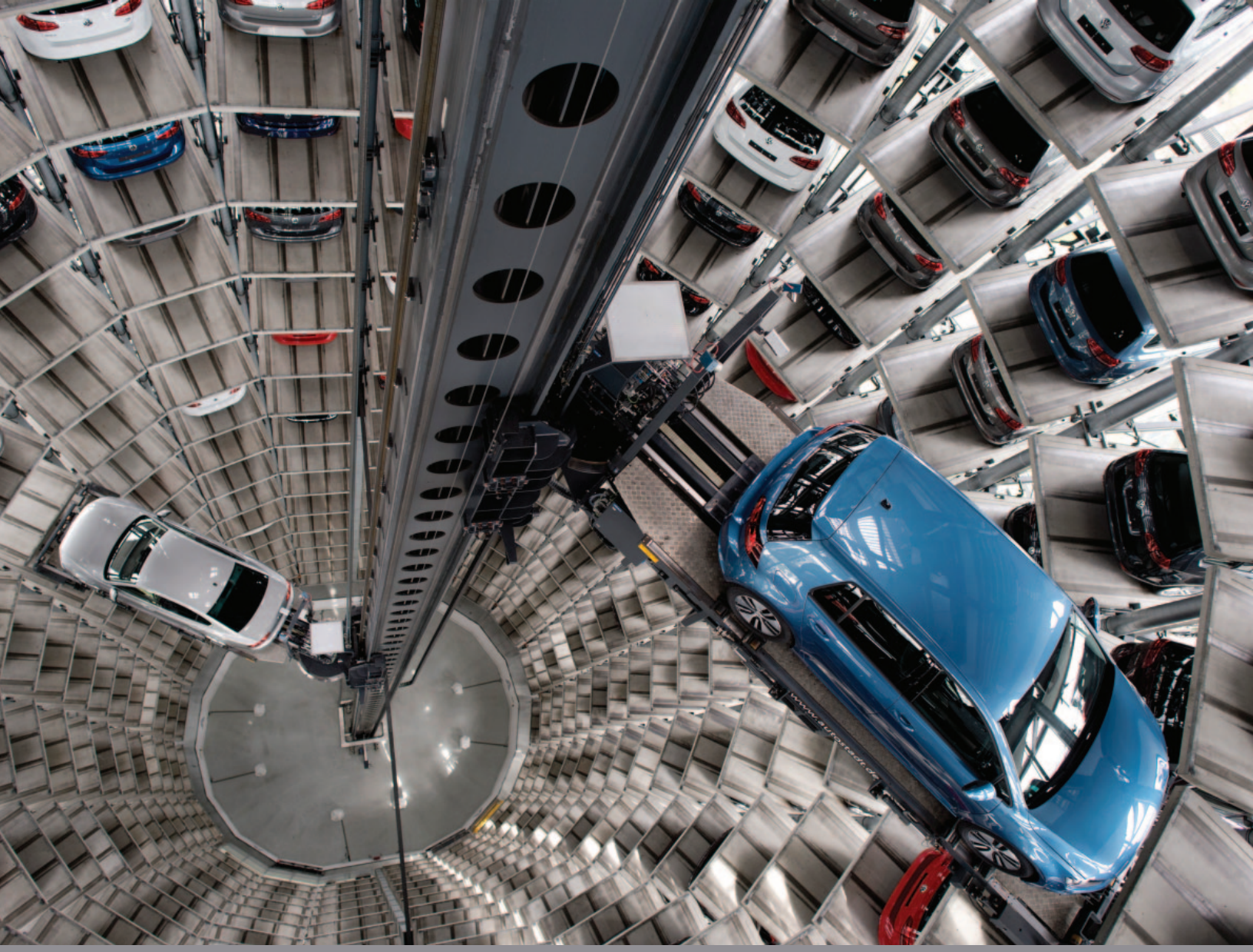


Aluminum: The Car Industry's Blind Spot

Why Car Companies Should Address the Human Rights Impact of Aluminum Production

HUMAN RIGHTS WATCH

IDI Inclusive Development International

HUMAN RIGHTS WATCH

IDI Inclusive Development International

Aluminum: The Car Industry's Blind Spot

Why Car Companies Should Address the Human Rights Impact of Aluminum Production

Printed in the United States of America
ISBN: 978-1-62313-924-7
Cover design by Rafael Jimenez

Human Rights Watch defends the rights of people worldwide. We scrupulously investigate abuses, expose the facts widely, and pressure those with power to respect rights and secure justice. Human Rights Watch is an independent, international organization that works as part of a vibrant movement to uphold human dignity and advance the cause of human rights for all.

Human Rights Watch is an international organization with staff in more than 40 countries, and offices in Amsterdam, Beirut, Berlin, Brussels, Chicago, Geneva, Goma, Johannesburg, London, Los Angeles, Moscow, Nairobi, New York, Paris, San Francisco, Sydney, Tokyo, Toronto, Tunis, Washington DC, and Zurich.

For more information, please visit our website: http://www.hrw.org

Inclusive Development International works to advance social, economic, and environmental justice by supporting communities around the world to defend their human rights and environment in the face of harmful corporate activities. Through research, casework, and policy advocacy, we hold corporations, financial institutions, and development agencies accountable to their human rights and environmental responsibilities and promote a more just and equitable international economic system.

For more information, please visit our website: https://www.inclusivedevelopment.net/

JULY 2021

ISBN: 9781623139247

Aluminum: The Car Industry's Blind Spot

Why Car Companies Should Address the Human Rights Impact of Aluminum Production

Summary

Maciré Camara, a widow and mother of five, is a farmer in Diakhabia, a village in the Boké region of Guinea, West Africa.[1] Walking through Camara's community, it's hard to imagine the connection between the global car industry and her rural village, where most of the vehicles are beat-up taxis used to ferry people to nearby towns.

Guinea is at the center of an extraordinary boom in bauxite mining, the ore used to make aluminum, a lightweight metal that is a key component of fuel-efficient vehicles. Guinea has the world's largest bauxite deposits and has rapidly expanded production, growing its global market share from 4 percent in 2014 to 22 percent in 2020. Guinea is now the biggest exporter of bauxite to refineries in China, which produces the majority of the world's aluminum. Bauxite is also mined in Australia, Brazil, India, and several other countries.

Car manufacturers are major industrial consumers of aluminum, using 18 percent of all aluminum consumed worldwide in 2019, according to the International Aluminum Institute (IAI), an industry group. As car companies transition to electric vehicles, the IAI forecasts that the industry's demand for aluminum will double by 2050. Aluminum is highly recyclable, but more than half the aluminum used by the car industry is primary aluminum produced from bauxite.

The aluminum industry portrays aluminum as a key material for the transition to a more sustainable world, with the European Aluminum Association, an industry group, saying in a 2018 video that, "The future of mobility is electric…and the metal enabling this green electric future is aluminum." This image, however, contrasts sharply with the experience of communities, like Camara's, for whom bauxite mining has had a devastating impact on their way of life.

Prior to the arrival of mining, Camara's family relied on farming for food and income, planting rice and other crops on the fertile land on the banks of the nearby Rio Nunez river. She could just about afford enough food for her children, earning up to 1.5 million Guinean

[1] Name changed to protect her identity.

francs (US$152) per week during a good harvest season and taking home around 10 million Guinean francs per year ($1,010).

Things changed in 2016 when a consortium linked to La Société Minière de Boké (SMB), Guinea's largest bauxite mining company, began clearing hundreds of hectares of land around Diakhabia to make way for an industrial port. Since 2017, the port has been shipping millions of tons of bauxite each year to refineries belonging to China Hongqiao, the largest aluminum producer in the world. China Hongqiao and other companies who source bauxite from Guinea make aluminum that is eventually turned into components used by some of the world's largest car companies.

Camara's family was among the dozens of households in Diakhabia who lost land to the port. The mining consortium paid Camara compensation of just over 4 million Guinean francs ($406) in 2016, a one-off payment that could not replace the land that her family depended on for its livelihood. More than four years later, and without land to farm, Camara has been thrust further into poverty. "I've only been able to find half a hectare of land to farm, and I make about 3 million Guinean francs ($303) per year," she said in December 2020. "We used to eat three meals a day, but now we sometimes have to make do with one or two." SMB told Human Rights Watch that its projects are audited annually by the Guinean government to verify its respect for human rights and the environment and that it pays fair compensation for the land it acquires.

Camara's story is just one example of the profound impact that aluminum production around the world can have on the rural communities that live closest to mining and refining operations.

Bauxite mines, because they involve surface level or "strip" mining, take up a large area, often covering land that has significant ecological value and that local communities depend on for their livelihoods. In Australia, bauxite mining has for decades occurred on land belonging to Indigenous Peoples, many of whom are still fighting for adequate restitution.

Bauxite mining can also contaminate rivers and streams by removing vegetation and facilitating erosion, reducing the quality and quantity of water available to nearby communities. In Ghana, a coalition of civil society and local citizens' groups say that a

planned bauxite mine in the Atewa rainforest threatens to contaminate rivers that provide drinking water to millions of people.

The process of refining bauxite into alumina, an intermediate product then converted to aluminum, also has significant potential environmental and human rights impacts. Alumina refining produces large amounts of red mud, a highly caustic material that, unless stored properly, can pollute waterways and harm people who come into contact with it. In Brazil's Pará State, a nongovernmental organization representing more than 11,000 people, including Indigenous People and Afro-Brazilians, has several ongoing legal complaints against Norsk Hydro, which operates a bauxite mine, refinery, and aluminum smelter, over the alleged contamination of waterways in the Amazon basin. Norsk Hydro told Human Rights Watch that it respects the claimants' right to file the lawsuits and will respond based on the facts and evidence presented in court.

Aluminum production also generates significant amounts of greenhouse gas emissions, with the majority of the electricity used to convert alumina into aluminum, an energy intensive process, currently generated by coal power plants. In China, which dominates global aluminum production, 90 percent of aluminum was produced with electricity from coal power in 2018. Aluminum production is responsible for more than one billion tons of CO_2 equivalent annually—around two percent of global greenhouse gas emissions.

This report, a collaboration between Human Rights Watch and Inclusive Development International, argues that, given the reliance on aluminum of the global automobile industry, car companies have a responsibility under the United Nations Guiding Principles on Business and Human Rights to address the human rights and environmental impacts of aluminum production.

The report begins by setting out the human rights consequences of the aluminum industry, using examples from around the world and an in-depth case study of bauxite mining in Guinea, based on extensive field and remote research from 2017 to 2020. The report then discusses the car industry's current efforts to source aluminum responsibly, drawing on meetings or correspondence with nine car companies: BMW (headquartered in Germany), Daimler (Germany), Ford (United States), General Motors (United States), Groupe PSA (France, now part of Stellantis group), Renault (France), Toyota (Japan), Volkswagen (Germany), and Volvo (Sweden). Three companies, BYD (China), Hyundai (South Korea),

and Tesla (United States), did not respond to requests for information. By combining field-driven examples of communities' experience of aluminum production with dialogue with car companies about their ability to respond, this report makes a compelling case for the car industry to do more to protect communities like Camara's from the negative impacts of the aluminum industry.

Aluminum Sourcing is a Blind Spot for the Car Industry

Many of the world's leading car companies have human rights due diligence policies that commit them to identifying and mitigating human rights abuses in their supply chains. However, despite the increasing importance of aluminum to the automobile industry, the human rights impact of aluminum production – and bauxite mining in particular – remains a blind spot.

Although car companies' knowledge of aluminum supply chains varies, none of the nine companies that responded to Human Rights Watch and Inclusive Development International had, prior to being contacted for this report, mapped their aluminum supply chain to understand the human rights risks within it. Car companies have instead prioritized supply chain due diligence for other materials central to electric vehicles, such as the cobalt needed for electric batteries, with several car industry executives underscoring the need for consistency between the transition to environmentally friendly vehicles and responsible sourcing.

Although the car industry as a whole has made limited efforts to source aluminum responsibly, several car companies, Audi, BMW, and Daimler, have sought to promote responsible sourcing by joining an industry-led certification scheme, the Aluminium Stewardship Initiative (ASI), that uses third-party audits to assess mines, refineries, and smelters against a Performance Standard that includes human rights and environmental factors. According to ASI, 11 percent of operational bauxite mines and alumina refineries and 20 percent of aluminum smelters are currently certified against the Performance Standard. Volkswagen, BMW, and Daimler are encouraging aluminum producers to join ASI and expand the amount of certified aluminum available for purchase.

ASI's standards and audit process, however, need significant strengthening. ASI's human rights standards, which are currently being revised, need to provide increased protection

for communities who lose land to mining, particularly those with customary land rights. More broadly, the human rights requirements in ASI's standards lack adequate detail and do not break down key human rights issues, such as how to resettle communities displaced by mining, into specific criteria against which companies' policies and practices can be assessed. ASI's process for verifying whether companies meet its standards also need to provide stronger guarantees for participation from communities in the audit process and should ensure that published audit reports state clearly whether and how a facility met ASI's standards. In the absence of clear requirements for participation from communities in ASI's audits, and more transparency in audit reports, they provide little reassurance about whether and how a company is respecting human rights on the ground.

BMW and Daimler said ASI should consider aligning its standards and assurance process more closely with another mining certification scheme, the Initiative for Responsible Mining Assurance (IRMA). Human Rights Watch is a member of IRMA's board. IRMA has more detailed human rights standards, clearer guidance on how to involve communities in audit reports, and has so far provided more detail in its published audit reports. Fiona Solomon, ASI's Chief Executive Officer (CEO), said that as part of its standards revision, ASI is, "enhancing guidance for auditors on consultation with, and outreach to, affected communities." She also said that IRMA and a range of other standards were being reviewed as part the standards revision.

Car companies should also understand that sourcing certified aluminum does not on its own fulfill their responsibility to address human rights risks in supply chains. Certification schemes rely on third-party audits that research has shown have significant limitations, including inadequate consultation with affected communities and lack of human rights expertise among auditors. Sourcing certified aluminum should only ever be one part of a broader due diligence process that includes supply chain mapping and public disclosure, risk analysis, grievance mechanisms, and direct engagement with mines, refineries, and smelters implicated in human rights abuses.

Some car companies have, since being contacted by Human Rights Watch and Inclusive Development International, begun to take these steps. Drive Sustainability, a coalition of 11 car companies that includes BMW, Daimler, Ford, Toyota, Volkswagen, and Volvo, in May 2021 initiated a project to assess the human rights risks inherent in aluminum supply chains and those of nine other raw materials, which it said could presage collective action

by the autoindustry to drive up standards in supply chains. Other companies, including Renault, have also begun dialogue with their suppliers about human rights risks in the aluminum industry. In January 2021, Drive Sustainability also wrote to The Aluminum Association, an association of dozens of aluminum producers, in order "to express concern about the situation in Guinea," to solicit information on members' human rights due diligence efforts, and to express support for an ongoing mediation between a Guinean mining company and 13 impacted communities. In November 2020, BMW Group stated that, if bauxite mining in Ghana's Atewa Forest violated the government's commitments to fight climate change and protect biodiversity, BMW would not accept aluminum originating from the forest in its supply chain.

What the Car Industry Should Do Next

These positive steps should be the start of a wider effort by car companies to address the human rights impacts of aluminum production. Car companies should begin by ensuring that binding human rights and environmental standards are integrated into their procurement contracts and should require suppliers to integrate similar language into contracts throughout the supply chain.

Car manufacturers cannot, however, rely only on their suppliers to enforce human rights and environmental standards. All car manufacturers should make aluminum a priority raw material for responsible sourcing and should map their aluminum supply chain to identify the mines, refineries, and smelters they are sourcing from. Car companies should then disclose this information to enable communities and NGOs to share information on human rights risks.

Having mapped their supply chains, car companies should regularly assess any adverse human rights impacts through robust third-party audits at mines, refineries, or smelters, as well as through dialogue with NGOs and civil society groups. Third-party audits should be designed in consultation with a variety of stakeholders, including civil society and affected communities, and should empower affected populations to participate without fear of retaliation. Car manufacturers should also conduct visits to bauxite mines, alumina refineries, and aluminum smelters and meet with impacted communities at these sites.

Car companies should then formulate a plan for mitigating and addressing human rights abuses in their aluminum supply chains. This should include engagement with mines, refineries, or smelters implicated in human rights violations to require them to develop time-bound corrective action plans and provide remedies for victims. Where facilities do not take adequate corrective action over a reasonable period of time, car manufacturers should reject aluminum parts sourced from the facility in question and require their suppliers to terminate procurement relationships with the facility.

Car companies should also consider whether to take collective action, in collaboration with civil society groups and other key stakeholders, to address human rights risks common to bauxite mining, alumina refining, or aluminum production in a given country or region. This could include, for example, an effort to audit multiple mining companies in the region to compare practices and identify common areas for improvement.

Finally, car companies should develop grievance mechanisms through which communities can file complaints of human rights abuses by bauxite mines or aluminum producers in their supply chains. Car manufacturers should also support the development of laws requiring all business actors to conduct robust human rights due diligence, creating a level playing field across the industry and increasing their suppliers' incentive to respect human rights.

The story of Camara and her community in Guinea is still unfolding. The SMB consortium that operates the port near her village has the right to mine in the area until at least 2031, and there is enough bauxite for mining to continue in the Boké region far beyond that. Camara's experience with mining so far reflects the huge power imbalance between communities affected by bauxite mining and multinational mining companies. By lending their weight to efforts to drive up human rights standards in the aluminum industry, car companies can help provide a more hopeful future for Camara's community and others like it.

Methodology

This joint report by Human Rights Watch and Inclusive Development International advocates for strengthened efforts by the global car industry to address the human rights impact of aluminum production, particularly the mining and refining of bauxite, the ore needed to produce aluminum. Aluminum is a key material for the transition to lighter and more environmentally friendly vehicles, particularly electric cars.

Human Rights Impact of Aluminum Production

This report's description of the human rights impact of aluminum production draws on desk research on the impacts of the industry worldwide, including a review of material published by industry groups, NGOs, and journalists. The report then uses a detailed case study of bauxite mining in Guinea, which has the world's largest deposits and is the second largest producer, to illustrate the industry's human rights impacts. The chapter on Guinea focuses in particular on two mining companies, La Société Minière de Boké (SMB) and La Compagnie des Bauxite de Guinée (CBG), that together made up more than 70 percent of Guinea's bauxite exports in 2019 and almost 60 percent in 2020.

The findings on Guinea are based on extensive research by Human Rights Watch and Inclusive Development International. Human Rights Watch conducted more than six weeks of field research in mining-affected areas in Guinea between 2017 and 2019, and published a 145-page report in 2018. During 2020, and in the course of the Covid-19 pandemic, Human Rights Watch conducted 18 telephone interviews with community members in mining-affected areas and with NGO representatives, mining executives, and journalists active in Guinea's mining sector. Human Rights Watch's findings on Guinea's mining sector are also informed by satellite imagery analysis, review of environmental and social impact assessments and government and company audits, and correspondence and interviews with government officials and company executives.

Inclusive Development International has also conducted extensive research and advocacy in Guinea. In February 2019, Inclusive Development International, along with Guinean NGOs, filed a complaint on behalf of 13 villages affected by CBG's operations against the International Finance Corporation (IFC), a World Bank body, for lending the company

US$200 million to expand its mining operations. CBG and the communities are now engaged in a mediation process facilitated by the IFC's Compliance Advisor Ombudsman to try to resolve the communities' grievances. Inclusive Development International and two Guinean NGOs are accompanying the community representatives in the mediation process.

Prior to filing this complaint and subsequently, Inclusive Development International and Guinean NGOs conducted extensive fact-finding to document the impacts of CBG's mining operations on local communities. This included in-person interviews, group discussions, participatory resource mapping with 17 CBG-affected villages and an analysis of satellite imagery from 1973-2019.

Despite the Covid-19 pandemic, Inclusive Development International has remained in close and frequent contact with the 13 communities involved in the complaint against CBG, speaking regularly to community representatives and conducting field research to reflect recent impacts from the mine's expansion activities in 2020.

Human Rights Watch wrote to SMB and CBG in May 2021 informing them about the publication of this report and requesting updated information on their human rights, environmental, and social practices. Human Rights Watch also had a virtual meeting with CBG in June 2021. SMB and CBG responded with letters in June 2021 and Human Rights Watch subsequently wrote to SMB and CBG again requesting supplemental information, including comments on supply chain mapping. At time of writing, Human Rights Watch had not received an additional response.

In May 2021, Human Rights Watch wrote to the Guinean Ministry of Mines and Geology requesting responses to questions about the government's oversight of Guinea's bauxite mining sector. The ministry replied in June 2021. Copies of all the letters from CBG, SMB, and the Guinean government are available on Human Rights Watch's website.

Aluminum Sourcing and the Car Industry

This report's research on car companies' aluminum sourcing included supply chain mapping and research on the car industry's efforts to integrate human rights due diligence into their sourcing practices.

To demonstrate the connections between bauxite mining, aluminum production, and the global car industry, Inclusive Development International conducted a detailed investigation to examine the supply chain that links bauxite produced in Guinea, the main case study for this report, and the aluminum parts used by global car companies. The investigation, which was conducted from 2017 to 2019, used publicly available sources such as company financial disclosures, import-export data, shipping records, and media reporting.

Between May and October 2020, Human Rights Watch and Inclusive Development International conducted a desk review of car companies' existing human rights due diligence and responsible sourcing efforts, reviewing car companies' published materials describing their sourcing and sustainability practices and reports written by NGOs and industry groups. We then wrote to 12 car companies to ask them what steps they take to responsibly source aluminum. We identified the car companies based on factors that included their overall share of global car sales; their share of global electric vehicle sales; and a desire for geographic diversity in the companies that we targeted.

Human Rights Watch and Inclusive Development International ultimately met with representatives of seven of the 12 companies contacted ahead of the publication of this report: BMW (headquartered in Germany), Daimler (Germany), Ford (United States), General Motors (United States), Groupe PSA (France, now part of Stellantis group), and Renault (France), and Volkswagen (Germany). Toyota (Japan) and Volvo (Sweden) responded in writing to our letter. We received no reply from BYD (China), Hyundai (South Korea), or Tesla (United States).

As part of the research, we also spoke with several aluminum and automotive industry groups, including Drive Sustainability, a coalition of 11 car companies that includes BMW, Daimler, Ford, Toyota, Volkswagen, and Volvo; the International Aluminum Association, an aluminum industry group; and the Aluminum Stewardship Initiative (ASI), the leading certification scheme in the aluminum sector. We wrote to ASI in April 2021 to provide comments on proposed revisions to their standards. In June 2021, we also shared preliminary findings of this report with ASI. ASI provided comments during meetings in June 2021 and also provided a written response.

Aluminum and the Car Industry

Aluminum is a light weight but strong metal produced from bauxite, a red ore.[2] Bauxite deposits are found in Guinea, which has the world's biggest deposits, in Australia, currently the biggest producer, and in other countries including Brazil, China, India, Jamaica, and Vietnam.[3] Primary aluminum is produced through a refining process in which bauxite is converted to an intermediate product, alumina, and then smelted into aluminum.[4] As a general rule, four tons of dried bauxite is required to produce two tons of alumina, which in turn produces one ton of aluminum.[5] Some but not all aluminum producers are "vertically integrated," meaning that they operate or co-own their own mines, refineries, and aluminum smelters.[6]

The car industry is a major industrial user of aluminum, consuming 18 percent of all aluminum consumed worldwide in 2019.[7] Although aluminum usage varies by car brand, manufacturers currently use aluminum in parts like engines, chassis, frames, body panels, wheels, and many other smaller components.[8]

---

[2] "Student Educational Resources," The Aluminum Association, https://www.aluminum.org/aluminum-advantage/student-educational-resources (accessed February 1, 2021).

[3] E. Lee Bray, "2020 Minerals Commodities Summary, Bauxite and Alumina Data Sheet," U.S. Geological Survey, January 2021.

[4] A. Michael Donoghue, Neale Frisch, & David Olney. "Bauxite Mining and Alumina Refining: Process Description and Occupational Health Risks." *Journal of Occupational and Environmental Medicine*, 56.5S (2014): S12-S17.

[5] E. Lee Bray, "2019 Minerals Commodities Summary, Bauxite and Alumina Data Sheet," U.S. Geological Survey, January 2020, https://pubs.usgs.gov/periodicals/mcs2020/mcs2020-bauxite-alumina.pdf (accessed June 30, 2021).

[6] In some cases, companies refining and smelting aluminum also manufacture semi-industrial products (like aluminum sheets or cylinders), and sometimes even the final product used by end users like car companies. In other cases, semi-industrial products and final products, like car parts, are produced by industrial manufacturers who buy and then process aluminum from smelters. "Measuring distortions in international markets: the aluminium value chain," Organisation for Economic Cooperation and Development (OECD), 2019, https://www.oecd-ilibrary.org/trade/measuring-distortions-in-international-markets-the-aluminium-value-chain_c82911ab-en (accessed February 1, 2021).

[7] Human Rights Watch email correspondence with International Aluminum Institute, May 27, 2021.

[8] "Material Change: A Study of Risks and Opportunities for Collective Action in the Materials Supply Chains of the Automotive and Electronics Industries," Drive Sustainability, July 2018, https://drivesustainability.org/wp-content/uploads/2018/07/Material-Change_VF.pdf (accessed February 1, 2021); "Automotive," The Aluminum Association, undated, https://www.aluminum.org/product-markets/automotive (accessed February 1, 2021).

The car industry's aluminum usage has increased dramatically as car companies have sought to make gas and diesel-powered cars lighter to increase fuel efficiency and reduce emissions.[9] One study estimated that the average aluminum content in cars in North America had grown from 84 pounds (38 kilograms) per vehicle in 1975 to 340 pounds (154 kilograms) in 2010 and an estimated 466 pounds (211 kilograms)– or 13 percent of a vehicle's total weight – in 2020.[10]

Aluminum usage in cars will now expand further as the automobile industry races to develop electric and hybrid vehicles that can cut greenhouse gas emissions and contribute to the fight against climate change.[11] Deloitte, a consulting firm, has predicted that global sales of electric vehicles will increase from 2 million in 2018 to 12 million in 2025 and 21 million in 2030.[12]

Aluminum's light weight makes it a key component of electric cars, with reduced weight increasing the distance electric cars can travel before being recharged.[13] Aluminum can also be used as a component of, and for the casings that surround, electric batteries.[14] European Aluminum, an industry group, said in a 2018 video that, "The future of mobility is electric…and the metal enabling this green electric future is aluminum."[15] The International

---

[9] "Products, Aluminium," RioTinto, https://www.riotinto.com/en/products/Aluminium (accessed February 1, 2021).

[10] "Aluminum Content in North American Light Vehicles 2016 to 2028," Ducker Worldwide LLC, July 2018, http://1pp2jy1hodtm6dg8i11qjfb1-wpengine.netdna-ssl.com/wp-content/uploads/2017/10/Ducker-Public_FINAL.pdf (accessed February 1, 2021), p. 10. See also, "All About Aluminum: Aluminum in Transport," Aluminum Leader, undated, https://www.aluminiumleader.com/application/transport/ (accessed May 21, 2021).

[11] Charles Riley, "The great electric car race is just beginning," *CNN Business*, undated, https://www.cnn.com/interactive/2019/08/business/electric-cars-audi-volkswagen-tesla/ (accessed February 1, 2021). See also: Zeke Hausfather, "Factcheck: How electric vehicles help to tackle climate change," Carbon Brief, https://www.carbonbrief.org/factcheck-how-electric-vehicles-help-to-tackle-climate-change (accessed February 1, 2021).

[12] "Battery Electric Vehicles," Deloitte, https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/manufacturing/deloitte-uk-battery-electric-vehicles.pdf (accessed February 1, 2021), p. 4.

[13] "Aluminum Efficiency," Drive Aluminum, https://www.drivealuminum.org/aluminum-advantages/efficiency/#:~:text=Using%20aluminum%20in%20electric%20vehicles,farther%20on%20the%20same%20charge. (accessed February 1, 2021).

[14] "How does aluminium enable a green electric future mobility?" May 2, 2018, video clip, YouTube, https://www.youtube.com/watch?v=IGx3OodJjmU (accessed February 1, 2021). See also: Faiz Siddiqui, "Teslas still go much farther on a single charge than their competitors. But the strategy carries risks," *The Washington Post*, Jan. 10, 2020, https://www.washingtonpost.com/technology/2020/01/10/tesla-battery-range/ (accessed February 1, 2021).

[15] "How does aluminium enable a green electric future mobility?" May 2, 2018, video clip, YouTube, https://www.youtube.com/watch?v=IGx3OodJjmU (accessed February 1, 2021).

Aluminum Institute (IAI), an aluminum industry group, estimates that the car industry's demand for aluminum will double by 2050, from almost 17 million tons in 2019 to almost 35 million tons. [16]

Aluminum is highly recyclable and producing recycled aluminum – known as "secondary" aluminum – is more energy efficient and results in less waste material than producing "primary" aluminum from bauxite. [17] Primary aluminum, however, accounts for the majority of aluminum produced worldwide, accounting for 66 percent of aluminum in 2019 compared to 34 percent recycled material. [18] The IAI estimates that 42 percent of the aluminum used by the car industry is recycled and 58 percent comes from primary aluminum. [19] The IAI has forecast that even by 2050 primary aluminum will still constitute 50 percent of aluminum produced globally, and approximately 45 percent of the aluminum used by the car industry. [20]

---

[16] Human Rights Watch email correspondence with International Aluminum Institute, May 27, 2021.

[17] "Recycling," The Aluminum Association, https://www.aluminum.org/industries/production/recycling#:~:text=Aluminum%20is%20one%20of%20the,in%20a%20true%20closed%20loop (accessed May 21, 2021); Jirang Cui and Hans Roven, "Recycling of automotive aluminum," *Transactions of Nonferrous Metals Society of China*, 20(2010), 2057-2063, https://www.sciencedirect.com/science/article/pii/S1003632609604179 (accessed May 21, 2021); "The Environmental Footprint of Semi-Finished Aluminum Products in North America," The Aluminum Association, December 2013, https://www.aluminum.org/sites/default/files/LCA_Report_Aluminum_Association_12_13.pdf (accessed May 21, 2021), p. 102.

[18] "IAI Material Flow Model – 2021 Update," International Aluminum Institute, https://www.world-aluminium.org/media/filer_public/2021/05/26/iai_material_flow_model__2021_update.pdf (accessed May 26, 2021).

[19] Human Rights Watch email correspondence with International Aluminum Institute, May 26, 2021.

[20] International Aluminum Institute, "IAI Material Flow Model – 2021 Update," https://www.world-aluminium.org/media/filer_public/2021/05/26/iai_material_flow_model__2021_update.pdf (accessed May 26, 2021); Human Rights Watch email correspondence with International Aluminum Institute, May 27, 2021. Car companies are looking for ways to increase their use of recycled aluminum, with several companies and their suppliers introducing "closed-loop" manufacturing processes that use aluminum recycled from old vehicles. "The future for aluminium recycling," Automotive World, November 13, 2014, https://www.automotiveworld.com/articles/future-aluminium-recycling/ (accessed February 1, 2021); Philippa Horton et al., "Material Demand Reduction and Closed-Loop Recycling Automotive Aluminium," *MRS Advances*, 3(25) (2018), pp. 1393-1398. In the future, however, two aluminum sector experts predicted that car companies' usage of primary aluminum might actually increase, with primary aluminum, due to its higher quality, needed for battery casings and other key components of electric vehicles. The experts said that improved sorting of the aluminum found in end-of-life products, including cars, has the potential to mitigate increasing demand for primary aluminum, although other (non-automotive) industries will also be looking to increase their intake of well sorted, high quality scrap material. Human Rights Watch email correspondence with E. Lee Bray, Mineral Commodity Specialist, National Minerals Information Center, United States Geological Survey, May 21, 2021; Human Rights Watch correspondence with Chris Bayliss, Director of Standards, Aluminium Stewardship Initiative (ASI)—and formerly Deputy Secretary General, International Aluminum Institute, May 26, 2021.

The Human Rights Impact of Aluminum Production

Loss of Land to Mining

Bauxite mining, because it occurs at the surface level, requires access to large tracts of land, often forcing the resettlement of homes or villages, reducing access to farm and pasture land, and threatening communities' access to housing, food, and the right to an adequate standard of living. [21]

Bauxite mining in Australia has for decades occurred on land belonging to Indigenous Peoples, who were historically forcibly displaced from or dispossessed of their ancestral lands. [22] Although Australia, beginning in the mid-1970s, strengthened protection for the land rights of Aboriginal and Torres Strait Islander people, many are still fighting for restitution for past land seizures, redress for damage caused to their lands, and for their right to exercise control over and fully benefit from natural resource extraction on their land. [23]

---

[21] World Aluminium, "Sustainable Bauxite Mining Guidelines," https://www.world-aluminium.org/media/filer_public/2018/05/18/170518_sbmg_final.pdf (accessed February 1, 2021), p. ii, p. 42. "For more information on potential impacts of bauxite mining on air and noise pollution see "Sustainable Bauxite Mining Guidelines," p. 68.

[22] Cathal Doyle, "Australia: Rolling Back on Progress towards Rights Realization: The Wik Peoples' Experiences with 40 years of Bauxite Mining in their Homeland," in *Enhancing Corporate Respect for Indigenous Peoples' Rights*, (Asia Indigenous Peoples Pact, Forest Peoples Programme, International Union for Conservation of Nature, Chiang Mai/Gloucestershire/Gland, 2015) https://www.forestpeoples.org/sites/fpp/files/news/2015/11/Mining,%20the%20Aluminium%20Industry%20and%20Indigenous%20Peoples.pdf (accessed June 30, 2021), pp. 54-58; Ciaran O'Faircheallaigh, *Negotiations in the Indigenous World: Aboriginal Peoples and the Extractive Industry in Australia and Canada* (Routledge, 2018), Chapter 6, "Bauxite mining, Western Cape York, Queensland." Dean Carson et. al, "Indigenous Experiences of the Mining Resource Cycle in Australia's Northern Territory: Benefits, Burdens and Bridges?" *Journal of Northern Studies* (2018) (12)2), p. 18-25 http://umu.diva-portal.org/smash/record.jsf?pid=diva2%3A1344241&dswid=clicktoresponse:162506705058o:https://www.imdb.com/name/nm1510116/ (accessed June 30, 2021)

[23] See "Land rights," Australian Institute of Aboriginal and Torres Strait Islander Studies, https://aiatsis.gov.au/explore/land-rights (accessed March 26, 2021). See also, *Enhancing Corporate Respect for Indigenous Peoples' Rights*, pp. 54-58. See also "Australia to be sued over mining project's 'unmerciful' destruction of Indigenous land," *The Guardian*, August 3, 2019, https://www.theguardian.com/australia-news/2019/aug/04/australia-to-be-sued-over-mining-projects-unmerciful-destruction-of-indigenous-land (accessed February 1, 2021).

Mining operations at the Rio Tinto alumina refinery and bauxite mine in Gove, also known as Nhulunbuy, in Australia's Northern Territory. Bauxite mining in Australia has for decades occurred on land belonging to Indigenous Peoples, many of whom are still fighting for adequate restitution. © 2013 David Gray/Reuters

In Guinea, as discussed in more detail below, a bauxite mining boom is occurring in areas occupied by communities that have ancestral customary land rights. A Guinean Ministry of Mines commissioned study estimated in 2019 that over the next 20 years bauxite mining will eliminate 858 square kilometers of agricultural land and more than 4,700 square kilometers of natural habitat, an area six times bigger than New York City. [24] Guinean families, who are often dependent on subsistence agriculture, frequently do not receive replacement land or adequate compensation from mining companies, which means land loss deprives them of their economic base and risks plunging them further into poverty. [25]

[24] "Étude des impacts cumulatifs des projets miniers dans la région de Boké," Final Report, Government of Guinea, June 2019, pp. 7-71, Table 7.2.8. "Selon les projections qui ont été faites quant à l'évolution de la production de la bauxite dans la région de Boké à l'horizon 2045, on estime que cette région va perdre un total de 1 193,73 km2 de terres agricoles au cours des 20 prochaines années, dont 858,78 km2 attribuables aux activités minières."

[25] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea* (New York: Human Rights Watch, 2018), https://www.hrw.org/report/2018/10/04/what-do-we-get-out-it/human-rights-impact-bauxite-mining-guinea, pp. 40-42.

Reduced Access to Water

Unless managed appropriately, bauxite mining can produce significant impacts on the hydrology of the surrounding landscape, threatening access to water.[26] Surface mining can increase soil erosion, sending sediment into nearby rivers and streams, gradually blocking or obstructing their flow and reducing water quality for aquatic organisms.[27] Sediment can also bring with it aluminum, iron compounds, and naturally occurring heavy metals that can be dangerous at high concentrations, reducing access to clean water for communities.[28]

In Malaysia, images of rivers and coastal areas polluted with red sediment were a key factor in the government's decision to ban bauxite mining for environmental reasons in January 2016.[29] The government ended the ban in March 2019.[30]

---

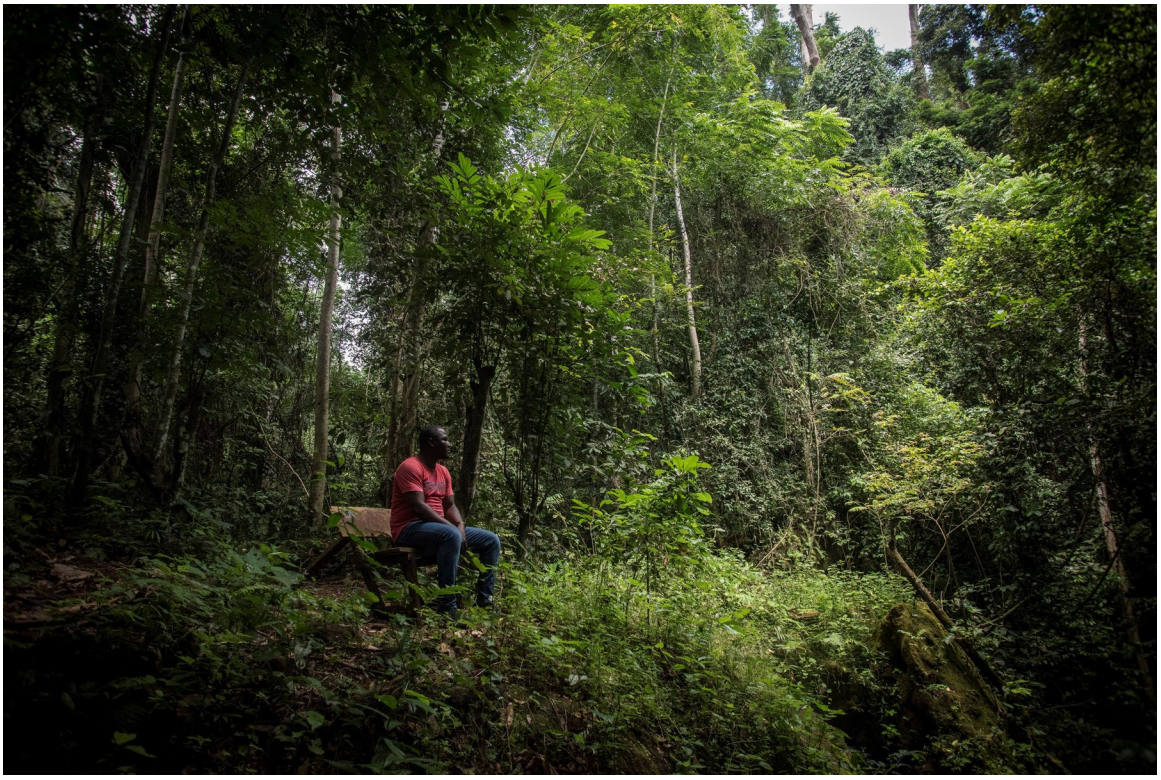
[26] Aristeidis Mertzanis, "The opencast bauxite mining in N.E. Ghiona: Ecoenvironmental impacts and geomorphological changes (Central Greece)," *Journal of Geography and Regional Planning,* vol. 5 (2011), pp. 21-35; Noor Hisham Abdullah et. al, "Potential Health Impacts of Bauxite Mining in Kuantan," *The Malaysian Journal of Medical Sciences*, vol. 23 (2016), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4934713/ (accessed June 30, 2021) pp. 1-8.

[27] Ibid.

[28] "Potential Health Impacts of Bauxite Mining in Kuantan," p. 7. For discussion of the health risks posed by heavy metals, including after deforestation, see Lixin Ma et. al, "Human Health Risk of Metals in Drinking-Water Source Areas from a Forest Zone after Long-Term Excessive Deforestation," *Human and Ecological Risk Assessment: An International Journal*, vol. 20 (2013), pp. 1200-1212. For a discussion of the potential risks of aluminum in drinking water, see "Water Sanitation Hygiene," World Health Organization, 2010, www.who.int/water_sanitation_health/ publications/aluminium/en (accessed March 26, 2018). For a discussion of the potential risks of iron in drinking water, see "Iron in Drinking-water," World Health Organization, 2003, www.who.int/water_sanitation_health/dwq/chemicals/iron.pdf (accessed June 30, 2021).

[29] Human Rights Watch interview with Malaysian environmental scientist and water quality expert, March 6, 2019. See also "Rivers, sea run red in Malaysia as bauxite exports boom," *Reuters*, December 30, 2015, https://www.reuters.com/article/us-malaysia-environment-bauxite/rivers-sea-run-red-in-malaysia-as-bauxite-exports-boom-idUSKBNoUDoOB20151230 (accessed February 1, 2021). "Potential Health Impacts of Bauxite Mining in Kuantan,") p. 7. See also, Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, footnote 15.

[30] "Malaysia lifts bauxite mining moratorium after three-year ban: minister," *Reuters*, February 18, 2019, https://www.reuters.com/article/us-malaysia-bauxite/malaysia-lifts-bauxite-mining-moratorium-after-three-year-ban-minister-idUSKCN1Q7146 (accessed February 1, 2021).



Daryl E. Bosu, deputy national director of the Ghanaian group A Rocha, in the Atewa Range Forest Reserve. A Rocha is part of a coalition of citizen groups and nongovernmental organizations that filed a lawsuit opposing a planned bauxite mine in the reserve, which they say could pollute rivers that provide water to millions of people. © 2018 Cristina Aldehuela/AFP/Getty Images

In Ghana, a coalition of civil society and local citizen groups have filed a lawsuit opposing a planned bauxite mine in the Atewa Range Forest Reserve, a biodiverse rainforest.[31] The groups argue that bauxite mining, by clearing large areas of forest, would threaten the access to food and livelihoods of local communities and affect the quality and quantity of water in three rivers that provide drinking water to millions of people.[32]

---

[31] "Ghanaian activists sue government to save forest from mine," *Reuters*, July 8, 2020, https://www.reuters.com/article/us-ghana-mining-environment-trfn/ghanaian-activists-sue-government-to-save-forest-from-mine-idUSKBN24930W (accessed April 30, 2021).

[32] Human Rights Watch email correspondence with Daryl Bosu, Deputy Director, A Rocha Ghana, and Jeremy Lindsell, Director of Science & Conservation, A Rocha International, May 20, 2021; "Statement of Claim," Arocha Ghana et al., July 2020, copy on file with Human Rights Watch, para. 20-22. International Union for Conservation of Nature National Committee National Committee of The Netherlands and others, *The Economics of the Atewa Forest Range, Ghana*, 2016, https://ghana.arocha.org/wp-content/uploads/sites/15/2016/11/Atewa-brochure-compleet-compressed1.pdf, p. 17, 51 (accessed February, 2, 2021). Terrence Neal, "The Environmental Implications of China-Africa Resource-Financed Infrastructure Agreements: Lessons Learned from Ghana's Sinohydro Agreement," Duke University Nicholas Institute for Environmental Policy Solutions, March 2021, https://nicholasinstitute.duke.edu/sites/default /files/publications/The-Environmental-Implications-of-China-Africa-Resource-Financed-Infrastructure-Agreements-Lessons-Learned-from-

In Guinea, communities have told Human Rights Watch and Inclusive Development International that sediment from bauxite mines and mining roads has reduced water quantity and quality in local rivers, streams, and wells that they rely on for washing, cooking, and drinking.[33]

Impacts from Alumina Refining

In countries that refine bauxite into alumina before export, refineries are often located near bauxite mines to enable efficient transport of bauxite to the refinery.[34] Alumina refineries bring with them additional and potentially very significant environmental and human rights impacts. The refining process, for example, produces very large amounts of a caustic by-product, known as "red mud," with 1 to 1.5 tons of red mud produced for every 1 ton of alumina.[35] Red mud is highly alkaline and contains compounds, including iron and metallic oxides, that can be harmful to local ecosystems.[36] If not stored safely it can contaminate surrounding waterways and cause harm to people who come into contact with it.[37]

The failure of a dam used to store red mud in Hungary in October 2010 flooded more than 250 homes, killing at least 10 people and injuring 150, some of whom were burnt by the caustic mud through their clothes, according to media reports.[38] In Brazil's Pará State, a nongovernmental organization representing more than 11,000 people, including Indigenous People and Afro-Brazilians, has several ongoing legal complaints against

---

Ghana%E2%80%99s-Sinohydro-Agreement.pdf (accessed June 30, 2021) pp. 26-28; Stacey Knott, "Mining Ghana's bauxite would bring in billions from China. But it could also taint the water for 5 million people," *The Washington Post*, October 28, 2019, https://www.washingtonpost.com/world/africa/mining-ghanas-bauxite-would-bring-in-billions-from-china-but-it-could-also-taint-the-water-for-5-million-people/2019/10/25/e4726518-e3a7-11e9-boa63do3721b85ef_story.html?fbclid=IwAR1AfCwWJcT7QOXY1tYWltdBb-c-AbG (accessed February 2, 2021).

33 Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, pp. 70-85.

34 "The Refining Process," International Aluminium Institute, http://bauxite.world-aluminium.org/refining/process/ (accessed June 30, 2021).

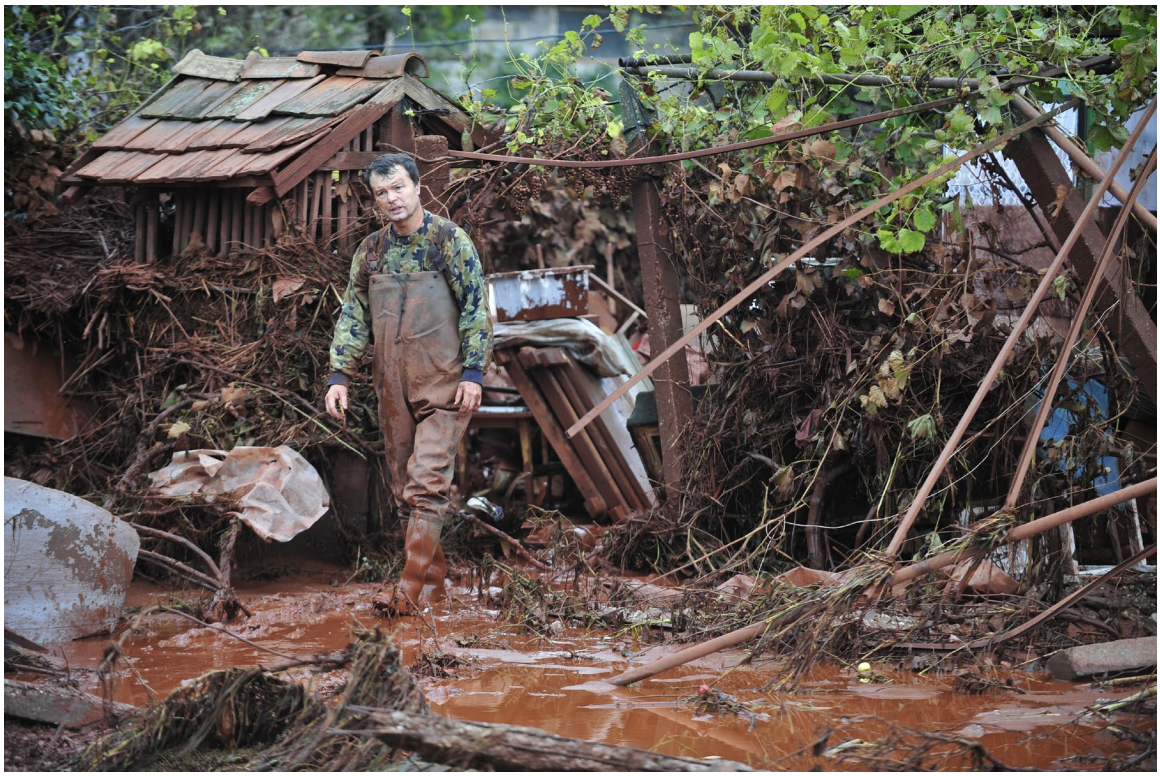
35 M.A. Khairul, Jafar Zanganeh, and Behdad Moghtaderi, "The composition, recycling and utilisation of Bayer red mud," *Resources, Conservation & Recycling* 141 (2018), p. 484.

36 Ibid.

37 Ibid. See also Glenn Switkes, *Foiling the Aluminum Industry: A Toolkit for Communities, Activists, Consumers, And Workers*, (International Rivers Network, 2005).

38 Dan Bilefsky and Judy Dempsey, "Caustic Sludge Floods Several Hungarian Towns," *New York Times*, October 5, 2010, https://www.nytimes.com/2010/10/06/world/europe/06hungary.html (accessed June 30, 2021). Olivia Lang, "How toxic is Hungary's red sludge?" *BBC News*, Oct. 7, 2010, https://www.bbc.com/news/world-europe-11492387 (accessed June 30, 2021).

Norsk Hydro, which operates a bauxite mine, a refinery and an aluminum smelter, over the alleged contamination of waterways in the Amazon basin. [39] Norsk Hydro told Human Rights Watch that it respects the claimants' right to file the lawsuits and will respond "based on the facts and evidence as requested before the court." [40]



A man walks in sludge in the village of Kolontar, Hungary, after the collapse of a dam at an alumina refinery storage reservoir caused a wave of hazardous red mud to sweep through the area, killing 10 people and injuring more than 150. © 2010 Attila Kisbenedek/AFP/Getty Images

[39] "Brazil group sues Norsk Hydro over alleged pollution," *Reuters*, February 9, 2021, https://www.reuters.com/article/us-norsk-hydro-brazil/brazil-group-sues-norsk-hydro-over-alleged-pollution-idUSKBN2A923Q (accessed April 30, 2021). See also, "Brazilian victims take international legal action against Norsk Hydro ASA over toxic waste pollution," PGMBM press release, February 9, 2021, copy on file with Human Rights Watch.

[40] Letter from Norsk Hydro to Human Rights Watch, June 30, 2021.

Aluminum and Climate Change

Production of primary aluminum, and particularly the smelting of alumina into aluminum through electrolysis, is very energy intensive. [41] Each year, aluminum production is responsible for about one billion tons of CO_2 equivalent or around two percent of global greenhouse gas emissions. [42] Producing recycled or secondary aluminum requires about one tenth of the energy of primary aluminum production. [43]

The cooling towers of a coal power plant at the China Hongqiao Group, Ltd. aluminum smelting facility in Zouping, China. Aluminum producers' reliance on coal means that each year the industry is responsible for about one billion tons of CO_2 equivalent or around two percent of global greenhouse gas emissions. © 2013 Brent Lewin/Bloomberg/Getty Images

[41] G. Saevarsdottir, H. Kvande, and B.J. Welch, "Aluminum Production in the Times of Climate Change: The Global Challenge to Reduce the Carbon Footprint and Prevent Carbon Leakage," *JOM* 72, 296–308 (2020), https://doi.org/10.1007/s11837-019-03918-6, p. 297. See also, "U.S. Energy Requirements for Aluminum Production," U.S. Department of Energy, 2007 https://www1.eere.energy.gov/manufacturing/resources/aluminum/pdfs/al_theoretical.pdf (accessed May 27, 2021), p. 11.

[42] Aluminum Production in the Times of Climate Change: The Global Challenge to Reduce the Carbon Footprint and Prevent Carbon Leakage," p. 298. See also, Renee Van Heusden, Morrison Harry, and Mary Puleo, "Why addressing the aluminum industry's carbon footprint is key to climate action," *Green Biz*, December 16, 2020, https://www.greenbiz.com/article/why-addressing-aluminum-industrys-carbon-footprint-key-climate-action (accessed June 30, 2021).

[43] "Secondary Production," The Aluminum Association, https://www.aluminum.org/industries/production/secondary-production (accessed June 30, 2021).

The aluminum industry's high carbon footprint is in large part due to the industry's reliance on coal power. Globally, 71 percent of electricity generated for aluminum comes from fossil fuels, more than 60 percent from coal-fired power plants.[44] China's aluminum smelters, which produce more than half of the world's primary aluminum, are particularly reliant on coal, with 90 percent of Chinese aluminum produced with electricity from coal power plants in 2018.[45] Many of China's major aluminum producers have built and operate their own coal-fired power stations, outside of China's electricity grid, with approximately 75 percent of the energy used for China's aluminum industry self-generated.[46]

[44] Ibid.

[45] Aluminum Production in the Times of Climate Change: The Global Challenge to Reduce the Carbon Footprint and Prevent Carbon Leakage," p. 303. "Is China nearing peak aluminium after record 2020 output?," *Reuters*, January 22, 2021, https://www.reuters.com/article/us-metals-aluminium-ahome/column-is-china-nearing-peak-aluminium-after-record-2020-output-idUSKBN29R1TG (accessed February 1, 2021).

[46] "Aluminum," International Energy Agency, https://www.iea.org/reports/aluminium (accessed June 30, 2021); Ben Heubl, "Investigation: Can China clean up after the aluminium king?" The Institution of Engineering and Technology, February 11, 2021, https://eandt.theiet.org/content/articles/2021/02/can-china-clean-up-after-the-aluminium-king/ (accessed June 30, 2021).

Case Study: Bauxite Mining in Guinea

Guinea's Bauxite Boom

Guinea is a small, resource-rich country in West Africa, with a population of approximately 13.1 million people.[47] Guinea possesses the world's largest reserves of bauxite – the ore needed to make aluminum – with more than one-third of the Earth's known deposits.[48] Guinea also has large deposits of iron ore, gold, and diamonds.[49]

Mining has long been a major contributor to the Guinean economy, with a World Bank report in August 2020 stating that mining accounts for 15 percent of Guinea's gross domestic product and 20 to 25 percent of government revenues.[50] But despite its abundant mineral wealth, Guinea remains one of the world's poorest countries, ranking 174 of 189 states in the 2019 Human Development Index.[51]

Guinea's bauxite sector has grown rapidly since 2015, with foreign investment in bauxite mining in the Boké region totaling $5 billion since 2015, according to the World Bank.[52] Demand for Guinean bauxite in global markets sharply increased as other countries, notably Indonesia in 2014 and Malaysia in 2016, banned bauxite exports.[53] Guinea is now on its way to becoming the world's largest bauxite producer, growing its global market

---

[47] "World Population Prospects 2019," United Nations Department of Economic and Social Affairs, Population Division, Custom data acquired via website, https://esa.un.org/unpd/wpp/DataQuery/ (accessed December 3, 2020).

[48] "Bauxite: Become a Leader in Global Production," Republic of Guinea Ministry of Mines and Geology, undated, http://mines.gov.gn/ressources/bauxite/ (accessed May 22, 2021). See also "2019 Minerals Yearbook Bauxite and Alumina Data Sheet," United States Geological Survey, https://pubs.usgs.gov/periodicals/mcs2020/mcs2020-bauxite-alumina.pdf (accessed March 19, 2020), p. 31.

[49] "Bauxite: Become a Leader in Global Production."

[50] "Project Appraisal Document, Guinea - Commercial Agriculture Development Project (English)," World Bank, August 26, 2020, https://documents.worldbank.org/en/publication/documents-reports/documentdetail/131431599060184070/guinea-commercial-agriculture-development-project (accessed January 24, 2021) p. 7.

[51] United Nations Development Program, *Human Development Report 2019* (New York: United Nations Development Program 2019), http://hdr.undp.org/sites/default/files/hdr2019.pdf (accessed December 3, 2020), p. 310.

[52] "Project Appraisal Document, Guinea - Commercial Agriculture Development Project (English)," p. 7.

[53] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, p. 29.

share from 4 percent (17 million tons) in 2014 to 22 percent (82 million tons) in 2020.[54] Guinea is already the biggest exporter of bauxite to refineries in China, which in 2020 despite mining just 16 percent of global bauxite produced more than 56 percent of primary aluminum.[55] Guinea's share of the global bauxite market is likely to grow further in the next few years, with the Guinean government aiming to produce at least 100 million tons per year.[56]

La Société Minière de Boké (SMB) and La Compagnie des Bauxite de Guinée (CBG), the two companies examined in this report, made up more than 70 percent of Guinea's bauxite exports in 2019 and almost 60 percent in 2020.[57] SMB is a consortium bringing together the world's largest aluminum producer, China Hongqiao Group, which operates its own alumina refineries and aluminum smelters in China, as well as a Singaporean shipping company, Winning International Group, and a Guinean logistics company, United Mining Services International.[58] CBG is a joint venture co-owned by the Guinean government and multinational mining companies Rio Tinto, Alcoa, and Dadco.[59]

---

[54] For Guinea's 2014 market share, see E. Lee Bray, U.S. Geological Survey: Bauxite and Alumina, 2015 Minerals Yearbook https://s3-us-west-2.amazonaws.com/prd-wret/assets/palladium/production/mineral-pubs/bauxite/myb1-2015-bauxi.pdf (accessed February 1, 2021). For its 2020 market share, see E. Lee Bray, U.S. Geological Survey, "2021 Minerals Commodities Summary, Bauxite and Alumina Data Sheet," January 2021, https://pubs.usgs.gov/periodicals/mcs2021/mcs2021-bauxite-alumina.pdf (accessed March 19, 2021), p. 2.

[55] China produced 36 million of the 64 million tons (56 percent) of aluminum produced globally in 2019. E. Lee Bray, "Mineral Commodity Summaries, January 2020," United States Geological Survey, https://pubs.usgs.gov/periodicals/mcs2020/mcs2020.pdf, p. 21. China imported 101 million tons of bauxite in 2019, with Guinea providing 44.5 million tons (44 percent). See Debanjali Sengupta, "China's bauxite imports for the first time crossed 100 million tonnes in 2019," *Al Circle*, February 25, 2020, https://www.alcircle.com/news/chinas-bauxite-imports-for-the-first-time-crossed-100-million-tonnes-in-2019-51176 (accessed February 1, 2021).

[56] "Bauxite: Become a Leader in Global Production."

[57] "Bulletin de Statistiques Minières," République de Guinée Ministère des Mines et de la Géologie, 2019, https://www.itiedoc-guinee.org/wp-content/uploads/2020/03/Bulletin_Stat_MMG_N%C2%B006_2019_VF.pdf (accessed February 1, 2021) ; "Bulletin de Statistiques Minières," République de Guinée Ministère des Mines et de la Géologie, 2020, https://www.itiedoc-guinee.org/wp-content/uploads/2021/02/Guinee.pdf (accessed April 5, 2021).

[58] "Groupe," Société Minière de Boké, " undated, http://www.smb-guinee.com/en/consortium-smb-winning/ (accessed February 2, 2021). China Hongqiao holds its stake in SMB through several wholly owned subsidiaries. The direct owner of the stake in SMB is Shandong Weiqiao Aluminum and Electricity (sometimes translated as Power), a wholly owned subsidiary of Shandong Hongqiao New Material, whose ultimate parent is China Hongqiao. See also, "Initiative pour la Transparence dans les industries Extractives, " Rapport ITIE 2015, République de Guinée, https://eiti.org/sites/default/files/documents/finergies_-_itie_guine e_-_rapport_itie_2015_-_version_finale_signee_1.pdf (accessed March 20, 2018).

[59] For details of Rio Tinto's involvement in CBG, see "Non-Managed Operations," RioTinto, undated, https://www.riotinto.com/operations/non-managed-operations (accessed February 1, 2021). For Alcoa, see "Guinea," Alcoa, undated,

Guinea's Role in Global Supply Chains

The expansion of bauxite mining in Guinea means that it is playing an increasingly significant role in global aluminum supply chains. In addition to China, bauxite from Guinea is also shipped to refineries in Canada, France, Germany, Ireland, Russia, Spain, and the United Arab Emirates. [60] Guinea itself refined less than 1 million tons of the 82 million tons of bauxite it produced in 2020, although Guinea's government aims to expand the country's refining capacity in the next few years. [61]

To explore in detail the connections between Guinea's mining industry and the global car industry, Inclusive Development International traced how the bauxite produced by CBG and SMB flows through global supply chains. CBG and SMB have mining permits running until at least 2040 and 2031, respectively, meaning they, like other bauxite mining companies in Guinea, are likely to contribute to global supply for many years. [62]

Inclusive Development International's supply chain investigation, which was undertaken from 2017 to 2019, used open-source data such as company filings, import-export data, shipping records, and other public reporting to trace bauxite from Guinea to the supply chains of aluminum companies operating globally.

In the case of CBG, the investigation found that the bulk of the company's bauxite is shipped to alumina refineries and aluminum smelters in North America and Europe that belong to CBG's co-owners, Rio Tinto, Alcoa, and Dadco. [63] The aluminum is then converted into semi-industrial aluminum products used by industrial manufacturers, including

---

https://www.alcoa.com/guinea/fr (accessed February 1, 2021). For Dadco, see "About Dadco," Dadco, undated, http://dadcoalumina.com/about/ (accessed February 1, 2021).

[60] Initiative pour la Transparence dans les industries Extractives (ITIE), "Rapport ITIE 2017," République de Guinée, May 2019, https://eiti.org/files/documents/rapport-itie-02-guinee-2017-version-signee-3.pdf (accessed February 1, 2021), pp. 116-117.

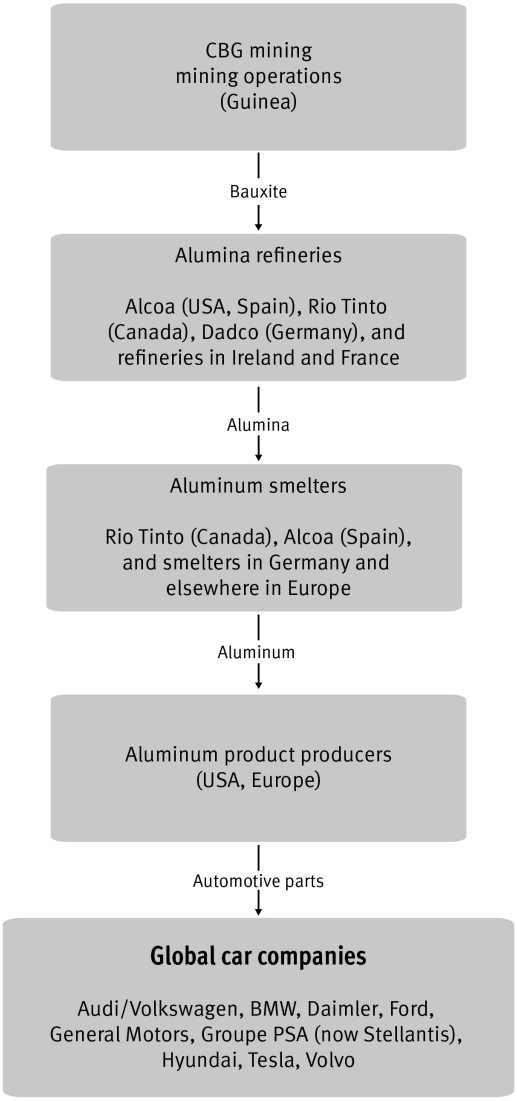
[61] E. Lee Bray, "2019 Minerals Commodities Summary, Bauxite and Alumina Data Sheet," U.S. Geological Survey, January 2020. Guinea produced 300,000 tons of alumina in 2019, and two tons of bauxite are needed to make one ton of alumina. See also "Primary Production," The Aluminum Association, undated, https://www.aluminum.org/industries/production/primary-production#:~:text=Pure%20forms%20of%20the%20metal,Hall%E2%80%93H%C3%A9roult%20electrolytic%20reduction%20process.&text=For%20every%204%20pounds%20of,pound%20of%20aluminum%20is%20produced (accessed February 1, 2021).

[62] "Guinea Mining Cadastre Portal," The Ministry of Mines and Geology and Trimble Land Administration, undated, https://guinee.cadastreminier.org/en/ (accessed February 1, 2021).

[63] Inclusive Development International, CBG Supply Chain Investigation Report, 2019, on file with Inclusive Development International and Human Rights Watch.

suppliers of many of the world's leading automobile brands. The graphic below illustrates key features of CBG's supply chain based on supply chain mapping from 2017 to 2019.

La Compagnie des Bauxites de Guinée
Car Industry Connections



SMB's bauxite takes a different route. The bauxite is shipped to China and bought, refined, and smelted by facilities owned by the China Hongqiao Group, a member of the SMB consortium.[64] China Hongqiao's refineries and smelters, which produce the largest amount of primary aluminum in the world, get the majority of their bauxite from SMB's Guinean mines.[65] Aluminum produced by China Hongqiao is used by industrial manufacturers in China that supply parts to many of the world's biggest car companies.[66] China Hongqiao, in its 2020 annual report, noted that, "with energy savings, reduced emissions and low carbon footprints being strongly advocated by society, aluminum for...lightweight aluminum for motor vehicles [is] expected to become key consumption growth for the aluminum processing industry."[67] The graphic on the next page illustrates key features of SMB's supply chain based on supply chain mapping from 2017 to 2019.

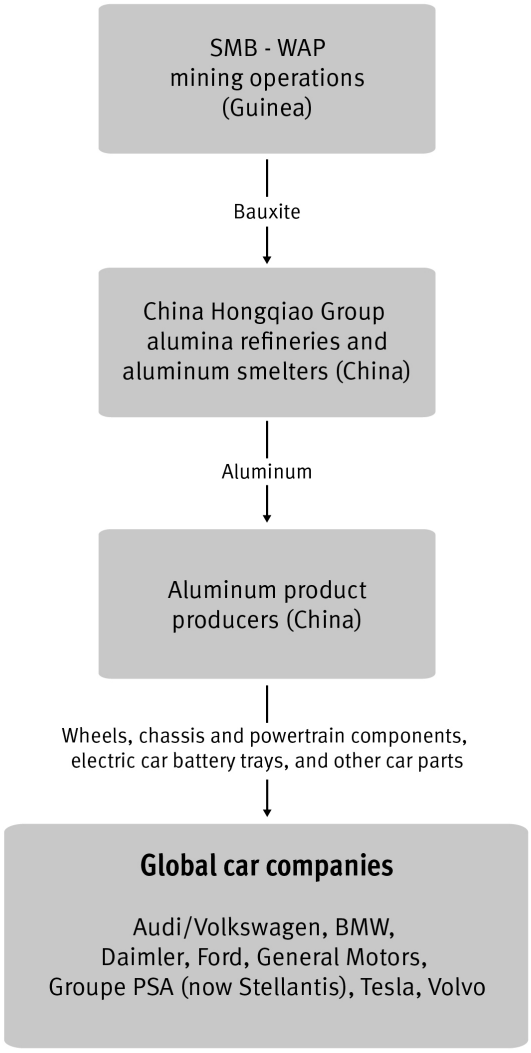
[64] "Société Minière de Boké-Winning Africa (SMB-WAP) mines and exports," Mining Global, June 5, 2017, https://www.miningglobal.com/brochure/societe-miniere-de-boke-winning-africa-smb-wap-mines-and-exports (accessed February 1, 2021).

[65] "Measuring distortions in international markets: the aluminium value," OECD, p. 42.

[66] Inclusive Development International, SMB Supply Chain Investigation Report, 2019, on file with Inclusive Development International and Human Rights Watch.

[67] China Hongqiao Group Limited, Annual Report 2020, p. 7, http://en.hongqiaochina.com/Uploads/File/2021/04/07/E1378-AR.20210407172143.PDF (accessed July 6, 2021).

Société Minière de Boké Consortium
Car Industry Connections



The Human Rights Impact of Bauxite Mining in Guinea

The Boké region, in northwestern Guinea, has been at the center of the bauxite sector's recent growth. Government figures estimated the region's population at 1.3 million people in 2020.[68] Like other parts of Guinea, the region has high levels of poverty, with a 2014 census finding that 73 percent of its population, and 86 percent in rural areas, live in poverty, which the census defined according to a range of criteria evaluating a person's living standards and access to health and education.[69]

Boké is highly dependent on agriculture, with government data stating that, in 2014 to 2015, more than 890,000 people in the region, or approximately 80 percent of the population, relied on agriculture for their livelihoods.[70] Most farmers live in rural villages surrounded by land that has been cultivated by their families or communities for generations. Many rural villages also source water from wells or natural water sources, although they often struggle to find clean and reliable drinking water.[71]

The expansion of bauxite mining in the Boké region has significant potential economic benefits, with an October 2020 World Bank report on Guinea's economy stating that, "mining sector growth can potentially act as a critical catalyst for local economic

---

[68] "Populations des Divisions Administratives de la Guinée de 1996 à 2025," Institut National de la Statistique République de Guinée, undated, https://population.insguinee.org/resultat/ (accessed February 1, 2021).

[69] Institut National de la Statistique République de Guinée, Troisième Recensement Général de la Population de l'Habitation, Institut National de la Statistique République de Guinée, December 2017, https://www.stat-guinee.org/images/Documents/Publications/INS/rapports_enquetes/RGPH3/RGPH3_rapport_pauvrete.pdf (accessed February 1, 2021), p. 36. For details on how the survey defined poverty, see p. 30.

[70] According to Guinean government figures the agricultural population (population agricole) was 892,568 in 2014/2015. "Annuaire des statistiques Agricoles 2019," Institut National de la Statistique République de Guinée, July 2020, http://www.statguinee.org/images/Documents/Publications/INS/annuelles/annuaire/ANNUAIRE_STATISTIQUE_AGRICOLE__2019_INS_FINALISE.pdf (accessed February 2, 2021), p. 24. The total population of Boké's five prefectures in 2014 was, according to government figures, 1,083,147. "Annuaire Statistique," Institut National de la Statistique République de Guinée, 2015, p. 60.

[71] A 2018 government survey found that only 54 percent of people in the Boké region have access to safe drinking water within 30 minutes of their home. 53.5 percent of people in Boké have access to, "d'un service élémentaire pour l'approvisionnement en eau de boisson, » defined as de « l'eau de boisson provenant d'une source améliorée, à condition qu'elle soit située sur place ou que le temps d'approvisionnement aller-retour soit de 30 minutes ou moins. » République de Guinée, Enquête Démographique et de Santé 2018, July 2019, https://www.unicef.org/guinea/media/2106/file/EDS%202018.pdf (accessed February 2, 2021), p. 26. For discussion of the impacts of bauxite mining on water sources in the Boké region, see Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea,* pp. 70-85.

development."[72] Guinea's mining ministry, in a June 2021 letter to Human Rights Watch, said that mining decreases poverty in mining areas and noted that mining companies are required to devote a portion of their revenue to the development of local communities.[73]

In the rural communities in Boké where Human Rights Watch and Inclusive Development International have conducted research, however, residents have often described a different experience. Families describe how mining is destroying the land that they have relied on for generations and harming the natural environment they depend on for their food and livelihoods.[74] The World Bank's October 2020 report stated that, "there are tensions among local communities in the Boké region, which often lack access to basic services (water, electricity), and do not perceive sufficient local benefits from the expanding mining industry."[75] An earlier 2017 assessment by the Bank had concluded that, "it is urgent to mitigate the [mining] industry's negative environmental impacts, dramatically improve its contribution to socioeconomic welfare and for the country to invest in more sustainable, diversified, and inclusive economic activities."[76]

Land Lost to Mining

Rural land in Guinea is typically organized under customary (i.e. traditional) systems and laws.[77] A 2001 government land policy called for the formalization of customary rights to land, but has not been adequately implemented, leaving most rural land unregistered and vulnerable to transfer by the state or acquisition by private enterprises.[78] International

---

[72] "Creating Markets in Guinea - Generating diversified growth in a resource-rich environment," World Bank Group (International Financial Corporation), https://www.ifc.org/wps/wcm/connect/497008dc-f1e0-4c62-adec-db5bc6b0528e/CPSD-Guinea.pdf?MOD=AJPERES&CVID=nlHaz9K (accessed June 30, 2021) p. 15.

[73] Letter from Ministry of Mines and Geology to Human Rights Watch, June 18, 2021.

[74] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea,* pp. 40-104. Complaint concerning IFC loan to the "Compagnie des Bauxites de Guinée" (CBG), CECIDE, IDI, ADREMGUI, February 20, 2019, https://www.inclusivedevelopment.net/wp-content/uploads/2020/12/CBG_CAO-Request-for-Mediation_FINAL-EN.pdf.

[75] "Creating Markets in Guinea - Generating diversified growth in a resource-rich environment," World Bank Group (International Finance Corporation), p. 16.

[76] See "Project Appraisal Document, Guinea - Commercial Agriculture Development Project (English)," World Bank, August 26, 2020, https://documents.worldbank.org/en/publication/documents-reports/documentdetail/131431599060184070/guinea-commercial-agriculture-development-project, (accessed January 24, 2021), p. 8.

[77] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, pp. 42-43.

[78] Ibid.

human rights standards protect individuals and communities, including those with customary land tenure, from forced eviction and arbitrary interference with their rights to property and land.[79] Land acquisitions for mining, whether permanent or temporary, should only occur either through legally authorized processes for involuntary land acquisition or on terms agreed to by customary landholders. Individuals and communities should in all cases receive the payment of fair compensation, the provision of equivalent replacement land, and support for re-establishing livelihoods.[80]

In Guinea, however, mining companies have taken advantage of the lack of legal registration of rural land rights – and the challenges Guineans face in claiming their legal rights in the courts – to arbitrarily determine if and how they compensate families for their land.[81] The Guinean mining ministry, in a June 2021 letter to Human Rights Watch, said that land acquisitions by mining companies occur, "following an agreement negotiated between the landowner and the mining company with the assistance of government officials and local authorities according to international best practices."[82] In reality, however, the dozens of interviews that Human Rights Watch and Inclusive Development International have conducted across the Boké region suggest that communities have little influence as to the amount and type of compensation they receive – which are determined

---

[79] Constitution of the Republic of Guinea, 2010, Article 13. The Universal Declaration of Human Rights states that, "Everyone has the right to own property, alone as well as in association with others and no one shall be arbitrarily deprived of his or her property." Universal Declaration of Human Rights (UDHR), adopted December 10, 1948, G.A. Res. 217A(III), UN Doc. A/810 at 71 (1948), art. 17. The African Charter on Human and Peoples' Rights (Banjul Charter) also guarantees the right to property, and a right to economic, social, and cultural development. African [Banjul] Charter on Human and Peoples' Rights, adopted June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force October 21, 1986, arts. 14, 20, 21, 22. Ratified by Guinea, February 16, 1982. In the case of COHRE v. Sudan, the African Commission found that "[i]t doesn't matter whether they had legal titles to the land, the fact that the victims cannot derive their livelihood from what they possessed for generations means they have been deprived of the use of their property under conditions which are not permitted by Article 14 [right to property]." African Commission on Human and Peoples' Rights: Center on Housing Rights and Evictions (COHRE) v. Sudan, Communication No. 296/2005, July 29, 2009, para. 205. In the context of the right to housing, The UN Committee on Economic, Social and Cultural Rights (UN CESCR) notes in its General Comment No. 4 that legal security of tenure "takes a variety of forms, including … occupation of land or property. Notwithstanding the type of tenure, all persons should possess a degree of security of tenure which guarantees legal protection against forced eviction, harassment and other threats." UN CESCR, General Comment No. 4, The Right to Adequate Housing (Sixth session, 1991), UN Doc. E/1992 /23, annex III, art. 114 (1991). See also Food and Agriculture Organization of the United Nations, "Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security", paras. 9.1-9.12.

[80] See, for example, UN Human Rights Committee, "Basic Principles and Guidelines on Development-Based Evictions and Displacement," A/HRC/4/18, https://www.ohchr.org/documents/issues/housing/guidelines_en.pdf (accessed February 2, 2021), para. 60.

[81] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, pp. 42-44.

[82] Letter from Ministry of Mines and Geology to Human Rights Watch, June 18, 2021.

by the mining company in question and approved by the government – and have little choice but to accept the payment offered.[83] Communities frequently neither receive adequate replacement land or compensation for land nor adequate support obtaining alternative livelihoods.[84]

The practices of CBG and SMB illustrate the approach that companies take towards communities' land rights. Since it began exporting bauxite in 1973, CBG has progressively excavated and mined large tracts of farmland surrounding the town of Sangaredi, where its mining operations are concentrated.[85] In 2019, participatory mapping of land use conducted by local communities, Guinean NGOs, and Inclusive Development International, supported by satellite imagery analysis, found that 17 villages had lost at least 80 square kilometers of farmland and grazing land to CBG since the 1980s.[86] A central issue in communities' complaint to the IFC's accountability mechanism concerns CBG's failure to provide restitution in the form of equivalent replacement land and assistance to restore livelihoods that have been destroyed as a result of land loss. According to the February 2019 complaint on behalf of 13 communities:

> Since commencing its operations in the region of Sangaredi, CBG has systematically minimized and negated the customary land rights of the local communities who were living there, under an organized tenure system, long before CBG arrived. In doing so, CBG, like other mining companies in Guinea, has treated rural land as state property, and ignored or negated the customary land rights of rural farmers. Adopting this interpretation of the law, CBG has acquired land without the free, prior, and informed consent of customary landowners, without following a public expropriation process, as required under national legislation, and without the payment of fair compensation.[87]

---

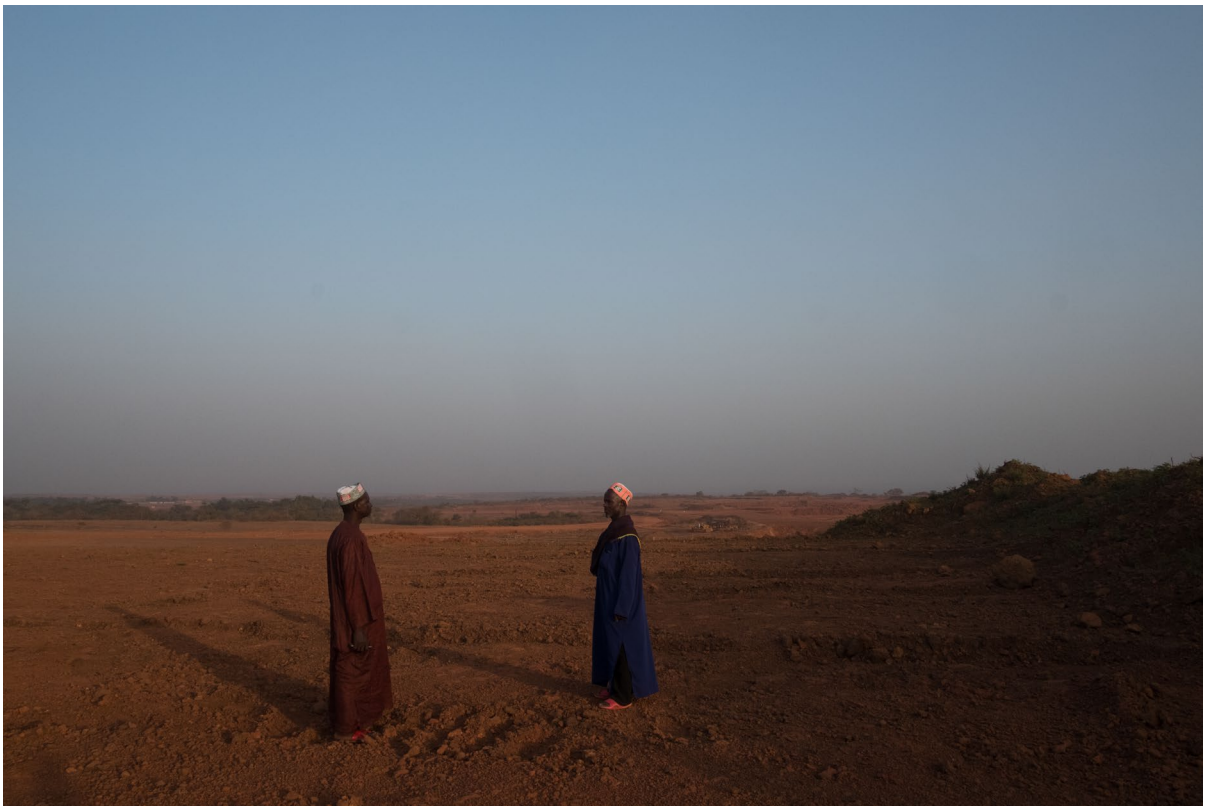
[83] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, pp. 40-69.

[84] Ibid.

[85] Ibid., p. 47.

[86] IDI, CECIDE, ADREMGUI, *Impacts of CBG on the communities of Sangarédi, Guinea, a Visual Representation*, undated, slide 16.

[87] Complaint concerning IFC loan to the "Compagnie des Bauxites de Guinée" (CBG), CECIDE, IDI, ADREMGUI, February 20, 2019, https://www.inclusivedevelopment.net/wp-content/uploads/2020/12/CBG_CAO-Request-for-Mediation_FINAL-



Farmers from Hamdallaye village, in the Boké region, look out over the village's ancestral lands, which have been cleared by La Compagnie des Bauxites de Guinée for an expansion of mining operations. © 2018 Ricci Shryock for Human Rights Watch

CBG said in a May 2021 letter to Human Rights Watch that it was working to update its policy for resettling or displacing communities from land and would make public the revised document in the third quarter of 2021.[88] CBG said that the revised framework, which it said was formulated with assistance of community representatives, "acknowledges customary land rights and that it commits CBG to help communities develop alternative livelihoods and access new lands where possible."[89] CBG also said that it has begun programs to support the restoration of livelihoods affected by mining and is "committed to prepare livelihood restoration plans in all the established communities impacted by the extension of CBG's mining operations."[90]

EN.pdf, p. 8 (accessed February 18, 2021). See also Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, pp. 44-46.

[88] Letter from La Compagnie des Bauxites de Guinée (CBG) to Human Rights Watch, May 19, 2021.

[89] Ibid.

[90] Ibid.

SMB's approach to land acquisitions differs from CBG but is also problematic. Since it began operating in 2015, the consortium has made one-off financial payments to farmers for their land, helping the company to acquire land quickly and expand rapidly.[91] This approach, however, has often left farmers, unused to managing or investing money, without the resources, support, or training needed to find new land or income sources.[92] International human rights and IFC standards make clear that financial compensation alone cannot replace the lasting benefits that farming communities derived from land.[93] SMB itself stated in 2018 that:

> The money [paid to individuals or communities] represents a very large amount of money that can suddenly destabilize the budget of some households and villages. Experience has taught us that people receiving these sums can spend them in a way that some people consider unreasonable (lack of budgetary vision in the medium and long term; lack of investment in potential revenue-creating activities).[94]

SMB has, since 2018, landscaped new farmland in some of the communities where it operates, but a community leader said in November 2020 that the amount of replacement land falls far short of what the community needs.[95] "The company [SMB] has only landscaped one hectare of land, where 50 people can work," said a community leader from the village of Dapilon in December 2020.[96] "That's only a fraction of the number of people who have lost land in this area." Satellite imagery shows that families in Dapilon, which shares the name of one of SMB's ports, and surrounding villages, have lost at least 200 hectares (2 square kilometers) to the SMB consortium since 2016.

---

[91] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, pp. 57-64.

[92] Ibid.

[93] UN Human Rights Committee, *Basic Principles and Guidelines on Development-Based Evictions and Displacement*, A/HRC/4/18, para. 60. The IFC's guidance notes on Performance Standard 5 states that: "Short-term consumption of cash compensation can result in hardship for subsistence-based economies or poor households." "Guidance Note 5, Land Acquisition and Involuntary Resettlement," International Finance Corporation, 2012, https://www.ifc.org/wps/wcm/connect/61320ff7-0e9a-4908-bef5-5c9671c8ddfd/GN5_English_2012.pdf?MOD=AJPERES&CVID=mRQjWGZ (accessed July 12, 2021), p. 10.

[94] Memorandum from SMB to Human Rights Watch, September 12, 2018. (On file with Human Rights Watch).

[95] Human Rights Watch interview with community leaders in Dapilon, November 22-23, 2020.

[96] Human Rights Watch interview with community paralegal, Dapilon, December 4, 2020.

Human Rights Watch asked SMB in a May 2021 letter for details of the replacement land that it has provided to communities impacted by its operations, including in Dapilon specifically.[97] SMB, in a June 2021 response, did not provide any information on the amounts of replacement land it has provided, but said that its land acquisitions are conducted consistent with Guinean law and international standards and that local communities have received fair compensation.[98]

Guinea's ministry of mines told Human Rights Watch in June 2021 that it is taking steps to strengthen the legal framework governing land rights in the mining sector. The government is drafting a reference document for how public and private institutions approach land acquisitions that will provide guidance, "on the management of the impacts of compensation and reinstallation in line with national legislation and international best practices."[99]

Impacts on Local Environment and the Right to Clean Water

Bauxite mining in the Boké region is also having a damaging impact on many communities' local environment, particularly their access to water. The 2019 participatory mapping exercise conducted by Inclusive Development International with local communities concluded that CBG's operations had polluted or destroyed 91 water sources, serving 17 villages, due to sediment runoff and the development of mining infrastructure.[100] CBG said in a May 2021 letter to Human Rights Watch that in 2018 it had implemented a water management plan to protect water resources in communities, including measures to control erosion from its mining operations. CBG also said it is installing and restoring water wells in villages bordering its mines, and constructed 15 wells in 2020.[101]

Ahead of Human Rights Watch's 2018 report on Guinea's bauxite mining sector, dozens of people, across more than 13 villages, told Human Rights Watch that the water sources they

[97] Human Rights Watch letter to La Société Minère de Boké, May 12, 2021.

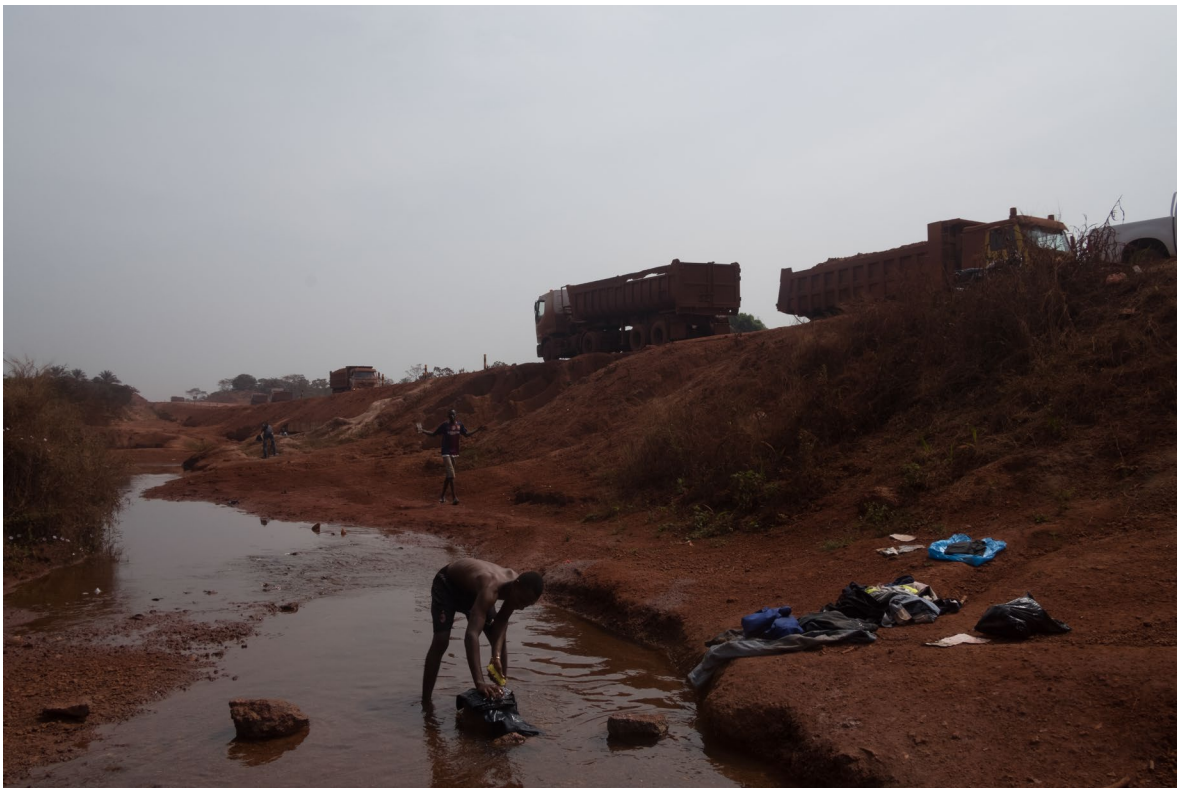
[98] Letter from La Société Minière de Boké to Human Rights Watch, June 17, 2021.

[99] Letter from Ministry of Mines and Geology to Human Rights Watch, June 18, 2021. The full name of the reference guide is "Référentiel National pour la Compensation, l'Indemnisation et la Réinstallation des Populations Impactées par les Projets de Développement."

[100] IDI, CECIDE, ADREMGUI, *Impacts of CBG on the communities of Sangarédi, Guinea, a Visual Representation*, July 2020, slide 16.

[101] Letter from La Compagnie des Bauxites de Guinée (CBG) to Human Rights Watch, May 19, 2021.

rely on for drinking, washing, and cooking had been negatively impacted by the arrival of SMB's mining operations.[102] "The company cut across the rivers where we get water when they dug their mining road, without giving any warning," said a community leader from Djoumayah, a village near SMB's Malapouya mine.[103] "Sediments and rocks…washed down from the road into the water source." SMB told Human Rights Watch in a June 2021 letter that it has adopted a water management plan that includes measures to mitigate its impact on water, such as the redirection of water carrying sediment run-off from mining sites to reservoirs.[104] SMB also said it had, over the past three years, constructed 87 bore holes and 10 wells for local communities, as well as made annual payments to local development funds for the Boké region, including $2.1 million for 2020.[105]



A man washes clothes next to a mining road belonging to the La Société Minière de Boké (SMB) consortium in Guinea. Local community members said that the construction of SMB's mining roads blocked rivers and streams, diverting their course and reducing water levels in local wells. © 2018 Ricci Shryock for Human Rights Watch

[102] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, pp. 74-78.

[103] Human Rights Watch interviews with community leader from Djoumayah, April 29, 2017 and January 10, 2018.

[104] Letter from La Société Minière de Boké to Human Rights Watch, June 17, 2021.

[105] Letter from La Société Minière de Boké to Human Rights Watch, June 17, 2021.

Beyond the impact of individual mining projects, the cumulative long-term impacts of mining also have potentially profound repercussions for the Boké region's environment.[106] The World Bank's October 2020 report noted that, "managing cumulative impacts [in Guinea's mining sector] will inevitably be beyond the scope of any individual investments, and hence will require proactive planning and monitoring capacity on the part of the government, which currently appears to be lacking."[107]

"Everything That Made Fassaly a Village is Gone": A Farmer's Experience of Bauxite Mining in Guinea

Kounssa Bailo Barry, 30, lives with his wife in the Guinean village of Fassaly Foutabhé, a farming community located in the heart of the Boké bauxite mining region.[108] The land around Fassaly Foutabhé is mined by La Compagnie des Bauxite de Guinée (CBG), which has been operating in the area since 1973.

Barry said CBG's operations have increasingly destroyed the village's land and water sources, its most precious resources.[109] Barry estimates that his community has lost 80 percent of its farmland to the company. "Everything about Fassaly that made it a village is gone," he said. "And we don't benefit from what caused it."

Barry said CBG has paid community members compensation for crops and trees growing on land, but nothing for the value of the land itself.[110] "It's like losing your home and only being compensated for the furniture inside," said a Guinean human rights activist.[111] CBG said that it compensates communities when their economic

---

[106] Étude des impacts cumulatifs des projets miniers dans la région de Boké," Final Report, Government of Guinea, June 2019, pp. 5-6.

[107] "Creating Markets in Guinea - Generating diversified growth in a resource-rich environment," World Bank Group (International Financial Corporation), p. 17.

[108] Inclusive Development International telephone interview with Kounssa Baïlo Barry, Sangaredi, January 27, 2021.

[109] See also Complaint concerning IFC loan to the "Compagnie des Bauxites de Guinée" (CBG), CECIDE, IDI, ADREMGUI, February 20, 2019, https://www.inclusivedevelopment.net/wp-content/uploads/2020/12/CBG_CAO-Request-for-Mediation_FINAL-EN.pdf, p. 12 (accessed June 29, 2021).

[110] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea,* pp. 50-55.

[111] Human Rights Watch interview with Guinean human rights activist, Conakry, February 1, 2021.

activities are impacted and that it is in the process of revising the framework and compensation principles it uses for land acquisitions. [112]

Barry has rented land from a neighboring village, but he estimates that his extended family now harvests about 10 to 15 sacks of peanuts per year, their main cash crop, compared to 40 to 80 sacks prior to CBG's recent land acquisitions. "We use what little we have for our consumption and our children's schooling – we just have to prioritize our immediate needs." In addition to providing adequate compensation, Barry wants CBG to help households register their customary rights to land and then commit to returning and rehabilitating lands to families after they have used it.

Barry said that CBG has set aside land in Fassaly Foutabhé to help community members plant vegetables, but Barry said the land is poorly irrigated and only replaces a fraction of the land lost to mining. CBG, in a May 2021 letter, said that it had begun a livelihood restoration process in Fassaly Foutabhé that was benefitting 98 people, and had invested in land, infrastructure, and materials to support local livelihoods. [113]

Bauxite mining has also affected Fassaly Foutabhé's access to water. [114] Since 2017, Barry said that the natural springs that the village uses for drinking water and irrigation have begun to dry up. CBG said in its May 2021 letter that it was installing and restoring wells in villages bordering its mines and had drilled eleven wells to support agriculture and animal breeding in Fassaly Foutabhé and a neighboring village. [115] "We do need clean drinking water," Barry said. "But CBG also needs to find a more permanent solution to the damage to our springs and streams, because we'll need them as long as the village is there."

[112] Letter from La Compagnie des Bauxites de Guinée (CBG) to Human Rights Watch, May 19, 2021.

[113] Ibid.

[114] Inclusive Development International, Complaint concerning IFC loan to the "Compagnie des Bauxites de Guinée" (CBG), February 20, 2019, p. 17, https://www.inclusivedevelopment.net/wp-content/uploads/2020/12/CBG_CAO-Request-for-Mediation_FINAL-EN.pdf (accessed February 1, 2021).

[115] Letter from La Compagnie des Bauxites de Guinée (CBG) to Human Rights Watch, May 19, 2021.

Barry is encouraged that CBG has agreed to enter a mediation with 13 communities, including Fassaly Foutabhé. "We hope CBG will respect its engagements to the communities that it has tormented for so long," he said. But Barry also said that it is important for companies that buy bauxite from Guinea to be more aware of mining's human rights impacts. "If mining companies are permitted to tread on the rights of communities to get bauxite, it's because they have buyers that allow them to do so," he said.

Inadequate Government Oversight

Guinea's government, although cognizant of the damage that mining can cause, has not done enough to require mining companies to meet strong environmental and human rights standards.[116] In SMB's case, for example, Human Rights Watch's 2018 report concluded that the consortium received mining permits in 2015 despite submitting environmental and social impact assessments that did not adequately assess the impacts of the project and how to mitigate them.[117] SMB said in 2018 that it had commissioned an international consulting firm to conduct new ESIAs and devise a new environmental social management plan (ESMP) for its mining sites.[118] SMB also said in 2018 that, "as soon as this study…is available it will be shared" and said it would be available on its website.[119] These ESIAs, if conducted appropriately, should have considered the impacts of SMB's operations on local communities in the Boké region from 2015 onwards and provided recommendations on how to address them.[120]

---

[116] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, pp. 111-124.

[117] Ibid.

[118] Memorandum from SMB to Human Rights Watch, September 12, 2018.

[119] Ibid.

[120] The environmental and social impact assessment completed in 2015 for the extension of CBG's bauxite mine is an example of an assessment that examined a company's previous impacts on local communities as well as potential future impacts. The assessment considered in detail how CBG's mining had affected local communities so as to design an environmental and social management plan for the expansion project that, according to the consultants who conducted the study, would address past flaws in CBG's operations. The study included significant critiques of CBG's operations as well as proposals to address them. "Environmental and Social Impact Assessment of the CBG Mine Expansion Project," EEM, March 2018, http://www.cbg-guinee.com/nos-engagements/environnement-et-biodiversite/environnement/ (accessed June 30, 2021).

SMB told Human Rights Watch in June 2021 that the revised ESIA and ESMP were completed by the international consultancy and approved by the Guinean government in June 2020. The consortium, however, has not yet published either document.[121] Instead, SMB said that Human Rights Watch should contact a Guinean environment ministry agency for a copy. Human Rights Watch contacted the agency in question and the agency said that it had not reviewed an updated ESIA or ESMP for SMB, which it said do not require government approval.[122] Human Rights Watch wrote to SMB again requesting a copy of the studies but did not receive a reply. CBG, in contrast, publishes all its environmental and social impact assessments on its website, and also conducts and publishes annual audits of environmental, social, and governance practices.[123]

Human Rights Watch's 2018 report identified a range of factors underlying the Guinean government's failure to adequately ensure mining companies are meeting strong environmental and social standards, including a lack of adequate resources in agencies providing oversight of mining companies and the government's focus on growing the mining sector quickly instead of prioritizing environmental and social safeguards.[124] But there are also other factors potentially at play: a 2018 report co-commissioned by Drive Sustainability and the Responsible Minerals Initiative, a group of 360 companies that promotes responsible sourcing, ranked Guinea's rule of law as "very weak" and its experience of corruption as "very high."[125] The Natural Resource Governance Institute, an NGO, in June 2021 issued an updated Guinea chapter for its Resource Governance Index, which assesses how countries govern their mineral wealth. Guinea scored relatively highly in several areas, including in its management of mining revenue (scored "satisfactory") and the conditions for establishing and realizing mining activities ("good), but continued to receive low marks for control of corruption ("poor") and rule of law ("failing").[126]

---

[121] Letter from La Société Minière de Boké to Human Rights Watch, June 17, 2021.

[122] Human Rights Watch email exchange with Sidiki Condé, head of the Bureau Guinéen d'Etudes et d'Evaluation Environnementale, July 2, 2021.

[123] "Environnement," Compagnie des Bauxites de Guinée, http://www.cbg-guinee.com/nos-engagements/environnement-et-biodiversite/environnement/ (accessed June 30, 2021).

[124] Human Rights Watch, *'What Do We Get Out of It?' The Human Rights Impact of Bauxite Mining in Guinea*, p. 111-124.

[125] "Material Change: A Study of Risks and Opportunities for Collective Action in the Materials Supply Chains of the Automotive and Electronics Industries," Drive Sustainability, p. 26.

[126] "Resource Governance Index: Guinea," Natural Resource Governance Institute, 2021, https://resourcegovernance.org/sites/default/files/documents/2021_resource_governance_index_guinea_mining.pdf (accessed June 30, 2021).

In a June 2021 letter to Human Rights Watch, Guinea's ministry of mines stated that the government "works tirelessly for sustainable mining development" and "is putting everything in place to ensure mining and environmental laws are respected." [127] The ministry's letter also described a long list of reforms implemented to strengthen government oversight of the mining sector, and noted that the government in June 2021 negotiated and signed a new $65 million World Bank project to further strengthen its management of natural resources and the environment. [128]

An Urgent Need for Improvement

Added urgency to address human rights and environmental issues in Guinea's aluminum sector comes from the prospect of a significant expansion in alumina refining, with approximately eight bauxite mining companies planning to set up alumina refineries in Guinea. [129] Guinea's mining ministry said in a June 2021 letter to Human Rights Watch that processing bauxite inside the country, "as well as creating more value, will facilitate the development of a service economy that will supplant an economy based on extraction." [130]

New alumina refineries, however, also risk adding to the human rights and environmental burden that Guinea's mining sector places upon communities. A February 2021 environmental and social impact assessment (ESIA) for a planned SMB refinery in the Boké region, for example, states that the refinery will produce the electricity needed to convert bauxite into alumina using a generator supplied by coal from China. [131] Even with efforts to limit emissions, coal generators produce pollutants, such as sulfur dioxide and nitrogen oxides, linked to asthma, cancer, heart, and lung ailments, and neurological problems, while also emitting large quantities of carbon dioxide that contribute to global warming. [132]

---

[127] Letter from Ministry of Mines and Geology to Human Rights Watch, June 18, 2021.

[128] Ibid.

[129] Dr. Ashok Nandi and Dr. Alkaly Yamoussa Bangoura, "A Booming Bauxite Mining Industry of Guinea and Future Prospects," AlCircle Blog, December 2, 2020, https://blog.alcircle.com/2020/12/02/booming-bauxite-mining-industry-guinea-future-prospects/ (accessed June 30, 2021).

[130] Letter from Ministry of Mines and Geology to Human Rights Watch, June 18, 2021.

[131] "Projet de Construction d'une Raffinerie de Bauxite à Katougouma, Etude d'Impact Environnemental et Social," SEES, February 2021, Copy on file with Human Rights Watch, p. 2 and p. 110.

[132] "Coal and Air Pollution," Union of Concerned Scientists, last modified December 19, 2017.

SMB told Human Rights Watch in a June 2021 letter that the Guinean government had approved the ESIA for the refinery but that the company is still considering potential sources of energy.[133] The Guinean ministry of mines said in a June 2021 letter that, "the repercussions linked to the energy needs of the refinery and the means foreseen to achieve them are given particular attention by the administration, particularly measures put in place to control emissions of dust, smoke, and gas and improve air quality."[134]

A Role for Car Industry Engagement?

Prior to publication of this report, Human Rights Watch asked the Guinean mining ministry, SMB, and CBG what role car companies and the aluminum industry more widely can play in strengthening respect for human rights in the mining sector. Guinea's mining ministry said that it, "it remains open and ready to examine any initiative or measure of accompaniment adapted to a country's context that could guarantee the evolution and improvement of practices in the mining sector."[135] SMB said that, "industrial consumers of aluminum, and the autoindustry in particular, can play a determinative role in improving environmental and social standards in aluminum supply chains."[136] CBG said "it believes in the advocacy, call to action, sourcing, certification, and auditing roles of the various stakeholders, including civil society, NGOs and bauxite production and processing companies, industrial aluminum consumers, and governments, to promote honest, transparent, and good faith discussions on environmental, social, and human rights issues in the bauxite development industry."[137] As Guinea's bauxite industry plays an increasingly central role in global supply chains, car companies, through engagement with their suppliers and the mining companies they source from, should work to ensure that Guinean communities benefit from, and are not harmed by, aluminum production.

[133] Letter from La Société Minière de Boké (SMB) to Human Rights Watch, June 17, 2021.

[134] Letter from Guinean Ministry of Mines and Geology to Human Rights Watch, June 18, 2021.

[135] Ibid.

[136] Letter from La Société Minière de Boké (SMB) to Human Rights Watch, June 17, 2021.

[137] Letter from La Compagnie des Bauxites de Guinée (CBG) to Human Rights Watch, May 19, 2021.

IV. Car Companies' Responsible Sourcing Practices

Human Rights Due Diligence and the Car Industry

Under the United Nations Guiding Principles on Business and Human Rights, companies have a responsibility to put in place human rights due diligence processes to identify, prevent, mitigate, and remedy human rights abuses throughout their supply chain. [138] Businesses whose operations or products are directly linked to adverse human rights impacts, including through their supply chains, should take appropriate action, including using their leverage to address the harms. [139] Companies must ensure respect for human rights in their operations even where a national government lacks the necessary regulatory framework or is unable or unwilling to protect human rights. [140]

Beyond the UN Guiding Principles, the majority of car companies examined in this report have made their own commitments to human rights due diligence. As part of the Drive Sustainability initiative, 11 major car manufacturers, including BMW, Daimler, Ford, Toyota, Volkswagen, and Volvo, in 2017 adopted the Global Automotive Sustainability Guiding Principles, which commit members to, "responsibly source raw materials used in their products." [141] Guidance on implementing the principles states that companies, "are expected to conduct due diligence to understand the source of the raw materials used in their products" and that, "companies should work to reduce the risk of potential human rights violations in their operations and through their business relationships by identifying risks and remediating any non-conformance in a timely manner." [142]

---

[138] United Nations Human Rights Council, *Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework*, 2011, http://www.ohchr.org/documents/publications/GuidingprinciplesBusinesshr_en.pdf (accessed August 1, 2020).

[139] UN Human Rights Council, *Guiding Principles*, Principle 19.

[140] UN Human Rights Council, *Guiding Principles*, Principle 11.

[141] "Automotive Industry Guiding Principles to Enhance Sustainability Performance in the Supply Chain," Drive Sustainability, undated, https://drivesustainability.org/wp-content/uploads/2017/12/Guiding-Principles.pdf (accessed February 2, 2021).

[142] "Global Automotive Sustainability Practical Guidance," Drive Sustainability, undated, https://drivesustainability.org/wp-content/uploads/2017/12/Practical-Guidance.pdf (accessed February 4, 2021), p. 4.

The extent to which car companies have operationalized their commitments to human rights due diligence varies by company. Overall, however, the car industry has significant work to do to integrate human rights due diligence effectively. In June 2020, a report by Investor Advocates for Social Justice, an NGO promoting responsible investing, examined in detail the human rights due diligence policies and practices of 23 companies in the automotive sector.[143] The report concluded that, "the automotive industry is failing to demonstrate respect for human rights," that the sector's "most severe human rights risks are in the supply chain," and that there is "inadequate supply chain transparency or oversight to monitor even direct suppliers."[144]

In preparing this report, Human Rights Watch and Inclusive Development International asked car companies about their overall approach to human rights due diligence as well as their specific approach to aluminum. Many of the car companies contacted said they have publicly available standards that require or encourage their direct suppliers to ensure respect for human rights and which, with varying degrees of rigor, require or encourage their suppliers to work with companies further up the supply chain to ensure respect for human rights.[145]

But while car companies' public commitments to human rights standards are important, their enforcement and monitoring of those standards need significant strengthening. In its report on car companies' human rights due diligence practices, Investor Advocates for Social Justice concluded that:

> Enforceable commitments that are cascaded from one supplier to the next through the supply chain either do not exist or are not monitored…Few companies have robust management systems that enable them to embed

[143] Investor Advocates for Social Justice, *The Shifting Gears Report: An Assessment of Human Rights Risks & Due Diligence in the Automotive Industry*, June 2020, https://iasj.org/wp-content/uploads/IASJ_ShiftingGearsReport_F.pdf (accessed February 2, 2021).

[144] Ibid., p. 4.

[145] See, for example: Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021; Letter from Ford to Human Rights Watch and Inclusive Development International, May 28, 2021; Email from BMW to Human Rights Watch and Inclusive Development International, June 25, 2021. Human Rights Watch and Inclusive Development International interview with Renault, June 8, 2021. Investor Advocates for Social Justice's *Shifting Gears* report provides a much more detailed analysis of the different human rights due diligence policies present in the automobile sector, and the extent to which car companies require suppliers to enforce them within their supply chain.

human rights criteria into business functions like assessing suppliers before entering contracts, incorporating human rights into purchasing decisions, and monitoring compliance with human rights criteria in contracts. [146]

Prioritizing Minerals Critical for Electric Vehicles

Car company executives said that monitoring suppliers' conduct, including their efforts to source responsibly, is an enormous challenge when car companies have thousands of direct suppliers, each with their own sometimes complex supply chains. [147]

Car companies have therefore often chosen to focus their supply chain due diligence efforts on certain priority raw materials. In some cases, the decision on what materials to prioritize is driven by regulatory requirements, such as the requirement under US and European Union law to conduct human rights due diligence on gold, tin, tungsten, and tantalum. [148] In other cases, car companies have conducted their own assessment of what to focus on, based on factors like the risk of human rights violations, reputational risk, the amount of material sourced by the company, and the leverage the company might have to change their suppliers' conduct. [149]

---

[146] *The Shifting Gears Report: An Assessment of Human Rights Risks & Due Diligence in the Automotive Industry*, Investor Advocates for Social Justice, p. 4.

[147] Human Rights Watch and Inclusive Development International interview with General Motors, September 10, 2020; Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021; Letter from Daimler to Human Rights Watch and Inclusive Development International, May 31, 2021; Human Rights Watch and Inclusive Development International interview with BMW, June 17, 2021; Human Rights Watch meeting with Groupe PSA, October 15, 2020.

[148] "Factsheet: Disclosing the Use of Conflict Minerals," U.S. Securities and Exchange Commission, https://www.sec.gov/opa/Article/2012-2012-163htm---related-materials.html (accessed December 6, 2020). "Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas," Official Journal of the European Union, May 19, 2017, https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32017R0821&from=EN (accessed December 6, 2020).

[149] Human Rights Watch and Inclusive Development International interview with Daimler, June 18, 2020. Human Rights Watch and Inclusive Development International interview with BMW, October 13, 2020. Letter from Volvo Cars to Human Rights Watch and Inclusive Development International, May 30, 2021.

This approach has led many car companies to prioritize certain minerals critical to electric vehicles, such as the cobalt needed for electric batteries.[150] Widespread reporting by human rights groups of child labor and other human rights abuses in cobalt mining communities in the Democratic Republic of Congo, which produced approximately 70 percent of world supply in 2019, has helped raise awareness of the human rights risk in the cobalt supply chain.[151] Eight of the nine car companies who responded to Human Rights Watch and Inclusive Development International said they have taken at least some steps to specifically address the risk of human rights abuses in their supply of cobalt.[152]

Car companies have also begun to prioritize human rights due diligence for other materials required for car batteries, such as lithium.[153]

For some companies, the decision to prioritize oversight of the supply chain for minerals linked to electric batteries is partly driven by the need for consistency between environmentally friendly vehicles and responsible sourcing. Ullrich Gereke, head of procurement strategy at the Volkswagen Group, said in November 2020 that, "For our e-

---

[150] Angeli Mehta, "Electric car makers in drive to remove human rights stain from cobalt," *Reuters Events*, April 24, 2018, https://www.reutersevents.com/sustainability/electric-car-makers-drive-remove-human-rights-stain-cobalt (accessed February 2, 2021).

[151] Amnesty International, *Democratic Republic of Congo: "This is what we die for": Human Rights Abuses in the Democratic Republic of Congo Power the Global Trade in Cobalt*, January 2016, https://www.amnesty.org/en/documents/afr62/3183/2016/en/ (accessed February 2, 2021). Data on cobalt production in the Democratic Republic of Congo can be found here: Kim B. Shedd, "Cobalt," U.S. Geological Survey, Mineral Commodity Summaries, January 2020, https://pubs.usgs.gov/periodicals/mcs2020/mcs2020-cobalt.pdf (accessed February 2, 2021).

[152] The eight companies were Volkswagen, BMW, Daimler, Ford, General Motors, Groupe PSA, Renault, and Volvo. The human rights due diligence efforts conducted for cobalt vary by company, and it is beyond the scope of this report to exhaustively list, analyze, or evaluate different companies' approaches. Examples include: mapping out a car company's full cobalt supply chain, including the mines where raw materials are produced; disclosure of cobalt smelters and refineries in a company's supply chain; audits, including for compliance with human rights standards, of companies mining and refining cobalt; committing to require that mines that are part of a car company's supply chain meet certification standards; funding for, and participation in, development programs that aim to improve the working and living conditions of miners and mining communities. See, for example, "Our Activities in the Cobalt Supply Chain," Daimler, undated, https://www.daimler.com/sustainability/human-rights/supply-chain/cobalt.html (accessed February 2, 2021). "Greater Transparency in Cobalt Mining," BMW Group, undated https://www.bmwgroup.com/en/responsibility/sustainable-stories/popup-folder/Kobaltabbau.html (accessed February 2, 2021). "RCS Global and automotive company PSA announce supply chain due diligence programme," RCS Global, March 18, 2020, https://www.rcsglobal.com/rcs-global-automotive-company-psa-announce-supply-chain-due-diligence-programme/ (accessed February 2, 2021). Several car companies, including BMW, Renault, Honda, and Volkswagen, are participants in the World Economic Forum's Global Battery Alliance, which aims to help establish a sustainable battery value chain, including by eliminating human rights violations. "Global Battery Alliance," World Economic Forum, undated, https://www.weforum.org/global-battery-alliance/home (accessed February 2, 2021).

[153] "UN highlights urgent need to tackle impact of likely electric car battery production boom," *UN News*, June 28, 2020, https://news.un.org/en/story/2020/06/1067272 (accessed February 2, 2021).

mobility strategy, sustainable and responsible sourcing of raw materials is of the utmost importance."[154] The Chairman of BMW Europe, Manfred Schoch, said in 2019 that, "The growth in electromobility is increasingly transforming the supply chain…When purchasing new materials, such as cobalt or lithium… the BMW Group [is] working intensely to ensure fair working conditions and respect human rights."[155]

Aluminum is Currently a Blind Spot

Despite its central role in more fuel-efficient vehicles, the human rights impact of aluminum – and bauxite mining in particular – remains a blind spot for the car industry. Although car companies' knowledge of aluminum supply chains varies, none of the nine companies that responded to Human Rights Watch and Inclusive Development International had, prior to being contacted for this report, mapped their aluminum supply chain to understand the particular human rights risks within it. When asked, for example, about connections between their operations and CBG and SMB, the two Guinean mining companies discussed above, car companies either refused to disclose information about their supply chains or said that they do not currently track their supply chains down to the mine level.[156] Only two companies, Volkswagen and Daimler, acknowledged in writing that they might have connections to one or both of the mines.[157]

---

[154] Andrew Fawthrop, "Volkswagen to support sustainable artisanal cobalt mining in the Congo," *NS Energy*, November 20, 2020, https://www.nsenergybusiness.com/news/industry-news/volkswagen-cobalt-mining-congo/ (accessed February 2, 2021).

[155] "BMW Group Code on Human Rights and Working Conditions," BMW Group, April 2019, p. 4, https://www.bmwgroup.com/content/dam/grpw/websites/bmwgroup_com /responsibility/downloads/en/2019/2019-BMW-Group-Code-on-human-rights.pdf (accessed February 4, 2021).

[156] Human Rights Watch and International Development International in May 2021 sent 12 car companies supply chain mapping containing Inclusive Development International's findings on the connection between each car company and mines belonging to CBG and SMB, the two mining companies discussed in detail earlier in this report. Five car companies, BYD, General Motors, Hyundai, Groupe PSA and Tesla did not respond. Two car companies, Ford and Toyota, would not comment on whether the supply chain data was accurate. Email from Toyota to Human Rights Watch and Inclusive Development International, May 31, 2021. Letter from Ford to Human Rights Watch and Inclusive Development International, May 28, 2021. BMW said it could not currently track its aluminum supply chain down to the mine level. Email from BMW to Human Rights Watch and Inclusive Development International, June 25, 2021. Volvo and Renault said that they had initiated efforts to map out their aluminum supply chains. Letter from Volvo Cars to Human Rights Watch and Inclusive Development International, May 30, 2021.

[157] Volkswagen said, "Guinea is one of the largest global exporters of bauxite. Discussions with our most important suppliers of parts containing aluminium reveal, that we are unable to confirm that no bauxite from Guinea is used in our products." Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021. Daimler acknowledged that, given that its suppliers source material from Guinea, and CBG in particular, they, "assume the presence of physical material from Guinea and the CBG mine in our supply chain." Letter from Daimler to Human Rights Watch and Inclusive Development International, May 31, 2021.

The complexity of aluminum supply chains was a key reason cited by several car companies for their inability to identify the source of their aluminum products.[158] Volkswagen, for example, said in a June 2021 letter that, "due to the high variety and number of parts in our vehicles using aluminum, a process to track and trace all material back/up to mining level and have one hundred percent transparency for all aluminum parts is currently not possible."[159] BMW said that, "due to the high complexity of the supply chain, full traceability down to mine or refinery level is currently not possible."[160] Daimler said that, "through [exchanges] with our [aluminum] suppliers we realized many do not yet operate adequate traceability systems to make the connection to the mine site."[161] BMW and Daimler said that confidentiality considerations with suppliers or between suppliers and sub-suppliers also prevented full traceability to the mine level.[162] Ford did not say that confidentiality prevented full traceability. Rather, the company said that it "cannot disclose supply chain links to the mine level due to confidentiality obligations with suppliers."[163]

Several car companies acknowledged, however, the need for more efforts to understand aluminum supply chains and the human rights risks within them.[164] Volvo, for example, said in a December 2020 letter that, "We have made a prioritization of raw materials from a responsible sourcing perspective. Aluminum/Bauxite is one of the materials we have decided needs further investigation and evaluation of potential risks and impacts."[165] At least one car manufacturer said that the complexity of aluminum supply chains should not necessarily be an obstacle to increased human rights due diligence, noting that even if car companies don't have fully traceable supply chains in the short-term, they can still work

[158] Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021; Letter from Daimler to Human Rights Watch and Inclusive Development International, May 31, 2021; Email from BMW to Human Rights Watch and Inclusive Development International, June 25, 2021.

[159] Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021.

[160] Email from BMW to Human Rights Watch and Inclusive Development International, June 25, 2021.

[161] Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021.

[162] Letter from Daimler to Human Rights Watch and Inclusive Development International, May 31, 2021. Human Rights Watch and Inclusive Development International interview with BMW, June 17, 2021.

[163] Letter from Ford to Human Rights Watch and Inclusive Development International, May 28, 2021.

[164] Human Rights Watch and Inclusive Development International interview with Daimler, June 19, 2020. Human Rights Watch and Inclusive Development International interview with General Motors, September 10, 2020. Human Rights Watch and Inclusive Development International interview with BMW, June 17, 2021.

[165] Letter from Volvo to Human Rights Watch and Inclusive Development International, December 10, 2020.

with their suppliers to identify and address "hotspots" where there are significant risks of human rights abuses.[166]

Certification in the Aluminum Sector

Although the car industry as a whole has made limited efforts to source aluminum responsibly, several car companies, BMW, Daimler, and Audi, which leads Volkswagen Group's aluminum sourcing activities, have joined the Aluminum Stewardship Initiative (ASI), an industry-led certification scheme that aims to, "recognize and collaboratively foster responsible production, sourcing, and stewardship of aluminum."[167] Globally, an increased focus on responsible sourcing and human rights due diligence has contributed to the emergence of a range of certification schemes, like ASI, which are established by multistakeholder initiatives (MSI) or industry associations to audit mines and other facilities against an agreed standard.[168]

ASI, which was formed in 2015, has more than 150 members, including mining companies, refiners, industrial users of aluminum, and civil society groups.[169] ASI has developed a Performance Standard, which includes social, human rights and environmental factors, against which any actor in the aluminum supply chain – whether a mining operation, processing facility, or manufacturing plant – can seek certification.[170] Companies can join ASI provided that they commit to certify at least one of their facilities (a site or premises controlled by the company, not necessarily a mining site) against the Performance Standard within two years of joining, with certification requiring third-party audits of the facility's compliance.[171] ASI has also developed a "Chain of Custody" standard that

---

[166] Human Rights Watch and Inclusive Development International interview with major European car company, June 17, 2021.

[167] "ASI's Vision, Mission and Values," Aluminium Stewardship Initiative, https://aluminium-stewardship.org/about-asi/vision-mission-and-values/#:~:text=Our%20vision%20is%20to%20maximise,sourcing%20and%20stewardship%20of%20aluminium (accessed February 2, 2021).

[168] Susan van den Brink, René Kleijn, Arnold Tukker, Jaco Huisman, "Approaches to responsible sourcing in mineral supply chains," *Resources, Conservation and Recycling*, 145 (2019), pp. 389-398.

[169] "ASI Certified Members," Aluminium Stewardship Initiative, https://aluminium-stewardship.org/asi-certification/asi-certified-members/ (accessed May 23, 2021).

[170] "ASI Performance Standard," Aluminium Stewardship Initiative, December 2017, https://aluminium-stewardship.org/asi-standards/asi-performance-standard/ (accessed February 2, 2021).

[171] To seek or renew certification for a facility, companies submit a self-assessment and then select an ASI accredited auditor to conduct a third-party assessment. The audit report is reviewed by ASI's Secretariat, which then either issues a full ASI

companies can use to demonstrate that an end-use aluminum product has been produced by mines, refineries, smelters and manufacturers that all respect ASI's Performance Standard. [172]

ASI had by June 2021 certified 92 facilities against its Performance Standard in more than 40 countries. [173] In 2019, seven percent of global bauxite was mined by facilities certified against ASI's Chain of Custody standard, as well as around four percent of global alumina and just over one percent of aluminum ingots. [174] ASI said that its preliminary analysis showed that 16 percent of bauxite produced globally in 2020 was certified against ASI's Chain of Custody standard, which it said represented, "very strong year on year growth." [175] ASI also said its data showed that globally 11 percent of operational bauxite mines, 11 percent of alumina refineries, and 20 percent of alumina smelters are currently ASI Performance Standard certified. [176]

Volkswagen, BMW, and Daimler told Human Rights Watch and Inclusive Development International that they were encouraging mines, refineries, and smelters to join ASI and expand the amount of certified aluminum produced worldwide. [177] Volkswagen, for example, said in a June 2021 letter that, "It is our goal to increase the share of certified materials in our portfolio…. We believe that the growing share of certified aluminum in the market including certified mining operations is the right way to institute more sustainable

---

certification for the facility, awards only a provisional certification along with a corrective action plan to address major problems identified or denies certification. "ASI Assurance Manual Version 1," Aluminium Stewardship Initiative, December 2017, p. 11-16. For details on how ASI's Performance Standard defines a facility as "under the control of an ASI member," see "ASI Performance Standard," p. 24.

[172] "ASI Chain of Custody (CoC) Standard Version 1," December 2017, Aluminium Stewardship Initiative, https://aluminium-stewardship.org/asi-standards/chain-of-custody-standard/ (accessed February 2, 2021). ASI's chain of custody standard uses a "mass balance approach" that, rather than tracking a specific batch of material from the mine level, determines what percentage is made from ASI-certified materials (i.e. alumina produced at a certified refinery that sources 20 percent of its bauxite from an ASI-certified mine could describe 20 percent of its alumina as ASI-certified). Chain of Custody (CoC) Standard Version 1, p. 14-15. Companies can refer to end products made with material certified under the chain of custody standard as produced with "ASI Aluminum." ASI Chain of Custody (CoC) Standard Version 1, p. 4.

[173] "What we've achieved so far," Aluminium Stewardship Initiative, https://aluminium-stewardship.org/why-aluminium/asi-outcomes-impacts/ (accessed July 2, 2021).

[174] "ASI Chain of Custody Material along the value chain," Aluminium Stewardship Initiative, https://aluminium-stewardship.org/why-aluminium/asi-outcomes-impacts/asi-coc-material-flow (accessed June 30, 2021).

[175] Letter from Aluminium Stewardship Initiative to Human Rights Watch and Inclusive Development International, July 7, 2021.

[176] Ibid.

[177] Email from BMW to Human Rights Watch and Inclusive Development International, June 25, 2021. Human Rights Watch and Inclusive Development International interview with Daimler, June 18, 2020. Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021.

supply chains."[178] Volkswagen said one of its brands is requiring ASI certification for certain aluminum components in its supply chain.[179] Daimler also said that it had made ASI a sourcing requirement for all future procurements for "all primary aluminum suppliers to our stamping plants and foundries in Europe" and that, "by sending a clear demand signal, we intend to support the mainstreaming of ASI in the market."[180]

Certification processes can help car companies source responsibly by clarifying and defining industry standards and providing car manufactures with information about compliance with those standards at mines, refineries, and smelters in their supply chain. Participation in certification schemes is not, however, sufficient to discharge companies' responsibilities to detect human rights abuses and provide remedies to victims of corporate abuses.[181] Third-party audits, a key element of certification, have been found to have severe limitations, including potential conflicts of interest, lack of human rights expertise among auditors, and inadequate consultation with affected communities.[182] Car companies' efforts to source certified aluminum should only ever be one part of a broader due diligence process that includes supply chain mapping, risk analysis, mitigation measures, verification, grievance mechanisms, public reporting, and direct engagement with mines, refineries, and smelters implicated in, or at risk of, human rights abuses.

The different characteristics of certification schemes also means that they vary in their effectiveness in advancing human rights. In ASI's case, despite its potential advantages, the initiative also has significant limitations. ASI's board does not have equal participation and voting rights for impacted communities and civil society groups versus downstream and upstream industry representatives, even though it does allow for participation and

---

[178] Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021.

[179] Ibid.

[180] Ibid.

[181] "Not Fit-for-Purpose: The Grand Experiment of Multi-Stakeholder Initiatives in Corporate Accountability, Human Rights and Global Governance," MSI Integrity, July 2020, p. 4.

[182] "Not Fit-for-Purpose: The Grand Experiment of Multi-Stakeholder Initiatives in Corporate Accountability, Human Rights and Global Governance," MSI Integrity, pp. 128-138; Carolijn Terwindt and Miriam Saage-Maas, "Liability of Social Auditors in the Textile Industry," European Center for Constitutional and Human Rights, December 2016, https://www.ecchr.eu/fileadmin/Publikationen/Policy_Paper_Liability_of_Social_Auditors_in_the_Textile_Industry_FES_ECCHR_2016.pdf, accessed June 30, 2021), pp. 4-5; "Human rights fitness of the auditing and certification industry?," European Center for Constitutional and Human Rights, June 2021, https://www.ecchr.eu/fileadmin/Publikationen/ECCHR_BfdW_MIS_AUDITS_EN.pdf, accessed June 30, 2021), p. 19; "Social Audit Reforms and the Labor Rights Ruse," IPS, October 7, 2020, https://www.ipsnews.net/2020/10/social-audit-reforms-labor-rights-ruse/ (accessed October 21, 2020).

input from non-industry players.[183] MSI Integrity, an NGO, found in a July 2020 report that where MSIs have minority representation of civil society groups or rights holder in their governing bodies, it exacerbates their tendency to avoid significant changes to their standards or oversight systems, particularly reforms that would strengthen human rights protections for communities and impose additional human rights obligations on companies.[184]

Fiona Solomon, ASI's Chief Executive Officer (CEO), said in a July 2021 letter to Human Rights Watch and Inclusive Development International that ASI's board is responsible for the corporate governance of the initiative, but emphasized that ASI's Standards Committee, which includes equal representation from industry and civil society/community groups, is responsible for formulating the initiative's standards and verification processes.[185] ASI's board adopts standards once they have been formulated by the Standards Committee, although the board's oversight is limited to assessing whether the committee followed due process and "review of material risks."[186] ASI also has an Indigenous Peoples Advisory Forum (IPAF), made up of Indigenous, community, and civil society groups impacted by the aluminum sector, which functions as a "dialogue and engagement platform between ASI and representatives of Indigenous Peoples."[187] ASI's Standards Committee includes at least two members of IPAF.[188]

The Standard Committee is currently in the process of revising ASI's standards, and Human Rights Watch and Inclusive Development International wrote to ASI's Secretariat in April

---

[183] ASI's board is composed of four industry representatives (two from companies producing or transforming aluminum and two companies who use aluminum in their products), two civil society members and two independent directors. "ASI's Board of Directors," Aluminium Stewardship Initiative, undated, https://aluminium-stewardship.org/about-asi/asi-board/#1461082580363-700baceb-dde7 (accessed February 3, 2021).

[184] "Not Fit-for-Purpose: The Grand Experiment of Multi-Stakeholder Initiatives in Corporate Accountability, Human Rights and Global Governance," MSI Integrity, July 2020, pp. 71-73.

[185] Letter from Aluminium Stewardship Initiative to Human Rights Watch and Inclusive Development International, July 7, 2021. ASI aims to have – and currently does have – an equal number of civil society and industry members in its Standards Committee, who are elected by ASI's members, although ASI's bylaws only require a minimum of one third membership on the committee from civil society groups. "ASI Governance Handbook," Aluminium Stewardship Initiative, September 2019, https://aluminium-stewardship.org/wp-content/uploads/2017/09/ASI-Governance-Handbook-v1-1-September2017.pdf (accessed February 3, 2021), p. 37. See also "ASI Standards Committee," Aluminium Stewardship Initiative, https://aluminium-stewardship.org/about-asi/asi-standards-committee/ (accessed June 29, 2021).

[186] "ASI Governance Handbook," Aluminium Stewardship Initiative, September 2019, https://aluminium-stewardship.org/wp-content/uploads/2017/09/ASI-Governance-Handbook-v1-1-September2017.pdf (accessed February 3, 2021), p. 25.

[187] Ibid., pp. 42-43.

[188] Ibid., p. 37.

2021 to provide comments on ASI's proposed revisions.[189] Key issues raised in the letter included the need for increased protections for communities that lose land to mining, particularly those with customary land rights, and a need for the standards to more clearly articulate communities' right to participate in, and benefit from, natural resource exploitation.[190] The letter praised ASI's decision to integrate a supply chain due diligence requirement into the standard, in line with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas,[191] but also underscored that ASI standards should require companies to conduct due diligence for the full range of human rights abuses in their supply chains, whether they occur in conflict-affected and high-risk areas or otherwise.[192] ASI's revised standards do include strengthened language on managing greenhouse gas emissions at aluminum smelters, including requiring members to reduce the volume of emissions per metric ton of aluminum manufactured and a requirement to set absolute emissions reduction targets in line with the most ambitious goal of the Paris Agreement on climate change to keep global warming below 1.5 degrees Celsius.[193]

More broadly, however, the human rights requirements in ASI's Performance Standard currently lack adequate detail and do not break down key human rights issues into specific

---

[189] Letter from Human Rights Watch and Inclusive Development International to Aluminium Stewardship Initiative, April 14, 2021, https://www.inclusivedevelopment.net/wp-content/uploads/2021/04/ASILetteronStandardsRevisiono4152021Final.pdf (accessed June 30, 2021).

[190] Ibid.

[191] "ASI Performance Standard V3, 1.0 for Consultation," Aluminium Stewardship Initiative, March 2021, p. 21. The reference to the OECD Guidance in ASI's revised standard is in large part driven by the London Metal Exchange (LME)'s decision, in October 2019, to introduce new responsible sourcing requirements, underpinned by the OECD Guidance, for its listed brands. "ASI Performance Standard V3 – Guidance Draft 1.0 for Consultation," Aluminium Stewardship Initiative, March 2021, p. 93. Aluminum is the metal traded in the largest quantities on the LME. Human Right Watch interview with Georgina Hallett, Chief Sustainability Officer, London Metal Exchange, June 8, 2021. ASI has committed to further align its standards with the OECD Guidance to support implementation of LME's rules, and to be independently assessed for alignment via an OECD assessment tool.

[192] Standards like the UN Guiding Principles and the OECD Guidelines on Responsible Business Conduct make clear that companies' supply chain due diligence should address the full range of human rights issues potentially affected by aluminum production, including land rights and the rights to a healthy environment. OECD, "Due Diligence Guidance for Responsible Business Conduct," 2018, https://www.oecd.org/investment/due-diligence-guidance-for-responsible-business-conduct.htm (accessed July 15, 2021). The OECD is itself developing a "Tool for Environmental Due Diligence in Mineral Supply Chains" that will describe how the five-step due diligence framework presented in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas "can be applied to environmental risks and impacts in global mineral supply chains with a focus on extraction, processing and refining of mineral raw materials." See "OECD Tool on Environmental Due Diligence in Mineral Supply Chains," Umwelt Bundesamt, March 23, 2021, https://www.umweltbundesamt.de/en/oecd-tool-on-environmental-due-diligence-in-mineral (accessed June 30, 2021).

[193] "ASI Performance Standard V3, 1.0 for Consultation," Aluminium Stewardship Initiative, March 2021, p. 13.

criteria against which companies' policies and practices can be assessed. The section of ASI's revised Performance Standard on resettling communities, for example, requires companies to develop a Resettlement Action Plan for physical displacements, in line with relevant IFC standards, and requires that a company regularly review the plan and implement improvements to ensures that communities' "living conditions and income generating options equal or exceed those prior to the resettlement."[194] The IFC's resettlement standards are extremely lengthy, and resettlements themselves are very complex. ASI's Performance Standard does not break down the IFC standard into specific criteria against which auditors should assess a Resettlement Action Plan or evaluate companies' efforts to ensure communities' living conditions are maintained or improved.[195]

The lack of detail in ASI's Performance Standard can be contrasted with the more specific requirements in a standard developed by the Initiative for Responsible Mining Assurance (IRMA), a mining sector certification scheme whose members include BMW, Ford, and Daimler. IRMA's standard focuses only on mining companies' operations, not facilities further down the supply chain, although IRMA is developing a processing standard that would apply to smelters and refineries.[196] IRMA's standard, which so far has not been adopted by any bauxite mine but has been by mines in other mineral sectors, breaks down each of its key elements into detailed criteria against which mines should be assessed.[197] IRMA's section on resettlement, for example, although not yet finalized, includes 28 criteria with which to asses a mine's resettlement policies and practices, ranging from community engagement during resettlement to monitoring and evaluating the impacts of

---

[194] Ibid., p. 21. Physical displacement refers to the resettlement of communities from their homes. Economic displacement refers to land acquisitions that do not displace communities from their homes but instead result in impacts to their livelihoods. In an April 2021 letter to ASI, Human Rights Watch and Inclusive Development recommended that ASI's standards on resettlement also extend to economic displacement. Letter from Human Rights Watch and Inclusive Development to Aluminium Stewardship Initiative, April 14, 2021, https://www.inclusivedevelopment.net/wp-content/uploads/2021/04/ASILetteronStandardsRevisiono4152021Final.pdf (accessed June 30, 2021).

[195] "ASI Performance Standard V3 – Guidance Draft 1.0 for Consultation," Aluminium Stewardship Initiative, March 2021, p. 108.

[196] "Standard for Responsible Mineral Processing DRAFT," Initiative for Responsible Mining Assurance, June 2021, https://responsiblemining.net/wp-content/uploads/2021/06/IRMA-Mineral-Processing-Standard-DRAFT-14June2021.pdf ((accessed June 30, 2021). IRMA is also finalizing a chain of custody standard to provide guidelines on when and how downstream users like car companies can refer to mineral products as having been produced by mines certified by IRMA. "Chain of Custody Standard for Responsibly Mined Materials," Draft, Initiative for Responsible Mining Assurance, October 2020, https://responsiblemining.net/wp-content/uploads/2020/11/IRMA-Chain-of-Custody-Standard-DRAFTv1.0-October2020.pdf (accessed June 30, 2021).

[197] IRMA, "IRMA Standard for Responsible Mining," June 2018, https://responsiblemining.net/wp-content/uploads/2018/07/IRMA_STANDARD_v.1.0_FINAL_2018-1.pdf (accessed June 30, 2021).

resettlement on households after it is complete.[198] Human Rights Watch is a member of IRMA's board.

In addition to the lack of detail in its Performance Standard, ASI's current certification process contains insufficient guarantees that the third-party audits necessary for certification effectively capture whether companies respect the rights of local communities. There are, for example, insufficiently detailed requirements in ASI's assurance standard setting out when and how auditors should consult with local communities and the issues on which auditors should seek communities' input.[199] The guidance to IRMA's mining standard, in contrast, sets out detailed "means of verification" that describe when and on what issue auditors should consult with impacted communities or civil society groups.[200] ASI's assurance manual also lacks adequate guidance on how outreach to affected communities should be conducted so that they can freely and openly engage in the process, how much consultation with affected communities is required, and how their experiences and perspectives are to be reflected in auditing reports.[201] Solomon, ASI's CEO, said in a July 2021 letter to Human Rights Watch, that, "enhancing guidance for auditors on consultation with, and outreach to, affected communities is being addressed as part of the current Standards Revision and through development of new auditor training modules for 2022."[202]

ASI currently publishes a summary of the audit conducted for each certification, but the summaries do not include adequate detail to enable external stakeholders, including local community and civil society groups, to investigate the quality of the audit and ensure a

---

[198] IRMA, "IRMA Standard for Responsible Mining," June 2018, p. 60.

[199] ASI, in March 2021, proposed a revision to the Assurance Manual that would require auditors to interview Indigenous Peoples and other stakeholders whose rights might be affected by a company's operations. "ASI Assurance Manual V2.0 Draft 1.0 for Consultation," Aluminium Stewardship Initiative, p. 46. The revised draft, however, still does not offer adequate detail about the issues that impacted communities should be consulted on and in what level of detail.

[200] "IRMA Standard for Responsible Mining – Guidance Document," Initiative for Responsible Mining Assurance, October 2019, https://responsiblemining.net/wp-content/uploads/2019/12/IRMA_Standard-Guidance_Oct2019.pdf (accessed May 24, 2021).

[201] In comments on ASI's revised standards, Human Rights Watch and Inclusive Development International recommended that ASI's Assurance Manual integrate more detail on how to consult affected communities during audits, for example by integrating best practices from the guidance on assurance processes that civil society groups have developed to assist companies implementing the United Nations Guiding Principles. See, for example, Shift, Mazars, "UN Guiding Principles Reporting Framework - Assurance of Human Rights Performance and Reporting," 2017, https://www.ungpreporting.org/wp-content/uploads/UNGPRF_AssuranceGuidance.pdf, pp. 20-21, 30-31 (accessed May 23, 2021).

[202] Letter from Aluminium Stewardship Initiative to Human Rights Watch and Inclusive Development International, July 7, 2021.

company addresses the deficiencies it identifies. The lack of detail in summary audits reports is in part a result of the lack of detailed criteria for assessment in ASI's Performance Standard. But the summary audits also provide little information about why a company is or is not in conformity with the criteria in the Performance Standard, often limiting their analysis to a few short sentences. [203] Solomon, ASI's CEO, said that, "auditors prepare the summary statements and are expected to give the reader a clear sense of how they came to the conclusion of conformance or non-conformance (major or minor)." [204] In contrast to ASI, the two summary audit reports published by IRMA so far provide clear explanations as to why a company met or partially met the standard's detailed criteria. [205] IRMA's summary audits reports, however, do not include any explanatory narrative where a company is deemed not to meet a specific IRMA criterion.

ASI does have a grievance mechanism that can be accessed by communities that allege that a member company or a certified facility is implicated in human rights abuses. [206] ASI's assurance and complaints processes create pathways for a member company implicated in serious human rights abuses to be expelled from the initiative but does not require it. [207] Solomon, ASI's CEO, said that if a member company was implicated in serious human rights abuses, "a time-bound corrective action (remedial action) plan would be required…and other consequences (loss of membership and/or certification) may also apply." [208]

---

[203] Audit summaries available for each member on the ASI website: https://aluminium-stewardship.org/about-asi/current-members/. ASI's proposed revised Assurance Manual does require that some additional information be included in Summary Audit Reports, such as a sampling methodology and the strategy for engagement with affected populations and organizations, as well as the number of parties contacted and interviewed (including Indigenous Peoples, community members and NGOs). The revised Assurance Standard does not, however, require sufficient additional substantive information explaining or justifying the statement of conformance. See "ASI Assurance Manual Draft 1.0 for Consultation," p. 82.

[204] Letter from Aluminium Stewardship Initiative to Human Rights Watch and Inclusive Development International, July 7, 2021.

[205] "Mines under assessment," Initiative for Responsible Mining Assurance, https://responsiblemining.net/what-we-do/certification/mines-under-assessment/ (accessed May 24, 2021).

[206] "ASI Complaints Mechanism," Aluminium Stewardship Initiative, https://aluminium-stewardship.org/asi-certification/asi-complaints-mechanism/ (accessed June 30, 2021).

[207] "ASI Complaints Mechanism," Aluminium Stewardship Initiative, p 13. "ASI Assurance Manual Version 1," p. 16.

[208] Letter from Aluminium Stewardship Initiative to Human Rights Watch and Inclusive Development International, July 7, 2021.

The Future of Certification in Aluminum Supply Chains

Despite the limitations of certification, several car companies' use of schemes like ASI suggests that certification will remain a key strategy for the industry moving forward. Other car manufacturers have also suggested that they will soon join certification mechanisms, with Volvo stating in May 2021 that, "We are currently reviewing the different available standards with the ambition to engage in one or more of them in the near future." [209] Volvo also said that for future procurements it would require suppliers' entire aluminum supply chain, "to be verified by a third party to ensure responsible mineral sourcing practices of each actor." [210]

If certification is to remain a key tool for human rights due diligence, car companies should use their influence to ensure that certification schemes meet the highest available human rights standards and develop transparent and credible mechanisms for verifying companies' conduct with those standards.

ASI members, including BMW and Daimler, have so far committed to remaining in and using ASI while pushing the initiative to improve, including through its ongoing standards revision process. [211] Both BMW and Daimler said that they hoped that ASI would align more closely with IRMA's standards and verification process, with BMW describing IRMA as a "benchmark for the ASI standard revision process." [212] Daimler stated in a May 2021 letter that, "We are in discussion with both certification initiatives (ASI and IRMA) to work towards a common transparent approach to mutual recognition or interoperability." [213] Solomon, ASI's CEO, said in July 2021 that, "IRMA and a range of other standards have been reviewed as part of the current Standards Revision. It is ultimately up to ASI's multi-stakeholder Standards Committee, informed by public consultation processes, to

[209] Letter from Volvo Cars to Human Rights Watch and Inclusive Development International, May 30, 2021.

[210] Ibid.

[211] Email from BMW to Human Rights Watch and Inclusive Development International, June 25, 2021. Letter from Daimler to Human Rights Watch and Inclusive Development International, May 31, 2021. Volkswagen said that they believe that ASI's initial performance standard, "set an ambitious, and yet realistic, objective to reach as many supply chain actors as possible," but that, "as experience with the performance standard is gained, the ambition and the minimum standards will be increased." Letter from Volkswagen group to Human Rights Watch and Inclusive Development International, June 11, 2021.

[212] Email from BMW to Human Rights Watch and Inclusive Development International, June 25, 2021.

[213] Letter from Daimler to Human Rights Watch and Inclusive Development International, May 31, 2021.

determine the content of ASI Standards, taking into account the nature and materiality of sustainability issues for the aluminum value chain." [214]

Increased demand from car companies for certified aluminum will likely push more mining companies to join certification schemes. CBG, one of the two Guinean mining companies discussed in detail this report, said in a May 2021 letter to Human Rights Watch that it had joined ASI. [215] Given the ongoing mediation process between CBG and communities impacted by their operations, CBG's efforts to obtain ASI certification will be a critical test not only of the company's willingness to address and remedy the current and past impacts of its operations on communities but also the level of rigor and transparency of ASI's certification process. CBG should, in particular, be required to remedy legacy violations relating to communities' land rights and water access in a manner consistent with ASI's standards on these issues. ASI's standards require remediation for adverse human rights impacts but should more explicitly require remedial action plans for legacy and ongoing human rights violations to bring a facility in compliance with ASI's standards and their objectives. [216]

SMB, the other Guinean mining operation discussed in this report, said in a June 2021 letter to Human Rights Watch that certification schemes, and the independent audits they require, can play a role consolidating best practices in the industry. SMB said, however, that it has committed to apply standards established by "more recognized" international organizations, such as the IFC and World Bank. [217] SMB said that the consortium's commissioning of independent audits of their compliance with these international standards, such as the revised environmental and social impact assessment commissioned by SMB in 2018, was "an important guarantee of transparency in extractive industries." [218] SMB's audits, however, lack of many the safeguards inherent in certification schemes, whatever those schemes' limitations. SMB's audits, for example, are not conducted by auditors accredited by a certification initiative, are not required to follow the methodology established by the initiative, and do not systematically assess SMB against

[214] Letter from Aluminium Stewardship Initiative to Human Rights Watch and Inclusive Development International, July 7, 2021.

[215] Ibid.

[216] "ASI Performance Standard," Aluminium Stewardship Initiative, December 2017, https://aluminium-stewardship.org/asi-standards/asi-performance-standard/ (accessed February 2, 2021), p. 15.

[217] Letter from La Société Minière de Boké (SMB) to Human Rights Watch, June 17, 2021.

[218] Ibid.

the initiative's standards. Furthermore, SMB has not published even summary versions of its own audits.

What Car Companies Should Do Next

Positive Signs

The increasing importance of aluminum to the car industry makes it essential for car companies to tackle the human rights impact of aluminum production. Car companies' limited efforts to source aluminum responsibly have so far focused on certification schemes, such as the Aluminum Stewardship Initiative, that provide third-party oversight of mines, refineries, and smelters. As discussed above, however, sourcing certified aluminum should only ever be one part of a broader due diligence process that includes supply chain mapping and disclosure, risk analysis, grievance mechanisms, and direct engagement with mines, refineries, and smelters implicated in human rights abuses.

Some car companies have already begun to take these steps. Car companies, both individually and collectively, have started to map out their aluminum supply chains and analyze the human rights risks within them. Drive Sustainability, a coalition of 11 car manufacturers, in May 2021 initiated a project to assess the human rights risks inherent in aluminum supply chains and those of nine other raw materials, which it said could presage collective action to drive up standards in automotive supply chains. [219] Volvo said in a May 2021 letter that it had begun to map its aluminum supply chains and would now require aluminum suppliers to establish "full material traceability" throughout its supply chain. [220]

Car companies, including Audi/Volkswagen, BMW, Daimler, Renault, and Volvo, have also begun dialogue with their suppliers about human rights risks in the aluminum industry. Daimler said in a May 2021 letter that it had "conducted dialogue with all its direct aluminum suppliers, a mid-stream processor, and three mining companies" to discuss how to address risks linked to bauxite mining. [221] Norsk Hydro, a major aluminum parts supplier to the autoindustry, in December 2020 sent a letter to CBG, copying Daimler, Audi, BMW, and Groupe PSA, expressing support for the ongoing mediation with communities in

[219] "Drive Sustainability Develops Raw Material Outlook," Press Release, Drive Sustainability, May 18, 2021, https://static1.squarespace.com/static/5df776f6866c14507f2df68a/t/60a2105011968a4a9634e935/1621233744887/Press+Release_Raw+Materials+Outlook_18052021.pdf (accessed June 30, 2021).

[220] Letter from Volvo Cars to Human Rights Watch and Inclusive Development International, May 30, 2021.

[221] Letter from Daimler to Human Rights Watch and Inclusive Development International, May 31, 2021.

Guinea.[222] Norsk Hydro told Human Rights Watch in a June 2021 letter that, "they have been contacted by several customers in the automotive industry regarding our bauxite sourcing and find this increased interest in human rights to be a positive development."[223]

Finally, car companies have already begun to engage the aluminum industry to push for more respect for human rights. In January 2021, representatives from Drive Sustainability wrote to The Aluminum Association, an association of dozens of companies engaged in the manufacture and sale of aluminum products, to solicit information on members' human rights due diligence efforts, underscore their concern about risks in Guinea's mining sector, and express support for the mediation process underway between CBG and affected communities.[224] Several car companies, including Volkswagen, have contacted CBG directly, as well as its co-owners, Alcoa, Dadco, and Rio Tinto, to ask them to participate constructively in the mediation.[225] BMW has also said publicly that if bauxite mining occurs in Ghana's Atewa Forest in contravention of Ghana's obligations under the United Nations Convention on Biological Diversity and the Paris Agreement on Climate Change, BMW will not accept aluminum in its supply chain originating from the forest.[226]

Next Steps

The positive steps car companies have taken so far should be just the start of a wider effort to tackle the human rights impacts of aluminum production.

Car companies should begin by ensuring that ***binding human rights and environmental standards are integrated into procurement contracts with direct suppliers.*** The contracts should also require suppliers to impose the same requirements throughout the supply chain to the mine level. Human rights and environmental standards in contracts

---

[222] Letter from Norsk Hydro to La Compagnie des Bauxites de Guinée, December 16, 2020 (Copy on file with Inclusive Development International).

[223] Letter from Norsk Hydro to Human Rights Watch, June 30, 2021.

[224] Letter from Drive Sustainability to The Aluminum Association, February 2021 (Copy on File with Human Rights Watch). "About Us," Drive Sustainability, undated, https://www.drivesustainability.org/about-us/ (accessed February 3, 2021).

[225] Audi, Volkswagen and Porsche, for example, issued a call for action, targeted at the mediator, CBG and local communities, which encouraged all parties, including CBG, to "sincerely engage" in the mediation process. "Call for Action encouraging a constructive outcome of the mediation between CBG and affected communities," Audi, Volkswagen, Porsche, October 23, 2020, on file with Human Rights Watch.

[226] Letter from BMW to Concerned Citizens of Atewa Landscape, November 10, 2020, (Copy on file with Human Rights Watch).

with suppliers should be enforceable legal requirements with remedies available for breaches. Remedies should include the adoption by suppliers of time-bound remedial action plans for human rights abuses and, in the event of an ongoing breach, the termination of procurement relationships.

Car manufacturers cannot, however, rely only on their suppliers to enforce human rights and environmental standards. Companies should ***map out their aluminum supply chains*** to understand where they are sourcing from and key human rights risks. Car companies should also work collectively to share information about aluminum supply chains and the risks within them.

Car companies should ***make public information about their aluminum supply chains, including the mines, refineries, and smelters they source from.*** Experience from other sectors, such as the garment industry, suggests that supply chain transparency is a powerful tool to promote human rights, advance ethical business practice, and build trust among companies' stakeholders.[227] Publishing the names of mines, refineries, and smelters enables communities and human rights advocates to alert car companies to human rights abuses.

Having mapped and disclosed their aluminum supply chains, car companies ***should regularly assess human rights risks, including at the bauxite mining, alumina refining and smelting level.*** Risk assessment should be conducted through third-party audits at problematic mines, refineries, or smelters, as well as dialogue with NGOs and civil society groups. Audits should be commissioned by the car companies themselves, or their tier one suppliers, and not the mining company, in order to help avoid conflicts of interests. Audit contracts should require the involvement of a broad section of affected communities throughout the process, should include safeguards to avoid intimidation of participants, and also require that community experiences and perspectives be reflected in the final audit report and findings. Auditors should have demonstrated human rights expertise and a track record of integrity and independence in their auditing processes and reporting.

---

[227] HRW, *Follow the Thread, The Need for Supply Chain Transparency in the Garment and Footwear Industry*, undated, https://www.hrw.org/sites/default/files/report_pdf/wrdtransparency0417_brochure_web_spreads_3.pdf (accessed February 3, 2021), p. 4.

Car manufacturers should also conduct visits to bauxite mines, alumina refineries, and aluminum smelters and meet with impacted communities at these sites. Joint assessments could be undertaken by multiple car companies, for example through collective initiatives such as Drive Sustainability.

Car manufacturers should, on the basis of their supply chain mapping and risk assessment, ***prioritize individual and collective action to address key human rights risks.*** This should include ***engagement with mines, refineries, or smelters implicated in human rights violations to assist them to develop time-bound corrective action plans and remedies for victims.*** The plans should address any human rights issues identified through an audit process or by communities or civil society groups. Corrective action plans should include steps for monitoring of implementation by car companies, including through ongoing consultation dialogue with affected communities and civil society groups. Where mines, refineries, or smelters do not take adequate corrective action over a reasonable period of time, car companies should reject aluminum parts sourced from the facility in question and require their suppliers to terminate procurement relationships with the facility.

The car industry should also consider ***collective action to address human rights risks common to bauxite mining, alumina refining, or aluminum production in a given country or region.*** There are examples of car companies working together with other stakeholders, including civil society groups, to fund and create development programs to strengthen governance in mining sectors with significant human rights risks, including for lithium mining in Chile's Salar de Atacama region and in the Democratic Republic of Congo's cobalt industry. [228] The car industry should consider whether similar initiatives, which could include an effort to audit multiple mining companies in the region to compare practices and identify common areas for improvement, would be effective in contexts, like Guinea, where there are significant human rights and environmental concerns in the aluminum industry.

[228] "Partnership for sustainable lithium mining in Chile," Daimler, undated, https://www.daimler.com/sustainability/human-rights/responsible-lithium-partnership.html (accessed June 30, 2021). "Cobalt for Development" project started trainings for mining cooperatives in Kolwezi, Democratic Republic of Congo," BASF, BMW Samsung SDI, Volkswagen, October 30, 2020, https://www.basf.com/global/en/media/news-releases/2020/10/p-20-350.html (accessed June 30, 2021).

In addition to taking proactive steps to address human rights risks in their supply chains, car companies ***should develop grievance mechanisms through which affected communities can file complaints of human rights abuses** in **the company's supply chains.*** Grievance mechanisms should be designed in close consultation with a wide variety of stakeholders, including affected communities, human rights groups, and other stakeholders; be legitimate, accessible, and equitable; and meet the other effectiveness criteria established in the UN Guiding Principles on Business and Human Rights. [229] When companies are aware of grievances involving bauxite mines or other facilities in their aluminum supply chain, they should use their leverage by engaging with the companies in question and requiring them to resolve the grievances promptly and effectively or risk being excluded from future procurements. Pressure from industrial users that ultimately purchase aluminum can play a hugely important role in pushing mining companies to constructively resolve communities' complaints.

Finally, ***car manufacturers should support the development of laws requiring all business actors to conduct robust human rights due diligence, including in their supply chains.*** Despite the existence of voluntary standards that encourage companies to respect human rights, abuses related to aluminum production and other forms of natural resource extraction remain widespread. Ultimately, only mandatory human rights due diligence rules—national or regional laws— will create a level playing field and move the whole industry in the right direction. The car industry should support ongoing efforts to pass mandatory human rights due diligence legislation, for example in the European Union, but also encourage similar legislative efforts in other jurisdictions, such as the United States, which are still some distance away from enacting human rights due diligence laws. [230]

[229] UN Guiding Principles on Business and Human Rights, Principle 31.

[230] See, for example, Human Rights Watch, "Recommendations for New EU Legislation on Mandatory Human Rights and Environmental Due Diligence," June 24, 2020, https://www.hrw.org/news/2020/06/24/recommendations-new-eu-legislation-mandatory-human-rights-andenvironmental-due.

Acknowledgments

This report was researched and written by Jim Wormington, senior researcher on environmental and natural resource rights in the Africa division at Human Rights Watch, and Natalie Bugalski, legal and policy director, and Coleen Scott, legal and policy associate, at Inclusive Development International.

Ida Sawyer, deputy Africa director, edited the report for Human Rights Watch. Clive Baldwin, senior legal advisor, provided legal review, and Babatunde Olugboji, deputy program director, provided programmatic review for Human Rights Watch. The report was also reviewed by Aruna Kashyap, Associate Director in the Business and Human Rights division; Juliane Kippenberg, Associate Director in the Children's Rights Division, Juliana Nnoku-Mewanu, Senior Researcher in the Women's Rights division; and Felix Horne, Senior Researcher, and Luciana Tellez-Chavez, Researcher, in the Environment and Human Rights Division, all at Human Rights Watch. This report also benefitted from the editorial review of Aoife Croucher, associate in the Africa division, at Human Rights Watch, and Birgit Schwarz, communications manager in the media department of Human Rights Watch.

David Pred, executive director, edited the report for Inclusive Development International. Mark Grimsditch, director of the China Global Program, provided programmatic review for Inclusive Development International. The supply chain research was reviewed by Dustin Roasa, research director of Inclusive Development International.

Chandler Spaid, assistant editor at Human Rights Watch, and Ifé Fatunase, multimedia director at Human Rights Watch, produced and edited the video accompanying the report.

Travis Carr, publications/photography coordinator provided support for the selection and layout of the photographs in the report. The report was prepared for publication by Fitzroy Hepkins, administrative manager.

Annex: Letter from Aluminium Stewardship Initiative to Human Rights Watch and Inclusive Development International, July 7, 2021

The Aluminium Stewardship Initiative (ASI) program and action on human rights

We thank Human Rights Watch (HRW) and Inclusive Development International (IDI) for the opportunity to engage in a dialogue on some of the draft summary findings from this report, in advance of publication. While we were not able to review the draft report itself, we appreciate the opportunity to share some perspectives in this Annex to the report.

ASI is a multi-stakeholder membership organisation, incorporated in 2015, that provides an inclusive platform for engagement and action for a wide and growing range of stakeholders. We take a whole of value chain approach, providing an end-to-end platform for efforts on responsible production, sourcing and stewardship in the aluminium sector, addressing a broad suite of sustainability issues. When considering the challenges of rolling out human rights due diligence processes at a global scale, think of ASI as taking a longitudinal approach, covering one commodity but working with and through that entire ecosystem and the people impacted at every step.

ASI agrees that independent third-party certification is one tool to drive and support human rights due diligence, within a broader suite of processes, including government regulation and implementation, stakeholder efforts and business action. ASI standards, assurance and oversight processes promote the due diligence measures identified in this report, and our program has a range of systems and controls in place for integrity risks. The ASI Complaints Mechanism provides a mechanism to hear and resolve complaints relating to ASI's standards setting processes, certification program, auditor conduct and ASI policies and procedures. ASI is a Code Compliant member of the ISEAL Alliance, ensuring our systems are externally reviewed for conformance with the ISEAL Codes of Good Practice, and improvement opportunities are acted on. Through its Indigenous Peoples Advisory Forum (IPAF), ASI is also engaged in 'beyond certification' activities, including efforts to build community capacity, to improve community resilience and to amplify local and marginalized voices.

ASI's governance has two layers: *standards governance* and *corporate governance*. Both are composed of half industry and half non-industry representatives. The ASI Standards Committee is the *standards* governance layer and comprised of 24 participants. Twelve seats are for industry – six upstream (production, recycling and transformation of aluminium) and six downstream (aluminium use sectors such as packaging, automotive and building and construction). The other twelve seats are for civil society organisations and the ASI IPAF. ASI's Standards Committee currently includes four direct Indigenous community representatives impacted by bauxite mining from India, Ghana, Suriname, and Australia and an NGO representative from Guinea – bringing valuable regional diversity for a globally applicable standard. The ASI Board focuses on *corporate* governance, providing a critical oversight role on the organisation's strategies, systems and risk. Its eight seats are likewise half industry and half non-industry, with two seats for upstream, two seats for downstream, two seats for civil society and two independent (non-industry) directors. Independent directors were included in ASI's governance model as good corporate governance practice. All Directors must act in the interests of the ASI organisation, not their own or other interests, as a fundamental duty.

On the question of impact, a standard that is not implemented is a standard that is not delivering change. ASI launched its Certification program in late December 2017 and at time of publication there are more than 130 Certifications issued, across 40 countries and throughout the aluminium value chain. Surveillance and re-certification audit cycles are well underway – important phases which lead to oversight of corrective action and the desired changes we are all seeking. For the 2020 calendar

ASI - Aluminium Stewardship Initiative
a PO Box 4061 Balwyn East VIC 3103 Australia
t +61 3 9857 8008 www.aluminium-stewardship.org

year, bauxite mining production from sites ASI Certified against both the Performance Standard and Chain of Custody Standard was around 16% of global bauxite production. From a site perspective, and looking at primary production of aluminium, there are at least 11% of the world's bauxite mines, 11% of alumina refiners and 20% of aluminium smelters ASI Performance Standard Certified – after just over 3 years of rollout *[Sources: ASI for numerator, CRU Group for denominator, data at June 2021].* This is strong progress for a still relatively young initiative, but our ambitions are larger again.

ASI is committed to transparency, and there is a wealth of information available on the ASI website. This includes Standards Committee and Board minutes, summary audit reports and a searchable map of ASI Certifications, analyses of outcomes and impacts, links to recorded webinars and training for implementation, and much more. We continue to add data and tools to meet stakeholder interests and expectations, and support our own journey of innovation and continual improvement. If these issues are of interest to you, we welcome your engagement.

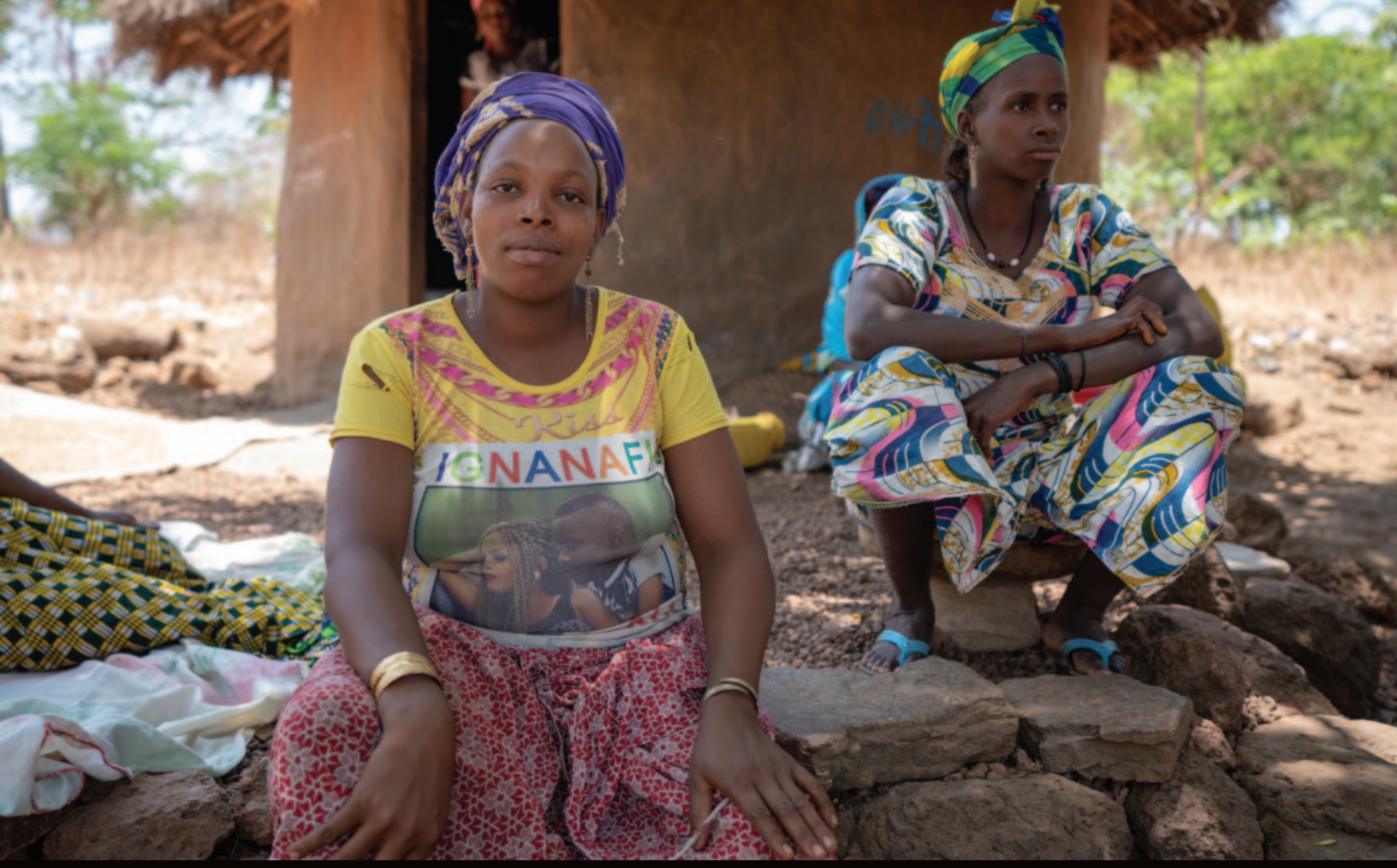
There are a range of approaches and initiatives that are seeking to drive and amplify change towards responsible practices. There is no one 'right' approach and ASI, like others, frame a scope and drive towards their long-term goals. All genuinely motivated programs, like ASI, mature and evolve through diverse stakeholder commitments and contributions. Working together, we can continue to improve and achieve our collective and respective goals – including on human rights due diligence.

Sincerely

Dr Fiona Solomon
ASI Chief Executive Officer
www.aluminium-stewardship.org

7 July 2021

ASI - Aluminium Stewardship Initiative
a PO Box 4061 Balwyn East VIC 3103 Australia
t +61 3 9857 8008 www.aluminium-stewardship.org



Aluminum: The Car Industry's Blind Spot

Why Car Companies Should Address the Human Rights Impact of Aluminum Production

Aluminum, a lightweight metal, is a key material for car companies' transition toward electric cars and more fuel-efficient vehicles. Car manufacturers used nearly a fifth of all aluminum consumed worldwide in 2019 and they are forecast to double their aluminum consumption by 2050. Aluminum is produced from bauxite, a red ore.

Despite aluminum's potential benefits, bauxite mining and aluminum production can have devastating human rights and environmental consequences, from the destruction of farmland and damage to water sources caused by mines and refineries to the significant carbon emissions from aluminum smelting.

Aluminum: The Car Industry's Blind Spot sheds light on the human rights consequences of the aluminum industry, using examples from around the world and an in-depth case study of bauxite mining in Guinea. It assesses how the global automobile industry is tackling the impacts of aluminum production, based on meetings and correspondence with nine major car manufacturers – BMW, Daimler, Ford, General Motors, Groupe PSA, Renault, Toyota, Volkswagen, and Volvo.

The report finds that most car companies have not done enough to map out the mines, refineries, and smelters that they source from and evaluate and address the negative human rights impacts of aluminum production. Given the importance of aluminum to the car industry's future, car companies should push mining companies, refineries, and smelters to respect stronger human rights and environmental standards and should stop sourcing from aluminum producers that refuse to do so.

(above) Women from Hamdallaye village, in Guinea's Boké region, in 2018. In 2020, Hamdallaye was relocated to a new site by La Compagnie des Bauxite de Guinée, a mining company backed by mining giants Alcoa, Rio Tinto, and Dadco. The new site lacks adequate farmland, housing, water and sanitation.

(front cover) Cars inside a storage tower in Wolfsburg, Germany.

hrw.org · inclusivedevelopment.net