Environmental Destruction and Human Rights Abuses in the Democratic Republic of the Congo: Examining the Epicenter of the Cobalt Mining Industry from an International Criminal Law Perspective

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Satisfying the world's growing demand for cobalt, which is used in a broad range of medical, military, technology, and renewable energy industries, comes at an incredible environmental and human cost, from the pollution of rivers and farmlands to the exploitation of thousands of laborers. Currently, the bulk of attention paid to the nexus between international criminal law and severe environmental and human rights abuses remains focused on efforts to amend the Rome Statute of the International Criminal Court to confer jurisdiction over the proposed international crime of ecocide. While not suggesting that such efforts are not worthwhile and laudable, this article considers how international criminal law might help reform the epicenter of the cobalt mining industry in the Democratic Republic of the Congo (DRC) through a representative case study that examines the potential applicability of the proposed international crime of ecocide and the existing category of crimes against humanity to the conduct of key actors affiliated with one of the world's largest extraction corporations. Based on the subsequent analysis, I argue that in certain contexts, including that of harmful cobalt mining practices in the DRC, international criminal law may still have a role to play in applying pressure for positive changes in worker conditions and environmental responsibility.

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INTRODUCTION

Contemporary society is shockingly dependent on cobalt, a valuable metal in the earth's crust that is used in a broad range of medical, military, technology, and renewable energy industries. The metal's multisectoral versatility has stimulated its global demand in recent years, particularly as mobile technology has experienced "exponential growth" and electric vehicles become more commonplace. In March 2018, cobalt prices hit a record high of nearly \$95,000 per ton—an increase of more than four hundred percent over a two-year span. This upward market trend, however, has not prompted more robust industry safeguards or corporate oversight in the Democratic Republic of the Congo (DRC), where the majority of the world's cobalt resources are located. As such, the Kolwezi mining region has experienced serious environmental harms and human rights abuses, from the pollution of rivers and farmlands to the employment of child labor.

The rapid growth of the DRC's cobalt mining industry has attracted hundreds of thousands of poor Congolese in search of work and a better life.⁸ In 2020, Congolese workers extracted roughly

^{1.} See Shahjadi Hisan Farjana et al., Life Cycle Assessment of Cobalt Extraction Process, 18 J. Sustainable Mining 150, 150 (2019).

^{2.} Id.

^{3.} Cobalt Perfectly Positioned as Global Cobalt Demand Surges, NETWORK NEWS WIRE (Nov. 17, 2017), https://www.prnewswire.co.uk/news-releases/cobalt-perfectly-positioned-as-global-cobalt-demand-surges-658216703.html.

^{4.} The Electric-Car Boom Sets Off a Scramble for Cobalt in Congo, ECON. (Mar. 31, 2021), https://www.economist.com/finance-and-economics/2021/03/31/the-electric-car-boom-sets-off-a-scramble-for-cobalt-in-congo.

^{5.} *Cobalt*, TRADING ECON., https://tradingeconomics.com/commodity/cobalt (last visited Nov. 2, 2021).

^{6.} There is an estimated 3.4 million metric tons of cobalt in the DRC. *See* Nicholas Niarchos, *The Dark Side of the Congo's Cobalt Rush*, NEW YORKER (May 24, 2021), https://www.newyorker.com/magazine/2021/05/31/the-dark-side-of-congos-cobalt-rush.

^{7.} Siddharth Kara, *Is Your Phone Tainted by the Misery of the 35,000 Children in Congo's Mines?*, GUARDIAN (Oct. 12, 2018), https://www.theguardian.com/global-development/2018/oct/12/phone-misery-children-congo-cobalt-mines-drc [hereinafter *Is Your Phone Tainted?*].

^{8.} The DRC suffers from rampant poverty, with nearly twenty-two million people facing starvation and malnutrition. *Cobalt Supply Must Double by 2030 to Meet Demand – Trafigura Exec*, REUTERS (June 16, 2021), https://www.reuters.com/article/us-metals-cobalt-trafigura/cobalt-supply-must-double-by-2030-to-meet-

95,000 metric tons of cobalt⁹ via industrial and illegal "artisanal" mining sectors, both of which have long been connected to serious human rights violations and environmental damage.¹⁰ However, government corruption and a lack of corporate transparency has made it challenging to ascertain the full extent of relevant abuses, much less identifying individual actors who may be legally responsible under international human rights or international criminal law.¹¹

A notable exception to this unclear picture of responsibility are the well-documented accusations levied against Glencore, a Swissbased multinational corporation that is one of the largest commodity traders and resource extraction entities in the world. Over the last decade, multiple civil society reports have chronicled the environmental damage caused by Glencore's cobalt mining subsidiaries in Kolwezi. Likewise, a 2019 complaint filed against Apple, Google, Tesla, Dell, and Microsoft detailed Glencore's reliance on child "creuseurs" (small-scale artisanal miners) and the death and disfigurement they have suffered in the cobalt mining industry. Hese allegations of serious human rights abuses, along with various documented serious environmental harms traced back to Glencore's

demand-trafigura-exec-idUSKCN2DS1Y8. Vava Tampa, *DRC is rich with farmland, so why do 22 million people there face starvation?*, GUARDIAN (Feb. 12, 2021), https://www.theguardian.com/global-development/2021/feb/12/congo-famine-crisis-international-tribunal-drc-militias.

- 9. This figure represents almost sixty percent of global cobalt extraction. Melissa Pistilli, *Top 10 Cobalt Production by Country*, INVESTING NEWS (June 21, 2021), https://investingnews.com/daily/resource-investing/battery-metals-investing/cobalt-investing/top-cobalt-producing-countries-congo-china-canadarussia-australia/.
 - 10. Id.
 - 11. Niarchos, supra note 6.
- 12. Helen Pidd et al., *The Rise of Glencore, the Biggest Company You've Never Heard of*, GUARDIAN (May 19, 2011), https://www.theguardian.com/business/2011/may/19/rise-of-glencore-commodities-company.
- 13. See Chantal Peyer & François Mercier, Glencore in the Democratic Republic of Congo: Profit Before Human Rights and the Environment (2012), https://www.cidse.org/2012/04/18/glencore-in-the-drc-profit-before-hrenvironment/ [hereinafter Profit Before Human Rights and the Environment]; Chantal Peyer et al., PR or Progress? Glencore's Corporate Responsibility in the Democratic Republic of the Congo (2014), https://www.raid-uk.org/sites/default/files/glencore-report-June2014.pdf [hereinafter PR or Progress?]; Bread for All et al., Glencore in the DR Congo: Incomplete Due Diligence (Nov. 2018), https://sehen-und-handeln.ch/content/uploads/2018/04/Report_Glencore_Congo_Summary_E.pdf?_sm_au_=iVVkqbGHrD0HbSMq [hereinafter Incomplete Due Diligence].
- 14. Doe v. Apple Inc., No. 1:19-cv-03737 (D.C. Cir. Dec. 15, 2019) [hereinafter Complaint].

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business activities in the DRC have led to sustained critiques of the corporation's activities in the DRC.15 When addressing the potential legal responsibilities of Glencore and key individual employees and corporate officers, the bulk of attention has focused primarily on alleged environmental harm and human sufferings.¹⁶ Far less attention has been paid to questions of whether and how certain large-scale harm-producing actions Glencore and its subsidiaries have allegedly engaged in, including in the DRC, may implicate international criminal law. This oversight is curious in light of the expanded interest in the nexus of environmental and human rights issues, particularly the renewed efforts to outlaw ecocide at the international level.¹⁷ This article attempts to fill this gap by assessing what role international criminal law might play as a component of broader efforts seeking to hold Glencore and its officials accountable for profiting from extensive environmental destruction and human suffering in the DRC.

As mentioned above, there is currently a growing push to pass an amendment to the Rome Statute that would allow the International Criminal Court (ICC) to prosecute egregious environmental polluters under the proposed crime of ecocide. This movement has gained the official support of nations across Europe¹⁹ as well as endorsements from high-profile public figures such as Pope Francis, Malala Yousafzai, and Greta Thunberg. Environmentalists have accordingly expressed optimism at the idea of holding corporate executives from companies such as Glencore accountable for the mass destruction of nature, which has been notoriously difficult to achieve under existing international criminal law. In the support of the pass and the support of the pass and the support of the property of the pass and the support of the property of the pass and the support of the property of the pass and the support of the property of the property of the pass and the property of the property of the pass and the property of the pass and property of the p

^{15.} See, e.g., Profit Before Human Rights and the Environment, supra note 13; Incomplete Due Diligence, supra note 13.

^{16.} Id.

^{17.} See e.g., Carly Krakow, Legally Defining Ecocide: Implications for Addressing Environmental Racism and Prioritizing Human Health in International Law, OpinioJuris (Mar. 17, 2021), http://opiniojuris.org/2021/03/17/legally-defining-ecocide-implications-for-addressing-environmental-racism-and-prioritizing-human-health-in-international-law/.

^{18.} Josie Fischels, *How 165 Words Could Make Mass Environmental Destruction an International Crime*, NPR (June 27, 2021, 8:00 AM), https://www.npr.org/2021/06/27/1010402568/ecocide-environment-destruction-international-crime-criminal-court.

^{19.} E.g., Leading States, Key Dates, STOP ECOCIDE, https://www.stopecocide.earth/leading-states (last visited Nov. 2, 2021).

^{20.} See Robin Kennedy, The Earth Needs a Lawyer Too: Making Ecocide an International Crime, McGill INT'l Rev. (Dec. 21, 2020), https://www.mironline.ca/the-earth-needs-a-lawyer-too-making-ecocide-an-international-crime/.

^{21.} See Peter Hood, Can Environmental Damage be Prosecuted as a Crime Under International Law?, FOCUS ON REGUL. (Apr. 30, 2018), https://www.hlregulation.

Despite the positive momentum surrounding the ecocide movement, even in a best-case scenario an amendment to the Rome Statute is likely years away from becoming a reality.²² As such, while considering the theoretical applicability of the proposed definition of ecocide to the activities of Glencore in the DRC, this article suggests that a more pragmatic approach to pursuing international criminal accountability predicated on the alleged misdeeds of Glencore and its subsidiaries in the DRC may be by framing relevant abuses as potential crimes against humanity. Not only does this pathway permit immediate action, it relies on well-developed international law and jurisprudence.²³ It is buoyed, moreover, by the fact that the suffering experienced by *creuseurs* in the DRC and the direct responsibility of Glencore-affiliated actors appear to prima facie qualify as crimes against humanity, as such harms are the product of the widespread and systematic abuse of DRC's civilian population. In terms of specific offenses, available documentation of harms suffered by creuseurs also appears to satisfy the elements of the crime against humanity of other inhumane acts, while also potentially implicating additional crimes against humanity.²⁴ Furthermore, the Supreme Court of Canada's landmark holding in Nevsun Resources Ltd. v. Araya—that a Canadian corporation could be held civilly liable for the crimes against humanity committed by its Eritrean mining subsidiary—may prove to be a valuable source of jurisprudential support should the victims of atrocities tied to cobalt mining practices in the DRC pursue a civil claim against Glencore.25

In order to examine Glencore's liability for both ecocide and crimes against humanity stemming from the alleged environmental and human harms of its cobalt mining subsidiaries in the DRC this article proceeds in four parts. Part I details alleged abuses committed or facilitated by Glencore and/or its subsidiaries in the DRC within the context of the recent surge in global demand for cobalt. Part II explores the recent international movement to outlaw ecocide and considers how an amendment to the Rome Statute might impact Glencore executives and other key corporate actors. Part III considers

com/2018/04/30/can-environmental-damage-be-prosecuted-as-a-crime-under-international-law/.

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^{22.} See Frédéric Mégret, The Problem of an International Criminal Law of the Environment, 36 COLUM. J. ENV'T L. 195, 217 (2011).

^{23.} See Int'l Crim. L. Servs., Crimes against Humanity, in International Criminal Law & Practice Training Materials (2018), https://iici.global/0.5.1/wp-content/uploads/2018/03/icls-training-materials-sec-7-cah1.pdf.

^{24.} See Rome Statute of the International Criminal Court, art. 7, July 17, 1998, 2187 U.N.T.S. 90 [hereinafter Rome Statute].

^{25.} Nevsun Resources Ltd. v. Araya, [2020] S.C.R. 5 (Can.).

whether the pursuit of accountability for crimes against humanity might provide a more realistic, currently available avenue toward achieving justice and accountability as the ecocide debate continues to percolate. Part IV concludes with some thoughts concerning whether and how Glencore's potential exposure to international criminal liability might create an additional incentive for positive internal changes and even more comprehensive cobalt mining industry safeguards regarding the well-being of workers and affected environments. While far from representing a singular solution to the various harmful aspects of practices associated with cobalt mining and other extractive industries, this article concludes that international criminal law may have a notable part to play in broader reform efforts.

I. COBALT MINING PRACTICES IN THE DEMOCRATIC REPUBLIC OF THE CONGO AND THE ALLEGATIONS AGAINST GLENCORE

Glencore's cobalt mining subsidiaries have developed a rather dubious reputation among environmental and human rights groups. The operations of these subsidiaries have allegedly tainted waterways, farmlands, and the natural ecosystems of Kolwezi.²⁶ In the process, workers of all ages have suffered serious harm.²⁷ This section explores these allegations, providing an overview of documented environmental harms and human rights abuses associated with Glencore's cobalt mining activities in the DRC.

A. ENVIRONMENTAL HARMS

Cobalt occurs naturally in rocks, water, plants, and animals.²⁸ Although it is much less toxic than heavy metals, such as arsenic, mercury, lead, chromium, and cadmium, concerned scientists have started to explore cobalt's impacts on the environment.²⁹ Their early research suggests that there is cause for concern. A 2016 study, for example, found that excess amounts of cobalt in soil from Tomaszkowo, Poland "generated not only very low enzyme activity

 $^{26. \}quad \textit{See, e.g.}, \textit{Profit Before Human Rights and the Environment}, \textit{supra} \ \textit{note} \ 13.$

^{27.} Complaint, *supra* note 14.

^{28.} See Jonathan Watts, How the Race for Cobalt Risks Turning it from Miracle Metal To Deadly Chemical, GUARDIAN (Dec. 18, 2019), https://www.theguardian.com/global-development/2019/dec/18/how-the-race-for-cobalt-risks-turning-it-from-miracle-metal-to-deadly-chemical.

^{29.} Id.

and resistance values but also contributed to a drastic spring barley yield reduction."30

Several countries have heeded early scientific research suggesting that excess cobalt appears to negatively affect the environment and agriculture and taken steps to address the potential environmental damage associated with cobalt mining. In 2017, the Philippines shut down twenty-three nickel mines, several of which produced cobalt,31 as part of a "government campaign to fight environmental degradation by the industry."32 In 2018, China's Ministry of Ecology and Environment placed a one-month halt on cobalt refining across ten provinces to carry out environmental inspections.³³ Cobalt mining in the DRC, on the other hand, suffers from inadequate government regulation,³⁴ permitting mining companies to pollute the environment with de facto impunity. Glencore has two subsidiaries in Kolwezi that appear to have taken advantage of the country's lax environmental oversight35: Mutanda Mining Sarl (MUMI), which operates an open-pit copper and cobalt mine in the Basse-Kando game reserve, and Kamoto Copper Company Sàrl (KCC), which operates both underground and open-pit copper and cobalt mines.³⁶ Both of these entities have been the subject of allegations of causing serious environmental damage.

1. Kamoto Copper Company Sàrl

KCC's mining activities have tainted the Luilu River, one of the

^{30.} Magdalena Zaborowska, *Biological Activity of Soil Contaminated with Cobalt, Tin, and Molybdenum,* 188 ENV'T MONITORING & ASSESSMENT 398, 407 (2016).

^{31.} Watts, *supra* note 28. Cobalt is a by-product of copper and nickel. Thus, countries that produce a high quantity of those metals also produce a high quantity of cobalt. Farjana, *supra* note 1, at 152.

^{32.} Enrico Dela Cruz & Manolo Serapio, Jr., *Philippines to Shut Half of Mines, Mostly Nickel, in Environmental Clampdown*, REUTERS (Feb. 1, 2017), https://www.reuters.com/article/us-philippines-mining-idUSKBN15H0BQ.

^{33.} Susan Zou, Environmental Scrutiny Disrupts Cobalt Production in China; Market Participants Downplay Impact on Prices, METAL BULL (June 4, 2018), https://www.metalbulletin.com/Article/3811083/Environmental-scrutiny-disrupts-cobalt-production-in-China-market-participants-downplay-impact-on.html.

^{34.} Bianca Nogrady, *Cobalt is Critical for a Renewable Energy Transition. How Can We Minimize its Social and Environmental Cost?*, GREENBIZ (June 4, 2020), https://www.greenbiz.com/article/cobalt-critical-renewable-energy-transition-how-can-we-minimize-its-social-and.

^{35.} Id.

^{36.} Kamoto Mine, NS ENERGY, https://www.nsenergybusiness.com/projects/kamoto-mine/ (last visited Oct. 20, 2021).

most important and vital waterways in the region.³⁷ In 2012, two Swiss non-governmental organizations, Bread for All and Fastenopfer – Swiss Catholic Lenten Fund (Fastenopfer), documented the company's release of untreated wastewater into the river.³⁸ These organizations documented "massive pollution" stemming from KCC's mining activities, especially acidification.³⁹ The pollution was so extensive that it could be "seen with the naked eye," while the water in the canal, which discharged the wastewater into the river, was black, smelled like "rotten eggs," and burned and irritated the skin.⁴⁰ Likewise, the area around the banks of the river "look[ed] like scorched earth."⁴¹ Laboratory analysis later confirmed the striking eye-witness observations, as the river's pH, lead, cobalt, copper, nickel, and zinc levels were "well above"⁴² the permitted thresholds established by the DRC, the World Health Organization (WHO), and the Aquatic Quality Guidelines for the Protection of Aquatic Life.⁴³

KCC's pollution of the Luilu River has had a devastating impact on aquatic life and local livelihoods. Just twenty years earlier, the waterway was a "source of revenue for nearly all the village." However, for fish to survive in river ecosystems, the water generally needs to maintain a pH value between 4.5 and 9.5. The untreated wastewater that spilled into the river resulted in a pH value of 1.9, indicating extremely high acidity. As one village chief stated, effluent waste pollution drastically changed the local environment and the community's way of life:

Today, there is nothing, no fish or crabs. The water is very dirty and you can even see the metals with the naked eye. The water is no longer suitable for irrigation nor can it be used any longer for domestic purposes, for washing dishes or clothes,

^{37.} Emmanuel K. Atibu et al., Concentration of Metals in Surface Water and Sediment of Luilu and Musonoie Rivers, Kolwezi-Katanga, Democratic Republic of Congo, 39 APPLIED GEOCHEMISTRY 26, 26 (2013).

^{38.} PROFIT BEFORE HUMAN RIGHTS AND THE ENVIRONMENT, *supra* note 13, at 26 n.72.

^{39.} Id. at 24.

^{40.} Id. at 23.

^{41.} PR OR PROGRESS?, supra note 13, at 35.

^{42.} PROFIT BEFORE HUMAN RIGHTS AND THE ENVIRONMENT, *supra* note 13, at 24–25(explaining that the levels of copper and zinc (2.5 mg/l and 9.4 mg/l, respectively) were eight times higher than the respective thresholds set by the Congolese Mining Regulation); *Id.*

^{43.} See Atibu et al., supra note 37, at 26.

^{44.} PROFIT BEFORE HUMAN RIGHTS AND THE ENVIRONMENT, *supra* note 13, at 26.

^{45.} Id. at 25.

^{46.} Id. at 24.

let alone for drinking. KCC discharges waste that is rich in ore and full of acid. That is what is behind the death of the fish and the drying-up of our fields. 47

The pollution of the Luilu River also affected the community's right of access to water. In the wake of the spills, local residents avoided using the river water for agricultural purposes out of fear of contaminating crop harvests.⁴⁸ Accordingly, there were "virtually no viable fields"⁴⁹ in the surrounding area. Researchers, moreover, recorded cobalt concentrations in the river fifty-three times the threshold for drinking water set by the WHO.⁵⁰ The lack of clean water was "disastrous"⁵¹ for the community, as residents were forced to dig small wells in their gardens and "filter"⁵² the water in buckets over the course of six or more hours. This standing water provided ideal breeding grounds for mosquitoes to lay their eggs, which subsequently spread disease throughout the community.⁵³ In response, KCC promised to construct wells that would serve roughly a third of the area⁵⁴ but, after more than a decade, those facilities do not appear to be built.⁵⁵

Community concerns were renewed in 2021 when African Resources Watch (AFREWATCH), a non-governmental organization dedicated to protecting human rights in the natural resources sector, published a press release stating that "huge quantities of sulfuric acid" from the KCC plant spilled into several waterways, including the Luilu River, in March 2021 following an explosion.⁵⁶ According to AFREWATCH, KCC "took no relevant measures" to secure the site or inform the surrounding populations of the incident.⁵⁷ Acid clouds were subsequently visible along the impacted waterways, while the population downstream from the Luilu River "complained of

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47. Id. at 26.
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^{48.} PR OR PROGRESS?, supra note 13, at 35.

^{49.} Id.

^{50.} *Id.* at 9.

^{51.} Id. at 84-85.

^{52.} Id. at 84.

^{53.} Id. at 85.

^{54.} See Incomplete Due Diligence, supra note 13, at 44.

^{55.} See id.

^{56.} Explosion of the Sulphuric Acid Tanks of KCC, A Subsidiary of Glencore, AFREWATCH Denounces the Negligence of the Company and the Complicity of the Congolese State and Demands an Investigation and Reparation, AFREWATCH (Apr. 7, 2021), https://afrewatch.org/explosion-of-the-sulphuric-acid-tanks-of-kcc-a-subsidiary-of-glencore-afrewatch-denounces-the-negligence-of-the-company-and-the-complicity-of-the-congolese-state-and-demands-an-investigation-and-r/.

^{57.} *Id.*

suffocating odors, cough and cold, especially during in the [sic] evening."58 Glencore denied that an explosion occurred; instead, it acknowledged there was a "limited release" of sulfuric acid "during maintenance work."59 The corporation did not identify the exact quantity of sulfuric acid spilled, but stated that KCC engaged with local authorities, community members, and the Department of the Environment following the incident.60 No report appears to have been published on the incident or its potential environmental or human health effects.

2. Mutanda Mining Sàrl

MUMI, another Glencore subsidiary in the DRC, is the world's largest cobalt mine and is responsible for twenty percent of the global cobalt supply. 61 While KCC's continued discharging of wastewater has badly damaged the Luilu River ecosystem, MUMI's conduct has allegedly caused extensive damage to the environment within the Basse-Kando game reserve. According to a 2014 report by Bread for All, Fastenopfer, and Rights and Accountability in Development (RAID), the official approach maintained by MUMI and Glencore for years was to "ignore the existence" 62 of the protected area altogether in official documents. Despite the fact that the mine is squarely located within the reserve, it was not mentioned within a single line of analysis in multiple sustainability reports and environmental impact assessments.63 By the time Glencore acknowledged Basse-Kando in a 2014 sustainability document, there had already been a mass elephant exodus across the Zambian border and a marked decline in the reserve's hippopotamus, blackbuck, lechwe, aquatic civet, and

^{58.} Id.

^{59.} Glencore's KCC Mine in Congo Had Acid Spill on March 16, REUTERS (Apr. 6, 2021, 3:15 PM), https://www.reuters.com/article/us-congo-mining-glencore/glencores-kcc-mine-in-congo-had-acid-spill-on-march-16-idUSKBN2BT2QS.

^{60.} *Id*.

^{61.} Glencore Closes Mutanda Mine, 20% of Global Cobalt Supply Comes Offline, BENCHMARK MIN. INTEL.: BLOG (Nov. 28, 2019),

https://www.benchmarkminerals.com/glencore-closes-mutanda-mine-20-of-global-cobalt-supply-comes-offline/. Glencore temporarily closed the mine in November 2019 for care and maintenance but reopened it for production near the start of 2022. See Yadarisa Shabong & Clara Denina, Glencore's Cobalt Output Climbs on Mutanda Restart; Sticks to 2022 Targets, NASDAQ (Feb. 2, 2022),

https://www.nasdaq.com/articles/glencores-cobalt-output-climbs-on-mutandarestart-sticks-to-2022-targets-0.

^{62.} PR OR PROGRESS?, supra note 13, at 44.

^{63.} Id.

rock hyrax populations.⁶⁴ It is unclear what drove the animals away from the reserve, but some suspect that the noise from MUMI's mining machines, which run twenty-four hours a day, played a part in this development.⁶⁵

There are also allegations that MUMI, like KCC, has discharged effluent into the Kando River.⁶⁶ This theory is supported by the presence of white powder residue, which previously indicated pollution at the Luilu River,⁶⁷ as well as elevated levels of cobalt that "gave [researchers] cause for concern."⁶⁸ An official for the Congolese Institute for Nature Conservation (ICCN), which manages the area, believes that there is "'no doubt that [MUMI] open[s] the gates in the rainy season or when the retention basins overflow."⁶⁹ MUMI, however, reportedly refused to open a dialogue with ICCN, the Ministry of the Environment, or other stakeholders.⁷⁰ MUMI's lack of transparency has created widespread fear in nearby communities in the Kolwezi region, leading a local environmental organization to declare the "invasion" of the Basse-Kando reserve by MUMI an "'ecological disaster.'"⁷¹

In 2018, Bread for All and Fastenopfer again produced a report describing the environmental damage in Kolwezi.⁷² The report detailed repeated pollution to the area's farmlands over a six-year period.⁷³ For example, in 2013 and 2014, spills from MUMI affected over twenty-three hectares of land in the nearby village of Moloka.⁷⁴ As a result, the cassava, maize, rice, bean, pineapple and banana harvests of twenty-six families were ruined.⁷⁵ The pollution rendered the fields "unusable"⁷⁶ and "was so severe"⁷⁷ that it could be seen from satellite images. Similar spills continued to occur in Moloka as well as

 $^{64. \;\;}$ The hippopotamus population declined from 400 in 2003 to less than 50 in 2013, id.

^{65.} See id.

^{66.} Id. at 45.

^{67.} Id.

^{68.} In October 2013, cobalt levels were 8.995 mg/l. In January 2014, cobalt levels were 19.916 mg/l, $\it id.$ at 46.

^{69.} Id.

^{70.} Id. at 115.

^{71.} PREMICONGO is an organization based in Katanga, see id. at 44.

^{72.} INCOMPLETE DUE DILIGENCE, supra note 13.

^{73.} Id. at 2.

^{74.} *Id.*

^{75.} Id.

^{76.} *Id.* MUMI originally denied its role in the environmental disaster. However, after the Legal Aid Centre contacted local authorities, MUMI paid the farmers a total of USD \$65,330. *Id.*

^{77.} Id.

in the villages of Kaindu and Tshamundenda, which led to speculation that the incidents were not accidental. Glencore, however, reportedly refused to disclose the exact composition of the leaked substances and their toxicity through environmental analyses. Glencore and their toxicity through environmental analyses. Glencore and Significant environmental degradation caused by the KCC and MUMI mining operations. Relatedly, such resistance towards providing details and access concerning operations and substances released into local environments may fuel speculation as to the total environmental harm attributable to these two operations, particularly as media attention increasingly focuses on the lack of oversight in the DRC's cobalt mining industry.

B. HUMAN RIGHTS ABUSES ALLEGEDLY COMMITTED BY GLENCORE IN THE DEMOCRATIC REPUBLIC OF THE CONGO

According to the DRC's own estimates, about twenty percent of the cobalt extracted in the country is mined by roughly 150,000 *creuseurs*—some of them as young as seven.⁸¹ Although industrial mines are not legally permitted to employ *creuseurs*, cobalt mining operations regularly rely on these workers for extraction purposes.⁸² There is evidence of a healthy black market in the DRC that allows *creuseurs* to (1) work as a hired hand and earn a fee; (2) join a team that shares its earnings with the mine owner; (3) enter a business arrangement with an investor who funds the mining; or (4) trespass on industrial sites and sell the cobalt they mine to an intermediary.⁸³

Regardless of the route each *creuseur* chooses, it likely involves working long hours in unsafe conditions without basic protective equipment, such as facemasks, gloves, or work clothes.⁸⁴ It is common for these miners to work in underground tunnels using only a chisel, mallet, or other rudimentary hand tools.⁸⁵ Similarly, adult and child *creuseurs* frequently dig for cobalt in the discarded byproducts

^{78.} See id. at 2-3.

^{79.} Id

^{80.} See e.g., Kara, supra note 7; Watts, supra note 28.

^{81.} AMNESTY INT'L, "THIS IS WHAT WE DIE FOR" HUMAN RIGHTS ABUSES IN THE DEMOCRATIC REPUBLIC OF THE CONGO POWER THE GLOBAL TRADE IN COBALT 4 (2016), https://www.amnesty.org/en/documents/afr62/3183/2016/en/.

^{82.} See Complaint, supra note 14.

^{83.} AMNESTY INT'L, supra note 81, at 5.

^{84.} Id.

^{85.} Id.

leftover from industrial mining processes.⁸⁶ These work conditions carry an immense human cost, as chronic exposure to cobalt dust can lead to a variety of respiratory issues, from asthma to pneumonia to hard metal lung disease.⁸⁷ Likewise, cobalt extraction releases radioactive emissions and particles that can cause cancer, vision problems, heart issues, nausea, and thyroid damage.⁸⁸

The communities near Glencore subsidiary cobalt mines in the DRC have already been exposed to these potential risks. A 2009 study determined that the urinary cobalt concentrations in DRC's mining districts were "the highest ever reported for a general population,"⁸⁹ with eighty-seven percent of children exceeding the occupational cobalt limit value of fifteen milligrams per liter. Another study found that women in southern parts of DRC, encompassing the Kolwezi region, "had metal concentrations that are among the highest ever reported for pregnant women,"⁹⁰ while "[p]aternal occupational mining exposure was the factor most strongly associated with birth defects [in children of miners]".⁹¹

In addition to these health considerations, artisanal cobalt mining is associated with serious occupational hazards. Hand-dug tunnels can extend as far as ten meters or more underground without structural support or proper ventilation. Although there is a lack of data on fatalities, these tunnels are prone to collapse and accidents are said to occur frequently. From September 2014 to December 2015, Radio Okapi, the radio station run by the United Nations (UN) in the DRC, reported over eighty *creuseur* fatalities in the former province of Katanga. It is important to note that "the true [death] figure is likely to be far higher as many accidents go unrecorded and bodies are left buried underground."

^{86.} Id.

^{87.} Rafael Futoshi Mizutani et al., *Hard Metal Lung Disease: A Case Series*, 42 J. Bras. Pneumol. 447, 447 (2016).

^{88.} Hisan Farjana et al., supra note 1, at 1.

^{89.} Celestin Lubaba Nkulu Banza et al., *High Human Exposure to Cobalt and Other Metals in Katanga, a Mining Area of the Democratic Republic of Congo*, 109 ENV'T RSCH. 745, 750 (2009).

^{90.} Daan Van Brusselen et al., Metal Mining and Birth Defects: A Case-Control Study in Lubumbashi, Democratic Republic of the Congo, 4 LANCET e158, e165 (2020).

^{91.} Id. at e166.

^{92.} AMNESTY INT'L, supra note 81, at 6.

^{93.} Id.

^{94.} Id. In 2015, Katanga was split into Haut-Katanga, Haut-Lomami, Lualaba and Tanganyika provinces. INT'L CRISIS GRP., KATANGA: TENSIONS IN DRC'S MINERAL HEARTLAND 12 (2016), https://www.crisisgroup.org/africa/central-africa/democratic-republic-congo/katanga-tensions-drcs-mineral-heartland.

^{95.} AMNESTY INT'L, supra note 81, at 6.

An incredible number of children suffer in DRC's cobalt mines. In 2014, the UN Children's Fund estimated that 40,000 youths work in the mining region for just several dollars a day. Gompounding the significant occupational hazards described above, these child creuseurs are exposed to physical violence, drug abuse, and sexual exploitation on a regular basis. Some of the children interviewed by researchers admitted to working twelve to twenty-four hours daily, soften with the use of drugs to suppress their hunger. Young girls also work as creuseurs, searching for cobalt stones on the ground, then washing, crushing, and sorting the minerals. These labor conditions have led to an abundance of heartbreaking images, such as the one described by Siddharth Kara, a leading scholar on modern slavery, during his field research in the DRC:

I found the child, a girl caked in dirt with an ailing newborn strapped to her back, hacking at the ground for cobalt at Lake Malo, not far from Kolwezi. Her limbs were like sticks, her face was crusted with mucus and she had a rib-cracking cough. The horror of her wretched existence could never be remedied by an academic report ... 102

In December 2019, the human rights firm International Rights Advocates filed a lawsuit in the District of Columbia against Apple, Google, Tesla, Dell, and Microsoft on behalf of fourteen children from the DRC.¹⁰³ The court dismissed the case in November 2021, finding that the supply chain was too long to identify a causal link between the plaintiffs and the tech companies.¹⁰⁴ However, the complaint

^{96.} Jane Wakefield, *Apple, Samsung and Sony Face Child Labour Claims*, BBC (Jan. 19, 2016), https://www.bbc.com/news/technology-35311456.

^{97.} Amnesty Int'L, supra note 81, at 30.

^{98.} Id. at 6.

^{99.} Niarchos, supra note 6.

^{100.} Alex Crawford, *Meet Dorsen, 8, Who Mines Cobalt to Make Your Smartphone Work,* SKY NEWS (Feb. 28, 2017), https://news.sky.com/story/meet-dorsen-8-whomines-cobalt-to-make-your-smartphone-work-10784120.

^{101.} WOMEN'S INT'L LEAGUE FOR PEACE & FREEDOM, LIFE AT THE BOTTOM OF THE CHAIN: WOMEN IN ARTISANAL MINES IN DRC 11 (2016), https://wilpf.org/wp-content/uploads/2016/10/WomenInArtisanalMinesInDRC_web.pdf.

^{102.} Siddharth Kara, *I Saw the Unbearable Grief Inflicted on Families by Cobalt Mining. I Pray for Change*, GUARDIAN (Dec. 16, 2019), https://www.theguardian.com/global-development/commentisfree/2019/dec/16/i-saw-the-unbearable-grief-inflicted-on-families-by-cobalt-mining-i-pray-for-change [hereinafter *I Pray for Change*].

^{103.} Complaint, supra note 14.

^{104.} *Doe v. Apple*, No. 1:19-cv-03737 (D.C. Cir. Nov. 2, 2021). This opinion dismisses Complaint *supra* note 14, *id.* at 21.

remains relevant, as the accusations levied at the defendants also highlight the potential commission of crimes against humanity associated with Glencore's cobalt mining activities in the DRC.¹⁰⁵

The plaintiffs—a representative group of young miners—alleged that Glencore sells cobalt mined via child labor to Umicore, 106 a Belgian company that refines and supplies the cobalt to major tech companies in the United States and Asia. 107 The complaint details Glencore's "primitive" 108 mining conditions in which child creuseurs are "forced to work in extremely dangerous" 109 circumstances, causing them to "regularly die in tunnel collapses, pit wall collapses, or from falling into unprotected shafts."110 Those who survive these hazards "suffer serious injury and are maimed for life, unable to work again and unable to support themselves."111 The court pointed out that these facts were not enough to tie the defendant tech companies to the litigation, but acknowledged that the complaint "implicates Glencore and Umicore in some cobalt-gathering venture"112—one in which "Glencoe would provide Umicore with DRC cobalt... and Umicore would whitewash this blood-stained cobalt and sell it"113 to the defendant tech companies. According to the plaintiffs, moreover, this venture "was established to mine cobalt under horrific conditions using young children to perform hazardous labor."114

While this initial effort at securing civil accountability for the suffering of *creuseurs* working in DRC cobalt mines in United States courts ultimately proved unsuccessful, the allegations in the complaint, combined with the above-cited reports, raise serious questions regarding whether international crimes may have been committed by individuals engaged in cobalt mining in the DRC, including Glencore as well as Umicore and other potential actors in the supply chain. As the following section explains, the severe environmental degradation associated with this industry are paradigmatic examples of the types of harms proponents of ecocide as a new international crime hope to address. However, theoretical

^{105.} Complaint, supra note 14.

^{106.} Umicore was incorporated in 1906 and "was a major participant in the horrific pillaging and exploitation of the Congo by King Leopold and the companies associated with him." Complaint, *supra* note 14, at ¶ 71.

^{107.} Id. at ¶ 25.

^{108.} Id. at ¶ 64.

^{109.} Id.

^{110.} Id.

^{111.} Id.

^{112.} Doe v. Apple, supra note 104, at 21.

^{113.} Complaint, supra note 14, at ¶ 71.

^{114.} Id.

assessments of whether key Glencore actors would be responsible for participating in acts of ecocide in the DRC are not the end of the story when it comes to the potential role of international criminal law in addressing the country's mining sector. After discussing cobalt mining practices as an apparent form of ecocide, this article considers whether existing international crimes, in the form of crimes against humanity, may provide a potential avenue for pursuing criminal accountability under current formulations of international law.

II. GLENCORE'S ALLEGED CONDUCT IN THE DEMOCRATIC REPUBLIC OF THE CONGO AND LIABILITY UNDER THE PROPOSED DEFINITION OF ECOCIDE

Ecocide first entered the international consciousness during the Vietnam War, when American biologist Arthur W. Galston publicly spoke out against the mass destruction of nature caused by the United States military program known as "Operation Ranch Hand." From 1961 to 1971, United States planes dropped more than twenty million gallons of Agent Orange, a "dioxin-contaminated and exceedingly toxic herbicide" that has since wreaked ongoing havoc on Vietnam's ecosystems and citizens. In the ensuing decades, lawmakers and environmentalists endeavored to criminalize ecocide during times of peace and war with varying degrees of success. As discussed below, the ecocide movement has long-been animated by the desire to criminalize large-scale environmentally destructive activities such as those associated with the cobalt mining industry in the DRC.

A. THE ECOCIDE MOVEMENT

As the Vietnam War drew to a close, ecocide was the focus of numerous scholarly books 119 and articles 120 as well as the 1972 UN

^{115.} Galston compared ecocide to genocide at a 1970 conference titled *War Crimes and the American Conscience*. Bronwyn Leebaw, *Scorched Earth: Environmental War Crimes and International Justice*, 12 Am. Persp. on Pol. 770, 777 (2014).

^{116.} H. Patricia Hynes, *The Legacy of Agent Orange in Vietnam*, 28 PEACE REV.: J. Soc. Just. 114, 115 (2016).

^{117.} Id.

^{118.} See discussion infra Part III.A.

^{119.} See e.g., BARRY WEISBERG, ECOCIDE IN INDOCHINA: THE ECOLOGY OF WAR (1970).

^{120.} Frédéric Robert, *Legacy and Impact of the American New Left: National and International Influence*, 6 AM. INT'L J. OF CONTEMP. RSCH. 15, 22 (2016); Patrick Foster, Climate Torts and Ecocide in the Context of Proposals for an International Environmental Court, CUNY ACAD. WORKS 52–53 (June 2011) (M.A. thesis, City Coll. of

Conference on the Human Environment in Stockholm, Sweden, the first global environmental conference.121 These concerns were reflected in the text of the 1977 Protocol Additional to the Geneva Conventions of 12 August 1949 (Protocol I), which states that "[c]are shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage."122 In 1978, forty-eight states agreed to the Environmental Modification Convention (ENMOD) and, in so doing, condemned the use of wartime ecocide. 123 ENMOD signatories pledged "not to engage in military or any other hostile use of environmental modification techniques having widespread, longlasting or severe effects as the means of destruction, damage or injury to any other State Party."124 Although neither Protocol I nor ENMOD specifically uses the term "ecocide," their focus on environmental damage described using terms such as "widespread," "longlasting," "long-term," and "severe," can be seen as conceptually analogous to ecocide. 125

The 1990s kickstarted the passage of numerous national laws that criminalized ecocide during times of peace and war in Vietnam and several former republics of the Soviet Union. The international community took a step in that direction with the 1991 creation of the Draft Code of Crimes Against the Peace and Security of Mankind, which would form the basis of the Rome Statute of the ICC. The Code, developed by the International Law Commission (ILC), outlaws twelve crimes, including an offense largely analogous to ecocide ban, which would criminalize "willfully caus[ing] or order[ing] the causing of widespread, long-term and severe damage to the natural

N.Y.) (quoting Herbert Marcuse, *Ecology and Revolution*, in Introduction to Ecology: Key Concepts in Critical Theory 52 (Carolyn Merchant ed., 1999).

^{121.} *United Nations Conf. on the Env't, 5–16 June 1972, Stockholm,* UNITED NATIONS (last visited Nov. 28, 2021) https://www.un.org/en/conferences/environment/stockholm1972.

^{122.} Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), art. 55, 1125 U.N.T.S. 3.

^{123.} Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD), UNITED NATIONS (last visited Nov. 27, 2021) https://www.un.org/disarmament/enmod/.

 $^{124.\;}$ Convention on the Prohibition of Military or Any Other Hostile Use of Env't Modification Tech., art. 1, 1108 U.N.T.S. 153.

^{125.} Id.

^{126.} Those countries include Armenia, Belarus, Kyrgyzstan, Georgia, Russian Federation, Republic of Moldovia, Tajikistan, Kazakhstan, Ukraine, and Uzbekistan. Bedirhan Erdem & Uğur Orhan, *Ecocide, in* EARTH LAW: EMERGING ECOCENTRIC LAW—A GUIDE FOR PRACTITIONERS 333, 342–43 (Anthony R. Zelle et al. eds., 2021).

^{127.} Anastacia Greene, The Campaign to Make Ecocide an International Crime: Quixotic Quest or Moral Imperative?, FORDHAM ENV'T L.R. 1, 15 (2019).

environment."¹²⁸ However, at the request of the United Kingdom, France, and the Netherlands,¹²⁹ the ILC removed Article 26 from the final version of the code before it went to a vote at the UN General Assembly.¹³⁰ As such, "the Rome Statute lost any protections for the environment outside of war crimes."¹³¹ Although Article 8(2)(b)(iv) of the Rome Statute outlaws "widespread, long-term and severe damage to the natural environment"¹³² during international armed conflicts, no individual has been charged with such a crime at the ICC.¹³³

In the years that followed the 1998 adoption of the Rome Statute, Polly Higgins, a Scottish barrister and environmentalist, continued to fight for an international law criminalizing peacetime ecocide. 134 In 2010, she released a model law to the UN Law Commission that defined ecocide as "acts or omissions committed in times of peace or conflict "135" that "cause, contribute to, or may be expected to cause or contribute to serious ecological, climate or cultural loss or damage to or destruction of ecosystem(s) ... such that peaceful enjoyment by the inhabitants has been or will be severely diminished."136 In 2019, Vanuatu, a small island nation particularly vulnerable to climate change, argued in a statement at the ICC's annual Assembly of States Parties that outlawing ecocide under the Rome Statute "merits serious discussion."137 Over the last two years, France, Belgium, Sweden, Finland, and Luxembourg have all voiced varying degrees of support for ecocide to be enshrined in the Rome Statute as the fifth category of crime under the jurisdiction of the Court, joining genocide, crimes against humanity, war crimes and (eventually) aggression. 138

^{128.} Id. at 15-16.

^{129.} George Monbiot, *The Destruction of the Earth is a Crime. It Should be Prosecuted*, GUARDIAN (Mar. 28, 2019, 3:00 AM), https://www.theguardian.com/commentisfree/2019/mar/28/destruction-earth-crime-polly-higgins-ecocidegeorge-monbiot.

^{130.} Greene, supra note 127, at 16.

^{131.} *Id.*

^{132.} Rome Statute, supra note 24, art.8(2)(b)(iv).

^{133.} Greene, supra note 127, at 19.

^{134.} See Polly Higgins, STOP ECOCIDE INT'L, https://www.stopecocide.earth/polly-higgins (last visited Nov. 27, 2021).

^{135.} *Ecocide Crime*, ECOCIDE L., https://ecocidelaw.com/polly-higgins-ecocide-crime/ (last visited Nov. 20, 2022).

^{136.} Id.

^{137.} Vanuatu Calls for International Criminal Court to Seriously Consider Recognising Crime of Ecocide, STOP ECOCIDE INT'L (Dec. 3, 2019), https://www.stopecocide.earth/press-releases-summary/vanuatu-calls-for-international-criminal-court-to-seriously-consider-recognizing-crime-of-ecocide-.

^{138.} *See Leading States, Key Dates*, STOP ECOCIDE INT'L, https://www.stopecocide.earth/leading-states (last visited Nov. 27, 2021).

One of the most notable developments to come out of the reinvigorated ecocide movement is the publication of a new definition of "ecocide" in June 2021.¹³⁹ An expert panel of twelve prominent international lawyers¹⁴⁰ worked on the definition for six months in the hopes that it "might serve as the basis of consideration for an amendment to the Rome Statute of the International Criminal Court (ICC)."¹⁴¹

The revised definition describes ecocide as "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." The language employed by the panel is very much deliberate. The threshold terms "widespread," "long-term," and "severe" are all featured in Article 8(2)(b)(iv) of the Rome Statute, 143 while the use of the terms "unlawful" and "wanton" as another set of threshold requirements draws a parallel with Article 8(2)(a)(iv) concerning the definition of war crimes. Although there are numerous definitions that could inform an amendment to the Rome Statute, this paper will analyze Glencore's alleged environmental damage under the proposed ecocide definition, as it will likely serve as the starting point of any serious Rome Statute amendment discussions in the future.

^{139.} Stop Ecocide Found., Independent Expert Panel for the Legal Definition of Ecocide: Commentary and Core Text 2 (2021), https://static1.squarespace.com/static/5ca2608ab914493c64ef1f6d/t/60d7479cf8e7e5461534dd07/162472131443 0/SE+Foundation+Commentary+and+core+text+revised+%281%29.pdf.

^{140.} This panel included Philippe Sands, KC; Justice Florence Mumba, a Zambian judge at the Extraordinary Chambers in the Courts of Cambodia (Khmer Rouge Tribunal); former ICC Judge Tuiloma Neroni Slade; Professor Christina Voigt, Chair of the International Union for Conservation of Nature World Commission on Environmental Law; international criminal lawyer Richard J. Rogers; and Rodrigo Lledó, Director of the Fundación Internacional Baltasar Garzón. *Top International Lawyers to Draft Definition of "Ecocide"*, STOP ECOCIDE INT'L (Nov. 17, 2020), https://www.stopecocide.earth/press-releases-summary/top-international-lawyers-to-draft-definition-of-ecocide.

^{141.} STOP ECOCIDE FOUND., *supra* note 139, at 2.

^{142.} Id. at 5.

^{143.} Rome Statute, supra note 24, art. 8(2)(b)(iv).

^{144.} *Id.* at art. 8(2)(a)(iv) ("Extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly."). The term "unlawful" is also used throughout the Rome Statute. *See e.g., id.* arts. 31(1)(c), 33(1)(b), 33(1)(c), 33(2), 85(1); *id.* arts. 7(2)(f), 8(2)(a)(vii), 31(1)(a), 31(1)(b) (as "unlawfulness").

B. GLENCORE'S POTENTIAL CRIMINAL LIABILITY UNDER THE NEW PROPOSED DEFINITION OF ECOCIDE

To be clear, assessments of whether Glencore and its subsidiaries have "committed" ecocide is, at this point, purely an exercise in hypothetical forecasting. The Rome Statute limits the ICC's jurisdiction to "natural persons," 145 thus criminal liability will almost certainly¹⁴⁶ be restricted in this case to Glencore's executives and officials. More importantly, as ecocide has not yet been enshrined in the Rome Statute, nor criminalized by any international judicial institution, prosecuting Glencore as a corporation, or key individual corporate officers for ecocide, would violate the fundamental international criminal law principle of nullum crimen sine lege (no crime without law). 147 Although tribunals "have rejected, or impliedly denied, the absolute positivistic version of the principle in favor of the general applicability of the values underlying the principle,"148 that interpretation would likely not apply to the ICC, as Article 22 of the Rome Statute expressly endorses nullum crimen sine lege as well as strict interpretations of definitions of crimes.¹⁴⁹ Nevertheless, by

^{145.} Id. art. 25(1).

^{146.} The question of whether the ICC can prosecute corporations for violations of the Rome Statute remains a point of debate. David Scheffer, Director Emeritus of the Center for International Human Rights at Northwestern University, has argued that "atrocity crimes arising as a consequence of corporate operations or complicity in government commission of atrocity crimes to facilitate corporate investments might trigger the jurisdiction of the ICC." David Scheffer, Corporate Liability under the Rome Statute, HARV. INT'L L. J. (July 2016), https://harvardilj.org/2016/07/corporateliability-under-the-rome-statute/. However, "[t]ough requirements of personal, territorial, temporal, and subject-matter jurisdiction requirements must still be met." Id. Likewise, Juan Pablo Calderon Mez, a Colombian human rights lawyer, has pointed out that Article 25(1) of the Rome Statute "does not prevent investigation and prosecution of industrialists for their role in directly or accessorily participating, as per Article 25(3), in crimes under ICC jurisdiction." Juan Pablo Calderon Mez, ICC Personal Jurisdiction on Corporations for Criminal Liability and/or Civil Liability for Reparations, HARV. INT'L L. J. (May 2021), https://harvardilj.org/2021/05/iccpersonal-jurisdiction-on-corporations-for-criminal-liability-and-or-civil-liability-forreparations/. However, despite these gray areas, both scholars ultimately concluded that amending the Rome Statute to expressly allow for the prosecution of corporations would be a more effective approach.

^{147.} Beth Van Schaack, *Crimen Sine Lege: Judicial Lawmaking at the Intersection of Law and Morals*, 97 GEO. L.J. 119, 139 (2008).

^{148.} *Id.* at 141. For example, in *Prosecutor v. Stakić*, the Appeals Chamber for the International Criminal Tribunal for the Former Yugoslavia held that the crime against humanity of "other inhumane acts" "cannot be regarded as a violation of the principle of *nullum crimen sine lege* as it forms part of customary international law. The function of this provision as a residual category is clear." Prosecutor v. Stakić, Case No. IT-97-24-A, Judgment, ¶ 315 (Mar. 22, 2006).

^{149.} Rome Statute, supra note 24, art. 22.

examining environmental harm common to the cobalt mining industry, this representative analysis will consider the practical application of the proposed ecocide definition, thereby highlighting the potential liability of cobalt mining executives should they carry out the type of harms alleged after some variation of ecocide becomes enforceable law, be it at the ICC or another jurisdiction.

1. Mens rea

The current proposed definition of ecocide requires the environmentally harmful action(s) to be "requiring awareness of a substantial likelihood of severe and either widespread or long-term damage." This *mens rea* requirement reflects a recklessness or *dolus eventualis* standard that the ecocide panel argues is "sufficiently onerous to ensure that only those persons with significant culpability for grave damage to the environment will be held responsible." However, this definition is broader than the default *mens rea* found in Article 30 of the Rome Statute, which states that intent occurs when a person "means to cause that consequence or is aware that it will occur in the ordinary course of events." The panel offered the following explanation for their decision:

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.¹⁵³

Although *dolus eventualis* is not incorporated in Article 30 of the Rome Statute, the ICC Pre-Trial Chamber shed light on this *mens rea* standard in *Prosecutor v. Lubanga*.¹⁵⁴ The chamber held that *dolus eventualis* can be inferred from "the awareness by the suspect of the substantial likelihood that his or her actions or omissions would result in the realisation of the objective elements of the crime"¹⁵⁵ and

^{150.} STOP ECOCIDE FOUND., supra note 139, at 11.

^{151.} Id.

^{152.} Rome Statute, *supra* note 24, art. 30(2)(b).

^{153.} STOP ECOCIDE FOUND., supra note 139, at 11.

^{154.} Prosecutor v. Lubanga, ICC-01/04-01/06, Decision on the Confirmation of Charges (Jan. 29, 2007), https://www.icc-cpi.int/sites/default/files/CourtRecords/CR2007_02360.PDF.

^{155.} Id. at ¶ 353(i).

"the decision by the suspect to carry out his or her actions or omissions despite such awareness." ¹⁵⁶ Given the extensive body of information detailing the harm associated with toxic mining effluents, the decision to dump wastewater into rivers and farmlands would most likely establish a *prima facie* showing of *dolus eventualis* (if not knowledge as defined by the ICC). ¹⁵⁷ However, as those actions would likely implicate KCC and MUMI employees, additional evidence would need to be uncovered to support a showing of at least *dolus eventualis* on the part of Glencore actors outside the DRC. As additional scientific research is conducted and disseminated on the harmful effects of cobalt mining, it may eventually be easier to prove *mens rea* at the executive level in the future. ¹⁵⁸

2. Severe and either widespread or long-term

The new definition of ecocide also requires that the environmental damage at issue be "severe and either widespread or long-term." As mentioned earlier, these terms (or slight variations thereof) appear in Article 8(2)(b)(iv) of the Rome Statute, Protocol I, ENMOD, and the 1991 ILC Draft Code of Crimes Against the Peace and Security of Mankind. The panel admittedly arrived at a "midpoint" between ENMOD's disjunctive and easily satisfied language ("widespread, long-lasting or severe") and the high bar created by Protocol I and the Rome Statute's conjunctive test ("widespread, long-term and severe"). The environmental harms caused by the operations of both KCC and MUMI appear to be at least long-term and severe in nature. However, it is unclear whether such harms would be found to be "widespread" according to previous definitions of the term in the environmental context.

a. Severe

All ecocide crimes under the new definition must involve

^{156.} Id. at ¶ 353(ii).

^{157.} See e.g., Mike Holland, Reducing the Health Risks of the Copper, Rare Earth and Cobalt Industries: The Transition to a Low-Carbon Economy (paper presented at the 2019 OECD Green Growth and Sustainable Development Forum, Paris, Fr., Nov. 26–27, 2019).

^{158.} See discussion supra Part The Ecocide Movement

^{159.} STOP ECOCIDE FOUND., supra note 139, at 5.

^{160.} See discussion supra Part The Ecocide Movement

^{161.} Stop Ecocide Found., supra note 139, at 8.

^{162.} Id.

"severe" 163 environmental harm. According to the panel, "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." 164 This language is an adaptation of the UN Committee on Disarmament's interpretation of the same term used in ENMOD. 165 As such, the definition provided by the panel offers helpful guidance given that Article 8(b)(iv) of the Rome Statute does not define "severe" and the ICC has yet to adjudicate that particular provision. 166 In Glencore's case, the years-long ecological damage to Kolwezi's waterways and farmlands described above seemingly involves "very serious adverse changes, disruption or harm," 167 although this determination would likely be made on a case-by-case basis at the ICC.

b. Widespread

Once the "severe" requirement has been met, the alleged environmental harm must be either "widespread" or "long-term." 168 "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."169 This definition is a departure from prior attempts to quantify what "widespread" means in terms of square kilometers. 170 The Committee on Disarmament interpreted "widespread" within the context of ENMOD to mean harm encompassing "several hundred square kilometers."171 Similarly, background material to Protocol I defines "widespread" as "thousands of square kilometers." 172 The ecocide panel argued 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."173 Quantifying harm in terms of square kilometers, according to the panel, is also "inappropriate when

^{163.} Id.

^{164.} Id. at 5.

^{165.} *Id.* at 8 ("serious or significant disruption or harm to human life, natural and economic resources or other assets.").

^{166.} Greene, supra note 127, at 30.

^{167.} STOP ECOCIDE FOUND., supra note 139, at 8.

^{168.} Id. at 5.

^{169.} Id.

^{170.} Id. at 9.

^{171.} Id.

^{172.} Id.

^{173.} Id.

dealing with harms to certain climatic systems, which do not have definable areas."174

The alleged environmental harm committed by Glencore's subsidiaries in the DRC likely does not extend beyond a limited geographic area or cross state boundaries. As the damage in question is confined to several villages and the Basse-Kando game reserve in Kolwezi, no state boundaries have been crossed. 175 The total size of the affected areas, moreover, appears to be relatively small.¹⁷⁶ It is unclear how many square kilometers of Basse-Kando land is impacted by cobalt pollution, but the entire reserve boasts 17,500 square hectares, or 175 square kilometers. 177 The environmental damage in the reserve likely represents just a small fraction of that figure, which falls well short of the square kilometer criteria put forward by ENMOD's Committee on Disarmament and Protocol I mentioned above. While the proposed ecocide definition is not confined to either of those "widespread" interpretations, such calculations are helpful for comparative purposes. Additionally, there is currently no information that suggests the cobalt pollution extends beyond a limited geographic area, although the tainting of waterways could theoretically expand the magnitude and location of the damage.

The environmental harm in question could still satisfy the "widespread" requirement if it affected an entire ecosystem or species or a large number of human beings.¹⁷⁸ The panel embraced this "ecocentric" concept of "widespread" by adapting jurisprudence from the ICC, such as the Pre-Trial Chamber's holding in *Prosecutor v. Bemba* that in the context of the "widespread or systematic attack" requirement of crimes against humanity, "the adjective 'widespread' refers to 'the large-scale nature of the attack and the number of targeted persons."¹⁷⁹ Under the panel's broader "widespread" interpretation, the ICC could, in addition to analyzing human impacts, consider the range of flora and fauna affected by the contamination of waterways and farmlands, ¹⁸⁰ although it remains unclear if pollution

^{174.} Id.

^{175.} See discussion supra Part The Ecocide Movement

l76. *Id.*

^{177.} Reserve de la Basse Kando, PAPACO, https://papaco.org/wp-content/uploads/2015/04/METT-Basse-Kando.pdf (last visited Nov. 23, 2021).

^{178.} Stop Ecocide Found., *supra* note 139, at 5.

^{179.} *Id.* at 9; Prosecutor v. Bemba, ICC-01/05-01/08, Decision on the Prosecutor's Application for a Warrant of Arrest against Jean-Pierre Bemba Gombo, ¶ 33 (June 10, 2008), https://www.icc-cpi.int/sites/default/files/CourtRecords/CR2008_04180.PDF.

Jean-Pierre Bemba Gombo, ¶ 33 (June 10, 2008).

^{180.} See discussion supra Part II.A.

from cobalt mining practices in the Kolwezi region have affected an "entire ecosystem or species or a large number of human beings." ¹⁸¹

c. Long-term

If the alleged environmental harm caused by Glencore's subsidiaries does not meet the requirements for "widespread," it would have to alternatively qualify as being "long-term" in nature. Long-term" means "damage which is irreversible or which cannot be redressed through natural recovery within a reasonable period of time. According to the panel, "[w]hat constitutes a 'reasonable period of time' will depend on the particular circumstances of any situation. It is commentary departs notably from the Committee on Disarmament's interpretation of the closely related "long-lasting" term in ENMOD, which is defined as a season or a period of several months. It also departs from the background material to Protocol I's interpretation of "long-term" as "a period of decades. The ecocide panel argued that both interpretations are "somewhat arbitrary" and "problematic," as the latter is likely too short, while the former is possibly too long.

It is unclear if the environmental harm at issue satisfies the "long-term" elements. An irreversible standard is an extremely high bar to cross and none of the evidence mentioned earlier is indicative of potentially permanent environmental damage, such as radioactive waste contamination or the extinction of flora or fauna species. ¹⁸⁹ Conversely, ascertaining the reasonable natural recovery time of the areas affected by cobalt pollution is a fact-intensive exercise that is beyond the scope of this article. ¹⁹⁰ Pragmatically speaking, however, early ecocide prosecutions when and if the offense becomes law are likely to focus on either permanent or manifestly "long-term" harms. It appears that the harms caused by Glencore's subsidiary cobalt mining activities would satisfy this requirement as relevant harms

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182. Id.
183. Id.
184. Id. at 9.
185. Id.
186. Id.
187. Id.
188. Id.
189. See discussion supra Part The Ecocide Movement; Padmaparna Ghosh,
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181. STOP ECOCIDE FOUND., *supra* note 139, at 5.

Nuclear Power 101, NAT'L. RES. DEF. COUNCIL (Jan. 5, 2022), https://www.nrdc.org/stories/nuclear-power-101.

^{190.} STOP ECOCIDE FOUND., *supra* note 139, at 9.

have already spanned multiple years with seemingly no meaningful efforts made toward remediation. However, this remains an area of ambiguity, especially given the ongoing evolution of ecocide as a concept.

3. Unlawful or wanton acts

The ecocide panel set a second threshold out of concern that the "[s]evere and either widespread or long-term" requirement "may, taken alone, be overly inclusive."¹⁹¹ Accordingly, the "unlawful or wanton acts" prong "draws upon environmental law principles, which balance social and economic benefits with environmental harms through the concept of sustainable development."¹⁹²

The "unlawful" requirement of the proposed ecocide definition refers to acts that "are already prohibited in law." ¹⁹³ This includes acts that are unlawful either under international or national law. ¹⁹⁴ The panel made this decision because "[i]nternational 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." ¹⁹⁵

There are multiple laws protecting the environment in the DRC that Glencore appears to have broken. Article 48 of the country's constitution guarantees DRC citizens the right of access to drinking water, 196 while Article 53 guarantees the right to a healthy environment. 197 Relatedly, Article 55 prohibits the "spilling [or] the disposal in the internal waters or maritime spaces under national jurisdiction... of toxic, polluting or radioactive waste." 198 Similar constitutional provisions are enshrined in DRC's Law No. 11/009 on Fundamental Principles Relating to the Protection of the Environment 199 as well as its 2018 Mining Code. 200 Therefore, the substantial pollution of the Luilu River as well as the Moloka, Kaindu,

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191. Id. at 7.
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^{192.} Id.

^{193.} Id. at 10.

^{194.} Id.

^{195.} Id.

^{196.} Dem. Rep. Congo Const. of 2005 with amend through 2011, art. 48.

^{197.} Id. art. 53.

^{198.} Id. art. 55.

^{199.} See Loi N° 11/009 du 09 Juillet 2011 portant principes fondamentaux relatifs à la protection de l'environnement, arts. 29, 46, 49, 77, 78, 80 (Dem. Rep. Congo).

 $^{200.~}See~Loi~n^{\circ}18/001~du~09~mars~2018~modifiant~et~complétant~la~Loi~n^{\circ}~007/2002~du~11~juillet~2002~portant~Code~minier,~art.~285~(Dem.~Rep.~Congo).$

and Tshamundenda farmlands by Glencore's subsidiaries would almost certainly meet the "unlawful" definition.²⁰¹

The panel defines "wanton" as "reckless disregard for damage which would be clearly excessive in relation to the social and economic benefits anticipated."202 Although this "wanton" mens rea is once again broader than the default Article 30 standard, it nevertheless presents notable challenges. According to prominent international criminal law scholar Kevin Ion Heller, it will be "difficult enough"²⁰³ to establish that "the perpetrator was aware there was a substantial likelihood his or her acts would cause the required environmental damage."204 On the other hand, "it will be nearly impossible to prove that he or she was also aware the expected environmental damage would be clearly excessive in relation to the anticipated social and economic benefits."205 The ecocide panel defended this proportionality component on the grounds that it "reflects environmental law principles" 206 which frequently involve "a balancing of environmental harms against social and economic benefit."207

Establishing that key actors within Glencore or its subsidiaries acted with sufficient recklessness to satisfy ecocide's "wanton" prong will not be easy. Purposefully discharging effluent into rivers is probably enough to fulfill the reckless disregard element, but additional evidence would be needed to prove that the discharge did not occur accidentally and to tie relevant Glencore actors to the action. ²⁰⁸ Glencore, conversely, may argue that cobalt mining provides numerous social and economic benefits, such as living wages to workers, the development of rural villages, and a positive contribution to DRC's economy. Ascertaining whether the damage to the environment is "clearly excessive" in relation to the social and economic benefits of cobalt—and that Glencore executives were aware of this proportionality—would be a question of fact that also requires additional evidence. However, establishing wantonness may be a moot point given the variety of DRC laws the KCC and MUMI

^{201.} See discussion supra Part II.A.

^{202.} STOP ECOCIDE FOUND., supra note 139, at 5.

^{203.} Kevin Jon Heller, *Skeptical Thoughts on the Proposed Crime of "Ecocide" (That Isn't)*, OPINIO JURIS (June 23, 2021), http://opiniojuris.org/2021/06/23/skeptical-thoughts-on-the-proposed-crime-of-ecocide-that-isnt/.

^{204.} Id.

^{205.} Id.

^{206.} STOP ECOCIDE FOUND., supra note 139, at 10.

^{207.} Id

^{208.} See discussion supra The Ecocide Movement

subsidiaries appear to have repeatedly violated.²⁰⁹

C. ADDITIONAL FACTORS TO CONSIDER

As the above analysis indicates, it is uncertain if the environmental damage allegedly caused by Glencore's cobalt mining subsidiaries in the DRC would meet the requirements of the proposed ecocide definition. This is noteworthy because the ICC, the primary institution targeted by ecocide advocates, is tasked with trying "the most serious crimes of concern to the international community" and is only given the budget to pursue "a handful of prosecutions per year" 211 out of thousands of potential cases. Accordingly, the ICC prosecutor has historically avoided adjudicating cases where a conviction appears difficult to obtain. 212

On the other hand, a large majority of the thirty cases initiated by the ICC have had ties to the Global South, and all formally charged persons have been Black and/or Arab African men.²¹³ This has created a perception that Africans are "the sacrificial lambs in the ICC's struggle for global legitimation."²¹⁴ Prosecuting prominent officers of a Swiss company for the alleged harm done to the DRC's environment and population could represent an opportunity to shift a narrative that has plagued the Court since its inception.²¹⁵ This is not an unrealistic scenario as the ICC Office of the Prosecutor (OTP) mentioned in a 2016 policy paper that it hopes to "give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, *inter alia*, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land."²¹⁶

- 209. See discussion supra Part III.B.
- 210. Rome Statute, supra note 24, at pbml.
- 211. Margaret M. deGuzman, *Choosing to Prosecute: Expressive Selection at the International Criminal Court*, 33 MICH. J. INT'L L. 265, 267 (2012).
- 212. See e.g., Prosecutor v. Lubanga, ICC-01/04-01/06, Judgment pursuant to Article 74 of the Statute (Mar. 14, 2012), https://www.icc-cpi.int/sites/default/files/CourtRecords/CR2012_03942.PDF.
- 213. Cases, INT'L CRIM. CT., https://www.icc-cpi.int/Pages/cases.aspx (last visited Nov. 7, 2022).
- 214. deGuzman, *supra* note 211, at 272 (quoting Charles Jalloh, *Regionalizing International Criminal Law?*, 9 INT'L CRIM. L. REV. 445, 463 (2009)); *see* Randle C. DeFalco & Frédéric Mégret, *The Invisibility of Race at the ICC: Lessons from the US Criminal Justice System*, 7 LONDON R. INT'L L. 55 (2019), for a more thorough discussion of this issue.
 - 215. See id.
- 216. INT'L CRIM. CT., OFF. OF THE PROSECUTOR, POLICY PAPER ON CASE SELECTION AND PRIORITIZATION para. 41 (2016).

Before the Court can weigh any of these considerations, the Rome Statute must first be amended to criminalize ecocide. This would require an ICC member state to propose an ecocide amendment (containing the proposed definition mentioned above), followed by the approval of eighty-two nations representing a two-thirds majority.²¹⁷ As this sequence of events would require "unprecedented levels of global solidarity,"218 such an amendment is likely several vears away, at the earliest. However, one can look to the 2019 amendment of the Rome Statute that extended the war crime of starvation to non-international armed conflicts as proof that expanding the scope of triable offenses at the ICC is not inconceivable, although that amendment was much more modest than the adoption of an entirely new crime.²¹⁹ Nevertheless, even if ecocide becomes a justiciable crime at the ICC, the Court has handed down just ten convictions in its two-decade history.²²⁰ Therefore, despite the enthusiasm of the ecocide movement and its potential to hold corporate executives individually accountable for environmental harms, there are significant barriers standing in the way of its enshrinement in the Rome Statute as well as the ICC's ability to prosecute violations of the new crime. In the specific case of Glencore and its subsidiaries in the DRC, when and if the ICC obtains jurisdiction over ecocide as a justiciable crime, such jurisdiction would only be temporally prospective from the date of adoption due to the *nullum crimen sine lege* principle. As such, even if the Rome Statute was amended rapidly, Glencore actors would only face potential exposure to prosecution should they participate in conduct legally characterizable as ecocide after the offense came into being.

III. GLENCORE'S ALLEGED CONDUCT IN THE DEMOCRATIC REPUBLIC OF THE CONGO AND CRIMES AGAINST HUMANITY

A potential ecocide amendment to the Rome Statute remains an unlikely pathway to hold Glencore criminally liable for the actions of

^{217.} Rome Statute, supra note 24, art. 9(2).

^{218.} Frédéric Mégret, The Problem of an International Criminal Law of the Environment, 36 COLUM. J. ENV'T L. 195, 217 (2011).

^{219.} Kevin Jon Heller, The Rome Statute's Flawed Amendment Regime — Starvation in NIAC Edition, OPINIOJURIS, (Dec. 7, 2019), http://opiniojuris.org/ 2019/12/07/the-rome-statutes-flawed-amendment-regime-starvation-in-niacedition/ (the proposal was initiated by Switzerland and unanimously adopted by the Assembly of State Parties).

^{220.} About the Court, INT'L CRIM. CT., https://www.icc-cpi.int/about (last visited Nov. 24, 2021).

its DRC subsidiaries. However, the close connection between environmental and human rights issues illuminates crimes against humanity as another approach that could address cobalt mining industry atrocities in the DRC.²²¹ Along these lines, the alleged abuses suffered by *creuseurs* appear most relevant in terms of potential avenues for seeking criminal accountability for key Glencore actors through this more established area of international criminal law.

According to most accounts, the concept of crimes against humanity first emerged in the international arena in May 1915, when France, Britain, and Russia issued a diplomatic statement decrying the Ottoman Empire's mass killing of Armenians as "crimes against humanity and civilization."222 Although no member of the Ottoman Empire faced prosecution for the regime's attack, these killings and their aftermath helped lay the normative foundation for the formulation of crimes against humanity in the wake of World War Crimes against humanity were originally tried at the International Military Tribunal and the International Military Tribunal for the Far East in connection with war crimes.²²⁴ However, the armed conflict "nexus" requirement—that crimes against humanity be demonstrably connected to the commission of war crimes—has since been abandoned.²²⁵ The prior nexus element has been replaced with contextual, or "chapeau," elements requiring that such crimes form part of a widespread or systematic attack directed against a civilian population.²²⁶

Despite its nebulous outer boundaries and the absence of an international instrument codifying its precise elements, a crimes against humanity allegation nevertheless remains a more pragmatic way to potentially hold key Glencore actors liable for the human rights abuses of its DRC subsidiaries. The utility and possible applicability of crimes against humanity in this regard is evidenced by the large body of crimes against humanity jurisprudence developed by multiple courts and tribunals in recent decades.²²⁷ Indeed, as the following

^{221.} Rome Statute, supra note 24, art. 7.

^{222.} NORMAN GERAS, CRIMES AGAINST HUMANITY: BIRTH OF A CONCEPT 7 (2011). George Washington Williams described the Belgian Congo as being "guilty of many crimes against humanity" in a letter to United States Secretary of State James G. Blaine as early as 1890. *Id.* at 4.

^{223.} Randle C. DeFalco, Conceptualizing Famine as a Subject of International Criminal Justice: Towards a Modality-Based Approach, 38 U. PA. J. INT'L L. 1113, 1149 (2017) [hereinafter Conceptualizing Famine].

^{224.} See id. at 1151.

^{225.} Id.

^{226.} Id.

^{227.} See Int'l Crim. L. Servs., Module 7: Crimes Against Humanity (2018),

analysis demonstrates, currently available documentation regarding the practices of Glencore cobalt mining subsidiaries in the DRC provides *prima facie* evidence that such practices may have involved the commission of crimes against humanity, most likely in the form of the specific offense of other inhumane acts.

A. CHAPEAU ELEMENTS

Attaining a crimes against humanity conviction first requires the prosecution to prove beyond a reasonable doubt that five distinct *chapeau* elements have been satisfied.²²⁸ These general elements are: (1) a widespread or systematic (2) attack (3) directed against a civilian population, in which the accused is (4) aware (*mens rea*) that his (5) actions (*actus reus*) form part of the overarching attack.²²⁹

1. Widespread or systematic

All crimes against humanity must form part of an attack against a civilian population that is either widespread or systematic.²³⁰ The commentary to the ILC's 1996 Draft Code of Crimes against the Peace and Security of Mankind notes that a widespread attack must be "committed 'on a large scale[,]' meaning that the acts are directed against a multiplicity of victims."²³¹ Conversely, a systematic attack is carried out "pursuant to a preconceived plan or policy."²³² Jurisprudence from both the International Criminal Tribunal for Rwanda (ICTR) and International Criminal Tribunal for the former Yugoslavia (ICTY) has reinforced this language.²³³ Although the widespread or systematic requirement is presented as a set of alternatives, the ICTY Trial Chamber noted, in *Prosecutor v. Blaškić*, that there is often significant overlap between the approaches "since a widespread attack targeting a large number of victims generally

https://iici.global/0.5.1/wp-content/uploads/2018/03/icls-training-materials-sec-7-cah1.pdf.

^{228.} Conceptualizing Famine, supra note 223, at 1159.

^{229.} See id. at 1151–52; John Cerone & Susana SáCouto, International Criminal Law: a Discussion Guide 14 (2004).

^{230.} Cerone & SáCouto, supra note 229, at 14.

^{231.} Int'l Law Comm'n, Rep. on the Work of Its Forty-Eighth Session, U.N. Doc. A/51/10, art. 18, comment 4 (1996).

^{232.} Id., art. 18, comment 3.

^{233.} See Prosecutor v. Bagilishema, Case No. ICTR 95-1A-T, Judgement, ¶ 77 (June 7, 2001); Prosecutor v. Tadić, Case No. IT-94-1-T, Opinion and Judgment, ¶ 648 (May 7, 1997).

relies on some form of planning or organization."234

The documented working conditions at cobalt mines operated by Glencore subsidiaries likely satisfies the widespread element. Those conditions have regularly resulted in suffering, death, and disfigurement, of many miners.²³⁵ As Glencore is one of the largest cobalt mine owners in the region, its subsidiaries presumably employ and knowingly subject a sizable percentage of the 150,000-*creuseur* population to serious harm.²³⁶ This is evidenced by a 2018 report from the Europe–Third World Centre to the UN Human Rights Council alleging that Glencore "categorically refuses to enter into negotiations over long standing" human rights grievances in its DRC subsidiaries.²³⁷ It is thus possible that the harm suffered by *creuseurs* in the DRC was born out of any number of corporate policies, such as an institutional disregard for workers' health or a failure to prioritize mining safeguards, although this line of thinking will likely require additional evidence to prove beyond a reasonable doubt.

2. Attack

Scholars have pointed out that what constitutes an "attack" is "fairly nebulous," but is "generally defined as an unlawful act, event, or series of events." ICTY and ICTR jurisprudence has consistently held that the attack need not be committed through armed force²³⁹ or even through acts of violence,²⁴⁰ but encompasses any sufficiently serious mistreatment of a civilian population that is widespread or systemic. The Rome Statute is the only international instrument that defines attack for the purposes of crimes against humanity, stating that it is "a course of conduct involving the multiple commission of [specific crimes against humanity] against any civilian population,

^{234.} Prosecutor v. Blaskic, Case No. IT-95-14-T 207, Judgment, \P 207 (Mar. 3, 2000).

^{235.} See Complaint, supra note 14, at \P 66.

^{236.} See discussion supra Part Glencore's Potential Criminal Liability Under the New Proposed Definition of Ecocide

^{237.} Human Rts. Council, Workers' Hum. Rts. Violations by Glencore Around the World, Ctr. Eur.–Tiers Monde, ¶ 8, U.N. Doc. A/HRC/38/NGO/91 (June 14, 2018).

^{238.} CERONE & SÁCOUTO, supra note 229, at 14; see also Chile Eboe-Osuji, Crimes Against Humanity: Directing Attacks Against a Civilian Population, 2 AFR. J. LEG. STUD. 118, 119–20 (2018).

^{239.} Prosecutor v. Kunarac, Case No. IT-96-23 & IT-96-23/1-A, Judgment, ¶ 86 (Int'l Crim. Trib. for the Former Yugoslavia June 12, 2002); Prosecutor v. Laurent Semanza, Case No. ICTR-97-20-T, Judgment and Sentence, ¶ 327 (May 15, 2003).

^{240.} See, e.g., Prosecutor v. Bagosora, Case No. ICTR-98-41-T, Judgement and Sentence, \P 2165 (Dec. 18, 2008).

pursuant to or in furtherance of a State or organizational policy to commit such attack."²⁴¹ While this definition "adds an additional 'policy' requirement that is unique to the ICC, it otherwise reflects the expansive view of the term 'attack' under customary law."²⁴² The illegal use of child *creuseurs* in dangerous cobalt mines spanning multiple years could certainly be viewed as an attack pursuant to an organizational policy.²⁴³ However, establishing that this policy existed and connecting it to key Glencore actors remains a significant evidentiary hurdle.

3. Directed against any civilian population

Crimes against humanity must primarily target a population that is civilian in nature.²⁴⁴ Relevant victims need not all qualify as civilians, as the mere presence of combatants within a population does not change its overall civilian character, but those victimized must form a cognizable "population", as opposed to "a limited and randomly selected number of individuals."245 Those victimized, however, need not "represent the entire population of a given State or territory ... in order for the acts to constitute a crime against humanity."246 Finally, the ICTY has repeatedly stated that these civilian populations must be the main target of the attack, as opposed to an incidental object of an attack against otherwise legitimate military targets.²⁴⁷ As mentioned earlier, creuseurs are predominantly poor DRC citizens searching for economic opportunity.²⁴⁸ It is difficult to ascertain exactly how many of the estimated 150,000 creuseurs in Kolwezi work in Glencore subsidiary mines, but the number is almost certain to be quite significant, presumptively numbering well into the thousands given the size and scale of the KCC and MUMI mining operations.249

- 241. Rome Statute, supra note 24, at art. 7(2).
- 242. *Id.*; Conceptualizing Famine, supra note 223, at 1152.
- 243. See discussion supra Part Glencore's Potential Criminal Liability Under the New Proposed Definition of Ecocide
- 244. *Conceptualizing Famine, supra* note 223, at 1156; *see, e.g.,* Prosecutor v. Akayesu, Case No. ICTR-96-4-T, Judgment, ¶ 582 (Sept. 2, 1998). For a discussion on whether such prominent jurisprudential emphasis should be placed on the modifier "primary," *see* Eboe-Osuji, *supra* note 238.
 - 245. Kunarac, Case No. IT-96-23 & IT-96-23/1-A, ¶ 90.
 - 246. *Tadić*, Case No. IT-94-1-T, ¶ 644.
- 247. *Id.* ¶ 91; Prosecutor v. Stakić, Case No. IT-97-24-T, Judgment, ¶ 624 (Int'l Crim. Trib. for the Former Yugoslavia July 31, 2003).
 - 248. See discussion supra Introduction.
 - 249. See discussion supra Part Glencore's Potential Criminal Liability Under the

4. Actus reus

In order to connect an individual accused's conduct to a widespread or systematic attack directed against any civilian population, there must be a nexus between the conduct of the accused and the attack at issue.²⁵⁰ The relevant conduct of an individual accused "need not be a sine qua non for the overall attack, as the commission of crimes against humanity often involves numerous perpetrators spread widely across time and space."251 However, the conduct cannot be committed in isolation²⁵², rather, "it must, by its characteristics, aims, nature, or consequence objectively form part of the [requisite] attack."253 The dangerous labor conditions in Glencore's cobalt mines are likely the result of numerous safety omissions and negligent acts, evidenced by the fact that, as discussed previously, both KCC and MUMI appear to have repeatedly violated the DRC constitution as well as the country's labor and environmental laws. These acts and omissions, however, will almost certainly be easier to establish the closer they are along the chain of causation. As such, connecting high-level Glencore actors to the suffering of creuseurs in the DRC would invariably involve significant investigatory work.

5. Mens rea

Crimes against humanity also contains a *mens rea* requirement that an accused must have knowledge of the criminal ramifications of his actions.²⁵⁴ In *Prosecutor v. Kayishema and Ruzindana*, the ICTR noted that the "perpetrator must knowingly commit crimes against humanity in the sense that he must understand the overall context of his act."²⁵⁵ ICTY jurisprudence from *Prosecutor v. Kunarac* and *Prosecutor v. Krnojelac* aligns with this point, but does not require the accused to have "knowledge of the details of the attack."²⁵⁶ It is

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- 250. CERONE & SÁCOUTO, supra note 229, at 18.
- 251. Conceptualizing Famine, supra note 223, at 1158.
- 252. Id.

- 254. See CERONE & SÁCOUTO, supra note 229, at 17.
- 255. Prosecutor v. Kayishema, Case No. ICTR-95-1-T, Judgment, ¶ 133 (Int'l Crim. Trib. For Rwanda May 21, 1999).
 - 256. *Kunarac*, Case No. IT-96-23 & IT-96-23/1-A, Judgment, ¶ 102; Prosecutor v.

^{253.} *Semanza*, Case No. ICTR-97-20-T, ¶ 326 (May 15, 2003). The ICTR statute required that crimes against humanity be committed in a discriminatory manner targeting a civilian population on specific grounds. However, this requirement is not part of customary ICL or applicable to the ICC.

important, however, to distinguish between *mens rea* requirements and an accused's motivations for engaging in the relevant illegal conduct. As the ICTY noted, the personal motives of the accused "are irrelevant and a crime against humanity may be committed for purely personal reasons." ²⁵⁷

It is very likely that Glencore executives had specific knowledge that child *creuseurs* were employed throughout the DRC's cobalt mining industry and that they were regularly exposed to inhumane working conditions. The 2019 complaint against Apple, Google, Tesla, Dell, and Microsoft points out that "the horrors of the plight of these children has been reported extensively in the media," 258 books, 259 and other major reports from non-profit organizations. 260 In addition to the 2018 UN Human Rights Council report mentioned above, an Amnesty International report states that "[i]t is widely recognized internationally that the involvement of children in mining constitutes one of the worst forms of child labour" 261 and that "[i]t is no secret that children mine cobalt in the DRC." 262

The use of this evidence to allege knowledge on the part of several major tech corporations carries an implicit understanding that Glencore executives were cognizant of the atrocities occurring in their subsidiary cobalt mines. Even if these actors were not initially aware of the conditions of the DRC mines, in many instances, especially those involving harms occurring over significant periods of time, the awareness individual actors have in relation to the harmful results of their conduct tends to evolve. That is, what starts out as perhaps "negligent, yet potentially non-criminal policymaking decisions" leading to large-scale harms may develop into a culpable level of *mens rea* on the part of key actors. Thus, any of the relevant accused could be criminally responsible for their actions, even if they may not have initially possessed the required *mens rea* when they first became associated with mining activities in the DRC.

Krnojelac, Case No. IT-97-25-T, Judgment, \P 59 (Int'l Crim. Trib. For the Former Yugoslavia Mar. 15, 2002).

^{257.} Kunarac, Case No. IT-96-23 & IT-96-23/1-A, at ¶ 103.

^{258.} Complaint, *supra* note 14, at \P 9, 13 11.

^{259.} Id. at ¶ 14.

^{260.} Id. at ¶ 11.

^{261.} Id. \P 11 (quoting Amnesty Int'l, "This is What We Die For" Human Rights Abuses in the Democratic Republic of Congro Power the Global Trade in Cobalt, AI Index AFR 62/3183/2016, at 6, 28 (2016)).

^{262.} Id.

^{263.} See Randle C. DeFalco, Time and the Visibility of Slow Atrocity Violence, INT'L CRIM. L. REV. 906, 918–19 (2021).

^{264.} See id., at 919.

B. Specific Crimes Against Humanity

Once the Chapeau elements mentioned above have been established, the prosecution must prove beyond a reasonable doubt that the accused's actions satisfy the elements of at least one specific crime against humanity.²⁶⁵ The death and injuries suffered by creuseurs in the mines of Glencore subsidiaries companies appear to fit most neatly within the rubric of crimes against humanity as other inhumane acts. Other inhumane acts are a "catch-all residual crime" 266 allowing for the prosecution of behavior that may not meet the requirements of other enumerated crimes against humanity but that "nevertheless rise to the same level of seriousness." 267 To establish these crimes, the prosecutor must prove at trial that the accused acted "with the intention to cause the other inhumane act" 268 and that the victims suffered injury in terms of "physical or mental integrity, health or human dignity."269 Similarly, Article 7(1)(k) of the Rome Statute requires that the accused "intentionally caus[e] great suffering, or serious injury to body or to mental or physical health."270 Assessing the gravity of a potential other inhumane act involves a consideration of "all the factual circumstances" 271 and, although long-term effects are not an element of the crime, such "effects may be relevant to the determination of the seriousness of the act."272 Accused have been found guilty of a range of other inhumane acts, including forcible transfer,²⁷³ physical and sexual violence against corpses,²⁷⁴ forced

^{265.} Conceptualizing Famine, supra note 223, at 1159. These enumerated specific crimes against humanity are "murder, extermination, enslavement, deportation, imprisonment, torture, rape, persecution, enforced disappearance, apartheid, and other inhumane acts of a similar character." See also, CERONE & SÁCOUTO, supra note 229, at 19; Rome Statute, supra note 24, at art. 7(1).

^{266.} Conceptualizing Famine, supra note 223, at 1173.

^{267.} *Id.*; *Kayishema*, Case No. ICTR-95-1-T, Judgment, ¶ 149 (May 21, 1999) ("Since the Nuremberg Charter, the category 'other inhumane acts' has been maintained as a useful category for acts not specifically stated but which are of comparable gravity").

^{268.} Kayishema, Case No. ICTR-95-1-T, ¶ 154.

^{269.} *Tadić*, Case No. IT-94-1-T, ¶ 729.

^{270.} Rome Statute, supra note 24, at art. 7(1)(k).

^{271.} Prosecutor v. Vasiljević, Case No. IT-98-32-T235, Judgment, ¶ 235 (Int'l Crim. Trib. for the Former Yugoslavia Nov. 29, 2002).

^{272.} Id.

^{273.} Prosecutor v. Milutinović, Case No. IT-05-87-T, Judgement, \P 475 (Int'l Crim. Trib. for the Former Yugoslavia Feb. 26, 2009).

 $^{274. \ \ \,}$ Prosecutor v. Niyitegeka, Case No. ICTR-96-14-T, Judgment (Int'l Crim. Trib. for Rwanda May 16, 2003).

marriage, 275 murder, 276 mistreatment of detainees, 277 and physical abuse. 278

The suffering endured by many, if not all *creuseurs* in the cobalt mines of Glencore's subsidiaries appears to be on par with the experiences of victims of other specific crimes against humanity. Working in the cobalt mines requires *creuseurs* to crawl "Spidermanlike" down long, narrow tunnels that are prone to collapse.²⁷⁹ In 2018, a sixteen-year-old boy was alone in a tunnel when its collapse causing his left leg to be "completely crushed." 280 Doctors surgically inserted an iron bar to hold his bone together, but he is in "constant pain and can no longer walk" on his leg²⁸¹. A similar tunnel collapse in 2017 resulted in seventeen unearthed dead bodies, with an unknown number of other persons left in the rubble.²⁸² Many of the children who work in these mines are forced into a system of "debt bondage" by "sponsors" who "advance food and small funds and then deduct these 'costs' from the proceeds of the sale of their cobalt."283 As such, children are kept in a perpetual labor cycle in which they are "paid nothing for their work" 284 and told that they owe "all the proceeds in costs."285 Although it would be much easier to connect these harms to individuals working for Glencore subsidiaries in the DRC, this does not automatically mean that Glencore officials have no exposure to liability for other inhumane acts. Under Article 25 of the Rome Statute, for instance, an individual is liable for crimes committed "through another person," or for inducing, facilitating, ordering, soliciting, or contributing "in any other way" to a crime carried out "by a group of persons acting with a common purpose."286

Should Glencore executives or other key actors face trial for the crime against humanity of other inhumane acts, the *Naletilić* case would likely apply as analogous and persuasive case law and could

^{275.} Prosecutor v. Brima, Case No. SCSL-2004-16-A, Judgment (Special Ct. for Sierra Leon Feb. 22, 2008).

^{276.} Prosecutor v. Lukić, Case No. IT-98-32/1-T, Judgment (Int'l Crim. Trib. for the Former Yugoslavia July 20, 2009).

^{277.} Prosecutor v. Kordić, Case No. IT-95-14/2-T, Judgment (Int'l Crim. Trib. for the Former Yugoslavia Feb. 26, 2001).

^{278.} Tadić, Case No. IT-94-1-T.

^{279.} Complaint, *supra* note 14, at \P 31.

^{280.} Id.

^{281.} Id.

^{282.} Id. at ¶ 32.

^{283.} Id. at ¶ 31.

^{284.} Id.

^{285.} Id.

^{286.} Rome Statute, supra note 24, at art. 25.

prove instructive in terms of how inhumane acts are assessed. The ICTY Trial Chamber held that the injuries suffered by detained Bosnian Muslims during forced labor rose to the level of other inhumane acts.²⁸⁷ Those injuries included leg wounds to several victims incurred during the performance of front-line military tasks.²⁸⁸ In the same regard, the life-long leg injuries endured by child creuseurs in Glencore's cobalt mines appears similar in terms of physical suffering and mental harm.²⁸⁹ One could argue, moreover, that the system of debt bondage that keeps children working in Glencore's cobalt mines amounts to a *de facto* forced labor regime that exposes them to a variety of life-threatening conditions, including toxic substances, agents, and processes; physical and sexual abuse; dangerous mining equipment; intense manual labor; and lengthy work hours in substandard environments.²⁹⁰ It is also important to note that the ICTY made its ruling in the *Naletilić* case despite the fact that "no detainees were killed as a direct result of their labour,"291 whereas numerous creuseurs died during cobalt mining collapses.²⁹²

C. ADDITIONAL FACTORS TO CONSIDER

The analysis of Glencore's potential crimes against humanity liability has thus far focused on how Glencore may have satisfied both the chapeau elements of crimes against humanity and the requirements for other inhumane acts. However, bringing Glencore or its corporate executives to trial involves several additional practical considerations and questions of jurisdiction.

1. Prosecution at the ICC

As mentioned above, Article 25(1) of the Rome Statute limits the ICC's jurisdiction to "natural persons." ²⁹³ It is important to note that

^{287.} Prosecutor v. Naletilić, Case No. IT-98-34-T, Judgment, \P 271 (Int'l Crim. Trib. for the Former Yugoslavia Mar. 31, 2003) ("The Chamber is satisfied that the injuries sustained by some of the prisoners in the course of their work caused serious mental harm or physical suffering or injury").

^{288.} Id. ¶ 268, n.728.

^{289.} Complaint, *supra* note 14, at \P 31.

^{290.} Id.; Benjamin K. Sovacool, When Subterranean Slavery Supports Sustainability Transitions? Power, Patriarchy, and Child Labor in Artisanal Congolese Cobalt Mining, 8 EXTRACTIVE INDUS. & SOC'Y 271, 285 (2021).

^{291.} Naletilić, Case No. IT-98-34-T, ¶ 271.

^{292.} Complaint, supra note 14, at ¶ 32.

^{293.} *See* discussion *supra* Part Glencore's Potential Criminal Liability Under the New Proposed Definition of Ecocide

corporate criminal liability remains an evolving topic at the ICC and in international criminal law in general.²⁹⁴ For example, the ICC's pretrial investigation into the Kenyan situation in 2010 acknowledged that a non-state actor could potentially qualify as an "organization" under Article 7(2) of the Rome Statute²⁹⁵ if certain policy criteria were satisfied:

This state-like "organization" is the author of a policy "to commit such attack" against any civilian population which is implemented by its members using the means of the "organization". As in case of a State policy, it seems to me that the "organizational policy" must be established at the policymaking level of the "organization". In case the policy is not formal, it must be endorsed *qua* acquiescence or be condoned by the highest policy-level of the "organization". Suffice to mention here, that in the absence of a State structure, what constitutes the highest policy-level of a state-like "organization" will have to be assessed on a case-by-case basis.²⁹⁶

This emerging jurisprudence leaves the possibility open that individual members of an organization such as Glencore could be prosecuted at the ICC for crimes against humanity by framing Glencore as a "state-like 'organization." Satisfying the "policy" requirement of Article 7(2), however, is a highly fact-specific inquiry in an unsettled area of international criminal law. Although a fulsome analysis of whether individuals could be prosecuted by the ICC predicated on participating in crimes against humanity committed through Glencore and its subsidiaries as one or more related "organizations" is beyond the scope of this article, it is ripe for future discussion, particularly if new evidentiary information surfaces regarding Glencore's organizational policies and its relationship to the prevalence of *creuseur* labor in the DRC.

^{294.} See id.

^{295.} Situation in the Republic of Kenya, ICC-01/09, Decision Pursuant to Article 15 of the Rome Statute on the Authorization of an Investigation into the Situation in the Republic of Kenya, \P 45 (Mar. 31, 2010).

^{296.} *Id.* ¶ 68.

^{297.} Id.

^{298.} See Maisie Biggs, International Criminal Law and Corporate Actors - Part 2: The Rome Statute and its Aftermath, Doing Bus. RIGHT (May 21, 2019), https://www.asser.nl/DoingBusinessRight/Blog/post/international-criminal-law-and-corporate-actors-part-2-the-rome-statute-and-its-aftermath-by-maisie-biggs#_ftnref18.

Putting the question of corporate criminal liability aside, an ICC trial focusing on Glencore's alleged cobalt mining atrocities would require proof that at least one specific crime against humanity was committed at the company's subsidiary mines in the DRC.²⁹⁹ There would also need to be a link established between individual Glencore executives and the commission of the alleged crime(s) utilizing modes of liability applicable to the ICC as laid out in Article 25.³⁰⁰ As discussed earlier, these procedural requirements would likely demand additional evidence beyond the reports and the 2019 civil complaint previously discussed.³⁰¹

There are multiple ways that a crimes against humanity case could come before the ICC. Individuals, groups, and organizations could provide relevant information to the OTP through an official communication, although no such efforts appear to have been made – at least publicly.³⁰² Alternatively, a state party to the Rome Statute, including but not limited to the DRC or Switzerland,³⁰³ where Glencore is based, could send a referral to the OTP under Article 14 to "investigate the [alleged cobalt mining atrocities] for the purpose of determining whether one or more specific persons should be charged with the commission of such crimes."³⁰⁴ That communication would be most effective if it contains "such supporting documentation as is available to the State referring the situation."³⁰⁵ The OTP would then be obligated to "analyse the seriousness of the information received,"³⁰⁶ which may prompt him to seek "additional information from States, organs of the United Nations, intergovernmental or

^{299.} Rome Statute, supra note 24, at art. 53.

^{300.} Id. at art. 25.

^{301.} Complaint, supra note 14.

^{302.} How to File a Communication to the ICC-Prosecutor, COAL. FOR THE INT'L CRIM. CT., https://coalitionfortheicc.org/how-file-communication-icc-prosecutor (last visited Dec 2, 2022). Interestingly, ICC jurisdiction over cobalt mining atrocities in fictional countries were the subject of multiple moot court problems in the last two years. 2019 International Criminal Court Moot Court Competition Problem, Case before the International Criminal Court (ICC): Prosecutor v. Dani Targarian of Cilanta, Pace Univ., https://law.pace.edu/sites/default/files/ICC_Moot/2019_ICC_Moot_Court_Problem.pdf (last visited Dec 2, 2022); Situation in the Kingdom of Ravis in the Case of The Prosecutor v. Liet Kynes Before the International Criminal Court at the Hague, Asia-Pacific Moot Ct., Nat'l Rounds 2020, https://www.icrc.org/en/download/file/139102/17th_annual_ihl_moot_-asia-pacific_national_rounds_moot_problem.pdf (last visited Dec 2, 2022).

^{303.} The State Parties to the Rome Statute, INT'L CRIM. CT., https://asp.icc-cpi.int/states-parties#D (last visited Dec 2, 2022).

^{304.} Rome Statute, supra note 24, at art. 14(1).

^{305.} Id. at art. 14(2).

^{306.} Id. at art. 15(2).

nongovernmental organizations, or other reliable sources."³⁰⁷ Even if such a communication did not lead to the opening of a preliminary examination or investigation, it could help raise the visibility of the suffering experienced by *creuseurs* in the DRC and push the cobalt mining industry to institute more comprehensive reforms. Finally, in the absence of any referrals or communications, the OTP could initiate an investigation of the DRC's cobalt mining industry *proprio motu*, given that the DRC is an ICC state party.³⁰⁸

As mentioned earlier, the number of cases that appear before the ICC represent just a small fraction of the cases that the Court could theoretically adjudicate.³⁰⁹ Thus, the OTP's determination that a crime against humanity may have been committed is just one hurdle that needs to be cleared during the adjudicatory process. The OTP's prosecutorial discretion presents another hurdle in situations involving children, particularly ones that do not involve the conscription of child soldiers³¹⁰ or sexual and gender based crimes.³¹¹ The atrocities endured by teenage and pre-teenage creuseurs illustrates how children are vulnerable to a range of crimes that are not necessarily codified in the Rome Statute.312 The lack of protection afforded to these children through the legal process thereby represents a shortcoming of the ICC and the larger international criminal law field. Interestingly, the OTP pledged in a 2016 policy paper that it would "adopt a child-sensitive approach in all aspects of its work involving children"313 and "take into account the best interests of a child as a primary consideration."314 Holding the OTP to these promises through future scholarship and other awareness efforts is one approach that could help safeguard particularly vulnerable child populations, such as the young miners in the DRC's cobalt mining industry.

^{307.} Id.

^{308.} Id. at art. 15(1).

^{309.} deGuzman, supra note 211, at 267.

^{310.} See Prosecutor v. Lubanga, ICC-01/04-01/06-2842, Judgment pursuant to Article 74 of the Statute (Mar. 14, 2012); Prosecutor v. Ongwen, ICC-02/04-01/15, Judgment (Feb. 4, 2021).

^{311.} See Prosecutor v. Ntaganda, ICC-01/04-02/06 A A2, Judgment (Mar. 30, 2021).

^{312.} See discussion supra Part Glencore's Potential Criminal Liability Under the New Proposed Definition of Ecocide, Part CONCLUSION

^{313.} Office of the Prosecutor, *Policy on Children* at 3, INT'L CRIM. CT., OFF. OF THE PROSECUTOR (Nov. 2016).

^{314.} Id.

2. Trials in Switzerland

Instead of sending a referral to the OTP, Switzerland could initiate a criminal proceeding against Glencore executives in its own judicial system. As Switzerland recognizes the principle of universal jurisdiction, the country can prosecute individuals suspected of genocide, crimes against humanity, and war crimes committed anywhere in the world, so long as that person is on Swiss territory at some point.315 Given Glencore's corporate presence in Switzerland, the principle of universal jurisdiction theoretically paves the way for the prosecution of the company's executives.316 Moreover, as the ICC is a court of last resort with notable budgetary limitations, universal jurisdiction may represent a more effective way of hauling key Glencore actors into court.317 Switzerland previously exercised universal jurisdiction in Niyonteze v. Public Prosecutor, a Military Court of Cassation case that resulted in the conviction of the former mayor of Mushubati, Rwanda for war crimes committed during the Rwandan genocide. 318 Even if the Swiss government is not interested in pursuing a prosecution against key Glencore actors, the possibility of adjudication could serve as a lever for international and domestic activists to press for industry reforms.

Unlike the ICC, Switzerland also boasts a well-defined legal pathway to hold corporations criminally liable for their misdeeds. Under Article 102 of the Swiss Criminal Code, corporations can be tried for criminal offenses committed during the course of business activities if (1) it is not possible to attribute an offense to a specific individual because of the corporation's inadequate organization, or (2) the corporation fails to take reasonable organizational measures to prevent crimes such as bribery, corruption, terrorism financing, or money laundering.³¹⁹ The maximum penalty in criminal proceedings is five million Swiss francs.³²⁰ Although this is a significant sum of money, it may not offer the sense of accountability through individual jail sentences that some cobalt mining industry victims likely desire,

^{315.} Julia Crawford, *International Crimes: Spotlight on Switzerland's War Crimes Unit*, JUSTICEINFO.NET (Feb. 15, 2019), https://www.justiceinfo.net/en/40328-international-crimes-spotlight-on-switzerland-s-war-crimes-unit.html.

^{316.} Pidd et al., supra note 12.

^{317.} About the Court, INT'L CRIM. CT., https://www.icc-cpi.int/about (last visited Dec 2, 2022); deGuzman, *supra* note 211, at 267.

^{318.} Cour de Cassation Militaire [Military Court of Cassation] Apr.27, 2001, N. et auditeur c. TMA 1A (Switz.).

^{319.} Flavio Romerio et al., Switzerland, in 2 THE PRACTITIONER'S GUIDE TO GLOBAL INVESTIGATIONS 483, 485 (Judith Seddon et al. eds., $5^{\rm th}$ ed. 2021).

^{320.} Id.

especially since Glencore made a net profit of \$1.28 billion in just the first half of 2021.321

Given that Switzerland's maximum criminal penalty pales in comparison to Glencore's corporate profits, DRC cobalt mining victims could file a civil suit in one of the Swiss cantonal courts that handle such claims.³²² Potential *creuseur* plaintiffs could then rely on the analogous Canadian Supreme Court Nevsun decision as a source of persuasive law.³²³ This approach would entail seeking damages based on breaches of prohibitions against crimes against humanity in customary international law, as well as breaches of domestic torts such as negligence. 324 The facts of the Nevsun case differ in that the miner-victims involved were military conscripts³²⁵ who regularly experienced torture, such as being tied up in the hot sun and beaten with sticks, rather than "voluntary" workers. 326 Nevertheless, human rights experts have hailed *Nevsun's* "landmark" 727 ruling and resultant settlement as a warning to other large corporations who conduct overseas mining operations under harmful working conditions. Accordingly, creuseurs could file a civil suit against Glencore in Switzerland in the hopes of receiving a swift settlement, regardless of their ultimate prospects at trial due to the negative press that Glencore would encounter. A settlement would not result in jail time for corporate executives, but it would at least provide some compensation to creuseurs for their injuries, along with acknowledgement that they were wronged. Such a process could also help build pressure for critically needed reforms within the broader cobalt mining industry.328

^{321.} Jaime Llinares Taboada, *Glencore Raises Shareholder Returns; Commodity Prices Boosted 1H Profit – Update*, MARKET WATCH (Aug. 5, 2021), https://www.marketwatch.com/story/glencore-raises-shareholder-returns-commodity-prices-boosted-1h-profit-update-271628145905.

^{322.} Roman Baechler & Roman Richers, *Conducting Litigation in Switzerland*, LEXOLOGY (July 25, 2019), https://www.lexology.com/library/detail.aspx?g= 5b2e9830-0730-4518-b3e4-d2c2214d84c1.

^{323.} Nevsun Res.Ltd. v. Araya, [2020] S.C.R. 5 (Can.).

^{324.} Id. ¶ 4.

^{325.} Id. ¶ 3.

^{326.} Id. ¶ 11.

^{327.} Yvette Brend, Landmark Settlement is a Message to Canadian Companies Extracting Resources Overseas: Amnesty International, CBC NEWS (Oct. 23, 2020, 4:13 PM), https://www.cbc.ca/news/canada/british-columbia/settlement-amnesty-scc-africa-mine-nevsun-1.5774910.

^{328.} The *Nevsun* settlement is confidential, but it likely contains fiscal compensation given that the plaintiffs partly grounded their complaint in tort-based claims. *See id.*

IV.CONCLUSION

Both ecocide and crimes against humanity offer intriguing pathways to hold Glencore executives liable for the harm that has occurred in the cobalt mining industry. Despite the environmental damage allegedly caused by Glencore subsidiaries KCC and MUMI, the destruction to Kolwezi's ecosystems does not necessarily rise to the level of ecocide according to its current proposed definition.³²⁹ Even if it did satisfy the elements of this definition, there are significant hurdles standing in the way of a conviction, including the doctrine of *nullum crimen sine lege*, the unprecedented levels of global solidarity necessary to amend the Rome Statute, and the mixed prosecutorial record of the ICC.³³⁰ As such, the ecocide analysis contained in this article should be viewed as a yardstick from which to gauge future environmental damage caused by cobalt mining in the DRC, particularly if the proposed ecocide definition is enshrined in the Rome Statute.

Given the uncertain variables related to ecocide liability at the ICC, crimes against humanity appears to be a more viable approach to hold key Glencore actors (and possibly the corporation itself) accountable for their alleged misdeeds under international criminal law. Not only is there a developed jurisprudence centered around crimes against humanity, Glencore and/or its employees could conceivably be tried at the ICC as well as in criminal and/or civil proceedings in Switzerland.331 Such suits do not have to be limited to Glencore or confined to other inhumane acts jurisprudence either, especially since the system of debt bondage that creuseurs often get stuck in may also satisfy the elements of the crime against humanity of enslavement.332 Other potential wrongdoers in the cobalt mining industry include Umicore, the "sponsors" who trap young creuseurs in debt bondage, high-ranking employees in Glencore's DRC-based subsidiaries, or other extraction corporations and their DRC mining subsidiaries.333

Even if the human rights abuses of Glencore's subsidiaries prima

^{329.} See discussion supra Part Glencore's Potential Criminal Liability Under the New Proposed Definition of Ecocide

^{330.} See id.

^{331.} See discussion supra Part Additional Factors to Consider

^{332.} *See* Rome Statute, *supra* note 24, at art. 7(2)(c) (citing the elements for the crime of enslavement).

^{333.} Dionne Searcey et al., *A Power Struggle Over Cobalt Rattles the Clean Energy Revolution*, N.Y. TIMES (Nov. 20, 2021), https://www.nytimes.com/2021/11/20/world/china-congo-cobalt.html.

facie meet the requirements necessary to frame them as inhumane acts, it is important to circle back to cobalt's central importance to the range of industries that depend on the metal, including the renewable energy, technology, and medical sectors.³³⁴ Human rights violations committed in the Global South have long fostered a sense of cognitive dissonance, particularly when those abuses are connected to the creation of devices of modern comfort.³³⁵ The ability to browse videos on a smartphone, read emails on a computer, drive an electric vehicle, or even pursue carbon-neutral national energy goals are just a handful of examples that have promoted convenience or progress despite the documented abuses of cobalt workers associated with them.³³⁶

The flip side of this dynamic is that allegations of misconduct or the threat of civil litigation, particularly in highly visible sectors, have the potential to raise societal awareness and create tangible corporate change.³³⁷ This is especially relevant as interest appears to be growing in the criminalization of ecocide at the international level, as well as in the DRC's cobalt mining industry.³³⁸ As such, if corporations such as Glencore do not substantially reform their cobalt mining practices, they remain increasingly vulnerable to the court of public opinion, even if the potential for individual criminal liability remains unclear.

^{334.} See discussion supra Introduction.

^{335.} *See, e.g.*, Caroline E. Drolet, Cognitive Dissonance, Hypocrisy, and Reducing Toleration of Human Rights Violations (Aug. 2018) (Ph.D. dissertation, Brock University) (on file with Brock University Digital Repository).

^{336.} See generally id.

^{337.} See, e.g., Kirk Kardashian, How Public Opinion Can Influence Organizations, TUCK (June 1, 2015), https://www.tuck.dartmouth.edu/news/articles/how-public-opinion-can-influence-organizations; Pino G. Audia, When Public Opinion Shifts, How Should Your Company Respond?, HARV. BUS. REV. (Sept. 29, 2015), https://hbr.org/2015/09/when-public-opinion-shifts-how-should-your-company-respond.

^{338.} See, e.g., Is Your Phone Tainted?, supra note 7; Watts, supra note 28.