



ArcelorMittal and the Responsibility of Stakeholders in the Steel Value Chain

by Armando Ayala-Robles.

Executive Summary.

Steel is an underlying component of a society's development, and the steel sector is not only a source of jobs but also part of local and global economies. However, the industry's impacts are not all beneficial. Steel production is a carbon intensive process that is responsible for more than 7% of all global greenhouse gas (GHG) emissions. While the global demand for steel and steel products (cars, pipes, construction material, etc.) continues to increase, so does the sector's carbon footprint. Therefore, it is of utmost importance that this sector shifts immediately towards cleaner and more sustainable ways of producing steel. ArcelorMittal, as the one of the top manufacturers of this material both globally and in South Africa, has an unmistakable responsibility to be a leader in the implementation of net zero plans and move away from coal-intensive manufacturing. In doing so, it also has an immense opportunity to be lead green steelmaking on the African continent, while avoiding carbon taxes and ensuring that steelmaking is for people and the planet.

All corporations have the obligation to respect human rights and reduce their carbon footprint, but companies that have directly affected the quality of life of the communities in their vicinity and that continue to compromise the global climate shift, are especially indebted to society to do better and repair the harm done. ArcelorMittal is a perfect example of a company with a long track record of human rights and environmental violations and its commitments toward a green steel revolution continue to fall short. This Luxembourg-based steel manufacturer needs to increase its tangible efforts to support an urgent decarbonisation transition of its steelmaking processes, especially for its subsidiaries in the Global South.

The responsibility does not start or end with ArcelorMittal. The company's financiers, clients and other stakeholders are also liable and should be held accountable for their role in the steel value chain. Financial institutions (FI's) need to use their financial leverage to steer the steel sector on the right path while ensuring that they are adequately addressing the full range of climate-related risks of steelmaking, which includes financial, transitional, and physical risks. The construction and automobile industries, as the main buyers of steel, have a vital role to play in the responsible sourcing of its materials. Shareholders need to use their influence to push ArcelorMittal to address concerns and repair the damage inflicted by its operations.

About this report. This report is based on an Investment Chain Analysis undertaken by Inclusive Development International¹ (IDI). The analysis was commissioned by the Fair Steel Coalition, a global coalition composed of 15 NGOs that seek to highlight the severe impact of steel on communities who live at the fence-line of steel manufacturers, as well as broader environmental and climate impacts. Based on publicly available information, IDI's research helped to unravel and expose the investment and supply chains behind ArcelorMittal.

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1. Impact of Steel Manufacturing – Globally and in South Africa

Steel is intrinsically woven into most aspects of society, whether in the steel beams of our buildings, the pipes in our houses or the chassis of our vehicles. However, steel production is one of the largest emitters of GHG² worldwide and as global demand for steel continues to increase, decarbonizing steel is crucial to keep the global average temperature increase below the 1.5°C limit.³ The environmental impact of this sector is due mostly to the coal-based production of steel; nearly 90% of steel emissions are related to the use of coal for its production.⁴ The International Energy Agency's (IEA) Net Zero Emissions by 2050 Scenario calls for steel sector emissions to drop by 25% by 2030 and then an over 90% drop by 2050. The biggest shift to achieve this is ending the use of coal to produce steel.⁵

Steel Manufacturers must urgently move away from coal-intensive manufacturing and implement effective net zero plans. ArcelorMittal is one of such steel manufacturers, with operations around the globe it is the world's second largest producer of steel. In South Africa, ArcelorMittal was the third highest contributor of GHG emissions in the country, as noted by the Centre for Environmental Rights (CER) in its 2019 Full Disclosure 5 assessment.⁶ Furthermore, the carbon footprint of ArcelorMittal South Africa (AMSA) has been increasing over the past 5 years, with its CO₂ emissions growing from 2.74t CO₂ eq/t liquid steel⁷ in 2019 to 3.4t in 2023.⁸ AMSA's local impact has substantial repercussions for the communities near its operations, beyond its contribution to global warming. Communities living in the Vaal triangle,⁹ home to AMSA's biggest steel mill in the continent, regularly experience the highest levels of harmful particulate emissions on the planet.¹⁰ These communities have long suffered the impacts of air pollution in the area and have always been vocal about the harmful effect of air pollution on their health, well-being, and the infringement of their constitutional right to a healthy environment. Furthermore, the Fair Steel Coalition's report – The Real Cost of Steel¹¹ – mentions specific examples that challenge AMSA's narrative of development and sustainability commitment, revealing a troubling pattern of environmental racism and systemic impunity.

2. ArcelorMittal South Africa – Who is AMSA and who is behind them.

AMSA dates its origins back to 1928¹² and is currently Africa's largest steel producer. In 2023, it sold 2.8 million tons of steel products, of which the majority was sold in South Africa (estimates between 60 and 80%) and the remaining was primarily exported to Sub-Saharan Africa (SSA), Europe and Asia. AMSA dominates the South African steel market with a market share that oscillates between 46% and 60% from 2019 to 2023. The company mainly manufactures and distributes flat and long steel products (representing approx. 98% of its sales in 2023). On a smaller scale, AMSA also carries out coke and chemical operations, producing commercial grade coke for the ferro-alloy industries (approx. 2% of 2023 sales).¹³

AMSA is listed on the Johannesburg Stock Exchange (JSE) with a market cap of approximately US\$1.3 billion as of May 2024 and continues to be majority owned 68%¹⁴ by the world's largest integrated steel and mining company, ArcelorMittal Group (AM Group). Locally, AMSA has several domestic shareholders. Through Broad-Based Black Economic Empowerment (B-BBEE) schemes, entities such as the Amandla We Nsimbi (Pty) Ltd. (Likamva Resources) and the Isabelo Employee Share Trust, have an effective shareholding of 16.7% and 5%, respectively. The South African Government's Industrial Development Corporation (IDC) has a 6.4% stake, while other known shareholders, including Investec Asset Management and the Public Investment Corporation (PIC), have individual holdings smaller than 5%. While local shareholders play an important part in AMSA, the control and main decision maker of the company remains the AM Group.

3. ArcelorMittal Group and their Responsibility for AMSA

The AM Group is one of the world's largest steelmaking companies. In FY23 the AM Group reported sales of US\$68.3 billion, a net profit of US\$4.9 billion and total assets of US\$93.9 billion¹⁵. It owns and operates steel manufacturing and mining facilities in Europe, North and South America, Asia, and Africa. It also has iron ore mining activities in Brazil, Bosnia, Canada, Liberia, Mexico, Ukraine, and the US, as well as coal mining activities in the US.

The ownership of AMSA by the AM Group is held through ArcelorMittal Holdings AG, a private holding company incorporated in Switzerland that holds the 68% stake in the South African operations. In turn, the Swiss holding company is 100% owned by ArcelorMittal S.A., the ultimate parent company of the Group, registered and headquartered in Luxembourg.

ArcelorMittal was formed in 2006 from the takeover and merger of the European Arcelor S.A. by the Indian-owned Mittal Steel. The ultimate beneficial owner (UBO) of ArcelorMittal Group is the Mittal family, one of the wealthiest families in the world that collectively holds almost 40% of the Group's shares. Led by Lakshmi N. Mittal (AM's Executive Chairperson) and his son Aditya Mittal (AM's CEO), the Mittal family have effective control of the corporation and hold some of their shares through the HSBC Trustee (C.I.) Ltd, a trustee shareholder of the AM Group. Other important shareholders include the UK based investment manager – BlackRock with a 5.7% stake, the US hedge fund – Vanguard Group with a 1.7% stake, and other national wealth and pension funds from around the world (Norway, Australia, Canada Sweden, etc.) each holding less than 1% stake in the AM Group.¹⁶

The Responsibility of the AM Group and its Shareholders. In their own words, the AM Group recognizes that if the world is to achieve net zero by 2050 it will require all parts of the economy in all regions of the world to contribute. Furthermore, AM states that as the world's leading steel company, they have a responsibility to lead the efforts to decarbonize the steelmaking process, which today has a significant carbon footprint¹⁷. The impact of AM is further highlighted by an analysis by the Australasian Centre for Corporate Responsibility that found that the biggest steel producers – ArcelorMittal being among the largest – continue to emit more carbon than the global average¹⁸.

AM's commitment to reduce the footprint of its operation is not self-imposed, but rather dictated by local regulations and international agreements. Having a parent and holding company based in Luxembourg and Switzerland, and with shareholders based mostly in countries that are members of the Organization for Economic Cooperation and Development (OECD), ArcelorMittal is required to follow the OECD Guidelines for Multinational Enterprises, which include standards on human rights and the environment. While AM also belongs to the ResponsibleSteel organization and has incorporated the United Nations Guiding Principles on Business and Human Rights (UNGPs) to its own policies, its track record for environmental and human rights abuses¹⁹ around the world²⁰ and in South Africa²¹ tell a different story than what the company publicizes in their annual reports and press releases.

Although AMSA only represents a very small percentage of the Group's global operations, the AM Group has a global footprint and thus a global responsibility to reduce its GHG emissions worldwide and to ultimately reach net-zero targets in all its subsidiaries. While AM has already set group carbon net zero goals, there seems to be a disproportionate effort in regions with stricter regulations compared to lagging commitments in the Global South.

In South Africa, AMSA aims to reduce their carbon intensity by 25% by 2030 and 86% by 2050. While for its European operations the targets are higher, with commitments to reduce emissions by 30% by 2030 and be carbon neutral by 2050. The difference in targets might be small in the short term, but

they carry significant environmental consequences for regional operations and local communities, while illustrating the prioritization of European commitments versus South African ones.

There is also a biased distribution of technology and capital in favour of regions with more advanced regulation and stricter oversight of AM's operations. Global South operations should receive the same level of prioritization, share in the rapid technological developments within the Group and have green hydrogen at the center of transition efforts. AM possesses the technology and resources to implement carbon free operations, as evidenced by their 2021 announcement²² that the Group's Sestao plant in Spain would become the world's first full-scale zero carbon-emissions steel plant by 2025. Similar commitments by AM are yet to be seen in South Africa or other countries in the Global South. However, the Sestao plant could turn out to be another empty promise. SteelWatch's 2024 Corporate Climate Report²³ on ArcelorMittal notes the plans to delay the construction of the zero carbon-emissions steel plant in Spain, and AM's continuous use of fossil gas instead of green hydrogen for an undefined period.

Similarly, financial support from the Group to decarbonize South African operations seems to be limited to security subordination agreements²⁴ that leave AMSA to finance itself with more expensive local commercial debt instead of concessional funds or capital injections from AM Group. One would expect to see more financial support from a multibillion-dollar valued family and corporate that claim to be leading the global steel decarbonization efforts.

4. Stakeholder Responsibility – Financial, Social, Environmental and Climate Risks for Financiers, Investors and Consumers of Steel

The responsibility of steel production does not lie solely with the steel manufacturers. Stakeholders, like the providers in the production supply chain, financiers and investors in the steel industry, and the corporate end users of steel products, exert an immense amount of influence in the steel sector. Steel stakeholders play an important role in determining the behavior of global corporates such as the AM Group, and even more so in the regional operations of subsidiaries like AMSA.

While the steel value chain is extensive and complex, it is easy to identify some of the larger and influential stakeholders. In South Africa, given their close relationship and ample influence with AMSA, two major groups of stakeholders stand out: a) financial institutions, namely banks; and b) automobile manufacturers.

a. Financiers and Investors – Who finances AMSA's and how are they accountable?

While individual decarbonization efforts are company-specific (as it depends on the existing steel production asset base of each company), financiers and investors of steel manufacturers exert a considerable influence over steel manufacturers. The steel sector requires significant amounts of upfront capital with long investment cycles, which means FI's hold a great deal of bargaining power in their relationship with manufacturers such as AMSA. In this regard, it is crucial for FI's and investors to hold steel companies accountable via credible transition planning, and concrete and implemented actions to reduce GHG emissions in alignment the transition plans that steer the sector and individual steel companies towards net zero operation²⁵.

In South Africa, four commercial banks (ABSA, Nedbank, Deutsche Bank and HSBC) have financed AMSA's local operations. Of these four, ABSA is considered their principal banker and current main financial partner in South Africa. Similarly, two development banks, the IDC, as mentioned previously, and the World Bank's International Finance Corporation (IFC), also have vested interest in AMSA, through equity stake and trade finance agreements, respectively.

Beyond correct due diligence processes and credit risk valuations to assure financial returns, investors must strengthen their environmental and social investment policies and divest from projects deemed

harmful for society. FI's investing in coal-intensive steel also risk locking their capital in long-term and expensive fossil-fueled infrastructure. Moreover, banks are tremendously susceptible to public opinion and ignoring society's growing call to cease new investments to fossil related projects increases their reputational risk. Banks that are perceived as unsupportive of the Green Steel Revolution²⁶ risk losing the trust of the public and the private sector. Finally, banks and other FI's are some of the most heavily regulated entities in the world. As they must comply with local laws and international standards, banks become especially vulnerable to financial risks caused by increasing pressure from new carbon regulations.

b. Automobile Industry: Major Consumers and End Users of Steel

On the tail end of the steel value chain sit the buyers and end users of finalized steel products. Finalized steel refers mainly to flat and long steel products that are commonly used for construction, auto parts, and electrical appliances. When looking at the major buyers of AM Group's products, there is one group that is worth highlighting both for its own environmental impact and its client-facing position: the automobile industry. In addition to being a top steel consumer, the automotive industry is the leading buyer of high-grade, high-premium automotive steel, the vast majority of which is made via the most polluting steelmaking route: coal-fired blast furnaces. These factors make the automobile industry an important stakeholder of the steel industry and crucial in its decarbonizing efforts.

An annual analysis by Lead the Charge²⁷, a global civil society coalition advocating for equitable, sustainable, and fossil-free automotive supply chains, shows that the industry average on steel decarbonization is very low (11%). Based on their methodology, several of AM's customers score poorly: Ford (17%), VW (15%), Nissan (11%), Renault (11%), and Toyota (0%); only Volvo (47%) stands out as a relative leader, but still has a long way to go. However, there are signs that steel decarbonization is a growing priority for the automobile industry. A second annual study²⁸ revealed that over two-thirds of auto manufacturers have taken at least initial steps on the steel supply chain, compared to the first analysis when over half had taken no steps at all.

Globally, AM Group's largest automobile industry customers include auto manufacturers Volvo, Volkswagen, Toyota, Renault, Mitsubishi, Nissan, as well as leading European auto-part manufacturers like Gestamp and FSD. In South Africa, AMSA's largest customers are steel distributors Macsteel Service Centers S.A. and Allied Steelrode that in turn sell mainly to car part manufacturers based in South Africa. The end users of which include Ford Motor Company of Southern Africa, Toyota Motors South Africa, Isuzu South Africa and KLT Automotive.

It is important to notice that Europe is the largest export market for motor vehicles assembled in South Africa. As large consumer goods companies headquartered in Europe and the US, these corporates represent a strong pressure point in AMSA's supply chain. Namely, companies like Ford and the Macsteel group, which have long-standing partnerships with AM, hold a key position to influence the Group locally and internationally. Not to mention that these steel consumers could face significant spikes in production costs derived from carbon taxes and regulations of carbon intensive produced steel.

Economic climate, opportunities, and repercussions for stakeholders. One incentive for AMSA and its stakeholders to move away from carbon-intensive steel are the global trends on carbon regulations from importing countries to limit the carbon leakage²⁹ from the supply chain, such as the EU's Carbon Border Adjustment Mechanism (CBAM) – a type of carbon pricing aimed to fight climate. Similarly, Germany's recent supply chain act legally compels large companies to increase the human rights and environmental due diligence in their supply chain, especially of steel and iron heavy products such as automobiles. While the CBAM's initial phase and the German supply chain act will not directly affect

AMSA's steel sales within South Africa, it will have important consequences for the export of steel and steel-made goods, such as automobiles. The next iterations of the CBAM, which will be reviewed in the coming years to consider the inclusion of manufactured goods by 2030. As automobiles contain emissions-intensive steel, aluminum, and batteries, they are an expected priority for inclusion. Moreover, any additional future global carbon regulations will most likely continue to have consequential economic impacts on steel exporters and products that are heavily reliant on steel.

On the other hand, net zero policies in key markets and the steel industry create immense opportunities for AM to decarbonize. This is on top of the building pressure due to climate concerns being placed on the Group by the government, public opinion, and civil society. In South Africa, for example, there are large local iron ore reserves, existing infrastructure, and among the lowest cost³⁰ abundant renewable energy in the world. With these ideal commercial settings, it should seem the natural path for AMSA has to be a leader in the green steel industry in SSA. While in the US, the Global Arrangement on Sustainable Steel and Aluminium (GASSA) offers a template to increase trade in steel and aluminium produced in a way that emits lower greenhouse gas emissions. There are huge commercial opportunities for AM and its stakeholders to transition their operations³¹ and avoid facing steep future costs for getting stuck in the past.

5. Conclusions and Recommendations

It is no longer a question of whether it is profitable or if the technology is available to transition the steel sector, but rather if AM and its stakeholders are taking the necessary steps to ensure the urgent decarbonisation of the steelmaking processes. All the players in the steel value chain must provide the required capital and technical support needed and exert their influence to prioritize these efforts across the globe³².

AM Group and AMSA. The AM Group should take definitive action and cease choosing fossil-business as usual while stopping all new blast furnace relining and end all coal use by 2040. If the Group is seriously committed to decarbonizing, it needs to align all climate actions with the 1.5C Paris Climate Agreement pathway, update its 2030 targets and add targets for 2040. Similarly, it must end double standards and implement its targets consistently across all subsidiaries, joint ventures, and material associates, especially those in the Global South. If AM is to be a real climate champion it must deliver by 2025 concrete, verifiable asset-by-asset transformation plans to end coal-based production processes globally³³. On a local level, AMSA is encouraged to continue the meaningful engagements with local communities affected by its operations. The South African subsidiary has begun to meet with civil society and should continue to collaborate with activists and local advocacy groups to improve its disclosure and transparency by making all relevant feasibility studies and pollution mappings publicly available. AMSA, as one of the largest emitters of GHG in the country, has a special responsibility to decarbonize, despite the financial costs. Finally, it should leverage South Africa's unique positions and favourable resources to pressure its parent company to provide the financial and technical support to make AMSA the regional leader in green steel production.

Responsibility of stakeholders in the steel value chain. The responsibility of the environmental impact of steel needs to be acknowledged and shared by all those who benefit from the production, sale, distribution, and commercial use of steel. While this report points out only the larger and more noticeable financiers, distributors, and users of steel³⁴, it is the duty of all those involved in the steel value chain to curb the negative effects of steel on the environment. Beyond the moral obligation, it is a legal requirement of corporates, mostly for those in the EU and other OECD member-countries, to comply with UNGP and OECD guidelines. Additionally, the EU's recent Corporate Sustainability Due Diligence Directive (CSDDD), set into law the obligations for large companies to conduct due diligence

regarding the identification, prevention, mitigation and accounting of negative human rights and environmental impacts in their own operations, their subsidiaries, and their value chains. Not only do stakeholders need to ensure that their business strategy is compatible with the Paris Agreement, but it is the duty of shareholders and directors to set up and oversee the implementation of due diligence processes that enact their sustainability and climate change mitigation goals and laws.

Financial sector responsibility and actions. Investors and financiers have the power to push the necessary conditions for the steel sector to decarbonize by using their financial leverage as an incentive to shift the production methods to fossil free techniques.³⁵ Moreover, banks and FI's hold a unique position to enforce and supervise the environmental action plans in the steel companies and projects they finance. FI's financing carbon-intensive steel runs the risk of having investments locked in harmful infrastructure that could be rendered obsolete by the advancement of green steel technologies. Furthermore, as client facing and heavily regulated entities, banks are at a higher risk of hindering their reputations and facing economic losses. The flow of capital and funds into the steel sector must urgently be diverted to fossil free projects and mitigation initiatives.

Responsibility of the automobile industry. Manufacturers of car parts and motor vehicles are far from the only large consumers of steel, but it is important to highlight their place in the steel value chain as they represent a very visible and tangible example of steel made goods in our everyday life. Furthermore, as client-facing companies they are more susceptible to the public opinion, making them more likely to listen to society's environmental concerns. Steel decarbonization can mitigate the risks from regulatory risks (such as CBAM) and presents the automobile industry with a unique first mover opportunity. As the industry transitions to electric vehicles, the industry's emissions profile changes dramatically, flipping from tailpipe emissions to supply chain emissions³⁶. Responsible steel procurement becomes a critical window of opportunity for the automobile industry to leverage their customer influence to accelerate the decarbonization of the steel industry, especially in Global South countries such as South Africa.

Society's responsibility and actions. In one way or another, society is the ultimate end user of and beneficiary of all steel products. As such, it is society's duty to hold companies responsible for their role in the steel value chain. Whether through consumer preferences or direct action, this report invites society and affected communities to engage with AM and its stakeholders. Advocating for the decarbonization of steel can take many forms and strategies. The general public can write to consumer brands, financiers, and shareholders identified here and persuade them to act or use their leverage. Civil Society Organizations can make use of grievances mechanisms and file complaints with AM, regulators, supervising bodies, and governments. Finally, it is indispensable to support the efforts of organizations and coalitions that continue to monitor steel manufactures and advance the decarbonization of steel.

Manufacturers, distributors, financiers, and consumers of steel must be willing to make concessions to their profitability in the short-term, to ensure a healthy environment that can allow humanity to thrive. The value chain of steel is complex and while the obstacles to achieve green steel production may seem over costly and insurmountable, we must not lose sight of the objective: to decarbonize an industry that produces a material that is so intertwined with society. It is the responsibility of stakeholders to leverage their business relationships to assure that the production of steel is done in a responsible and sustainable manner. Just as it is society's responsibility to hold steel stakeholders accountable for their role in the environmental degradation.

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- ¹ The IDI is a non-profit organization that works to advance social, economic, and environmental justice by supporting communities to defend their rights and resources in the face of harmful development. <https://www.inclusivedevelopment.net/>
- ² IEA <https://www.iea.org/energy-system/industry/steel#tracking> and WorldSteel <https://worldsteel.org/climate-action/climate-change-and-the-production-of-iron-and-steel/>
- ³ Steeling our Future. Reclaim Finance, 2024 https://reclaimfinance.org/site/wp-content/uploads/2024/03/Steeling-our_future_March_2024.pdf
- ⁴ Steel Climate Impact: An International Benchmarking of Energy and CO2 Intensities. Global Efficiency Intelligence, 2022 <https://www.globalefficiencyintel.com/steel-climate-impact-international-benchmarking-energy-co2-intensities#:~:text=The%20iron%20and%20steel%20industry,global%20steel%20production%20in%202020.>
- ⁵ Breakthrough Agenda Report. IEA, 2023 <https://www.iea.org/reports/breakthrough-agenda-report-2023>
- ⁶ Full Disclosure 5. CER, 2019. <https://fulldisclosure.cer.org.za/2019/companies/arcelormittal-south-africa-amsa>
- ⁷ Tons of CO2 or equivalent gas emission per ton of liquid steel produced.
- ⁸ Annual Report. AMSA, 2023. Pg 44 2023 top KPIs https://arcelormittalsa.com/Portals/0/ArcelorMittal%20South%20Africa%202023%20IR%20Final_1.pdf
- ⁹ A region in South Africa south of Johannesburg that has a population of around 1.7 million people.
- ¹⁰ <https://www.bloomberg.com/news/newsletters/2024-03-01/endless-agony-for-world-s-most-polluted-place-in-south-africa>
- ¹¹ The Real Cost of Steel. Fair Steel coalition, 2024 <https://cer.org.za/wp-content/uploads/2024/05/The-real-cost-of-steel-report.pdf>
- ¹² AMSA Our History <https://arcelormittalsa.com/whoweare/ourhistory.aspx>
- ¹³ Annual Report and Audited Financial Statements. AMSA, 2023.
- ¹⁴ Investment Chain Analysis on ArcelorMittal. IDI, 2024.
- ¹⁵ Financial Results. AM Group, 2023.
- ¹⁶ Shareholding percentages based on data from Refinitiv consulted by IDI on May 2, 2024, and the Group's shareholding structure website with information as of April 30, 2024. <https://corporate.arcelormittal.com/investors/corporate-governance/shareholding-structure>
- ¹⁷ ArcelorMittal sets 2050 group carbon emissions target of net zero. <https://corporate.arcelormittal.com/media/press-releases/arcelormittal-sets-2050-group-carbon-emissions-target-of-net-zero>
- ¹⁸ Forging pathways: insights for the green steel transformation. ACCR, 2024. <https://www.accr.org.au/research/forging-pathways-insights-for-the-green-steel-transformation/>
- ¹⁹ Investment Chain Analysis on ArcelorMittal. IDI, March 2024; and The Real Cost of Steel. Fair Steel coalition, 2024 <https://cer.org.za/wp-content/uploads/2024/05/The-real-cost-of-steel-report.pdf>
- ²⁰ An explosion at ArcelorMittal's coal mine in Kazakhstan killed 46 people <https://www.business-humanrights.org/en/latest-news/kazakhstan-46-killed-in-explosion-at-arcelormittal-mine-govt-ends-cooperation-with-co--nationalises-local-branch/> ; and Environmental groups sue steel giant ArcelorMittal <https://www.chicagotribune.com/2019/12/12/environmental-groups-sue-steel-giant-arcelormittal-to-enforce-clean-water-act-after-toxic-spill-into-little-calumet-river-kills-3000-fish/>
- ²¹ "ArcelorMittal SA slapped with a R3.64m fine" https://www.iol.co.za/business-report/companies/arcelormittal-sa-slapped-with-a-r364m-fine-49240936#google_vignette ; and "Union and steel producer at war after three employees die in explosion" <https://www.timeslive.co.za/news/south-africa/2021-02-20-union-and-steel-producer-at-war-after-three-employeesdie-in-explosion/>
- ²² <https://corporate.arcelormittal.com/media/press-releases/arcelormittal-sestao-to-become-the-world-s-first-full-scale-zero-carbon-emissions-steel-plant>
- ²³ ArcelorMittal Corporate Climate Assessment. SteelWatch, 2024 https://steelwatch.org/wp-content/uploads/2024/05/SteelWatch_ArcelorMittal_MAY-2024.pdf
- ²⁴ ArcelorMittal Holdings AG demonstrate their support through a subordinated Group loan of R2,700 million as of 31 December 2023 in favour of the lenders (commercial banks) of AMSA's borrowing base facility (BBF). AMSA 2023 Annual Financial Statements.

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- ²⁵ Assessing the Credibility of Climate Transition Plans in the Steel Sector. SSEE Oxford, 2023 https://sustainablefinance.ox.ac.uk/wp-content/uploads/2023/07/SSEE-Discussion-Paper-Steel_final_AR.pdf
- ²⁶ Global efforts to produce steel without the use of fossil fuels. World Economic Forum, 2022. <https://www.weforum.org/agenda/2022/07/green-steel-emissions-net-zero/>
- ²⁷ <https://leadthecharge.org/scorecards-summary/>
- ²⁸ The Race to Cleaner Automotive Supply Chains. Lead the Charge, 2024. <https://leadthecharge.org/wp-content/uploads/2024/02/LeadtheCharge-2024-Leaderboarden.pdf>
- ²⁹ Carbon leakage occurs when companies based in a country or jurisdiction (e.g. European Union) move carbon-intensive production abroad to countries where less stringent climate policies are in place than in the country or region of origin (e.g. South Africa), or when products produced locally get replaced by more carbon-intensive imports. (European Commission)
- ³⁰ ArcelorMittal, Climate Action Report 2 (July 2021) page 10. https://corporate-media.arcelormittal.com/media/ob3lpdom/car_2.pdf
- ³¹ The Role of Steel. CER, 2022 <https://cer.org.za/wp-content/uploads/2022/05/CER-Green-Steel-fact-sheet-2.pdf>
- ³² The Role of Steel. CER, 2022 <https://cer.org.za/wp-content/uploads/2022/05/CER-Green-Steel-fact-sheet-2.pdf>
- ³³ Shiny claims, Dirty Flames campaign. Fair Steel Coalition, 2024 <https://shiny.claims/claims/stop-making-empty-promises-and-be-a-real-climate-champion/>
- ³⁴ On May 15, 2024, the CER sent right of reply letters to key stakeholders identified in this report. At the time of the report's publication most responses were yet to be received. Therefore, an updated version of the report will be made available once all responses have been obtained.
- ³⁵ Stealing our Future. Reclaim Finance, 2024 https://reclaimfinance.org/site/wp-content/uploads/2024/03/Stealing-our_future_March_2024.pdf
- ³⁶ The Circular Economy - a Powerful Force for Climate Mitigation. Material Economics, 2018 https://materialeconomics.com/material-economics-the-circular-economy.pdf?cms_fileid=340952bea9e68d9013461c92fbc23cae