FINANCING THE ROAD TO NET ZERO: MINING & COMMODITIES

Host: Mhairi Main Garcia

Hello and welcome to Watson Farley and Williams' 'Countdown to COP: Financing and Fuelling the Future' podcast series. I'm your host, Mhairi Main Garcia.

In today's chapter, we will be discussing mining and commodities and the drive towards achieving net zero. I'm delighted to welcome our guest, Daisy East. Daisy is a Partner in the firm's energy team based in London. Daisy advises on the financing aspects of projects across the energy sector ranging from power generation to mining and metals and infrastructure. Her experience includes conventional loan type financing as well as convertible notes at a senior and mezzanine level.

Welcome, Daisy.

Guest: Daisy East

Thank you, Mhairi. I'm pleased to be here.

Host: Mhairi Main Garcia

I'd like to start with an overarching question about the status of the mining and commodity sectors and where we are in the drive towards net zero.

Guest: Daisy East

I think I'll probably focus on metals and minerals because soft commodities is a whole topic in itself: food security, water security, adaptation and so on. Looking at mining, minerals, metals, I think there's two ways to look at the question. From a global drive to net zero, the need for critical minerals sits right across it. We're not going to get to net zero without a significant expansion of the metals and mineral sector. Within the sector itself, it's a work in progress. Successive COPs have had a significant impact on the mining industry and the pressure for change is intensifying – I think there'll be more from COP28. The nature of the industry means it's unlikely to achieve a net zero status within itself. But, to secure the investment, whilst being fundamentally necessary to the global net zero drive, but also to 'just' transition, to a reduction of the poverty gap, to supporting a growing global population, we're seeing significant work being done to preserve the sector's social license and secure investment.

It's perhaps worth a short mention of 'just' transition and what that means and why its relevant to this conversation particularly. There are many definitions of just transition, but they have common themes: the cost and benefit of the transition to net zero being shared fairly, the resulting net zero economy being fair, inclusive, leaving no one behind – given the nature of much of the value chain in the mining and metal sector, you can't really discuss a transition to net zero in anything other than a 'just' way.

Host: Mhairi Main Garcia

Thank you. So, the 'just' transition is really fundamental and is an intrinsic part of the effort to achieve net zero?

Guest: Daisy East

I think that's right from a global perspective, but particularly in the context of mining and metals.

Host: Mhairi Main Garcia

Thank you. And, if we focus on mining and metals and really sort of home in on that, the industry, as you say, is unlikely to achieve net zero status within itself. So, what are the greatest barriers to the industry achieving net zero or otherwise contributing towards the global net zero drive?

Guest: Daisy East

It's a good question. I think there's unique challenges faced by the industry, both its innate ability to achieve net zero and its ability to support the global drive. You start with the social licence, your stereotypical mining vision is polluting, it's scarred landscapes, it's displaced communities and that's before you get to things like deep seabed mining, job losses from technological development, the move away from mining thermal coal - it's a difficult sector and the social licence is a challenge and that really affects the investment from general investors who shy away from activities that are difficult to report on, to their socially conscious investors.
It's a hugely energy-intensive industry, the scope 1 and scope 2 CO2 emissions are at least 1% of the global figures and that's driven by the operations and the power consumption. Your scope 3 emissions are enormous, but obviously a lot of that comes from thermal coal but net zero is always going to be very challenging within the sector.

We are seeing hydrogen powered trucks and increasing electrification of processing. But, achieving those things themselves is really challenging in typically remote locations for these sorts of projects. There is an escalating demand against, frankly, a diminishing ore grade, to support the transition, but also in respect of non-transition metals that we need just to support a growing population and to try to reduce a poverty gap, raising living standards.

So, these are complex projects in a complex environment. As I say, they're often remote they include not only the mine but also transportation, power sub projects, they're hugely dependent on and exposed to nature, they need a lot of water, but they're typically also very vulnerable to heavy rainfall in the same breath and those dependencies and impacts - they need management and probably adaptation as the sector expands. They exist in a world of fluctuating political support that affects their permitting, it affects their regulation, and it affects investor appetite. Their product is exposed to considerable price fluctuation as well because the suppliers change, the extraction technology changes and demand and application of product changes. Take battery technologies, it's such a hot topic with electric cars but there's only been 15 years or so of the electric car. If you think where we were 15 years into the internal combustion engine, there was a lot of development to come. I assume we're the same with batteries, who knows which commodities are going to prevail in the resulting technology. And therefore supporting a mine that might not be the one that produces the ore that everybody wants is a challenge. So, there are big barriers.

Host: Mhairi Main Garcia

Thank you. So, for metals and minerals, there's a real and competing challenge of addressing social environmental issues and increasing and varying demands as you've indicated and on top of that we're trying to achieve net zero in a sector which is hugely energy intensive, really complex indeed as you've said.

Guest: Daisy East

Exactly.

Host: Mhairi Main Garcia

Let's talk about financing. What does the mining and commodity sector need to make financing easier to achieve net zero?

Guest: Daisy East

Well, that's an interesting question, isn't it? Because it's paramount that there is more funding. We really need the expansion of the sector. That funding needs to be all along the value chain because if the consumer or the taxpayer can't pay for the net zero product – electric cars or renewable electricity or green steel infrastructure – then the efforts at earlier points in the chain are really challenging. I think in terms of how we get money into the sector, and perhaps it comes back a bit to social licence, but not entirely. I think there's a combination of national and global government regulatory action: probably some government financial support; probably a revisit by funders that haven't typically looked at this sector of the business case for funding the sector.

If we take a combination of government regulatory action at a national level, you need consistent political support along the value chain. There are many, many tales of transition metal mines being stalled or even terminated because the permitting is taking too long or because it's imposing insurmountable hurdles. There's one in the UK at the moment, Tungsten West, it’s awaiting permits before it can get further funding and whilst it's waiting it has to cut staff. Perhaps it's a bit of a test of how really committed the UK government is as to whether those permits come quickly enough for that project to be viable but it's not the only one, globally that is a problem.

At an international level, you need effective and coordinated government policies to incentivise and require companies and financiers to get involved. And if we start with adopting greener technologies and practices, the unilateral adoption of policy or regulation can lead to an unintended unfairness.

As an example, if we take the EU carbon board adjustment mechanism, which is discouraging EU companies from shifting their production abroad to reduce their carbon tax exposure - that's a good policy in itself. The US has taken the approach of subsidising clean energy use and the EU is concerned its producers may decamp to the US to benefit from that. So, it's thinking of offering something similar here, subsidising green energy use. Again, probably, sensible steps. Developing countries with limited budgets and little prospect of the promised climate action funding that's supposed to come from industrial countries – they’re spending their constrained budgets on adaptation, not on emissions reduction which means then, when you look at the picture as a whole, they can't compete with the EU producers because they're not reducing their emissions. And so, then they're not getting their revenues, and they're not getting their tax returns, and they can't even afford their adaptation, let alone emissions reduction. So, really there needs to be a very coordinated approach by governments and hopefully that is what we will see from COP28: covering everything from the

ESG requirements through to transparency and responsible sourcing, support for innovative technologies. Not only is there a question of how you get the stuff out of the ground, but there's how to use that product efficiently, make it last longer, probably discourage quite so much usage by the consumer, quite so much turnover and, better recycling, repurposing and supporting the ‘just’ transition, shifting communities who've been prejudiced by a shift towards a cleaner practice into ensuring it’s not detrimental to them. So, I would expect to see COP28 push quite hard in that direction, I think, on the global coordination.

I think we need to see more government-led funding. Take as an example the UFK regime in Germany, which is the core part of the German government's raw materials supply security chain. It's not the only country doing it, but I think there probably need to be more governments setting up that sort of regime for real meaningful immediate funding. It supports that country's desire to secure access, but it can also de-risk projects in a way that can open the door to less specialist funders which then brings us to those funders. So, finance typically comes at the moment from specialist investors, traders, family firms, specialist funds, specialist banks, but there's a limited pool of that and undoubtedly, not enough to fund the expansion that's required.

So, in addition, I think we need to see the more generalist funders change the way they approach these transactions, perhaps take a longer view of pricing risk, perhaps a more bespoke analysis of the specific opportunity rather than a general shying away from dirty assets and technological uncertainty. And perhaps an acceptance that a ‘just’ transition to global net zero is the driving force, not purely metals and mineral net zero. It's got to be seen as part of the bigger picture.

Host: Mhairi Main Garcia

So coordinated approaches are absolutely key and funding is fundamental to achieve a ‘just’ transition as well as, of course, as part of that net zero within the sector and I think from what you're saying, significantly, is it's not just about the sector, it's about the global drive towards achieving that net zero?

Guest: Daisy East

Yes.

Host: Mhairi Main Garcia

So, in terms of funding that being the case what is the sector doing to achieve net zero in terms of financing?

Guest: Daisy East

So, I think we're seeing a number of steps to overcome those hurdles. It is moving itself as a sector along a road of a ‘just’ transition and reduced emissions. We see companies actively working to reduce carbon footprint and overall environmental impact as I mentioned, hydrogen powered trucks, increased interest in recycling and reusing and giving products a longer life. We see an increase in integrating ESG considerations into the operations, including ethical sources material, labour practices, minimising social and environmental impacts. About 20% of companies in the sector now have nature-related pledges, for example, which is great. But, on the flip side, it's still uncommon for companies to follow the principles of a free prior informed consent on displacing or sharing space with communities.

There remains a key part to the 'just' transition here. Ensuring communities no longer employed in coal mining or in production methods that have been automated are given support and alternative employment, so they're not left behind. Larger companies are investing in more research and innovation, again, Anglo-American very famously a year or so ago came out with its hydrogen powered trucks, we see them exploring carbon capture and storage, recycling and circular economy more broadly. There's an increasing number of membership bodies assembling standards and policies for stakeholders across the value chain and, to some extent, that allows them to validate their transition or 'just' transition credentials to satisfy their investors, governments, financiers and therefore the social license. And we see not only producers signing up to those standards, but also the investors signing up to them.

Through that perhaps we're seeing investors encouraging the mining sector to reduce its emissions by demanding clear carbon pricing and measurable emission reduction targets. And we see financial institutions increasingly offering loans and credit lines that have favourable terms if you can demonstrate a commitment to your ESG standards. And integrating the ESG standards into investment decisions does help direct capital towards the more sustainable projects. But you do need to ensure across all of this that perfection doesn't become the enemy of the good and the real goal has to be kept in mind - the global net zero transition and not just the mining and metals one.

Host: Mhairi Main Garcia

Thank you. It seems really clear that the environmental and social aspects are key and how these will be reflected in standards that are either already developed or are being developed by the sector and obviously these standards in themselves are then linked to financing. So, it all seems very much interlinked. Perhaps we could look at it from a slightly different angle? Where are the opportunities for clients that are financing or looking to finance the sector rather than the actual participants?

Guest: Daisy East

I think there are plenty of opportunities. I think we will see the ore-rich jurisdictions and the companies with a focus on critical minerals develop a powerful position and the opportunity to move themselves up the value chain if they can meet increasingly rigorous ESG requirements. So, I think there'll be opportunities for funders to support those jurisdictions and those producers in achieving that. I think that again there'll be opportunities to finance the exploitation of the increased demand for particular minerals, the ones that are growing in the critical space, clients should be following technological trends and look at the best way to anticipate where that's going to be.

I think also, there's an opportunity to finance what isn't the obvious part of the value chain which is your production processing application but the 'side lines' of it: the recycling, the repurposing, the better efficiency. I think companies that are able to approach and assess research and technology-type sectors and funders who can support those types of companies will have a lot of opportunity in just making the system more efficient in the way that it uses the ores, whether in quantity, whether in processing, whether in life cycle and longevity.

So, I think there are plenty of opportunities there.

Host: Mhairi Main Garcia

That's interesting, I think the idea of establishing partnerships is going to be very important in so many sectors not only in mining and commodities in the drive towards net zero.

Guest: Daisy East

I think that's absolutely right.

Host: Mhairi Main Garcia

If we can close with a look towards the future. What will be the most important steps in the next, let's say five years, to help the mining and commodities sector in the drive towards achieving in itself or towards achieving globally net zero?

Guest: Daisy East

So, I think five years is an interesting time frame. The lead time on exploration to development to production is so long that many of these steps simply can't wait five years if we're going to achieve the current global net zero timelines or the sub-timelines. By 2030, the UK has legislated that the sale of new internal combustion engine cars will be banned. The lead time for some of the technology advancements that are needed to support that will only just fit within that time frame.

So, there isn't really time to make a five-year plan. It needs to be a two or three-year plan for quite a lot of this.

All the stakeholders, be they governments, society at large or funders need to recognise the fundamental role of mining and metals in the global drive to net zero and I think there needs to be a shift in mindset to make sure that even if there's a slower progression to net zero within the metals and minerals sector, that mustn't derail the overall net zero target from a global perspective. I think we do need to see an increase and probably this is where hopefully COP28 will produce helpful stuff, an increase in the governmental and finance sector support for metals and minerals production and refinement, specifically along the value chain and more generally but, in relation to critical minerals, it'll be key I think for a 'just' transition to the global net zero ambitions.

Within the sector itself, I think we will need to see rapid adoption and scaling up of innovation. But that does all come from these points about funding and that innovation will reduce emissions and, it will reduce resource consumption. And, as I say, resource consumption both within itself, making batteries more efficient for example or solar panels more efficient, but also reducing the need for new, I think longevity, repurposing and recycling will all come into that. But the biggest point is to not lose sight of the global target of net zero in the attempt to make the sector net zero within itself.

Host: Mhairi Main Garcia

Thank you, Daisy, for taking the time to share your expertise today. I'd like to recap just some of the main points that you've discussed.

The focus of the discussion was on mining and metals and within that context the projects are complex with often competing challenges and demands in particular when considering ESG, sustainability, new technologies and increasing and changing demands.

Funding is crucial for the sector to drive towards net zero even if the sector cannot achieve net zero within itself, it can contribute towards the overall goal of global net zero. But so too is the consistent political and regulatory support, that is also critical.

And finally, collaboration and partnerships will be key going forward both between private sector stakeholders but also within the public sector at both a national and global level.
Daisy, thank you for being our guest today.

Guest: Daisy East

Thank you very much for having me Mhairi, it's been a pleasure.

Host: Mhairi Main Garcia

Thank you. And sincere thanks to the listeners for your time and engagement. Please do get in touch with your feedback or if you would like to discuss any of the topics that we've covered today.
To listen or view the transcripts of all the episodes of this COP28 series, please visit wfw.com.

We look forward to welcoming you to our next episode of Watson Farley and Williams' 'Countdown to COP: Financing and Fuelling the Future' podcast series.