

EV HYPOCRISY: ANALYZING THE BIDEN ADMINISTRATION'S CONFLICTING PURSUIT OF GREEN TECHNOLOGY AND UPHOLDING INTERNATIONAL HUMAN RIGHTS

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I. INTRODUCTION

A. *The Electric Vehicle Push*

Upon Joe Biden's assumption of the presidency in 2021, one of his first measures in office was recommitting the U.S. to the 2015 Paris Agreement ("the Agreement").¹ The Agreement, joined by President Obama in December 2015 but later rejected under President Trump in June 2017 and again in January 2025, aligned with the Biden administration's ambitious goals of reducing carbon dioxide emissions to cool a heating planet.² To accomplish the goals set out in the Agreement, the Biden administration actively promoted electric vehicles ("EVs") as a central component of its policy, hoping that American consumers would more willingly buy into the EV revolution.³ The Biden administration specifically stated that its goal was for EVs to make up half of all new vehicle sales by 2030.⁴ This endeavor required significant subsidies, manufacturer incen-

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1. See Press Statement, Anthony J. Blinken, Sec'y of State, U.S. Dep't of State, The United States Officially Rejoins the Paris Agreement (Feb. 19, 2021), <https://www.energy.gov/sites/default/files/2024-06/089.%20Anthony%20Blinken%2C%20The%20United%20States%20Officially%20Rejoins%20the%20Paris%20Agreement%2C%20U.S.%20Department%20of%20State.pdf>.

2. See Sheila Hu, *Paris Climate Agreement: Everything You Need to Know*, NAT'L RES. DEF. COUNCIL (Jan. 23, 2025), <https://www.nrdc.org/stories/paris-climate-agreement-everything-you-need-know>.

3. See Press Statement, The White House Briefing Room, FACT SHEET: Biden-Harris Administration Announces New Private and Public Sector Investments for Affordable Electric Vehicles (Apr. 17, 2023), <https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/04/17/fact-sheet-biden-harris-administration-announces-new-private-and-public-sector-investments-for-affordable-electric-vehicles>.

4. *Id.*

tives, and price cuts, as EVs significantly outpace internal combustion vehicles in price.⁵ Yet consumer interest lags, despite the broader availability of EVs after ramped-up production by automobile manufacturers.⁶ Still, to reach the goals of the Agreement, experts predicted that a global fifty-fold increase in EV adoption between 2016 and 2030 would be necessary.⁷

Rechargeable lithium-ion batteries, the primary power source of EVs, are crucial for achieving the desired production levels of EVs.⁸ The integral resource in such batteries, cobalt, was therefore expected to grow in demand by 500% between 2020 and 2025.⁹ However, ramped-up production in the early 2020s and a turn toward cheaper and less controversial alternatives spurred a global oversupply of cobalt and lowered prices.¹⁰ Still, after the Biden administration's heavy push for EVs to make up a majority of the road share by 2030, cobalt demand is expected to rise, especially as automotive batteries have overtaken portable electronics as the highest industry consumer of cobalt.¹¹ Cobalt mining has major issues of its own, and increased mining of this crucial element contradicts another stated goal of the Biden administration.¹²

B. *The UFLPA and Global Humanitarian Concerns*

In late 2021, in response to growing humanitarian concerns and intelligence reports coming out of the Xinjiang Uyghur Autonomous Region of China about the Chinese government's abuse of ethnic minorities, Congress passed and President Biden signed into law Pub. L. No. 117-78 ("the UFLPA").¹³ The Uyghurs, a group of roughly twelve million people who are predominantly Muslim and trace their ethnic roots back to Central Asia, make up less than half of the population in Xinjiang and have been subject to forced labor, re-education

5. See *id.*; Ines Ferré, *EV Transition Could Take Longer than the Biden Administration Wants. Here's Why*, YAHOO FIN. (Dec. 2, 2023), <https://finance.yahoo.com/news/ev-transition-could-take-longer-than-the-biden-administration-wants-heres-why> (stating that "only the top 10% population is able to afford to buy EVs" while automobile manufacturers have had to scale back EV plans due to lack of consumer interest).

6. See Ines Ferré, *supra* note 5.

7. Benjamin K. Sovacool, *The Precarious Political Economy of Cobalt: Balancing Prosperity, Poverty, and Brutality in Artisanal and Industrial Mining in the Democratic Republic of the Congo*, 6 THE EXTRACTIVE INDUS. & SOC'Y 915, 915 (2019).

8. See Yelin Deng et al., *Life Cycle Assessment of Lithium Sulfur Battery for Electric Vehicles*, 343 J. POWER SOURCES 284, 284 (2017).

9. Sovacool, *supra* note 7, at 915.

10. See Franchesca Viernes, *Oversupply, Low Prices for Cobalt to Persist in 2024 as Demand Slips*, S&P GLOB. (Dec. 27, 2023), <https://www.spglobal.com/commodityinsights/pt/market-insights/latest-news/metals/122723-oversupply-low-prices-for-cobalt-to-persist-in-2024-as-demand-slips>.

11. See JOEL CRANE, COBALT BLUE HOLDINGS LTD.: THE COBALT MARKET, at i, (2022).

12. See discussion *infra* Section I. B.

13. Act of Dec. 23, 2021, Pub. L. No. 117-78, 135 Stat. 1525. Note that while this Act is commonly called UFLPA, it should not be confused with H.R. 1155, officially titled UFLPA, which was a prior version of the Act that did not pass. H.R. 1155, 117th Cong. (2021).

camps, and religious persecution.¹⁴ Western intelligence agencies believe that the Chinese government is attempting to dilute the Uyghur Muslim population in Xinjiang after the mass migration of Han Chinese people into the region in past decades.¹⁵ The UFLPA bans all entry of goods into the U.S. that were manufactured or produced in Xinjiang unless U.S. Customs and Border Protection can determine that the goods were not manufactured by forced or penal labor and openly reports this determination to the public.¹⁶ These protections extend beyond Uyghur Muslims to other Muslim minorities in Xinjiang, like Kazakhs and Kyrgyz.¹⁷ The enactment of this legislation was a wholeheartedly bipartisan effort, passing the House by a vote of 428-1 followed by a unanimous approval in the Senate.¹⁸

While it is commendable for the U.S. to combat forced labor and humanitarian crises through economic measures, this concern seems to be selectively enforced, focused only on geopolitical rivals while avoiding conflicts with other policy priorities. As this article will discuss, the cobalt that powers EVs and aided the Biden administration's commitments to the Agreement is mined in Africa under many of the same slave-like conditions the Biden administration refused to be complicit in by signing the UFLPA. And yet, cobalt mined in Africa, often by children, for wages that amount to pennies in U.S. currency is bought by Chinese refineries and sold to American companies to fuel the environmentally friendly agenda President Biden sought to enact.¹⁹ The Biden administration's interest in reducing carbon emissions through rapid adoption of EVs was directly at odds with its commitment to uphold fair labor practices and human rights across the globe.²⁰

Fortunately, this oversight was formally recognized when New Jersey representative Christopher H. Smith proposed House Bill 4443 in June 2023.²¹ The Bill sought to block "certain goods made with child labor or forced labor in the Democratic Republic of the Congo."²² Additionally, the Bill specifically names cobalt as one of the resources that is mined in the Democratic Republic of the Congo ("the

14. See *Who are the Uyghurs and Why is China Being Accused of Genocide?*, BBC (May 24, 2022), <https://www.bbc.com/news/world-asia-china-22278037>.

15. See *id.*

16. See 135 Stat. at 1529.

17. See *id.* at 1526.

18. See Marti Flacks & Madeleine Songy, *The Uyghur Forced Labor Prevention Act Goes into Effect*, CTR. FOR STRATEGIC & INT'L STUDS. (June 27, 2022), <https://www.csis.org/analysis/uyghur-forced-labor-prevention-act-goes-effect>.

19. See discussion *infra* Section III. C.

20. See Press Statement, The White House Briefing Room, FACT SHEET: President Biden Takes Historic Step to Advance Worker Empowerment, Rights, and High Labor Standards Globally (Nov. 16, 2023), <https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2023/11/16/fact-sheet-president-biden-takes-historic-step-to-advance-worker-empowerment-rights-and-high-labor-standards-globally>.

21. Countering China's Exploitation of Strategic Metals and Minerals and Child and Forced Labor in the Democratic Republic of the Congo Act, H.R. 4443, 118th Cong. (2023).

22. *Id.*

DRC”) through child and forced labor. It also notes China as the dominant player in both the DRC and the global strategic metals supply chains.²³ Unfortunately, the Bill remained in committees, and was most recently referred to the Subcommittee on Trade in December 2024, but ultimately died at the end of the 118th Congress’s term on January 3, 2025.²⁴ As this article will illustrate, it is imperative that U.S. lawmakers reintroduce legislation similar to House Bill 4443 for the same reasons that the UFLPA was passed.

The Biden administration’s push for an all-electric American automobile market was reckless and ignored the ethical and sustainability issues behind EV production. While the U.S. is no longer a member of the Agreement after President Trump’s Day One Executive Order,²⁵ rechargeable lithium-ion batteries are nevertheless considered critical to successfully transition to sustainable energy.²⁶ As battery technology continues to be adopted, Congress and future presidential administrations must take a hardline stance on cobalt mining operations, as with the UFLPA, or refrain from EV incentives altogether until new innovations and technology in lithium-ion batteries are created that can be applied to EVs.

II. HOW MINING EXPLOITS WORKERS AND CHINA’S ROLE IN THE SYSTEM

“Here, it is better not to be born”²⁷

A. *The Mining Process*

Cobalt is crucial to the effectiveness and longevity of the lithium-ion batteries that make our electronic devices function.²⁸ Amidst the personal electronic device boom that followed the popularization of the personal computer and the introduction of the smartphone and tablet, global cobalt demand increased from 65,000 tons to more than 90,000 tons in a five-year period, with over half of the world’s

23. *Id.* § 2.

24. See *All Actions: H.R. 4443 — 118th Congress (2023-2024)*, CONG., <https://www.congress.gov/bill/118th-congress/house-bill/4443/all-actions> (last visited Mar. 24, 2025); *H.R. 4443 (118th): Countering China’s Exploitation of Strategic Metals and Minerals and Child and Forced Labor in the Democratic Republic of the Congo Act*, GOVTRACK, <https://www.govtrack.us/congress/bills/118/hr4443> (last visited Mar. 25, 2025) [hereinafter *H.R. 4443 Tracking*].

25. See Exec. Order No. 14,162, 90 Fed. Reg. 8455 (2025).

26. See Peter Greim, et al., *Assessment of Lithium Criticality in the Global Energy Transition and Addressing Policy Gaps in Transportation*, 11 NATURE COMM’NS, no. 4570, 2020, at 1, 8.

27. SIDDHARTH KARA, COBALT RED 57 (2023).

28. See *Batteries & Electric Vehicles*, COBALT INST., <https://www.cobaltinstitute.org/essential-cobalt-2/powering-the-green-economy/batteries-electric-vehicle> (last visited Mar. 6, 2025).

cobalt being used in batteries for phones, computers, and, more recently, EVs.²⁹ Miners can find cobalt deposits alongside copper and nickel as far as thirty meters below the earth's surface.³⁰ The cobalt ore is then sorted and washed to reveal purity before being sold to depots which are usually owned, at least in the DRC, by foreign businesses.³¹ This is referred to as artisanal mining, as opposed to large-scale industrial mining, which utilizes large machinery such as bulldozers and diggers operated by specialized firms and contractors.³² "Artisanal miners occupy the base of the chain" and "use rudimentary tools to dig in pits, trenches, and tunnels to find an ore called heterogenite, which contains copper, nickel, cobalt, and sometimes uranium."³³ The DRC is the world's largest producer of cobalt, mining an estimated 170,000 metric tons in 2023, which is over seventy percent of the global cobalt supply.³⁴ The daily wages for an artisanal miner in the DRC's Copper Belt is roughly \$1-\$3 USD, while producing anywhere from thirty to fifty kilograms of raw ore per day using nothing but his hands and, at best, a shovel and a bucket.³⁵ One artisanal miner says he is typically paid between \$1.10-\$1.40 USD per day in return for his forty to fifty kilograms of heterogenite.³⁶

After the miners extract the cobalt, the ore is sold to people called *négociants*, who run the ore via motorbike or car and are required to have a permit which can cost upwards of \$100 per year depending on how much ore is transported and how far.³⁷ *Négociants* take these sacks of raw ore to depots that grade the ore based on purity and pay the price of the entire sack to the *négociant*.³⁸ In one example, a forty-kilogram sack of one percent graded ore sold for about \$4.40 USD.³⁹ The depots, most of which are operated by Chinese companies,⁴⁰ then sell the ore to mining companies and refineries, many of which are located in China.⁴¹ There, cobalt ore is processed,

29. See Sovacool, *supra* note 7, at 915.

30. See *id.* at 917, 921.

31. See *id.* at 921.

32. *Id.* at 923.

33. KARA, *supra* note 27, at 20.

34. MINE PRODUCTION OF COBALT IN THE DEMOCRATIC REPUBLIC OF CONGO FROM 2010 TO 2023 (IN 1,000 METRIC TONS) STATISTA, <https://www.statista.com/statistics/339834/mine-production-of-cobalt-in-dr-congo> (last visited Mar. 2, 2025).

35. See Sovacool, *supra* note 7, at 922.

36. KARA, *supra* note 27, at 40.

37. See *id.* at 53.

38. *Id.* at 59.

39. *Id.*

40. Jonas Gerding, *DRC: Why it's Hard to Make Cobalt Mining More Transparent*, DEUTSCHE WELLE (Mar. 19, 2024), <https://www.dw.com/en/drc-struggles-to-make-cobalt-mining-more-transparent/a-68610784>.

41. See *From Cobalt to Cars: How China Exploits Child and Forced Labor in the Congo: Hearing Before the Cong. Exec. Comm'n on China*, 118th Cong. 11 (2023) (statement of Milos Ivkovic, International Arbitrator and Adjunct Professor, Washington University School of Law) [hereinafter *Hearing*].

smelted, and sold globally.⁴² Finally, this tiny, silvery element finds its way into the throes of the global supply chain: manufacturers use the now-refined cobalt to produce cathodes, anodes, and collectors which are then assembled into the lithium-ion batteries we use every day.⁴³ This entire process is laden with red tape, unnecessary middlemen, and excessive fees paid to the government.⁴⁴ All of the stops along the way drive the price of cobalt up while keeping the wages of the artisanal miners meager.

B. Human Rights Horrors in the Mining Process

Sparse income and long hours are only a fraction of the problems Congolese miners face to ensure that the industrialized world has a charged cell phone and a running automobile. The main issue is the rampant abuse of human rights that victimizes millions of impoverished Congolese.⁴⁵ These individuals are often forced into mining for cobalt because they have no other means to make a living.⁴⁶ The mines do not have hazard protections or workplace safety measures as they do in the U.S.⁴⁷ Further, many DRC mines utilize child labor.⁴⁸ International attempts that have been made to eliminate child and forced labor through on-ground monitoring and third-party assessments are largely ineffective.⁴⁹ Some children are even recruited or

42. See RODRIGO CASTILLO & CAITLIN PURDY, CHINA'S ROLE IN SUPPLYING CRITICAL MINERALS FOR THE GLOBAL ENERGY TRANSITION 4 (2022), https://www.brookings.edu/wp-content/uploads/2022/08/LTRC_ChinaSupplyChain.pdf.

43. See *id.*

44. See Sovacool, *supra* note 7, at 937; Matthieu Le Roux & Oliver Bustin, *Mining Duties, Royalties and Taxes in Democratic Republic of Congo*, LEXOLOGY (July 4, 2019), <https://www.lexology.com/library/detail.aspx?g=245d47c6-1472-4251-98d7-14a36a64e474>.

45. See *Forced Evictions at Industrial Cobalt and Copper Mines in the Democratic Republic of the Congo*, AMNESTY INT'L (Sep. 12, 2023), <https://www.amnesty.org/en/latest/news/2023/09/drc-cobalt-and-copper-mining-for-batteries-leading-to-human-rights-abuses>.

46. See Sovacool, *supra* note 7, at 924–25.

47. See generally ICF MACRO, INC., FORCED LABOR IN COBALT MINING IN THE DEMOCRATIC REPUBLIC OF THE CONGO, 27–35 (2023), <https://www.dol.gov/sites/dolgov/files/ILAB/DRC-FL-Cobalt-Report-508.pdf> (reporting statistics about various workplace hazards in Congolese cobalt mines).

48. See *id.* at 35.

49. See BUREAU OF INT'L LAB. AFF.S, U.S. DEPT. OF LABOR, 2023 FINDINGS ON THE WORST FORMS OF CHILD LABOR, CONGO, DEMOCRATIC REPUBLIC OF THE 1 (2023) ("In 2023, the Democratic Republic of the Congo made minimal advancement in efforts to eliminate the worst forms of child labor. The government piloted the Child Labor Monitoring and Remediation System in 10 artisanal cobalt mining sites, and as of December 2023, 5,346 children were registered in the database and are being assessed for services. However, despite new initiatives to address child labor, the Democratic Republic of the Congo is receiving an assessment of minimal advancement because the country's armed forces coordinated with and supplied material support to armed groups known for recruiting children. In addition, the government did not publish labor or criminal law enforcement data. It also failed to take active measures to ensure that children are not inappropriately incarcerated, penalized, or physically harmed solely for unlawful acts committed as a direct result of their exploitation in the worst forms of child

forced into labor by chiefs in the Congolese Republican Guard via indentured servitude to mine the cobalt.⁵⁰ Women are particularly victimized, suffering from rampant sexual abuse, a prolific problem across all mining sites in the Copper Belt,⁵¹ in addition to receiving less pay than their male counterparts for the same amount of ore produced.⁵² Illness and injury from working in the mines abound,⁵³ and attempts to whistle-blow or speak to outsiders about the work environments are usually met with deadly violence.⁵⁴

Outside the mines, conditions are less immediately life-threatening but nonetheless harmful and dangerous. Across the DRC, widespread negative health consequences result from the contamination of the constant mining of heavy metals.⁵⁵ These contaminants harm both the natural resources and individuals, with one study finding “a five-fold increase in risk of birth defects in babies born to fathers working in cobalt mines.”⁵⁶ Environmental disasters—ironically, the avoidance of which is the very reason the DRC is witnessing such a spike in cobalt production—are slamming villages and cities across the DRC, as heavy traffic of transport vehicles and nonstop mining has caused dangerous amounts of air pollution.⁵⁷ Members of mining communities have high levels of cobalt in their urine, along with DNA damage in their children.⁵⁸ Soil erosion, air pollution, biodiversity loss, the destruction of natural habitats, deforestation, and land instability are all consequences of rampant artisanal mining.⁵⁹

The goal of reducing environmental harm through the proliferation of lithium-ion batteries is leading to catastrophic consequences. Perhaps most ironically, “[t]his land that is home to the world’s largest reserves of an element crucial to the manufacture of the most dominant form of rechargeable energy in the world still awaits the

labor. Other gaps remain, including inadequate financial resources allocated to enforcement agencies.”).

50. See *id.*; KARA, *supra* note 27, at 149.

51. See Anna Pienaar, *The Cobalt Mining Industry is a Human Rights Failure – Here’s What Needs to be Done*, WORLD ECON. F. (Jan. 10, 2020), <https://www.weforum.org/stories/2020/01/how-to-secure-clean-cobalt> (citing a study by the Catholic NGO Good Shepherd International Foundation that found that “80% of women interviewed had been physically forced to have sexual relations during the previous twelve months”).

52. See KARA, *supra* note 27, at 160; *Case Study: Corporations, Peace, and Gender Equality in the DRC*, PEACE WOMEN, <https://www.peacewomen.org/resource/case-study-corporations-peace-and-gender-equality-drc> (last visited Mar. 7, 2025).

53. See ICF MACRO, INC., *supra* note 47, at 31.

54. See KARA, *supra* note 27, at 145.

55. See RAID, BENEATH THE GREEN 1–3 (2024), <https://raid-uk.org/wp-content/uploads/2024/03/Report-Beneath-the-Green-DRC-Pollution-March-2024.pdf>.

56. Roy Maconachie, *‘We Miners Die A Lot.’ Appalling Conditions and Poverty Wages: the Lives of Cobalt Miners in the DRC*, THE CONVERSATION (Jan. 30, 2024, 7:31 AM), <https://theconversation.com/we-miners-die-a-lot-appalling-conditions-and-poverty-wages-the-lives-of-cobalt-miners-in-the-drc-220986>.

57. See KARA, *supra* note 27, at 118.

58. Sovacool, *supra*, note 7, at 929.

59. *Id.*

arrival of electricity.”⁶⁰ The people who mine the cobalt that powers our world and turns on our screens largely lack access to basic electricity.⁶¹ Addressing the lack of electricity for the Congolese seems to be a low priority compared to the violence and pollution at mining sites and suppression by foreign and local government agents.⁶²

C. *The DRC’s Corrupt Bargain with China*

While the Biden administration approved legislation in an effort to eliminate the U.S.’s complicity in genocidal activity occurring in China,⁶³ it failed to recognize that China’s inhumanity reaches beyond Chinese borders.⁶⁴ The DRC, in particular, has found itself a common trade partner with Chinese companies.⁶⁵ Cobalt mining has become a vertically integrated business scheme for Chinese manufacturing companies: in addition to owning eighty percent of the DRC’s cobalt output, China refines seventy-three percent of the world’s cobalt, fifty-nine percent of its lithium, forty percent of its copper, and is host to seventy-five percent of the world’s lithium-ion battery mega factories.⁶⁶ Logic dictates then that the Agreement’s clean energy goals require relying on China to meet the demands for the raw materials and batteries that power EVs.⁶⁷

On the ground in the DRC, China’s influence is apparent to any lay observer: Chinese companies own the vast majority of the depots that purchase raw ore from miners,⁶⁸ have negotiated arrangements wherein they purchase ore from the Congolese army,⁶⁹ and operate

60. KARA, *supra* note 27, at 72.

61. See *Democratic Republic of the Congo – Energy*, INT’L TRADE ADMIN. (Mar. 14, 2024), <https://www.trade.gov/country-commercial-guides/democratic-republic-congo-energy> (reporting that as of 2024, nineteen percent of people in the DRC have electricity, with forty-one percent having access in urban areas but only one percent in rural regions).

62. Compare Sam Mednick, *Chinese Gold Mining Threatens a Protected UN Heritage Site in Congo*, AP NEWS (Dec. 10, 2024, 10:09 AM), <https://apnews.com/article/congo-world-heritage-site-gold-mining-china-5e9499fd939c3c2d798a6165f3fc487b> (discussing the environmental threats posed by cobalt mines in the DRC), and *Democratic Republic of the Congo: Industrial mining of cobalt and copper for rechargeable batteries is leading to grievous human rights abuses*, AMNESTY INT’L, (Sep. 12, 2023), <https://www.amnesty.org/en/latest/news/2023/09/drc-cobalt-and-copper-mining-for-batteries-leading-to-human-rights-abuses> (discussing the violence and human rights violations associated with cobalt mining), with *Democratic Republic of the Congo – Energy*, *supra* note 61 (reporting the DRC’s goal to increase access to electricity to thirty-two percent of the population by 2030).

63. See Act of Dec. 23, 2021, Pub. L. No. 117-78, 135 Stat. 1525.

64. See Rachel Owens, *The Global Dimensions of the Chinese Government Human Rights Abuses*, STAN. UNIV. (Mar. 11, 2024), <https://fsi.stanford.edu/news/global-dimensions-chinese-government-human-rights-abuses>.

65. See *Hearing* at 10.

66. See *id.* at 4 (statement of Hon. Jeff Merkley, A United States Sen. From Oregon; Co-chair, Congressional-Executive Commission on China); CASTILLO & PURDY, *supra* note 42, at 6.

67. See CASTILLO & PURDY, *supra* note 42, at 5 (noting that the International Energy Agency recognizes the high concentration of production and processing of critical minerals in China as a key vulnerability of the energy transition).

68. See Andrew L. Gulley, *China, the Democratic Republic of the Congo, and Artisanal Cobalt Mining From 2000 through 2020*, PROC. NAT’L ACAD. SCI. U.S., June 2023, at 1, 1.

69. See KARA, *supra* note 27, at 98.

massive infrastructure projects in the DRC for cheap in return for a near monopoly on mining sites.⁷⁰ China's infrastructure initiative in the DRC reflects its long-term goal of enmeshing itself with resource-rich African nations by providing low-cost highways and roads through its Belt and Road Initiative in return for preferential access to these resources.⁷¹ The DRC in particular sees Chinese companies use predatory lending practices to secure projects because they have no constraints through human rights protections.⁷² This latest scheme invites warranted scrutiny of the Congolese government, a consistently sordid authority since Congolese independence in 1960, which has seen wanton violence, civil wars, intervention from global superpowers, coups, and of course, corruption.⁷³

The DRC's injurious dealings with China can largely be traced to corrupt leaders seeking to line their own pockets. The DRC's system of using depots to purchase ore from miners and requiring expensive permits to transport ore from the mines to the depots appears to be nothing more than a money grab.⁷⁴ With high fees and mining royalties coming out of the blood and sweat of poor artisanal miners, government officials sought to extract more ore to leech more royalties, allowing mining companies to do as they pleased as long as these royalties were paid.⁷⁵

The government's skimming of its own mining companies has resulted in multiple deleterious consequences for the mining sector. Joseph Mobutu, who served as President of the DRC when it was known as Zaire, forced mines to transfer annual profits to his own overseas bank accounts,⁷⁶ causing the biggest company at the time to fall into financial ruin and rely on foreign mining companies to prop them up.⁷⁷ In November 2018, the government declared cobalt a "strategic" substance, initiating an increase in the royalty rate from

70. Farrell Gregory and Paul J. Milas, *China in the Democratic Republic of the Congo: A New Dynamic in Critical Mineral Procurement*, STRATEGIC STUDIES INST., U.S. ARMY WAR COLLEGE, (Oct. 17, 2024), <https://ssi.armywarcollege.edu/SSI-Media/Recent-Publications/Article/3938204/china-in-the-democratic-republic-of-the-congo-a-new-dynamic-in-critical-mineral>.

71. See Jessica Malobisky, *A Roadmap for Strategically Countering China's Development Influence in Africa*, NEW LINES INST. (Jan. 18, 2024), <https://newlinesinstitute.org/state-resilience-fragility/a-roadmap-for-strategically-countering-chinas-development-influence-in-africa>.

72. See *id.*

73. See *generally* *Democratic Republic of Congo Profile – Timeline*, BBC (Jan. 10, 2019), <https://www.bbc.com/news/world-africa-13286306> (chronologizing the DRC's geopolitical conflicts).

74. See Sovacool, *supra* note 7, at 935.

75. See KARA, *supra* note 27, at 62.

76. Mary Braid Kinshasa, *Mobutu Takes the Money and Runs to a Safe Haven*, THE INDEPENDENT (May 16, 1997, 1:02 PM), <https://www.independent.co.uk/news/world/mobutu-takes-the-money-and-runs-to-a-safe-haven-1261945.html>.

77. See KARA, *supra* note 27, at 90.

3.5% to 10% that companies had to pay for cobalt.⁷⁸ This kind of legislation is likely to only worsen the plight of artisanal miners because with higher royalties coming out of industrial mining companies' pockets, companies' reliance on cheap artisanal mining will only increase.

The DRC's corruption under former president Joseph Kabila even saw sanctioned uranium smuggling operations, authorized and brokered by Kabila himself, to illegally send uranium to North Korea.⁷⁹ The uranium ore was disguised in trucks supposedly hauling cobalt and copper to China, and the entire scheme was facilitated by a Lebanese national who, despite a five-year prison sentence and expulsion from the DRC, was released from prison after a few months and remained in the country.⁸⁰ However, new leadership under President Felix Tshisekedi has attempted to stamp out corruption in the mining sector, most notably in 2021 when Tshisekedi removed from office and indicted former governor of Lualaba Province, Richard Muyej, on charges of embezzling upwards of \$316 million from mining deals.⁸¹ In his efforts to root out corruption, Tshisekedi is also seeking to draw more interest from Western mining companies who would offer better terms and more transparency than the deals brokered with Chinese mining conglomerates under Kabila,⁸² but it may be too little too late. American enterprise has not had a sizable presence in the Congo since 2016 when an Arizona-based company sold its stake in the DRC's largest mine to a Chinese company, while not a single American company made a competitive bid.⁸³ With China's near complete domination of the cobalt mining and refining industry, along with its willingness to skirt human rights protections to maintain the cheapest labor force it can with these projects, it is hard to see an avenue through which American or other Western democracies would be able to navigate to regain their competitive advantages.

78. Stanis Bujakera et al., *Congo Declares Cobalt 'Strategic', Nearly Tripling Royalty Rate*, REUTERS (Dec. 3, 2018), <https://www.reuters.com/article/idUSKBN10220C>.

79. See KARA, *supra* note 27, at 153–54.

80. *Id.*

81. *Id.* at 160.

82. See *id.* at 114–15.

83. See Eric Lipton & Dionne Searcey, *How the U.S. Lost Ground to China in the Contest for Clean Energy*, N.Y. TIMES (Nov. 21, 2021), <https://www.nytimes.com/2021/11/21/world/us-china-energy.html>.

III. SUSTAINABILITY WITHOUT INHUMANITY

“Please tell the people in your country, a child in the Congo dies every day so that they can plug in their phones.”⁸⁴

A. The Flaws of “Green” Batteries

If the U.S.’s goal in implementing the UFLPA is to uphold its human rights ideals against the Chinese government, it is entirely inconsistent to tolerate similar human rights abuses in Africa. Such hypocrisy becomes ever more apparent because Chinese companies, backed by the Chinese Communist Party are behind the operation and ownership of the African mines⁸⁵ that cause the horrors the Biden administration openly censured.⁸⁶ Despite these well-documented abuses, the Biden administration implicitly tolerated them while sensible legislation to counteract them languished in committee,⁸⁷ seemingly out of deference to political priorities.⁸⁸ The push for a rapid transition to an all-EV market, without addressing these humanitarian concerns is irresponsible. Destroying lives in third-world countries and poisoning environments unseen by the average American is not an acceptable tradeoff for reduced carbon emissions. The U.S. is a major possessor of important elements like cobalt, lithium, and copper but finds itself increasingly blocked from using such deposits by regulation, red tape, and, significantly, opposition from environmental groups.⁸⁹ The Biden administration was also hesitant to advance potentially controversial projects that would likely significantly increase the domestic supply of clean energy minerals.⁹⁰ Banning mining at home because of minor ecological concerns but looking the other way as mining operations destroy the environment of the DRC is essentially a net negative for the health of the Earth.

84. KARA, *supra* note 27, at 155.

85. The five largest Chinese mining companies in the DRC enjoy direct lines of credit from Chinese state-owned banks. See Katherine Wells, *China’s Monopoly over Critical Minerals*, GEORGETOWN SEC. STUDS. REV. (June 1, 2023), <https://georgetownsecuritystudiesreview.org/2023/06/01/chinas-monopoly-over-critical-minerals>; see also Countering China’s Exploitation of Strategic Metals and Minerals and Child and Forced Labor in the Democratic Republic of the Congo Act, H.R. 4443, 118th CONG. (2023).

86. See Carol E. Lee, *Biden Raises Concerns with Chinese President in First Official Phone Call*, NBC NEWS (Feb. 10, 2021, 9:23 PM), <https://www.nbcnews.com/politics/joe-biden/biden-raises-concerns-chinese-president-first-official-phone-call-n1257405>.

87. H.R. 4443.

88. Compare H.R. 1155 (117th): *Uyghur Forced Labor Prevention Act*, GOVTRACK, <https://www.govtrack.us/congress/bills/117/hr1155> (last visited Mar. 25, 2025) (noting that the first version of the UFLPA had 114 cosponsors, including 76 Democrats and 38 Republicans) with H.R. 4443 *Tracking*, *supra* note 24 (noting eighteen cosponsors, all of whom are Republicans).

89. See CASTILLO & PURDY, *supra* note 42, at 11 (stating that despite the U.S. holding four percent of global lithium reserves, it hosts only one mine which produces lithium). *But see* Exec. Order No. 14,241 90 Fed. Reg. 13673 (Mar. 20, 2025) (authorizing increased domestic mineral production using presidential emergency powers).

90. *Id.* at 11–12.

Additionally, rechargeable batteries have emissions issues of their own. Their lifespans stand somewhere between an estimated eight to fifteen years,⁹¹ before they must be discarded and (hopefully) recycled.⁹² However, the entire industrial lifecycle of rechargeable batteries, from refining the metals to recycling the dead battery, generates a significant carbon footprint and creates other toxic emissions.⁹³ Herein lies another conundrum for rechargeable battery adoption in the U.S.: approval for such industrial operations at home often runs into local opposition, like when plans for a lithium-ion battery recycling facility in New York fell through due to community concerns over toxic emissions, yet there remains an expectation that the recycling happens elsewhere, such as China.⁹⁴ Such a lack of awareness of the consequences is compounded when one considers that, given China's rife environmental destructiveness,⁹⁵ its battery factories would more likely than not operate less green than those subject to strict U.S. oversight and regulation. As it currently stands, the negative consequences of rechargeable batteries outweigh their redeemable qualities as possible instruments for reducing greenhouse emissions.

B. *Adopting a Zero Tolerance Policy for Human Rights Abuses*

The UFLPA was well-intentioned and well-executed. Because the U.S. fancied itself a just nation, it was necessary for it to uproot China's legacy of forced labor and human rights abuses, especially in Xinjiang Province.⁹⁶ This rejection of the repugnant labor practices in China, however, was automatically undermined by tolerance and indirect endorsement of China's human rights abuses of cobalt miners in the DRC through the Biden administration's push for a wholesale embrace of EVs.⁹⁷ Under President Joe Biden, American automakers embraced the administration's environmental goals and

91. ELSA DOMINISH ET AL., REDUCING NEW MINING FOR ELECTRIC VEHICLE BATTERY METALS: RESPONSIBLE SOURCING THROUGH DEMAND REDUCTION STRATEGIES AND RECYCLING 21 (2021), <https://earthworks.org/wp-content/uploads/2021/09/UTS-EV-battery-metals-sourcing-20210419-FINAL.pdf>.

92. See *All About EV Battery Recycling*, UNION CONCERNED SCIENTISTS (Apr. 5, 2024), <https://www.ucsusa.org/resources/all-about-ev-battery-recycling>.

93. CASTILLO & PURDY, *supra* note 42, at 13.

94. See *id.* (noting that China accounts for seventy-seven percent of lithium-ion battery production while the US and EU account for a mere fifteen percent).

95. See *generally China's Environmental Abuses*, U.S. Dep't of State, <https://2017-2021.state.gov/chinas-environmental-abuses> (last visited Mar. 8, 2025) (listing environmental abuses in China such as its emission of greenhouse gases at a rate more than double that of the United States, ocean pollution, mismanagement of plastic waste, and poor air quality, among others).

96. See Marie de Pinieux & Nadia Bernaz, *Doing Business in Xinjiang: Import Bans in the Face of Gross Human Rights Violations Against the Uyghurs*, 16 ERASMUS L. REV. 61, 62 (2023).

97. See White House Briefing Room, *supra* note 3.

ramped up long-term plans for the development of EVs.⁹⁸ To meet the demands of the expanded EV market, rates of cobalt mining increased.⁹⁹ Moreover, now that the primary consumptive use for cobalt is in EV batteries as opposed to individual electronic devices,¹⁰⁰ the rate of cobalt mining will likely continue to rise, as each 100 kilowatt-hour battery pack in an EV can contain up to twenty kilograms of cobalt,¹⁰¹ accounting for twice as much demand for cobalt from the automotive industry versus the smartphone industry.¹⁰²

And yet, politics change policy, and American policy has since changed when Donald Trump reassumed the presidency in January 2025. One of President Trump's first actions was an executive order that eliminated the Biden administration's EV mandate and considered eliminating subsidies that favor EVs.¹⁰³ Despite these changes in official federal policy, many states and local municipalities still offer incentives for EV purchase, ranging from exemption from state emissions inspections in Texas to up to \$2,400 in tax credits in Kansas.¹⁰⁴ While adoption may not have taken off the way automakers hoped,¹⁰⁵ EV sales are still a significant proportion of new car sales in the U.S., representing 8.1% of all passenger vehicle sales in 2024.¹⁰⁶ In light of increased rates of EV adoption, the U.S. should revive House Bill 4443, which would ensure that all EVs sold in America are made with ethically sourced materials and provide protection for those vulnerable miners in the DRC.

The UFLPA and House Bill 4443 are unique not only in their bold rebuke of a Chinese economy that enjoys global dependence but also in the execution of how they manage suspect Chinese goods. While

98. See Leo Banks, *Automakers Must Leverage Biden-Harris Administration Policies to Boost Affordable EV Production*, CTR. FOR AM. PROGRESS (Oct. 31, 2024), <https://www.americanprogress.org/article/automakers-must-leverage-biden-harris-administration-policies-to-boost-affordable-ev-production>.

99. See Viernes, *supra* note 10.

100. See NAT'L MINERALS INFO. CTR., *Cobalt Statistics and Information*, U.S. GEOLOGICAL SURVEY, <https://www.usgs.gov/centers/national-minerals-information-center/cobalt-statistics-and-information> (last visited Mar. 8, 2025).

101. VEHICLES TECH. OFF., *Reducing Reliance on Cobalt for Lithium-ion Batteries*, DEPT. OF ENERGY (Apr. 6, 2021), <https://www.energy.gov/eere/vehicles/articles/reducing-reliance-cobalt-lithium-ion-batteries>.

102. See Hazel Southwell, *Batteries for Electric Cars Now Demand More Cobalt than Phones*, THE DRIVE (May 17, 2022), <https://www.thedrive.com/tech/batteries-for-electric-cars-now-demand-more-cobalt-than-phones>.

103. See Exec. Order No. 14,154, 90 Fed. Reg. 8353 (Jan. 20, 2025).

104. See generally *Search Federal and State Laws and Incentives*, U.S. DEP'T OF ENERGY, <https://afdc.energy.gov/laws/search#/?jurisdiction&status> (last visited Mar. 8, 2025) (providing a database of federal and state EV incentives).

105. Tom Krisher & David McHugh, *Automakers Embrace Electric Vehicles. But What About Buyers?*, ASSOCIATED PRESS (Mar. 15, 2021, 4:29 PM), <https://apnews.com/general-news-6f24ab68fdbb8fd4ef0c91c4dc769364>.

106. Justin Fischer, *Electric Vehicle Sales and Market Share (US - Q4 2024 Updates)*, CAREEDGE (Jan. 13, 2025), https://caredge.com/guides/electric-vehicle-market-share-and-sales#Q4_2024_EV_Sales_Totals.

the Tariff Act of 1930 (the “Tariff Act”) prohibits importation of merchandise produced by forced labor into the U.S.,¹⁰⁷ the UFLPA authorizes a rebuttable presumption that goods manufactured or produced in Xinjiang or by entities implicated in the program in Xinjiang are made with forced labor and are not permitted to enter the U.S.¹⁰⁸ Thus, the UFLPA requires companies to prove, through due diligence and supply chain tracing, that they are not importing goods made with forced labor from Xinjiang.¹⁰⁹

If this rebuttable presumption element of the UFLPA were to be applied to cobalt mining in the DRC, the consumer technology market would be profoundly impacted. Multinational companies that use rechargeable batteries, like Apple, Tesla, Samsung, and Ford, could find themselves falling short of the UFLPA’s higher standard, despite maintaining compliance with the Tariff Act.¹¹⁰ These companies could currently assert plausible deniability about the origins of the cobalt used to produce the rechargeable batteries in their products because the refining process combines ore from different mining sources, including both ethical mining operations and those using slave labor. It would be nearly impossible to trace a rechargeable battery back to the mine from which its raw materials were sourced with any degree of confidence.¹¹¹ Under the UFLPA’s rebuttable presumption standard, these companies could no longer avoid responsibility for participating in and benefitting from the cruelty miners face daily. While supply chain tracing difficulties are a convenient workaround to the Tariff Act, they would fail to meet the requirements of legislation modeled after the UFLPA.¹¹²

House Bill 4443 adopted the UFLPA’s rebuttable presumption for goods imported from the DRC, which can be overcome only if Customs and Border Protection determines that the goods “were not mined, produced or manufactured wholly or in part by child labor or forced labor.”¹¹³ Moreover, the Bill recommended that “alternative sources of supply and production” be developed, including in the U.S.¹¹⁴ Thus, House Bill 4443 harnessed the muscle of the UFLPA that, if revived, could be a much-needed shield for the millions of Congolese people who suffer and die every day in the ceaseless hunt for cobalt. While lawmakers are limited in how they can provide direct

107. 19 U.S.C. § 1307.

108. 135 Stat. at 1529.

109. *See id.* at 1528.

110. *See* Pinieux & Bernaz, *supra* note 96, at 65; *see also* Preston Barton, *UFLPA Compliance Amid Increased CBP Scrutiny*, DESCARTES (2024), <https://www.descartes.com/resources/knowledge-center/uflpa-compliance-amid-increased-cbp-scrutiny> (last visited Mar. 8, 2025).

111. *See* Sarah Way, *Integrating Artisanal Mining into the Formal Economy Would Benefit African Miners and Economies Alike*, ATL. COUNCIL (July 12, 2024), <https://www.atlantic-council.org/blogs/africasource/integrating-artisanal-mining-into-the-formal-economy-would-benefit-african-miners-and-economies-alike>.

112. *See* Flacks & Songy, *supra* note 18.

113. H.R. 4443 § 4.

114. *Id.* § 5.

support to these overseas victims, the U.S. government can restrict the flow of tainted cobalt and hold the companies that make billions off the resource responsible for the tragedies they help create.

C. *Countervailing Issues*

Several issues arise with the proposition that the U.S. must pass legislation that cracks down on the abuses suffered by cobalt miners. The foremost issue is the unintended consequences it would create for the very people it is meant to help. Somewhat counterintuitively, Congolese cobalt miners rely on mining to make some sort of income.¹¹⁵ Impoverished Congolese people might turn to other dangerous methods to earn money. Because the DRC's economy is so dependent on cobalt mining, the people have few economic alternatives.¹¹⁶ In fact, an all-out ban on artisanal mining could likely increase child labor because its absence would lower household incomes overall.¹¹⁷ The best remedy to these concerns is simply to pay a more livable wage to the miners.

To do so, eliminating red tape such as depots and transport fees, maintaining zero tolerance for oppressive labor practices, and requiring companies that import cobalt into the U.S. to rebut the presumption that cobalt sourced in the DRC is mined via forced labor would likely be an effective and powerful combination to address the labor exploitation concerns. Obviously, this sort of effort to overhaul a sovereign nation's internal labor practices cannot come unilaterally from the U.S. government. While eliminating depot and transport fees is subject to the DRC's own discretion, eliminating oppressive labor practices does not necessarily have to rely solely on Congolese government action. Instead, it must come from the companies that purchase their cobalt from the mostly Chinese-owned companies that source Congolese cobalt—those companies further down the supply chain that sell their batteries within the U.S. while asserting plausible deniability about the unethical sourcing of the materials that make their batteries function.¹¹⁸ Requiring companies to rebut such a presumption, as they are required to do under the UFLPA, is the best way to balance all of these competing concerns. House Bill 4443 would have done just that.

One potential criticism of House Bill 4443 and possible similar legislation is that it may cause a price spike in consumer goods. Determining a dollar amount on the price increase for American con-

115. See Sovacool, *supra* note 7, at 924–25.

116. See *id.* at 935 (quoting a safety inspector in Lubumbashi, DRC who suggests that eliminating cobalt mining from the DRC “would keep [the people] trapped in perpetual poverty”).

117. *Id.*

118. See KARA, *supra* note 27, at 65.

sumers that would result from foreign workers at the root of the supply chain being paid higher wages is largely a guessing game.¹¹⁹ However, the price spike would arguably be negligible: adding a mere \$4 USD to an artisanal miner's roughly \$1.30 daily wage for cobalt for an EV battery that costs anywhere between \$4,000 and \$20,000¹²⁰ cannot reasonably make EVs prohibitively more expensive. A 2023 Tesla Model S, for example, uses a \$12,030 battery—only 13.6% of the total cost of the \$88,490 vehicle.¹²¹ But for an environmentally concerned purchaser of an EV, it is safe to assume that a slight rise in price to ensure workplace safety and sustainability concerns are appropriately handled is an acceptable trade.¹²²

The Agreement would also suffer unintended consequences from a slowdown in EV adoption. EV adoption was a main component of the Biden administration's efforts to conform with the standards set forth in the Agreement,¹²³ and has been a central tenet in the Democratic Party's renewable energy pitches for years.¹²⁴ It is true that EVs have a smaller carbon footprint than gasoline-powered vehicles and emit less greenhouse gases over their lifetimes, even when considering the manufacturing process.¹²⁵ However, even if the Biden administration's goal of an all-electric automotive infrastruc-

119. See Christine McDaniel & Weifeng Zhong, *Worth the Pain: The Costs and Benefits of a Strict Implementation of the Uyghur Forced Labor Prevention Act*, MERCATUS CTR. (Mar. 10, 2022), <https://www.mercatus.org/research/public-interest-comments/worth-pain-costs-and-benefits-strict-implementation-uyghur-forced> (analyzing potential cost increases with the implementation of the UFLPA).

120. Dustin Hawley, *How Much Do EV Batteries Cost*, J.D. POWER (May 10, 2023), <https://www.jdpower.com/cars/shopping-guides/how-much-do-ev-batteries-cost>.

121. Bruno Venditti, *Visualized: What is the Cost of Electric Vehicle Batteries?*, ELEMENTS (Oct. 14, 2023), <https://elements.visualcapitalist.com/cost-of-electric-vehicle-batteries>.

122. See *PwC's Voice of the Consumer Survey 2024: Shrinking the Consumer Trust Deficit*, PRICEWATERHOUSECOOPERS (May 15, 2024), <https://www.pwc.com/gx/en/issues/c-suite-insights/voice-of-the-consumer-survey.html> (finding that, despite inflation being a top concern of sixty-four percent of the 20,000 people across thirty-one countries surveyed, seventy-nine percent would pay more for a product that is produced with a lower carbon footprint, seventy-eight percent would pay more for a product from a company with a reputation for ethical practices, and the mean percent above-average price consumers were willing to pay stood at over nine percent).

123. See *generally* Press Statement, The White House Briefing Room, FACT SHEET: President Biden Sets 2035 Climate Target Aimed at Creating Good-Paying Union Jobs, Reducing Costs for All Americans, and Securing U.S. Leadership in the Clean Energy Economy of the Future (Apr. 17, 2023), <https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2024/12/19/fact-sheet-president-biden-sets-2035-climate-target-aimed-at-creating-good-paying-union-jobs-reducing-costs-for-all-americans-and-securing-u-s-leadership-in-the-clean-energy-economy-of-the-future> (detailing the Biden administration's environmental policies since rejoining the Agreement).

124. See Fred Lambert, *Democrats Unveil \$462 Billion Electric Car Incentive Plan to Push if Elected*, ELECTREK (Oct. 25, 2019, 6:18 AM), <https://electrek.co/2019/10/25/democrats-electric-car-incentive-plan>; see also Rachel Frazin, *Democrats Walk Tightrope in Push for Electric Vehicles*, THE HILL (June 8, 2022, 8:00 AM), <https://thehill.com/driving-into-the-future/3513613-democrats-walk-tightrope-in-push-for-electric-vehicles>.

125. *Electric Vehicle Myths*, U.S. ENV'T PROT. AGENCY (Jan. 23, 2025), <https://www.epa.gov/greenvehicles/electric-vehicle-myths>.

ture is met, it is unlikely to move the needle on the temperature reduction goals of the Agreement. No G20 nation is on track to meet its net-zero target, and even the most optimistic scenario sees a fourteen percent chance of limiting warming to 1.5 degrees Celsius.¹²⁶

Additionally, China, the biggest emitter of carbon in the world, has weakened in its resolve to conform to promises and expectations in the Agreement.¹²⁷ China has the world's largest population, more than doubles the total emissions of the U.S., and is responsible for almost one-third of the globe's entire carbon emissions.¹²⁸ It announced at COP26 that it will remain on the same course of reaching peak emissions by 2030 and becoming carbon neutral by 2060: a lofty goal that deflated the confidence of environmental advocates who hoped that China would be even more ambitious and attempt to expedite that process.¹²⁹ India, meanwhile, sits at number three in global carbon emissions but is currently seeing its population of over one billion rapidly modernize, necessitating an increase in energy consumption.¹³⁰ Thus, even if 100% of U.S. consumers adopt EVs, the emissions reduction will likely only be a drop in the global bucket when accounting for China and India, as well as other developing countries, such as those in South America and South Asia.¹³¹ And as those nations further modernize, the U.S.'s adoption of EVs will have less and less of an effect on global carbon emissions.¹³²

D. Alternatives

Currently, only a few viable cobalt alternatives exist, and those that do show some promise require at least a decade of further research to perfect and make an adequate substitute.¹³³ Cobalt is so important because of its ability to hold more charge and operate for

126. See Nations Must Go Further than Current Paris Pledges or Face Global Warming of 2.5-2.9°C, UN ENV'T PROGRAMME (Nov. 20, 2023), <https://www.unep.org/news-and-stories/press-release/nations-must-go-further-current-paris-pledges-or-face-global-warming>.

127. Lauri Myllyvirta & Byford Tsang, *China's Climate Targets Could Make or Break the Paris Agreement*, FOREIGN POL'Y (Oct. 9, 2024, 12:19 PM), https://foreignpolicy.com/2024/10/09/china-climate-target-paris-agreement-global-warming-un/#cookie_message_anchor; *CO2 Emissions by Country*, WORLDOMETER, <https://www.worldometers.info/co2-emissions/co2-emissions-by-country> (last visited Mar. 8, 2025).

128. See Marcus Lu, *Visualizing All the World's Carbon Emissions by Country*, VISUAL CAPITALIST (Nov. 8, 2023), <https://www.visualcapitalist.com/carbon-emissions-by-country-2022>.

129. See All Things Considered, *Where do China, India and Brazil Stand on Climate Pledges*, NAT'L PUB. RADIO, at 0:45 (Oct. 29, 2021), <https://www.npr.org/2021/10/29/1050620390/where-do-china-india-and-brazil-stand-on-climate-pledges>.

130. See *id.* at 1:27 (noting that India uses coal for seventy percent of its electricity because it has limited oil or gas).

131. See Holly Rooper, *Emissions Growth in the Developing World*, CLIMATE LEADERSHIP COUNCIL (June 20, 2024), <https://clcouncil.org/blog/emissions-growth-in-the-developing-world> (noting that "the Global South's emissions are rapidly increasing" and "[d]eveloping countries contributed 95% of global emissions increases over the last decade").

132. See *id.*

133. Kara, *supra* note 27, at 29.

longer periods,¹³⁴ and so far, no other substance compares to cobalt's energy density.¹³⁵ Lithium-ion-phosphate is a potential option, but still maintains "only about half the energy density of cobalt and nickel batteries."¹³⁶ Organic materials have also been tested, but have several significant drawbacks in terms of conductivity, capacity, and lifespan.¹³⁷

Despite few alternatives at present, requiring stricter scrutiny of EV batteries entering the U.S. can force innovation in the materials that make up these batteries.¹³⁸ As companies are forced to pay more for cobalt and ensure safe conditions for workers at the bottom of the supply chain, it is reasonable to assume they would put more resources into research and development to figure out an alternative to the burdensome elements that cost so many lives.¹³⁹ Leaders in Washington, therefore, can promote further innovation into cleaner and less dangerous materials that can match the efficacy of cobalt in batteries, instead of simply implicitly encouraging companies to mine more and more in order to fuel the EVs that prior administrations wanted on the road by 2030.¹⁴⁰

In fact, this very shift may already be underway. Section Nine of President Trump's Inauguration Day executive order that eliminated the EV mandate calls for the Secretary of Homeland Security to "assess the quantity and inflow of minerals that are likely the product of forced labor into the United States" with her assessment to be delivered within ninety days.¹⁴¹ Section Nine also ordered the secretaries of the Interior and Agriculture and the EPA Administrator to collaborate with other agency heads to identify "all agency actions that impose undue burdens on the domestic mining and processing of non-fuel minerals and undertake steps to revise or rescind such actions."¹⁴² This executive order calls to attention two of the actionable solutions this very article recommends: restricting the importation of minerals produced by forced labor and reducing reliance on foreign-sourced rare-earth minerals by reducing red tape that would scale up mining efforts on U.S. soil. The current administration appears to be rightfully concerned with the ethical and security issues

134. *See id.*

135. Anne Trafton, *Cobalt-Free Batteries could Power the Cars of the Future*, MIT NEWS (Jan. 18, 2024), <https://news.mit.edu/2024/cobalt-free-batteries-could-power-future-cars-0118>.

136. *Id.*

137. *Id.*

138. *See id.*

139. *See* Trafton, *supra* note 135; *see also* Zachary Booth, *US Involvement in Central African Mining*, ALL FOR CITIZEN ENGAGEMENT (Sep. 12, 2023, 12:06 PM), <https://ace-usa.org/blog/research/research-foreignpolicy/us-involvement-in-central-african-mining> (discussing the inhumane conditions of cobalt mining in the DRC).

140. *See* Coral Davenport, *Biden Administration Announces Rule Aimed at Expanding Electric Vehicles*, N.Y. TIMES (Mar. 22, 2024), <https://www.nytimes.com/2024/03/20/climate/biden-phase-out-gas-cars.html>.

141. Exec. Order No. 14,154, *supra* note 103, at 8353, 8358.

142. *Id.* at 8358.

that importing cobalt from Chinese mines in the Congo create. With a reduced focus on EV production and adoption, the new administration is setting up a policy that will put humanitarian concerns ahead of goals for carbon emission reduction.

IV. CONCLUSION

*"We are no longer your monkeys."*¹⁴³

Rechargeable batteries, which are crucial to EVs and the former Biden administration's green energy agenda, require cobalt that is mined unethically in the DRC.¹⁴⁴ While the U.S. has shown that it has a vested interest in eliminating China's inhumane forced labor practices within its own borders, it must acknowledge that China employs the same sort of exploitation on miners in the DRC. House Bill 4443 recognized China's abusive relationship with the DRC, but the Bill's conclusions carry little weight if the legislation is not revived. The UFLPA was a monumental step in taking the worldwide lead in limiting inhumane working conditions for oppressed peoples overseas.¹⁴⁵ A similar initiative, applied to miners in the DRC, is an ethical imperative.

Although the Biden administration heavily relied on EVs and rechargeable batteries, it seemingly ignored the harsh reality that these batteries are made thanks to the blood and sacrifice of impoverished workers in Africa and rushed an EV policy rollout without considering other options.¹⁴⁶ Such options, like new legislation, would likely prompt research into cobalt and nickel alternatives due to the massive amounts of these resources needed just to make just one EV battery.¹⁴⁷ The mining, refining, and recycling process for rechargeable batteries has major environmental detriments in its own right;¹⁴⁸ producing an alternative with similar efficacy would be a reasonable consequence of such proposed legislation and a major benefit to the world at large.

Beyond research opportunities, the reintroduction of House Bill 4443 or similar legislation would not only maintain the U.S.'s legacy of upholding human rights globally but would reduce China's dominance in rare-earth element supply chains and green energy technology.¹⁴⁹ The U.S. has a vested interest in limiting China's economic domination in especially innovative fields, which has been seen in the semiconductor industry,¹⁵⁰ and rechargeable battery production

143. KARA, *supra* note 27, at 110.

144. *See supra* Part II.

145. *Id.*

146. *See generally* KARA, *supra* note 27.

147. *See* VEHICLES TECH. OFF., *supra* note 101.

148. *See* Castillo & Purdy, *supra* note 42, at 13; *see supra* Part III Section A.

149. *See* Ashima Sharma, *It is Foolish to Think We Could Ever Remove Our Dependence on China*, MINE (Jan. 2024), https://mine.nridigital.com/mine_jan24/china-lithium-supply-dependence.

150. *See* Press Statement, Anthony J. Blinken, Secretary of State, U.S. Department of State, Commerce Implements New Export Controls on Advanced Computing and Semiconducting

is one such field.¹⁵¹ Allowing the majority of refineries and recycling plants to reside in China not only leaves the U.S. lagging behind in manufacturing the technology but also leaves environmental standards for such operations to the laxer Chinese requirements that may result in more environmental harm than good.

Rechargeable batteries are here to stay and appear to be the most applicable means the U.S. has of limiting its carbon emissions.¹⁵² Reflecting this, the Trump administration already has put in its sights the flaws of EVs and the horrific labor practices behind how the materials to power EVs are mined.¹⁵³ Congress ought to enact the goals of this executive order into law to ensure that Americans reap the long-term benefits of rechargeable batteries and EVs. The best and most effective strategy for doing so is enacting a law targeting these overseas labor practices. One goal must take priority over the other: either reducing carbon emissions or protecting the lives put at risk when the U.S. participates in massive cobalt consumption. The latter goal must be the priority because it would result in better working conditions, fewer deaths and injuries, cleaner environments globally, and a reduction in Chinese control over this important sector.¹⁵⁴ Presidential administrations must put human rights above policy goals. To do so, the U.S. must take a hard stance on labor in the DRC, sending a clear worldwide message that such human rights violations, even for the sake of sustainability, cannot and will not be tolerated.

Manufacturing Items to the People's Republic of China (PRC) (Oct. 7, 2022), <https://www.bis.doc.gov/index.php/documents/about-bis/newsroom/press-releases/3158-2022-10-07-bis-press-release-advanced-computing-and-semiconductor-manufacturing-controls-final/file> (banning the sale of high-end semiconductors to China).

151. See U.S. Dep't of State, *Forced Labor and the Clean Energy Transition: Finding a Responsible Way Forward*, Off. to Monitor and Combat Trafficking in Pers. (Jul. 2022), <https://www.state.gov/wp-content/uploads/2022/07/Forced-Labor-and-the-Clean-Energy-Transition-Finding-A-Responsible-Way-Forward.pdf>.

152. Florencia Heredia et al., *The Importance of Lithium for Achieving a Low-Carbon Future: Overview of the Lithium Extraction in the 'Lithium Triangle'*, 38 J. ENERGY & NAT. RES. L. 213, 217 (2020).

153. See Exec. Order No. 14,154, *supra* note 103, at 8353.

154. See James Rupert, *In Congo, Peace Means a Halt to 'Brutal, Illegal Mining'*, U.S. INST. OF PEACE (Mar. 7, 2024), <https://www.usip.org/publications/2024/03/congo-peace-means-halt-brutal-illegal-mining>.



