

Written evidence submitted by Anglo American

Introduction to Anglo American

Anglo American is a UK headquartered, FTSE 100 listed global mining company with a product portfolio that spans platinum group metals, copper, diamonds (through De Beers), iron ore, crop nutrients and several other minerals. Our portfolio of world-class assets produces many of the high-quality metals and minerals needed to enable a cleaner, greener and more sustainable future.

Anglo American's purpose is to re-imagine mining to improve people's lives. One of the most explicit ways in which Anglo is delivering on its purpose is through 'FutureSmart Mining'[™] technology, digitalisation and sustainability working hand in hand, alongside our ambitious and comprehensive Sustainable Mining Plan.

We achieved our 2020 environmental targets and are confident that FutureSmart Mining[™] technologies will be a key driver of emissions reductions to 2030 and of driving operations towards carbon neutrality. The target by 2030 is to reduce water usage by 50%, energy use by 30% and greenhouse gas emissions by 30%. As a group we have a target to be carbon neutral operationally by 2040 and to be carbon neutral at eight of our sites by 2030. These are the most ambitious climate targets of any global mining company. In early April, Anglo American announced the latest step in our decarbonisation process through the demerger of our thermal coal operations in South Africa, as part of our responsible transition away from thermal coal.

Our aim is for the mining sector, through the provision of the necessary minerals, metals and materials, to play its role responsibly in forging a more sustainable world. More generally, Anglo American also works to ensure best practice in order to minimise our footprint and deliver maximum positive impact within the communities we serve.

At Anglo American we recognise our role in tackling the defining issues of our time, including climate change. Mining has historically been a major contributor of carbon emissions and we recognise our responsibility in changing this through the transformation of mining operations and responsible corporate practice. We work closely with groups such as the Initiative for Responsible Mining Assurance (IRMA) to ensure our practices and activities are independently verified.

Anglo American's Submission

Anglo American is pleased to submit a response to the Committee's inquiry. We note the inquiry's terms of reference with regards to the impact of mineral extraction as well as on the re-use and recycling of materials. Our submission focuses on our work as a global mining company in ensuring the responsible and sustainable sourcing of the minerals and materials necessary for electric vehicles and wider base products needed to facilitate the transition towards a sustainable world.

As one of the world's largest mining and natural resource companies, we hope our insight and experience as to how we are working to transition mining – an activity critical to the world's future resource needs – towards a more sustainable mode of operation, is of value.

Your sincerely,

Jan Klawitter
Head of International Policy
Anglo American

Response to Inquiry Questions

- **What measures should the Government take to ensure that minerals for battery electric vehicles are sourced in a responsible way?**

Anglo American engages in a wide range of initiatives and activities that help ensure the sourcing of necessary materials is done in an ethical and sustainable manner. We have set out examples of activities that can help Government ensure that minerals for products such as battery electric vehicles are sourced responsibly.

The mining sector performs a critical role in providing the necessary minerals and metals required for many of the products that are helping to facilitate a more sustainable, decarbonised future. For example, mining provides materials such as nickel, copper, lithium and cobalt, necessary for the battery electric vehicle (BEV) supply chain. Anglo American has several nickel and copper operations in South America, supplying a significant proportion of the minerals needed in electric vehicles. We are also one of the world's largest producers of platinum group metals and have thus taken an interest in hydrogen technologies and fuel cell electric vehicles (FCEVs), thereby offering optionality to governments and consumers between both BEVs and FCEVs.

A starting point in our approach to product stewardship is ensuring regulatory compliance for products across all our operations. As a global diversified company, we make sure to stay informed of new and upcoming regulations, and actively engage with stakeholders to ensure ongoing compliance in other regions and in other parts of the value chain – including transport and shipping. Membership and participation in various industry associations, such as the ICMM, Eurometaux, the Nickel Institute, and the International Copper Association, also helps us in this endeavour.

More widely, we encourage Government to incentivise the mining of local resources wherever possible to help build and develop local supply chains, as well as engaging in local, regional and country partnerships to help strengthen wider environmental and socio-economic efforts in those regions.

In addition, Governments can engage more on the topic of mandatory third-party assurance of responsible mining practices – further details on our partnership and commitment with the Initiative for Responsible Mining Assurance, as an example, have been outlined below.

Responsible Sourcing

Responsible sourcing is a critical focus of Anglo's American commitment to ethical value chains. Anglo American are committed to working with suppliers who comply with applicable laws, while striving for zero harm to people, society and the environment.

Through our 'Social Way 3.0' toolkit, an industry leading policy toolkit and assurance framework, we have been able to ensure that policies and systems are in place in all Anglo American managed sites

to support effective engagement with affected communities, avoid or minimise adverse social impacts, and maximise development opportunities.¹

Anglo American also works to deploy new innovative technology to advance the traceability, provenance and authenticity of its products. Through De Beers we are engaged in Tracr, which seeks to utilise blockchain technology to create an immutable and secure digital trail for diamond products as they move from the mine to cutter, polisher and then on to the retail side. Tracr aims to provide consumers with confidence that registered diamonds are natural and conflict-free, improve visibility and trust within the industry, and enhance efficiencies across the diamond value chain.² Anglo American also engages in the World Economic Forum's 'Mining and Metals Blockchain Initiative' (MMBI), which seeks to develop an industry-wide blockchain initiative to help increase transparency and efficiency as well as to improve the reporting of carbon emissions.

Supporting Human Rights

Respect for human rights is stated explicitly in our Code of Conduct and is reflected in our core values of safety, care and respect, integrity and accountability. Our commitment to human rights is expressed through the company's Human Rights Policy,³ Human Rights Framework,⁴ and Voluntary Principles on Security and Human Rights (VPSHR).⁵ We are also a signatory to both the United Nations Global Compact, where we publicly report on our activities annually in our Communication on Progress (COP),⁶ and by our support of the UN Guiding Principles on Business and Human Rights.⁷ Additionally, we outline our full commitment to an ethical value chain that includes respecting human rights and is free of modern slavery in our UK Modern Slavery Act statement.⁸

Initiative for Responsible Mining Assurance (IRMA)

Anglo American is a Steering Board member of IRMA (the Initiative for Responsible Mining Assurance), a global multi-stakeholder initiative to assess, certify and drive-up responsible mining activity.⁹

Founded in 2006 following a decade of development by a coalition of nongovernmental organisations, businesses purchasing minerals and metals for resale in other products, affected communities, mining companies, and trade unions, IRMA's best practice global standard, established through years of consultation with over 100 companies and organisations, covers all mined materials (except for energy fuels), for all sizes of industrial mines, in all parts of the world at the mine site level.

IRMA's Standard for Responsible Mining is the world's first and only global definition of what constitutes leading practices in social and environmental responsibility for large-scale mining operations, assessed through independent third-party verification and assurance against a comprehensive standard for all mined materials, providing 'one-stop coverage' across the range of issues related to the impacts of industrial-scale mines. The Standard provides the list of expectations

¹ Anglo American, [The Social Way 3.0](#)

² Anglo American, [Tracr](#)

³ Anglo American, [Human Rights Policy](#)

⁴ Anglo American, [Human Rights Framework](#)

⁵ Anglo American, [Voluntary Principles on Security and Human Rights \(VPSHR\)](#)

⁶ United Nations, [Global Compact](#)

⁷ Anglo American, [Guiding Principles on Business and Human Rights](#).

⁸ Anglo American, [UK Modern Slavery Act statement](#).

⁹ [IRMA](#)

that independent auditors will use as the benchmark for responsible mines and its publicly available audit results provide credible information to purchasers interested in the responsible sourcing of mined materials.

The Standard covers a wide range of issues under four broad categories, including business integrity, planning for positive legacies, social responsibility and environmental responsibility. IRMA also works to incorporate wider industry and sustainability best practice, such as recognised chain-of-custody or traceability solutions for different products. Anglo American's Unki platinum mine in Zimbabwe has been assessed against the comprehensive standard, reflecting our commitment to transparency and striving for the highest standards for responsible mining.

Encouraging the wider adoption and use of this kind of independent certification will ensure that the future of mining is sustainable, and that the industry can play the role that is expected of it in delivering the critical minerals needed for the technologies of the energy transition in a responsible way.

Anglo American's FutureSmart Mining™ Initiative

Anglo American is at the forefront of technical and business innovation to ensure that the mining sector addresses critical challenges of safety, productivity, and the way we use land, energy, and water across our portfolio. Anglo American's 'FutureSmart Mining'™ programme aims to drive down energy use and carbon emissions, as well as reducing our use of fresh water, and is central to our ability to produce responsibly the metals and minerals required for a low carbon world.

FutureSmart Mining™ is an innovation-led approach to sustainable mining. These are the step-change innovations that will transform the nature of mining – how we source, mine, process, move and market our products. It uses innovative mining methods and technologies to overcome challenges of water usage, lower ore grades and energy constraints and reduce capital intensity and operating costs while improving our safety record. Through this process we have applied technologies that more precisely target the desired metals or minerals, delivering greater than 30% reductions in the use of water, energy and capital intensity, and producing less waste in the process, in line with our overall trajectory towards carbon neutral mining. Furthermore, with 75% of our assets located in water constrained areas, we have worked hard to reduce our dependence on water and associated tailings facilities, taking steps towards full recovery recycling and the 'water-less' mine.

We have set ourselves the target of achieving carbon neutrality across our operations (Scope 1 and 2 emissions) by 2040. While we accelerate the roll-out of numerous technologies – bulk ore sorting, for example, and an increase in our sourcing of renewable electricity. We have delivered on our commitment to source 100% renewable energy for all operations in Brazil, Chile and Peru. Having already secured renewable energy to meet all power requirements for our nickel operations in Brazil from 2022, and for our copper operations in Chile in 2021, we have also signed an agreement with Engie Energía Perú to provide 100% renewable energy for our Quellaveco copper operation in Peru.

Anglo American's Sustainable Mining Plan

Anglo American's ambitious 'Sustainable Mining Plan', launched in 2018 as part of the FutureSmart Mining™ initiative, is built around three Global Sustainability Pillars, which are aligned to the UN's Sustainable Development Goals:

- Developing trust as a corporate leader, providing ethical value chains, policy advocacy, enhanced transparency and improved accountability.
- Building thriving communities with better health, education and levels of employment.
- Maintaining a healthy environment that use less water and deliver positive biodiversity outcomes, ultimately moving Anglo American closer to their vision of a carbon neutral mine.

Nature is also a key focus for the sustainability drive across our operations. Through our partnership with international NGO Fauna and Flora International we engage seriously in ensuring nature and biodiversity features strongly within our sustainability planning. In addition, we recently reached a new agreement with the International Union for Conservation of Nature which will explore how nature-based solutions can help deliver broad biodiversity benefits and support our carbon neutral goals. We will be working together to identify how we can discover and apply such solutions and new technology across our full mining lifecycle.

Driving Innovation

Anglo American are pioneering industry-leading mine innovations which includes automated mining vehicles, hydrogen-fuelled trucks, electrohydraulic drills and remote operated machinery. Across our portfolio we are building a digital ecosystem that underpins a digital way of working. Operations are being digitised through sensors and other instruments and artificial intelligence is being used to accelerate a range of processes. These innovations reduce the cost of mining operations, the environmental impact and carbon emissions while improving our safety record. Our work to create the 'Intelligent Mine' sees vast quantities of quality data transformed into predictive intelligence, leading to a safe, fully integrated, systemised and self-learning operations.

We are currently piloting the deployment of battery-fuel cell hybrid technology in one of our mines in South Africa: oversizing a solar power plant that will be used to both power mine operations and produce green hydrogen from excess power will allow us to displace diesel in our truck fleet; for the pilot, we are retrofitting a 300t category mine haul truck to enable it to run on hydrogen instead of diesel at our Mogalakwena mine in South Africa.

'CarbonVault', run through the De Beers Group, is a pioneering research programme to make carbon-neutral mining a reality, with the aim to lock away carbon inside kimberlite, the rocks in which diamonds are found.¹⁰ Anglo American is working in partnership with a team of leading experts from universities around the world to explore how this natural process can be accelerated, to soak up more carbon from the atmosphere.

Anglo American's 'Collaborative Regional Development' Activity

At the heart of Anglo American's Sustainable Mining Plan is 'Collaborative Regional Development' (CRD), our model for bringing long-term sustainable development opportunities to the regions around our operations. This applies in all jurisdictions where we have an active mining presence.¹¹

¹⁰ De Beers, [Carbon Vault](#)

¹¹ Anglo American, [Collaborative Regional Development](#)

Anglo American has partnered with Exxaro, the Council for Scientific and Industrial Research (CSIR) and World Vision International to work in collaboration with the government of Limpopo in South Africa to drive sustainable economic development through CRD. Our collaborative approach looks beyond the immediate vicinity of our sites to identify opportunities to support existing investments and initiatives to maximise the value to host communities, independent of Anglo American's presence, so the benefits will be felt long beyond the life of the mine. This has been rolled out across South Africa and Latin America and forms a crucial part of our work to make the mining fit for the future.

Ensuring Best Corporate Practice

More broadly, we welcome initiatives that increase the reporting and transparency of company practices. We welcome the announcement that disclosure against the Task Force for Climate Related Financial Disclosures (TCFD) framework will become mandatory for UK listed companies, as we believe it will increase the quantity, quality, standardisation and consistency of disclosure and engagement by stakeholders on the basis of that disclosure. We began voluntarily aligning our disclosure in 2016 and became a formal supporter of the TCFD in 2018. Our TCFD-aligned disclosures are embedded throughout our annual, sustainability and other reports with a table included in our annual report indicating where each element of the TCFD disclosure can be found.

It is important however that such policies do not result in unintended consequences. For example, the development of a UK Green Taxonomy, to replicate the EU's own taxonomy, is a logical step. However, that taxonomy needs to be sophisticated enough to recognise the vital role that metals and minerals (and the role of mining companies and mining activity in providing these) will play in delivering the renewable power, connectivity and digitalisation that will drive decarbonisation, whilst also encouraging positive change along the global value chains of which we are a part. Such classifications are crucial because they then become inputs into assessment tools, including those used by investors as they test how "green" their portfolio is.

Committing to a Range of Technological Options

There is a strong need for technological neutrality from Government policy, regulatory and financial support frameworks if the UK is to meet its ambitious climate targets, with no one technology offering the optimal solution across all use cases. This is especially the case in the transport sector, which accounted for 34% of total UK carbon emissions in 2019 and is well suited to the early adoption of new technologies, in support of the 2030 internal combustion engine phase-out target. One way of ensuring that emissions from battery technology are minimised is by taking a dual fuel approach, which we advocate, deploying hydrogen fuel cell technology as well as battery technology at scale.

As one of the world's largest producers of platinum group metals, Anglo American has a strong cross-sectoral interest in the future of hydrogen technologies, which stand to play a key role in the facilitating of hydrogen-related technology, such as electrolyzers to produce green hydrogen and fuel cells for vehicles. Hydrogen provides a complimentary fuelling method in the transport sector which can help to balance and distribute the global demand for specific minerals and metals.

In 2019, our Anglo American Platinum and Platinum Group Metals groups launched a joint venture to develop next-generation battery technology using platinum and palladium called Lion Battery

Technologies. This included an agreement with Florida International to develop a research programme to unlock the potential of lithium air and lithium sulphur battery chemistries.¹²

To achieve a 2030 Internal Combustion Engine (ICE) phase out date, the production of vehicles will need to increase rapidly to meet consumer demands. BEV supply chains have struggled to meet demand in the UK market, where BEV sales account for 3-4% of new car sales.¹³ Having a dual technological approach will benefit these supply chains and reduce risk, as FCEVs do not have the same mineral requirements that BEVs do. An over-reliance on BEVs as the technological solution for passenger cars would exacerbate existing supply chain risk and could potentially slow the pace of transition.

- **What steps should be taken to ensure that EV batteries are recycled at the end of their lives and not simply sent to landfill?**

Batteries will have a high economic value at the end of their life, particularly nickel and cobalt containing batteries, so the preference will be to recycle them. There is some concern that lithium ferrophosphate battery recycling is not economic and could be an issue for car companies in future if they have to be responsible for recycling batteries. Recycling of nickel containing batteries is much more advanced and economical and is where most of the scientific work has been directed.

Steps that can be taken to ensure batteries are recycled at the end of life include:

1. The standardisation of battery composition, particularly those which will have high recycling rates and economic incentives. Standardisation will enable recycling operations to operate at sufficient scale to achieve profitability.
2. Applying the Extended Producers Responsibility (ERP) concept for ensuring re-use and recycling of batteries. This makes the producer (automaker) of the battery responsible for the management of waste generated until they are scrapped.

The environmental impact of battery production and use is highly correlated to the dominant energy sources where they are both produced and used, with transportation of battery raw materials and components another aspect of their environmental impact. After their first use in vehicles, batteries can go on to a “second life” in energy storage applications, after which they can be fully recycled for reuse. The recycling of battery “scrap” generated in the battery production process is currently the biggest source of recycled supply. Lessons learned here will be important in building the scale of recycling required for batteries once they reach their end of life.

Attention is focusing around efforts to ensure a circular and responsible battery value chain. Key factors in ensuring this include the circular recovery of battery materials, the transparency and minimisation of greenhouse gas emissions across a battery’s life cycle, as well as labour and human rights issues, including the elimination of child and forced labour in the supply chain.

Processes and systems to allow the effective tracking of batteries, via a global solution facilitating the sharing of information and data on responsible and sustainable sourcing, can help provide reassurance to customers and end-users around battery products. Such efforts can build upon work to agree a common definition of what defines a ‘sustainable battery’. The concept of a ‘battery passport’ has been promoted as a potential option.

¹² [Lion Battery Technologies Inc.](#)

¹³ Next Green Car, [‘Electric car market statistics’](#)

Further efforts to establish responsible and sustainable supply chains for battery materials can look to existing best practice initiatives, as outlined in response to the previous question, to drive up standards, increase transparency and ensuring the sourcing of such materials represent genuine economic opportunities for workers and the communities that host such activities.

Finally, efforts to further establish and embed low-carbon economies, allowing for the accelerated deployment of batteries as a way of realising their full potential in delivering emissions reductions across economies and societies, as well as reducing barriers to the development of a circular battery economy, can help to ensure maximum use and benefit is ensured for such products.

Anglo American supports such efforts through our involvement in the Global Battery Alliance, an initiative of the World Economic Forum bringing together leading businesses along the entire battery value chain with governments, international organisations, NGOs and academics to actively shape a battery value chain that powers sustainable development.¹⁴

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¹⁴ World Economic Forum, ['Global Battery Alliance'](#)