecutors to punish willful harm to the environment. This gap in the Rome Statute can be filled by adding Ecocide as the fifth crime punishable under the Rome Statute as a means of mitigating climate change contributing behavior and prioritizing climate policy in state governance and public opinion.

^{1.} See, e.g., Christian Breyer & Alexander Gerlach, Global Overview on Grid-Parity, 21 PROG. PHOTOVOLT. RES. APPL. 121-36 (2013).

^{2.} See United Nations Framework on Climate Change, May 9, 1992, S. Treaty Doc. No. 102-38, 1771 U.N.T.S. 107.

^{3.} U.N. Charter Preamble.

^{4.} Uphold International Law, UNITED NATIONS (2021) https://perma.cc/WK3L-EAWX.

This article begins with a background on the purpose, features, and prosecutorial capabilities of the Rome Statute. The discussion on the Rome Statute is buttressed by an explanation of the proposed definition of Ecocide and an analysis of its augmentation of the ICC's enforcement powers. The balance of this article focuses on how Ecocide can be used as a climate change mitigation tool and demonstrates its viability by applying the proposed amendment to the real-world conduct of former Brazilian President Jair Bolsonaro. Ultimately, this essay argues Ecocide fills a gap that exists within the Rome Statute where willful conduct harmful to the environment, which harms humanity's collective wellbeing, remains uncovered by international law.

II. THE ROME STATUTE – HISTORY, FUNCTION, AND FEATURES

Although calls for the creation of a permanent body to try and convict accused international criminals began in the nineteenth century, the international community did not respond until after the atrocities of World War II.5 World War II showed that a threat in one part of the world could become a threat elsewhere as the international community became more interdependent. After the war, contemporary decisionmakers began discussing a framework for a legal body to hold those acting with malice to account for crimes affecting those outside of their sovereignty.⁶ Tribunals at Nuremberg and Tokyo, in 1945 and 1946 respectively, marked the first time an international judicial body had authority to try and convict individuals of crimes against humanity.7 Realizing a need to create black letter law in the wake of these tribunals, the UN adopted the Convention on the Prevention and Punishment of the Crime of Genocide ("Genocide Convention") in 1951. Unfortunately, the Cold War delayed efforts to establish a permanent international court to hear only crimes against humanity.8 After the Cold War, the UN responded to atrocities occurring in Iraq, Yugoslavia, Bosnia, and Rwanda with ad hoc tribunals to try the perpetrators. The UN, however, admitted ad hoc tribunals were not a sufficient tool to try and convict the perpetrators of these crimes. 10

^{5.} History of the Rome Statute of the International Criminal Court, Canada's Human Rights Commitments (Dec. 3, 2015) https://perma.cc/P9YN-MNKX.

^{6.} Philippe Kirsch, President, ICC, Keynote Address at the Conference "Judgment at Nuremberg" held on the 60th Anniversary of the Nuremberg Judgment: Applying the Principles of Nuremberg in the ICC 4 (Sept. 30, 2006) ("Shortly after the Nuremberg Tribunal concluded, one of the Tribunal's alternate Judges, John Parker, said, 'It is not too much to hope that what we have done may have laid the foundation for the building of a permanent court with a code defining crimes of an international character and providing for their punishment."").

^{7.} The Nuremberg Trial and the Tokyo War Crimes Trials (1945–1948), United States Department of State, https://perma.cc/4A74-V23H (last visited Sept. 13, 2022).

^{8.} See Kirsch, supra note 6, at 4.

^{9.} The Influence of the Nuremberg Trial on International Criminal Law, Robert H. Jackson Center (Tove Rosen ed., 2015), https://perma.cc/2759-ES3V.

^{10.} Paul Tavernier, *The experience of the International Criminal Tribunals for the former Yugoslavia and for Rwanda*, INTL. REV. OF THE RED CROSS 605, 611 (Dec. 31, 1997) ("The speech with which the two ad hoc Tribunals were established made it impossible to eliminate from their Statutes certain basic

Hence, in 1998, 160 UN member states voted to adopt the Rome Statute to satisfy the need for a permanent autonomous court to punish international criminals and deter future heinous crimes.¹¹

The Rome Statute established the ICC and its powers relative to its ratifying members. ¹² Under the statute, the ICC has an "international legal personality," meaning the ICC is an entity capable of initiating a legal dispute against another entity in a court of law. ¹³ As a legal personality, the ICC may exercise its "functions and powers" on the territory of any state that is a party to the statute. ¹⁴ The aforementioned "functions and powers" include the power to prosecute four distinct crimes that the UN considers the most serious: Genocide, Crimes Against Humanity, War Crimes, and the Crime of Aggression (altogether, "Article Five crimes"). ¹⁵ While each crime is separate and distinct, they have overlapping elements, rendering an actor potentially criminally liable under any combination of the four Article Five crimes. ¹⁶

The ICC's jurisdiction and power to investigate and prosecute a case hinge on multiple factors, which emanate from a member state's initial decision to ratify the statute. Explicit in a member state's decision to ratify the Rome Statute is the acceptance of the ICC's jurisdiction over that state and its citizens to be liable for prosecution.¹⁷ Limited only to its member states, the Rome Statute allows the ICC to exercise its jurisdiction with respect to an Article Five crime in three situations: (1) a state party refers to the Office of the Prosecutor a situation in which one or more Article Five crimes may have been committed;¹⁸ (2) the UN Security Council refers to the ICC Prosecutor's Office a situation in which one or more Article Five crimes may have been committed;¹⁹ (3) after receiving authorization by an ICC Pre-Trial Chamber consisting of three judges, ICC prosecutors may

ambiguities, relating mainly to the very purpose of instituting such courts and the general spirt of the legal system they apply.").

^{11.} Campaign for the Universality and Effectiveness of the Rome Statute of the International Criminal Court (ICC) system, PARLIAMENTARIANS FOR GLOBAL ACTION (2021) https://www.pgaction.org/ilhr/rome-statute/; see also Clinton's statement on war crimes court, BBC News (Dec. 31, 2000) (notably, the United States is not a ratifying country of the ICC because although President Clinton signed the Rome Statute, he did not send the treaty to Congress for ratification).

^{12.} Rome Statute of the International Criminal Court, July 17, 1998, 2187 U.N.T.S. 90.

^{13.} *Id*. art. 4, ¶ 1.

^{14.} *Id.* art. 4, ¶ 2.

^{15.} *Id.* art. 5, ¶ 3.

^{16.} See, e.g., Prosecutor v. Kony, ICC-02/04-01/05-57, Warrant of Arrest For Dominic Ongwen ¶¶ 10, 14-15 (Jul. 8, 2005), https://perma.cc/JVJ7-BEGD (noting in the warrant for arrest filed with the ICC the Prosecutor charges Dominic Ongwen and Joseph Kony, a Brigade Commander and Leader of the Lord's Resistance Army in Uganda, with multiple counts of War Crimes and Crimes Against Humanity for, *inter alia*, leading brigades partly comprised of children soldiers in the murder of civilians).

^{17.} See Rome Statute of the International Criminal Court, supra note 12, art. 12, ¶ 1.

^{18.} Id. art. 13(a).

^{19.} Id. art. 13(b).

initiate an investigation based on information which gives a reasonable basis that one or more Article Five crimes have been committed.²⁰

There are also several limitations on the ICC's jurisdiction where a case is inadmissible for prosecution: (a) a case that has been investigated and prosecuted by a member state, unless that state is *unwilling* or *unable* to carry out an investigation; (b) a case a member state has investigated and decided not to prosecute; (c) the person concerned has already been tried for the conduct which is the subject of the complaint; or (d) "the case is not of sufficient gravity to justify further action." An accused person or state may challenge the ICC's jurisdiction or admissibility of the ICC's case only once and before trial. A reviewing Pre-Trial Chamber will grant a challenge to admissibility if a member state is willing or able to carry out an investigation or an erroneous finding was made with respect to Article 17 admissibility, paragraphs 1(b)-(d), listed above. ²²

The ICC has evolved since its inception to provide clarity in international law and ensure accountability. The ICC particularly emphasizes questions of due process by applying several general criminal law principles: no double jeopardy; nullum crimen sine lege ("no crime without law"); a presumption of innocence; and no retroactive jurisdiction.²³ The Statute defines, in greater detail than either Nuremberg, Tokyo, or the ad hoc tribunals of the 1990s, the elements of each Article Five crime and the procedure for a criminal prosecution from inception to conviction. Moreover, the Statute does not hold either positional rank or actions taken under superior orders as defenses—two key lessons taken from Nuremberg.²⁴ Finally, the Statute grants strict immunity from prosecution for actors under eighteen years of age. 25 Because of the gravity of the crimes for which the ICC has jurisdiction, the Statute subjects the ICC to no applicable statute of limitations and applies equally to "all persons without distinction based on official capacity." ²⁶ By including no limitations period and an explicit "[i]rrelevance of official capacity" article into the final document, the Rome Statute makes one principle clear: no adult, in any member state, is immune from prosecution.

III. ECOCIDE

Ecocide is a necessary addition to the Rome Statute because it cures international law's inadequate protection of natural systems on which humanity's

^{20.} Id. art. 13(c).

^{21.} *Id.* art. 17 \P 1 (emphasis added).

^{22.} Id. art. 19 ¶¶ 4, 6, 10.

^{23.} The Road to the International Criminal Court, NUREMBERG HUMAN RIGHTS CENTRE (2021), https://perma.cc/QR99-BEEH.

^{24.} See Kirsch, supra note 6, at 5.

^{25.} See Rome Statute of the International Criminal Court, supra note 12, art. 26.

^{26.} Id. arts. 27, 29.

collective well-being depends.²⁷ Ecocide proponents argue current climate emergencies come as a result of centuries of harmful industrial and commercial practices. As the UN has recognized:

the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn. The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment.²⁸

The Rome Statute should account for willful conduct harmful to the environment as such conduct harms the health of human beings and damages our collective living space. By adding Ecocide to the Rome Statute as the fifth international crime under Article Five, ICC prosecutors can address and punish perpetrators who willfully commit, *inter alia*, ocean damage, deforestation, land and water contamination, and air pollution.²⁹ This section discusses the history of Ecocide and defines the law as a criminal statute.

A. HISTORY AND PURPOSE OF ECOCIDE

Ecocide is a relatively modern legal concept. Harm to the environment incidental to war as a legal principle was first seriously considered in the 1970s in response to the United States' conduct in Vietnam. In Vietnam, the United States military used Agent Orange, an herbicide and defoliant chemical, to clear jungle brush for operations. While Agent Orange has been linked to instances of cancer and death in both the United States military and the Vietnamese population, it also destroyed entire ecosystems. Professor Arthur Galston first used the term Ecocide at the 1970 Conference on War and National Responsibility in Washington, D.C. to describe Agent Orange's massive damage to the Vietnamese jungle. Concurrently, Richard Falk proposed an international convention to evaluate the effectiveness of the Genocide Convention with respect to environmental crimes. Falk's proposal included a law against Ecocide to account for destructive acts not criminalized in

^{27.} Sands & Sow, *Independent Expert Panel for the Legal Definition of Ecocide*, STOP ECOCIDE FOUNDATION (2021), https://perma.cc/V5WZ-X6TB.

^{28.} Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. Reports 241-42, ¶ 29 (July 8, 1996).

^{29.} What is Ecocide?, STOP ECOCIDE (2021), https://perma.cc/48R3-MERU (listing activities that contribute to ocean damage, deforestation, land and water contamination, and air pollution, which can be punished under Ecocide).

^{30.} Agent Orange and Cancer Risk, American Cancer Society (June 9, 2021), https://perma.cc/U5EZ-UPNH.

^{31.} DAVID ZIERLER, THE INVENTION OF ECOCIDE: AGENT ORANGE, VIETNAM, AND THE SCIENTISTS WHO CHANGED THE WAY WE THINK ABOUT THE ENVIRONMENT, University of Georgia Press, 15 (2011).

^{32.} Richard Falk, Environmental Warfare and Ecocide – Facts, Appraisals, and Proposals, 4 BULLETIN OF PEACE PROPOSALS 1, 80-96 (1973).

the Genocide Convention.³³ Moreover, the then Prime Minister of Sweden, Olof Palme, referred to the United States' use of Agent Orange as Ecocide at the UN Conference on the Human Environment in 1973.³⁴ In 1978, The UN Sub-Commission on Prevention of Discrimination and Protection of Minorities proposed adding Ecocide to the Geneva Convention to address environmental destruction in Vietnam and future similar acts.³⁵ Although this proposal was rejected in 1985, Vietnam became the first nation to codify Ecocide in a domestic statute five years later.³⁶ Vietnam's domestic Ecocide law has not seen affirmative use since its enactment because the law is written in the context of war crimes; however, the law spurred Vietnam to diplomatically negotiate for "environmental remediation" with the United States – a joint agreement between the two nations to address environmental contamination and health consequences in areas with high Agent Orange/dioxin contamination.³⁷

The United States is not the only country that has deliberately harmed the environment as a war tactic. In 1990, Iraq dumped several million barrels of oil into the Persian Gulf as a tactical move during its military invasion of Kuwait. The United States Department of State characterized the spill as "indiscriminate environmental war[fare]." At the same time, the UN was beginning the early stages of negotiating the content of the Rome Statute. The International Law Commission ("ILC"), a sub-commission of the UN, proposed adding Article Twenty-Six – "willful and severe damage to the environment" – to the Rome Statute. Part of the proposal included a sample indictment charging Saddam Hussein and his military under Article Twenty-Six with deliberately releasing millions of gallons of oil into the Persian Gulf for the express purpose of gaining

^{33.} Id. at 91.

^{34.} Tord Björk, The Emergence of popular participation in world politics: United Nations Conference on Human Environment 1972 (Fall 1996) (unpublished seminar paper, University of Stockholm), available at https://perma.cc/YW8T-ZEWG.

^{35.} Ruhashyankiko, Nicodème (Special Rapporteur), *Study of the question of the prevention and punishment of the crime of genocide*, UNITED NATIONS COMMISSION ON HUMAN RIGHTS ¶ 128-34 U.N. Doc. E/CN.4/Sub.2/416 (July 4, 1978).

^{36.} See International Committee of the Red Cross, Practice Relating to Rule 45. Causing Serious Damage to the Natural Environment (2021) (citing Viet Nam, Penal Code, Article 278 (1990) ("ecocide, destroying the natural environment", whether committed in time of peace or war, constitutes crimes against humanity.")).

^{37.} Elliana Cusato, From Ecocide to Voluntary Remedial Projects: Legal Responses to 'Environmental Warfare' in Vietnam and the Spectre of Colonization, 19 MELBOURNE J. OF INTL. LAW. 1, 14 (2018) (describing joint efforts between Vietnam and the United States to clean and disburse over \$130 million in aid to clean areas since 2006 where the United States Military stored large amounts of Agent Orange during the war).

^{38.} Office of the Chief of Naval Operations, Dep't of Navy, The U.S. Navy in "Desert Shield" – "Desert Storm" app. A, 20-21 (1991).

^{39.} ANJA GAUGER ET AL., ECOCIDE IS THE MISSING 5TH CRIME AGAINST PEACE 8-12, (The Ecocide Project, Human Rights Consortium, School of Advanced Study, University of London) (2012).

a military advantage while severely harming human welfare." The inclusion of Article Twenty-Six as a crime against humanity hinged on whether the crime was one of intent or strict liability. Several UN working groups convened to consider Article Twenty-Six and resolve the issue of intent. By 1996, however, Article Twenty-Six was unilaterally removed by the Chairman of the ILC without a vote because the members of the sub-commission could not agree on the requisite level of *mens rea* required for a prima facie case. The result of the deliberations was a set of instructions for the ILC drafting committee to consider environmental damage in the context of war crimes and not in the context of crimes against humanity. Considering environmental damage only in the context of war crimes as opposed to crimes against humanity reflected the world's predominant fear of nuclear weapons. International world leaders of the midnineties were simply not ready to consider criminalizing attacks on nature as a crime against the peace and security of mankind.

Today's discourse on the addition of Ecocide has been rejuvenated by the sense of urgency accompanying the threat posed by climate change. In 2016, the ICC Prosecutor's Office published an opinion paper discussing new environmental criteria for case selection: "The impact of crimes may be assessed in light of, *inter alia*, the increased vulnerability of the victims; the terror subsequently instilled, or the social, economic and *environmental* damage inflicted on the affected communities." The consideration of environmental damage in the ICC Prosecutor's Office's selection of cases to pursue is significant because it reflects the ICC's recognition that environmentally harmful conduct contributes to climate change, harming humanity's collective well-being.

Criminal prosecutions are uniquely capable of deterring conduct that contributes to climate change because the ICC may bring criminal charges against a group of actors whose prosecution may influence similarly situated individuals.⁴⁸

^{40.} Luis Kutner & Ved P. Nanda, *Draft Indictment of Saddam Hussein*, 20:1 DENV. J. INT'L L. & PoL'Y 91, 95 (1991).

^{41.} Polly Higgins et al., *Protecting the Planet: A Proposal for a Law of Ecocide*, 59 CRIME, LAW AND SOCIAL CHANGE 251, 260 (2013) (Australia, for example, felt strongly Ecocide should be a law of strict liability because damage to the environment during peace often occurs as a byproduct of profit-motivated activities.).

^{42.} Id. at 260-61.

^{43.} *Id.* at 263.

^{44.} *Id.* (After the ILC failed to put forward a concrete definition of Ecocide, domestic laws passed in nine countries in quick succession: Russian Federation (1994), Kazakhstan (1997), Kyrgyz Republic (1997), Tajikistan (1998), Georgia (1999), Belarus (1999), Ukraine (2001), Moldova (2002), Armenia (2003).).

^{45.} Christian Tomuschat, Crimes Against the Environment, 26 ENV'T POL'Y & L. 242, 243 (1996).

^{46.} *Id*

^{47.} Int'l Crim. Ct. Office of the Prosecutor, *Policy Paper on Case Selection and Prioritization* 14 (2016) https://perma.cc/4RYW-RRXX (emphasis added).

^{48.} Prosecuting climate crimes as a matter of priority and general deterrence, CENTER FOR CLIMATE CRIMES ANALYSIS, https://perma.cc/7VJK-LNSK (last visited Sept. 13, 2022).

Hypothetically, the prosecution of a corporate leader who authorizes his or her company to illegally deforest and remove Indigenous peoples from desirable commercial sites in the Amazon Rainforest will impact the cost-benefit analyses of similar business decisions by other corporate actors. ⁴⁹ This focus, however, is hampered by the ICC's lack of jurisdiction to prosecute environmental crimes for which it has no definition; hence, a law criminalizing willful conduct harmful to the environment is needed. ⁵⁰

The movement to add Ecocide to the Rome Statute is gaining momentum, as global leaders are now publicly calling on the UN to take action.⁵¹ The countries most fervently supporting Ecocide's addition to the Rome Statute are those most threatened by climate change. For example, both the Maldives and Vanuatu, island nations that face existential crises from rising sea levels, called for consideration of Ecocide's addition to the Rome Statute at the 18th Meeting of the ICC Assembly of State Parties in 2019.⁵² In 2021, Belgium, a country rendered particularly vulnerable to rising sea levels by its seaport towns, spearheaded the Inter-Parliamentary Union's successful adoption of a resolution for its 179 member parliaments around the world to "reinforce criminal law to prevent and punish widespread, long-term and severe damage to the environment."⁵³ International support for Ecocide signifies a global push for imposing legal liability for particular attacks on the environment and improves the law's chances of surviving a UN general assembly adoption vote.

B. STATUTORY DEFINITION

The following definitions would be added to the Rome Statute as article five, paragraph one, subsection e.

"<u>Ecocide</u>" 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."

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

^{49.} Id.

^{50.} See Alessandra Mistura, Is There Space for Environmental Crimes Under International Criminal Law? The Impact of the Office of the Prosecutor Policy Paper on Case Selection and Prioritization on the Current Legal Framework, 43 COLUM. J. ENV'T. L. 181, 183 (2018).

^{51.} Nicholas Kusnetz et al., *As the Climate Crisis Grows, a Movement Gathers to Make 'Ecocide' an International Crime Against the Environment, INSIDE CLIMATE NEWS (Apr. 7, 2021), https://perma.cc/N9AH-UHFW; Sophie Yeo, Ecocide: Should killing nature be a crime?*, BBC (Nov. 20, 2020) https://perma.cc/7DCE-3R79 (among many notable names, Pope Francis and French President Emmanuel Macron now verbally back the addition of Ecocide to the Rome Statute).

^{52.} See Isabella Kaminski, Vulnerable Nations Call for Ecocide to be Recognized as an International Crime, THE CLIMATE DOCKET (Dec. 6, 2019) https://perma.cc/HSG8-YE8G.

^{53.} Parliamentary Strategies to Strengthen Peace and Security Against Threats and Conflicts Resulting from Climate-Related Disasters and their Consequences, Inter-Parliamentary Union, 142nd Assembly, ¶ 31, A/142/2-DR (May 19, 2021), https://perma.cc/9XGX-3VFM.

"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."

"<u>Widespread</u>" 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."

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

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

This definition comes from the Stop Ecocide Foundation, which convened twelve international environmental, criminal, and climate law experts to draft a practical statutory definition for Ecocide in 2020 and 2021.⁵⁴ The experts also recommended the following addition to the statute's preambular paragraph: "Concerned that the environment is daily threatened by severe destruction and deterioration, gravely endangering natural and human systems worldwide." The panel also noted its Ecocide definition drew on existing precedents and international treaties. ⁵⁶

The proposed Ecocide statute establishes two thresholds that turn ordinary conduct into Ecocide. First, there must be a substantial likelihood that the conduct will result in severe and either widespread or long-term damage to the environment. Ecocide, the conduct must be unlawful or wanton. To ensure maximum clarity in the proposed Ecocide law, the panel drew on Article 8(2)(b)(iv), an existing provision of the Rome Statute pertaining to international armed conflicts during war. Three features of Article 8(2)(b)(iv) are reflected in the proposed Ecocide law: (1) use of the terms "widespread" and "long-term" add geographic and temporal elements to the damage proscribed; (2) a proportionality element, in that the damage must be clearly excessive in relation to the benefits of the conduct; and (3) the presence of endangerment liability, which imputes liability to

^{54.} Sands & Sow, supra note 27.

^{55.} *Id*.

^{56.} Id.

^{57.} *Id.* ("The Panel [recognizes] that this threshold may . . . 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.").

^{58.} Id.

^{59.} Rome Statute of the International Criminal Court, supra note 12, art. 8, \P 2(b)(iv) ("Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or 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."); Sands & Sow, supra note 27.

the creation of a dangerous situation rather than a material result.⁶⁰ The proposed Ecocide law expands the bounds of Article 8(2)(b)(iv) by applying Ecocide in times of peace instead of war.

IV. ECOCIDE AS A CLIMATE CHANGE MITIGATOR

Climate change is real, it is caused by humans, and it will have material consequences for future generations. Climate change is also a multi-faceted, complex problem that is far from being solved. Several aspects of the climate change problem render any viable comprehensive solution a difficult prospect. 61 First, urgency is needed because as time goes on, emissions increase, and the problem worsens; any solution would require a larger effort the longer we take to commit. 62 Second, the largest contributors to climate change, the United States and China, are the least likely to be harmed by the effects of climate change because they have the most resources to stave them off. Therefore, the major contributors have no incentive to curb their polluting behavior. ⁶³ Third, while we know carbon dioxide emissions contribute to climate change, and we know that certain activities (e.g., gas-powered transportation) emit more carbon dioxide than other activities, it is difficult to comprehend an emitting action in one place contributing to climate change more broadly or in a remote locale. ⁶⁴ For example, it is difficult to grasp how driving a gas-powered vehicle contributes to increased frequency and severity of hurricanes in the Gulf of Mexico—or, as relating to this article, cutting down trees in the Amazon threatens the existence of the Maldives because of greenhouse gases' effect on rising sea levels.65

More critically, international law suffers from a lack of enforcement. The ICC has a jurisdiction problem: the Rome Statute grants the ICC jurisdiction to prosecute crimes against actors within signatory nations only. ⁶⁶ The world's largest emitters, such as the United States, Russia, China, and India, are not signatories to the Rome Statute and do not support the ICC's efforts. ⁶⁷ Thus, the ICC cannot

^{60.} Sands & Sow, supra note 27.

^{61.} See Richard J. Lazarus, Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future, 94 CORNELL L. REV. 1153, 1159-1161 (2009).

^{62.} See Kelly Levin et al., Playing It Forward: Path Dependency, Progressive Incrementalism, and the "Super Wicked" Problem of Global Climate Change, 8-10 (2010) (unpublished manuscript) available at https://perma.cc/FQ7W-VPQQ.

^{63.} Id. at 9.

^{64.} See Anna Lehtonen et al., A Pedagogy of Interconnectedness for Encountering Climate Change as a Wicked Sustainability Problem, 199 J. CLEANER PRODUCTION 860, 864 (2018).

^{65.} See Sally Brown et al., Land Raising as a Solution to Sea-Level Rise: An Analysis of Coastal Flooding on an Artificial Island in the Maldives, 13 JOURNAL OF FLOOD RISK MANAGEMENT 11 (2020) (discussing the effect of rising sea levels to the Maldives); Gatti et al., infra note 131, at 391-92 (finding that deforestation in the Amazon rainforest has transformed the region into a net carbon emitter).

^{66.} See Greene, infra note 81, at 40-42.

^{67.} *Cf.* 2002 Supplemental Appropriations Act for Further Recovery from and Response to Terrorist Attacks on the United States ["The Hague Invasion Act"], Pub. L. 107-206 (2002) (preventing federal, state, and local governments and agencies from assisting the ICC in its duties).

pursue convictions against any actor which resides in one of these carbon-emitting behemoths. The ICC is severely limited in that it does not allow prosecution of actors in the heaviest greenhouse emitting countries because those countries are not signatories to the Statute.

This is to say that the addition of Ecocide as the fifth Article Five crime will not magically stop climate change by itself. While the Nuremberg and Tokyo trials have not prevented the occurrence of genocide, the emergence of international justice for crimes of the most serious nature has prioritized international human rights both in policy and in public opinion. By adding Ecocide to the Rome Statute, the ICC will be granted jurisdiction to prosecute both elected and multinational corporate leaders for willful environmental harm. Expanded jurisdiction would grant the ICC broader capabilities in prosecuting all Article Five crimes. This section will detail how ICC prosecutors can do their part in mitigating the effects of climate change.

A. PREEMPTIVE, PREVENTATIVE, AND POST-OPERATIVE EFFECTS

The international community has accepted that efforts to mitigate greenhouse gas emissions will not be effective if countries advance solely their own interests; the solution to effective mitigation lies in collective action.⁶⁹ International legal mechanisms must anticipate future environmentally harmful behavior by adjusting current international governance.⁷⁰ By adopting Ecocide as the fifth Article Five crime, the UN can conscript ICC prosecutors into the fight against climate change in a mitigation capacity by punishing carbon dioxide emitting actors now. As of 2021, the world's largest greenhouse gas emitters are multinational corporations and national pursuits toward economic growth.⁷¹

The pursuit of economic growth incentivizes countries to maintain the status quo as it relates to the intersection of business and environmental protection. The principal perpetrators of climate change are "state-corporations," a term conceptualizing a nation's efforts to advance socioeconomic growth by supporting multinational corporate interests doing business within that nation's borders.⁷² This support most often comes in the form of omitting laws which protect environments but harm bottom lines.⁷³ The consequences of countries supporting business interests to spur domestic growth are environmental transgressions against groups of people who live in areas where multinational corporations extract

^{68.} See generally Christian Tomuschat, The Legacy of Nuremberg, 4 J. OF INT'L CRIM. JUSTICE 830-44 (2006).

^{69.} Summary for Policymakers, Intergovernmental Panel on Climate Change 5 (2014), https://perma.cc/M7R4-75XY.

^{70.} See J.B. Ruhl & Robin K. Craig, 4°C, 106 MINN. L. REV. 191, 196 (2021).

^{71.} CDP, THE CARBON MAJORS DATABASE: CDP CARBON MAJORS REPORT 2017 8 (2017).

^{72.} Rob White et al., Critical Criminology and the Struggle Against Climate Change Ecocide, 23 CRIT. CRIM. 383, 383 (2015).

^{73.} Id. at 384-86.

resources.⁷⁴ Such environmental transgressions are rationalized as part of the normal course of business.⁷⁵ Where a multinational corporation can engage in more profitable activities at the expense of the environment because of omissions in the domestic law, the corporation almost always will.⁷⁶ This profit incentive has the effect of attracting other corporations to the same area to engage in similar conduct. The omission of environmental laws supports and encourages environmentally harmful acts.

An Ecocide law would be a preemptive, preventative, and post-operative criminal statute.⁷⁷ Ecocide acts preemptively by forcing businesses to consider not only the human cost of their decisions, but the environmental cost as well. Postoperatively, Ecocide would allow the ICC, state signatories to the Rome Statute, or another party allowed to recommend a case to the ICC under the Rome Statute to pursue criminal convictions or engage in restorative justice.⁷⁸ Under current international law, corporations are considered "fictional persons" that are not legally cognizable in criminal proceedings—a corporation cannot commit a crime, but a person within that corporation can.⁷⁹ The definition of Ecocide proposed by the Stop Ecocide Foundation includes corporate directors and chief officers, rendering them accountable for acts of Ecocide like national officials,80 Imposing legal and economic consequences on corporate actors alters the "business as usual" incentive to one that promotes acting with greater care for the environment and preventing reckless, profit-at-all-costs business strategies.⁸¹ Ecocide adds a new consideration to a corporation's standard cost-benefit analysis of pursuing an environmentally harmful project because the consequences of violating the law will be greater than the profit derived from the activity. 82 Ecocide's alteration of the business cost-benefit analysis serves a preventative function, damming the flow of corporate investment into environments previously rendered vulnerable by omitted environmentally protective laws. Critically, once a law is added to

^{74.} Id. at 386.

^{75.} ROB WHITE, CLIMATE CHANGE, ECOCIDE, AND THE CRIMES OF THE POWERFUL, Routledge, 24-29, 106-07 (2015).

^{76.} Id.

^{77.} Polly Higgins et al., *Protecting the Planet After Rio – the Need for a Crime of Ecocide*, CENTRE FOR CRIME AND JUSTICE STUDIES, 1, 4 (2012).

^{78.} Id; See also Rome Statute of the International Criminal Court, supra note 12, art. 13.

 $^{79.\} See$ Polly Higgins, Eradicating Ecocide: Exposing the Corporate and Political Practices Destroying the Planet and Proposing the Laws Needed to Eradicate Ecocide 24-29, 106-07 (1st ed. 2010).

^{80.} Press Release, Stop Ecocide Foundation, *Top International Lawyers Unveil Definition of "Ecocide"* (June 22, 2021), https://perma.cc/3SPR-QTVX.

^{81.} Anastacia Greene, *The Campaign to Make Ecocide an International Crime: Quixotic Quest or Moral Imperative?*, 30 FORDHAM ENV'T L. REV. 1, 27 (2019).

^{82.} See Hamdan Qudah, Towards International Criminalization of Transboundary Environmental Crimes (May 2014) (SJD dissertation, Pace University School of Law), available at https://perma.cc/C6DS-HF8P.

the Rome Statute, state members are pledged to enact similar domestic laws.⁸³ Thus, adding Ecocide to the Rome Statute adds another layer of enforcement imposed on corporate actors at the domestic level.⁸⁴

B. THE GAP IN THE ROME STATUTE

The purpose of the Rome Statute is to prevent conduct that threatens the peace, security, and well-being of the world. 85 Environmental damage, which logically should fall within the Rome Statute's scope, is not adequately reflected in the law. As written, the Article Five crimes pertain only to the targeted killing of humans for the purpose of killing humans or aggressive acts that likely lead to mass atrocities. Environmental damage is mentioned only in Article Eight War Crimes, but the prohibited criminal conduct is limited to war-time situations where environmental harm is incident to human harm. The Rome Statute does not allow the ICC to prosecute actions, like attacks on the environment, that occur during peace and indirectly threaten the well-being of the world. These actions represent an entire category of conduct meeting the Rome Statute's "gravity" requirement, which poses existential harms to groups of humans similar to the existing Article Five crimes but is not yet punishable. Ecocide fills this gap because inherent in the destruction of particular environments are the corresponding harms to the humans that live there and the contribution to climate change as a result of such destruction. To understand this, consider former Brazilian President Jair Bolsonaro's policies in the Amazon Rainforest, their harm to Indigenous tribes, and why his conduct is not prosecutable under any current Article Five crime.

1. Jair Bolsonaro's Amazon Policies

Jair Bolsonaro was elected President of Brazil on a campaign favoring the abolition of protected indigenous tribal lands in the Amazon and the curtailment of environmental laws in favor of economic development. ⁸⁶ The Amazon has historically been protected in part by the Brazilian Forest Code. Since 1965, the Code required landowners in the Amazon to "maintain 35 to 80 percent of their property under native vegetation . . . farmers of all kinds can buy land in the Amazon, but they can only farm 20 percent of it." ⁸⁷ In 2010, to increase the effectiveness of policing this law, the Brazilian government began requiring all landowners to register their land with a government monitoring system. ⁸⁸ But by 2012, the

^{83.} See HIGGINS, supra note 79, at 70.

^{84.} Id.

^{85.} Rome Statute of the International Criminal Court, *supra* note 12, preamble.

^{86.} Ernesto Londono, *As Brazil's Far Right Leader Threatens the Amazon, One Tribe Pushes Back*, N.Y. TIMES, Nov. 10, 2018, at A1 (Bolsonaro said in 2018, "Where there is indigenous land, there is wealth underneath it.").

^{87.} The Forest Code: Using Law to Protect the Amazon, NATURE (2021) https://perma.cc/8V62-JU8R.

^{88.} Id.

original Forest Code was curbed, reducing the amount of protected lands by over 15 million hectares.⁸⁹ Despite the weakening of the Forest Code, government monitoring programs and environmental agencies still protected the Amazon, monitored land usage, and imposed penalties on violators.⁹⁰

Bolsonaro, however, views the Amazon as Brazilian property, favoring total land exploitation for maximum economic gain. To achieve these goals, Bolsonaro defunded government programs that monitor Amazon land usage and sought to eliminate penalties for violating Amazon protection laws. Bolsonaro slashed the Ministry of Science's budget and attacked the National Institute for Space Research, the agency charged with monitoring the Amazon, by attempting to discredit the agency's reports and firing its director. More critically, Bolsonaro, in effect, eliminated the punishment for violating Amazon protection laws. In an October 2019 government decree, Bolsonaro declared that all environmental fines stemming from Amazon violations would be reviewed at "conciliation hearings." Seven months after the decree, only five "conciliation hearings" had occurred, and all others were suspended.

In order to mine the Amazon's resources, Bolsonaro removed the legal impediments. Once the legal impediments were gone, the last remaining obstacle standing between commercial use of the Amazon and the Brazilian government was the Indigenous people who live there. To remove Indigenous resistance to commercial exploitation, Bolsonaro defunded the National Indian Foundation ("FUNAI"), the organization which lobbies on behalf of the Indigenous population, and dismantled the Unified Health System and the National Policy for Attention to the Health of Indigenous Peoples. 95 Bolsonaro also proposed legislation to remove Indigenous peoples' right to be consulted on governmental or commercial use of their land. 96 Bolsonaro's selective defunding of government monitoring of the Amazon, elimination of laws protecting Amazonian indigenous

^{89.} Claire Asher, Brazil's New Forest Code puts vast areas of protected Amazon forest at risk, MONGABAY (Mar. 4, 2019), https://perma.cc/6UGH-UCHU.

^{90.} Andrea A. Azevedo et al., *Limits of Brazil's Forest Code as a means to end illegal deforestation*, 114 PNAS 7653, 7654 (2017).

^{91.} Dom Phillips, Bolsonaro declares 'the Amazon is ours' and calls deforestation data 'lies,' THE GUARDIAN (2019) https://www.theguardian.com/world/2019/jul/19/jair-bolsonaro-brazil-amazon-rainforest-deforestation

^{92.} See Ignacio Amigo, The Amazon's Fragile Future, 578 NATURE 505, 505, 507 (2020); see also Claudio Angelo, Brazil's government freezes nearly half of its science spending, 568 NATURE 155, 155 (2019) https://www.theguardian.com/world/2019/jul/19/jair-bolsonaro-brazil-amazon-rainforest-deforestation.

^{93.} See Dom Phillips, Bolsonaro declares 'the Amazon is ours' and calls deforestation data 'lies,' THE GUARDIAN (2019), https://perma.cc/GE4P-MB7V.

^{94.} Brazil's Own Data Shows Amazon Fines Unenforced, HUMAN RIGHTS WATCH (May 20, 2020 3:44 PM), https://perma.cc/BGH7-D984 (hereinafter Amazon Fines Unenforced).

^{95.} Renato Antunes dos Santos et al., *Bolsonaro's hostility has driven Brazil's Indigenous peoples to the brink*, 584 NATURE 524, 524. (2020).

^{96.} Mark Harris & Denise Ferreira Da Silva, *The war on Indigenous rights in Brazil is intensifying*, OPENDEMOCRACY (June 19, 2021) https://perma.cc/EBB5-YZFR.

lands, and restriction of Indigenous peoples' constitutional rights has resulted in greater incursions into the protected lands by commercial logging and mining and decreased ability for Indigenous people to pursue legal redress to prevent such illegal access.⁹⁷

2. Effect on the Amazonian Indigenous

As a consequence of greater access to Amazon lands by commercial interests fostered by Bolsonaro's Amazon policies, the indigenous tribes of the Amazon have suffered from increases in disease, land invasions, and violence. By dismantling the Unified Health System and the National Policy for Attention to the Health of Indigenous Peoples, these tribes, for example, become infected and died from COVID-19 at higher rates than in the rest of Brazil. Partially contributing to the death toll is the tribal preference for collective living in communal housing, lower immunization rates, and lower access to healthcare resources. However, in summer 2020, Bolsonaro vetoed provisions of a law that would have required the federal government to provide water, disinfectants, and hospital beds to Indigenous communities, citing these provisions as against "public interest." As of February 2021, more than 30,000 Indigenous people from 158 ethnic groups had been infected, resulting in 800 deaths. In light of these numbers, the Bolsonaro government distributed only 39% of the federal funding allotted to Indigenous peoples to combat COVID-19.

Furthermore, since Bolsonaro took office in 2019, assassination of Indigenous tribal leaders is at an eleven year high, with five assassinations occurring in the first six months of Bolsonaro's presidency alone. A report by Brazil's Indigenous Missionary Council details 160 cases of land invasions in 2019, which is double the amount from the year prior. In Bolsonaro's first two years

^{97.} *Id.*; see also Shambhavi Kant, *Brazil's 490/2007 Bill: Stripping Indigenous Communities of their Land Rights*, EARTH REFUGE (Apr. 27, 2022), https://perma.cc/TY4J-KAPJ (noting Bolsonaro's support for PL 490/2007, which, if passed, would eliminate the Indigenous' legal right to be consulted on the use of their land by non-indigenous people).

^{98.} Luciana Cristina Vitorino et al., *The impact of COVID-19 on the indigenous peoples related to air and road networks and habitat loss*, PLOS GLOBAL PUBLIC HEALTH (Mar. 7, 2022), https://perma.cc/9U5R-D28K.

^{99.} Antonio Neto et al., *The Impact of Covid-19 on the Defense of Human Rights in Brazil*, JUSTICIA GLOBAL 1, 5 (2021), https://perma.cc/KV9A-K69F.

^{100.} Jake Spring, *Brazil's Bolsonaro vetoes plans to offer COVID-19 support to Indigenous people*, REUTERS (July 8, 2020), https://perma.cc/TW4T-5S6Q.

^{101.} See Neto et al., supra note 99, at 6.

^{102.} Id

^{103.} Fabio Teixeira, *Indigenous leader from threatened tribe killed in Brazil*, REUTERS (Apr. 1, 2020), https://perma.cc/MP3C-7YWE; *see also* Shanna Hanbury, *Murders of Indigenous leaders in Brazilian Amazon at highest level in two decades*, MONGABAY (Dec. 14, 2019), https://perma.cc/B7YT-XKUA.

^{104.} Indigenous Forest Guardian Murdered by Illegal Loggers in Brazilian Amazon, AMAZON WATCH (Nov. 1, 2019), https://perma.cc/359R-SX99 [hereinafter Indigenous Forest Guardian].

in office, the number of violent occurrences, such as land conflicts, territory invasions, and murders, rose to 1,903 in 2019, and to 2,054 in 2020. 105 Acts of violence are not being committed by government agents; rather, murders have been carried out by loggers and miners seeking usage of indigenous lands. 106 The Legal Amazon, an area of Brazil the government considers a new agricultural frontier, has seen the majority of violence stemming from increased commercial activities. 107 Indigenous communities allege the higher rates of assassinations and land grabs are part of a systemic campaign of violence against them encouraged by Bolsonaro. 108

The experiences of the Uru Eu Wau Wau tribe are telling of Bolsonaro's anti-Amazon policies' effect on the Indigenous. In February 2019, two months into Bolsonaro's presidency, "200 men strode into [Uru Eu Wau Wau] territory with the apparent intent to establish a permanent settlement." Illegal loggers and miners commonly march into indigenous territories and settle on the land, using its resources for commercial use. To protect themselves, Indigenous people remove these camps from their lands to avoid the loss of their land. The increase in violence in 2019 towards the Indigenous people is a result of this land conflict. Historically, Brazilian authorities have prosecuted illegal loggers and miners for this practice under Brazil's constitution, and the indigenous had FUNAI to lobby the government on their behalf. Since Bolsonaro's elimination of environmental fines, defunding of FUNAI, and pro-development attitude, illegal loggers and miners have become more confident they can get away with their conduct and are not punished when they are caught. Ill

3. The Current Rome Statute is Inapplicable to Bolsonaro

Bolsonaro's elimination of the Amazon's protections allowed illegal commercial exploitation, substantial deforestation, contamination of the soil, and drastically contributed to the problem of climate change. Not only do the environmental harms of Bolsonaro's Amazon policies not fall under any existing Article Five crime, but neither does the disease, land invasions, and violence plaguing the Amazonian Indigenous. The Rome Statute's lack of coverage for Bolsonaro's belief that commercial exploitation of the Amazon will produce a

^{105.} Mariana Castro, *CPT estimates almost 1 million people involved in conflicts in the field, the highest number since 85*, BRASIL DE FATO (May 31, 2021), https://perma.cc/J5RT-HYKC.

^{106.} See Indigenous Forest Guardian, supra note 104.

^{107.} See Castro, supra note 105.

^{108.} Letter from Indigenous Blood, Not a Single Drop More to Pope Francisco, ARTICULATION OF INDIGENOUS PEOPLES OF BRAZIL (Oct. 21, 2019), https://perma.cc/9GAD-AEHA.

^{109.} Ernesto Londono & Leticia Casado, *As Bolsonaro Keeps Amazon Vows, Brazil's Indigenous Fear 'Ethnocide,*' N.Y. TIMES (Apr. 19, 2020) https://perma.cc/FX6P-QF54.

^{110.} FUNAI - National Indian Foundation (Brazil), SURVIVAL INTERNATIONAL, https://perma.cc/LKN7-BZ3M (last visited Sept. 10, 2022).

^{111.} See Amazon Fines Unenforced, supra note 94.

^{112.} See Gatti et al., infra note 131, at 388-93.

material benefit to Brazil's collective well-being, despite egregious harms to the Indigenous, exemplifies the urgent need for Ecocide. The following sections demonstrate the inapplicability of the Rome Statute to Bolsonaro by applying each Article Five crime to his Amazon policies.

a. Genocide

Genocide is "any of the following acts committed with intent to destroy, in whole or in part, a national, ethnic, racial or religious group, as such: (a) Killing members of a group; (b) Causing serious bodily or mental harm to members of the group; (c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; (d) Imposing measures intended to prevent births within the group; (e) Forcibly transferring children of the group to another group." Because Bolsonaro did not order Brazilian military forces or agents to conduct land invasions, land grabs, or acts of violence, Article 6 subsections (a) and (b) do not apply. There is also no indication that Bolsonaro prevented births or forcibly transferring Indigenous children, so Article 6 subsections (d) and (e) are not applicable.

Article 6 subsection (c) is the closest provision of genocide law to apply to Bolsonaro's policymaking and funding decisions. The word "deliberately," however, likely renders this section inapplicable. The Rome Statute requires any criminal act to be committed with intent and knowledge of the conduct being engaged in and the consequences of that conduct. Bolsonaro would have had to be cutting funding towards FUNAI, proposing laws against the Indigenous, and gutting agencies responsible for monitoring the Amazon with the express purpose of bringing about the physical destruction of Indigenous people. A prosecution under Genocide fails because stated Bolsonaro's purpose was to use Brazilian laws and agencies to exploit the Amazon for maximal economic gain, not solely to destroy the Indigenous. Thus, any argument made for conviction under Article 6(c) will likely not pass muster.

b. Crimes Against Humanity

Article Seven Crimes Against Humanity criminalizes a list of acts "when committed as part of a widespread or systemic attack directed against any civilian population, with knowledge of the attack." Article Seven is likely rendered

^{113.} See Rome Statute of the International Criminal Court, supra note 12, art. 6.

^{114.} See id. at art. 6(c).

^{115.} *Id.* at art. 30 ¶ 1.

^{116.} See Phillips, supra note 91.

^{117.} See Rome Statute of the International Criminal Court, supra note 12 at art. 66.

^{118.} *Id.* at art. 7 ((a) Murder; (b) Extermination (c) Enslavement; (d) Deportation or forcible transfer of population; (e) Imprisonment; (f) Torture); (g) Rape and other sexual crimes; (h) Persecution against any identifiable group on political, national, ethnic, cultural, religious, or gender grounds; (i) Enforced

inapplicable to Bolsonaro, inter alia, under the language "with knowledge of the attack." The character of Article Seven is crimes committed affirmatively, with knowledge of the particular result against a specified population. ¹¹⁹ To be guilty of an Article Seven Crime Against Humanity, Bolsonaro would have had to order Brazilian military forces or agents to inflict violence on indigenous tribes as part of a widespread campaign against all Indigenous people in the Brazilian Amazon. There is no evidence showing Bolsonaro ordered attacks on the Indigenous, and the acts of violence and land invasions that are occurring are perpetrated by nongovernmental actors acting on their own accord. Rather, he is accused of reworking the Brazilian government to allow commercial exploitation of the Amazon for Brazilian economic gain, which is affecting the indigenous traditional way of life. Bolsonaro's policies were a willful attempt to harm the environment where indigenous tribes live, not on the indigenous tribes specifically. Therefore, Bolsonaro likely cannot be charged and convicted under Article Seven because the connection between his Amazon policies and the resulting harm to Indigenous people is attenuated.

c. War Crimes

Article Eight War Crimes refers to "[g]rave breaches of the Geneva Conventions . . . acts against persons or property protected under the provisions of the relevant Geneva Convention" and "[o]ther serious violations of the laws and customs applicable in international armed conflict, within the established framework of international law." ¹²⁰ The statute includes a comprehensive list of criminal acts committed during armed conflict. ¹²¹ The Brazilian government is not at war nor engaged in armed conflict with its Indigenous people. Therefore, Article Eight War Crimes is irrelevant to Bolsonaro's Amazon policies.

d. Crime of Aggression

Article Eight *bis* Crime of Aggression refers to the "planning, preparation, initiation or execution, by a person in a position to effectively exercise control over or to direct the political or military action of a state, of an act of aggression which, by its character, gravity, and scale, constitutes a manifest violation of the Charter

disappearance of persons; (j) The crime of apartheid; (k) Other inhumane acts of similar character causing great suffering, or serious injury to body or to mental or physical health.).

^{119.} Accord ICC Trial Chamber I acquits Laurent Ggagbo and Charles Ble Goude from all charges, International Criminal Court (Jan. 15, 2019), https://perma.cc/XU4C-PTN3 (acquitting Charles Ble Goude of crimes against humanity allegedly committed in a spree of post-electoral violence in Cote d'Ivoire in 2010 because the Prosecutor did not submit sufficient evidence to prove the existence of a common plan of murder and rape to keep Ggagbo in power).

^{120.} See Rome Statute of the International Criminal Court, supra note 12, art. $8 \ \ 2(a)$ -(b) ("War crimes" refers to violations of the Geneva Convention, which applies international legal standards to war.).

^{121.} Id.

of the United Nations."¹²² An "act of aggression" means "the use of armed force by a State against . . . another State" regardless of a declaration of war. ¹²³ As previously stated, Bolsonaro did not using Brazilian military forces or agents against indigenous tribes. Thus, the crime of aggression is also not applicable to Bolsonaro's Amazon policies.

C. EXPANDING ICC PROSECUTORIAL CAPABILITIES AGAINST ENVIRONMENTAL CRIMES

Ecocide augments the ICC's authority by expanding its prosecutorial reach to environmental crimes that directly and indirectly threaten the peace, security, and well-being of the world. By granting the ICC jurisdiction to pursue Ecocide convictions, ICC prosecutors could go after heads of state and governmental figures who use or omit to use government resources in reckless disregard of the environment.¹²⁴

Opponents of codifying Ecocide into the Rome Statute advance several arguments. First, international crimes against the environment are vague and imprecise, thus, establishing the causation element in a criminal conviction is difficult. 125 However, criticisms over the vagueness of these international crimes and establishing causation are misplaced when applied to Ecocide. Using Bolsonaro's Amazon policies as an example, scientific data is available to show where deforestation in the Brazilian Amazon is occurring and the corresponding quantitative effect such deforestation is having on the Amazon's ability to absorb carbon dioxide. 126 Such data can pinpoint the spike in deforestation which occurred immediately following Bolsonaro's election, and the subsequent year's spike in deforestation after one year of Bolsonaro's campaign to cut Brazil's Amazon monitoring programs and legal protection for indigenous lands. 127 Ecocide's effectiveness as a climate change mitigation tool lies in its specificity: Ecocide will be used to prosecute specific instances of willful environmental harm to specific environments, such as Bolsonaro harming the Amazon, not Bolsonaro contributing to climate change. Thus, causation is easier to establish with respect to willful harm of a particular environment rather than the environment—the Earth.

Ecocide fits neatly into the current Rome Statute framework and fills the gap previously discussed. Like the current Article Five crimes, which punish actions that target people, Ecocide focuses on intentional harm to the environment, which

^{122.} R.C. Res. 6, art. 8 bis ¶ 1 (June 11, 2010).

^{123.} *Id*. at ¶ 2.

^{124.} See Sands & Sow, supra note 27.

^{125.} Frederic Megret, *The Problem of an International Criminal Law of the Environment*, 36 COLUM. J. ENV'T. L. 195, 201 (2011).

^{126.} See Gatti et al., infra note 131, at 388-93.

^{127.} See, e.g., Vale, infra note 141; see also Camargo, infra note 143.

harms people's way of life. ¹²⁸ By way of example, reconsider Brazilian President Jair Bolsonaro's Amazon policies assessed under the proposed Ecocide law.

1. Ecocide Applied to Bolsonaro

The Amazon is the world's largest tropical forest and functions as one of its largest carbon sinks. 129 The Amazon's biomass, organic material found in plants, wood, and other raw materials, absorbs carbon dioxide emissions.¹³⁰ Recently, however, the Amazon no longer functions as a carbon sink and has begun releasing more carbon dioxide than it can absorb: researchers who performed concurrent tests at four different locations in the Amazon from 2010 to 2018 found not only that the Amazon no longer acts as a carbon sink, but that the Southeastern Amazon releases more carbon dioxide than it captures, further contributing to global emissions of carbon dioxide. 131 The Amazon's capacity to absorb carbon dioxide emissions is expected to drop to zero by 2035. The elimination of the Amazon's carbon absorption capabilities is caused by the destruction of trees and vegetation, as a result of deforestation and destructive fires. ¹³³ In 2019, deforestation in Brazil increased by 30%, with over 9,762 square kilometers cut down.¹³⁴ In 2020, deforestation reached a twelve year high when over 11,000 square kilometers were burned or cut down. 135 As a result of tree clearing, the Amazon has shrunk 15% since 1970, more than six million square kilometers. ¹³⁶ In Brazil,

^{128.} See Jessica Durney, Crafting a Standard: Environmental Crimes as Crimes Against Humanity Under the International Criminal Court, 24 HASTINGS ENV'T. L. J. 413, 414-15 (2018).

^{129.} See R. J. W. Brienen et al., Long-Term Decline of the Amazon Carbon Sink, 519 NATURE 344, 344 (2015) ("One of the largest ecosystem carbon pools on Earth is the Amazon forest, storing around 150-200 Pg C in living biomass and soils.").

^{130.} See Josh Gabbatiss, Amazon carbon sink could be 'much less' due to lack of soil nutrients, CarbonBrief (May 8, 2019), https://perma.cc/EVX9-B8LE.

^{131.} See Luciana V. Gatti et al., Amazonia as a Carbon Source Linked to Deforestation and Climate Change, 595 NATURE 388, 389-93 (2021) ("We find that total carbon emissions are greater in eastern Amazonia than in the western part, mostly as a result of spatial differences in carbon-monoxide-derived fire emissions. Southeastern Amazonia, in particular, acts as a net carbon source (total carbon flux minus fire emissions) to the atmosphere. Over the past 40 years, eastern Amazonia has been subjected to more deforestation, warming and moisture stress than the western part, especially during the dry season, with the southeast experiencing the strongest trends.").

^{132.} The Amazon is no Longer a Carbon Sink. It's a 'Carbon Source,' Sustainability Times (Jul. 15, 2021), https://perma.cc/H3R3-3GGJ.

^{133.} See Gatti et al., supra note 131, at 388-93.

^{134.} Amazon Deforestation Rises to 11 Year High in Brazil, reaching 12-year High, Mongabay (Nov. 18, 2019), https://perma.cc/J4WM-5AX4 (9,762 square kilometers, which equates to 3,769 square miles, is an area larger than Yellowstone National Park).

^{135.} Luigi Mastrodonato, *The Deforestation of the Brazilian Amazon is Returning to the Abysmal Levels of the Early 2000s. And it's not just Bolsonaro's fault.*, LIFEGATE (Jun. 8, 2021), https://perma.cc/7X98-6G7T; *see also* Tom Phillips, *Amazon deforestation surges to 12-year high under Bolsonaro*, THE GUARDIAN (Nov. 30, 2020), https://perma.cc/FH65-RQRP.

^{136.} See Amigo, supra note 92.

which contains within its borders over half of the Amazon, the area of forest coverage has decreased by 19% in the same time. 137

To commit Ecocide, an actor must unlawfully or wantonly commit acts 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. Those acts must be committed with reckless disregard for the damage done—damage that is clearly excessive in relation to the social and economic benefits anticipated. Such damage, must involve very serious adverse changes, disruption, or harm to any element of the environment, and cannot be redressed through natural recovery within a reasonable period of time.

Jair Bolsonaro has committed Ecocide. During Bolsonaro's presidency, fifty-seven legislative acts have become law that weaken environmental protections of the Amazon and dismantled federal agencies charged with preventing deforestation and illegal burning. While the world focused on COVID-19, the Bolsonaro administration reduced enforcement of environmental fines by another 70%. He environmental agencies he left intact, Bolsonaro undercut their effectiveness by replacing the leaders of those agencies with military officials who lacked the requisite technical and scientific knowledge. He combined effect of Bolsonaro's public statements and official actions have emboldened deforesters and arsonists. Ralph Trancoso, a Brazilian forestry engineer at the University of Queensland, summarized this effect:

[I]ncreasing deforestation heads in the opposite direction, with stimulus for illegal takeover of public lands, illegal mining and agribusinesses within indigenous territories, and degazettement of protected areas. In addition, infrastructure projects within the rainforest building new roads, hydroelectric dams and mining are being encouraged. At the same time, sustainable development incentives and programs such as the Amazon Fund continue to be paralyzed or dismantled. The undermining of environmental agencies, along with a reduction in law enforcement and increased amnesty for deforesters, are clear

^{137.} Id.

^{138.} Sands & Sow, supra note 27.

^{139.} Id.

^{140.} *Id*.

^{141.} Mariana M. Vale et al., *The COVID-19 pandemic as an opportunity to weaken environmental protection in Brazil*, 255 BIOLOGICAL CONSERVATION (2021).

^{142.} *Id*.

^{143.} See Suzana Camargo, While thousands of Brazilians die in the pandemic, the government takes the opportunity to weaken environmental laws, MONGABAY (Mar. 11, 2021), https://perma.cc/L9H2-4YVJ ("[F]requent changes in leadership positions in bodies such as the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama) and the Chico Mendes Institute for Biodiversity Conservation (ICMBio), including the replacement of these professionals by military police, with little or no technical and scientific knowledge in the area. . . . ").

signals of the current threats to the Amazon rainforest, with land grabbers, illegal loggers and cattle ranchers advancing in the destruction of the rainforest.¹⁴⁴

By encouraging Amazonian land exploitation, defunding Amazon monitoring agencies, replacing existing environmental agency heads with individuals who lack the knowledge to implement effective policy, and eliminating the penalty for violating Amazon protection laws, Bolsonaro encouraged attacks on the Amazon by discarding its protections. These acts, done for the purpose of economic development, evidence reckless disregard for the well-being of the Amazon because such acts have emboldened and allowed illegal deforesters, miners, and burners commercial exploitation at greater frequency without punishment. 145 The increased deforestation, mining, and burning has resulted in quantifiable damage evidenced by the Amazon's diminished carbon sink capabilities. 146 To redress such damage, Brazil would need to undo all of Bolsonaro's intergovernmental reordering and make massive investments into reforestation subsidized by foreign donors.¹⁴⁷ Despite this theoretical possibility, recovery would be slow, and subsequent Brazilian administrations would need to remain committed to the Amazon's restoration.¹⁴⁸ In other words, Bolsonaro has allowed for long-term damage to the Amazon involving serious adverse changes which cannot be redressed through natural recovery within a reasonable period of time.

If Brazil is unwilling and unable to carry out an investigation to determine if Ecocide has been committed and to prevent its commission, under Article Thirteen of the Rome Statute, a state signatory could recommend Jair Bolsonaro to ICC prosecutors for investigation and indictment on Ecocide charge if Ecocide were added to Article Five. Under Article Thirteen of the Rome Statute, a state signatory to the Rome Statute could recommend Jair Bolsonaro to ICC prosecutors for investigation and indictment on Ecocide charges if Ecocide were added to Article Five.

V. Conclusion

The Rome Statute is the principal method for deterrence and punishment of crimes that threaten the health and wellbeing of humanity. Despite climate change becoming a mainstream political issue, national climate pledges are considered inadequate to address rising global temperatures. Although climate

^{144.} Ralph Trancoso, Changing Amazon deforestation patters: urgent need to restore command and control policies and market interventions, ENV'T RSCH LETTER 16, 17 (2021).

^{145.} See Celso H. L. Silva Junior et al., The Brazilian Amazon deforestation rate in 2020 is the greatest of the decade, 5 NAT. ECOL. EVOL. 144, 145 (2021), https://perma.cc/SY7F-JHVB.

^{146.} See Gatti et al., supra note 131, at 388-93.

^{147.} Ciara Nugent, *The Amazon Now Emits More Carbon Than it Absorbs. Can We Ever Reverse That Tipping Point?*, TIME (Jul. 21, 2021), https://perma.cc/9SPW-K724.

^{148.} *Id*.

^{149.} Glasgow's 2030 credibility gap: net zero's lip service to climate action, CLIMATE ACTION TRACKER, (Nov. 9, 2021), https://perma.cc/Z8EU-RPGG.

pledges may garner attractive headlines for dealmakers, no body of law currently exists to prosecute conduct harmful to the environment committed wantonly. Because the UN has favored climate commitments and largely ignored punishing climate violators, the problem of climate change has persisted. The conduct of Jair Bolsonaro is evidence that Ecocide is a modern problem that will not go away despite global agreements like the Paris Climate Accord. So long as international governance fosters an environment where the profit incentive of business activities remains unaffected by concerns for the environment, violations of environmental laws will fit neatly into business cost-benefit analysis. Not a government official nor a corporate leader will change their environmentally destructive behavior if the legal landscape remains business as usual.

By codifying Ecocide, the ICC will be conscripted into the fight against climate change. A law of Ecocide allows ICC prosecutors to go after both national elected officials and multinational corporate leaders who attack the environment by act or omission. Moreover, an Ecocide law allows prosecutors to target specific perpetrators of environmental crimes with the goal of influencing a broader set of actors operating under similar conditions. As previously stated, codifying Ecocide as an international law will not, by itself, stop climate change. The Nuremberg trials and the subsequent Genocide Convention have not stopped the occurrence of genocide, but they did bring awareness to an issue previously undefined. The addition of Ecocide to the Rome Statute, like Genocide, will result in a cultural shift in how the world perceives acts of harm towards nature. Accordingly, Ecocide prioritizes the fight against climate change both in black letter law and in public opinion. It's time for the UN to add international prosecutors into the fight against climate change before the climate changes beyond a tipping point.

^{150.} Sophie Yeo, *Ecocide: Should killing nature be a crime?*, BBC FUTURE PLANET, (Nov. 5, 2020), https://perma.cc/VY9N-X44D.