>> Ladies and gentlemen, please welcome to the podium Dr. Laura D. Taylor-Kale Assistant Secretary for Defense Industrial based Policy, department of Defense.

>> Good morning and thank you for the opportunity to kick off today's discussion on Critical Minerals. I also like to thank Chair Lewis and the EXIM team for inviting me. And thank you to General Richardson. Isn't she fantastic? One of our first women in command at that level at the Department of Defense, and we're just so excited that she's here today and I'm excited to be here as well. I am the first Senate confirmed Assistant Secretary of Defense for industrial based policy. My team oversees many areas of supply chain resilience and interactions and work with business and manufacturing industry. Today I am excited to share more about the tremendous opportunities that exist right now for partnering with the Department of Defense and our recent efforts towards securing a resilient, responsible, and diversified supply of critical minerals. Earlier this year, we published our first ever national defense industrial strategy right here. You can find it at www.defense.gov to meet the priorities identified in the National Defense Industrial Strategy. We are making historic investments, particularly in areas like microelectronics, kinetic capabilities and strategic and critical minerals beyond investments. We are strengthening cooperation and coordination between government, industry and our global allies. For example, the DOD recently announced that the UK and Australia joined Canada as domestic sources for the Defense Production Act funding the The Defense Production Act sits under my group. We administer it, and through this tool, it means that we can make direct investments in Canadian, UK, and Australian companies as well as US companies that are working in many areas of critical national defense priorities. We have backed two Australian listed rare Earth projects with up to $850 million of funding for magnetic metals. We need these metals for both renewable energy and defense capabilities. Also, my organization has embarked on a five year rare earth investment strategy. Since 2020, the DOD has awarded more than $439 million to establish domestic rare earth elements supply chains. We are on track to meet our goal of a sustainable mine to magnet supply chain capable of supporting all of US defense requirements by 2027. In total, since 2020, the Department of Defense through my group, has invested over a billion dollars in strategic and critical minerals. To further this momentum, my office has also introduced several new and expanded investment tools and strategies. The Defense Production Act authority is a key investment tool that we use to alleviate pain points in supply chains and expand capacity and manufacturing critical technologies, critical minerals, and other vital defense capabilities. And FY 24, the DOD is on track to execute over $1 billion in DPA funds and an additional $600 million in industrial based fund funds as well. Our recently launched defense industrial based consortium, other transaction agency targets both domestic and allied partners. It is designed to accelerate awards under the Defense Production Act and the industrial based fund to reduce Contracting times. Membership in this consortium is free and more than 300 organizations have already joined since it was announced at the end of January, member organizations receive advantage access to information sharing and networking opportunities. It's a low risk, low cost process and it's designed to be that way. If you're looking for more information, you can visit that website at dbconsortium.org. I hope you are encouraged by the ways we are making it easier to work with the Department of Defense, and even more so by the immense opportunities to partner with us. We will never be able to secure our, our US domestic defense supply chains alone. We need the engagement of industry and the participation of everyone in this room and your companies as well as those outside. I thank everyone for their commitment to modernizing our industrial ecosystem and look forward to continuing the dialogue this morning. And now I'll turn it over to the panel to get us started. Thank you so much.

>> Ladies and gentlemen, please welcome our first panel of the day, critically important critical minerals and global collaboration. Our moderator, Christina Lu, staff writer Foreign Policy. She's joined by Christopher Baker, director Global Metals and Mining, BMO, Abigail Hunter, executive Director safe, Brian Menell, CEO TechMet, Keith Morrison, CEO Premium Nickel, and Rowena Smith, CEO, Australian Strategic Minerals.

>> Hello, welcome and thank you all for joining us here today for a conversation that I'm very excited about. My name is Christina Lu and I'm a reporter currently covering the global rush for Critical Minerals at Foreign Policy Magazine. Based here in Washington DC Today, US lawmakers are facing a massive challenge in figuring out how to secure new supply chains for critical minerals, the resources that underpin everything from electric vehicle batteries to advanced weapon systems. The problem for Washington is that China has a decades long lead in this race and now commands many of those supply chains, a dominance that it's weaponized in the past. The big question then is how do you go about fixing a problem like this, a problem of that scale? To get to the bottom of this issue, we're very lucky to be joined by five people, all of whom are on the front lines of this challenge. Chris Baker is a director in BMO Capital Markets, metals and Mining and investment banking group focused on critical minerals. BMO has the largest metals and mining group in the world among investment banks. He advises critical minerals, miners and developers on debt equity, other funding alternatives and mergers and acquisitions. Abigail Hunter leads the Center for Critical Mineral Strategy at safe, which is dedicated to building secure, sustainable and ethical critical mineral supply chains. She most recently worked for the province of Quebec where she focused on policies to support North American minerals and battery capacity. Brian Menell is the chairman, and CEO of Tech met a critical minerals investment company with the current portfolio of 10 companies across the US, Europe, Africa, and South America that produce process, refine and recycle critical minerals. The US government is a significant shareholder of tech met through multiple equity investments by the US Development Finance corporation. Keith Morrison is the co-founder and CEO of premium nickel resources, a public Canadian company that is redeveloping and modernizing several past producing nickel copper cobalt mines in Botswana. The mines are permitted and have operating infrastructure in place supporting the goal of having this new critical metal supply chain in production in 2027. And Rowena Smith is managing director and CEO of ASX listed Australian strategic materials or ASM with 30 years of experience in the sector. Rowena has led ASM since 2022 as it executes its unique mind metal strategy. ASM has its globally significant rare earths and critical minerals project in Australia and a flagship metalization plant in South Korea and is continuing to build its position as a vertically integrated producer of critical minerals. And with that all said, let's jump right in. Keith, I'll start with you. We know that the US has finally woken up to this really immense challenge, but is that it? What is the US getting right in its response and what is it still getting wrong?

>> Thanks, Christina. It's a pleasure to be here and thanks to EXIM and congratulations on their 90th birthday. That's a great question and I'll try and do it very quick. Justice after Russia invaded the Ukraine and effectively weaponized energy sales to Germany, you know, I think that started a reaction in the US and the rest of the world that was embedded in the IRA act, which I think had bipartisan support in August, 2022, I believe, and separately as an act of Congress, a group called the Supply chain Integrity Innovation Task Force Innovation Task force was created as a interagency and inter-government body as a Canadian building mines in Africa. I was largely unaware of the IRA ACT and completely unaware of the embedded economic and national security policies and the decoupling of China embedded in the IRA and the intent of the IRA. So luckily for us, SCIF reached out to us very proactively and engaged us in early dialogue and really offered what they would describe as a concierge service to map the US government for us on a relationship basis. I think that very early introduction to the US and having had the opportunity for the last 18 months to watch the US pivot to the challenge of developing new independent supply chain has, has been a privilege. And I would point out that groups like SCIF I think are unique to the us You know, through SCIF, I've again had the pleasure of meeting with South Korean, Japanese, European, UK governments. The existence of SCIF and how it functions I think is unique to the United States and, and I would recommend the US to continue supporting it and empowering it to be more proactive. And I would suggest to foreign mining developers who are facing the challenges of how to interface with the US government, that that SCIF is a great place to start. You can google 'em and you know, reach, reach them that way. So I think the US has got, got that right. It's very proactive in developing

relationships with with industry. I think what I underestimated was the size of the pivot and the complexity of the pivot. So I think that a lot of the panel here and a lot of this convention is about policy, policy development, trade policy, industrial policy, you know, global coalition of these policies. I can say the people that I've met within the US government that are engaged in policy development, What's gonna replace the IRA, what's gonna improve on, you know, the FEOC, again, very capable people, very dedicated, very focused, but a very challenging process. You know, as an example, you know, supply chain concentration, you know, deglobalization, I think the US would be very comfortable with highly diversified supply of everything, you know, from a economic point of view. The reality is though, you know, globalization and the end of globalization sort of over the last five years has resulted in legacy supply chain concentrations that exist and have, you know, competitive economic and regional advantages to supplying key critical metals. You know, Indonesia's probably the most current example of that where you have, you know, decades of, you know, extensive Chinese investment creating a, you know, up to 50% supply of the global nickel. Indonesia would be happy to have 75%. I think the rest of the world would like to see Indonesia sort of in the 20% range. So some Indonesian nickel is very good, some Indonesian nickel's not so good, and some Indonesian nickels very bad, you know, not consistent with the value proposition that automobile OEMs expect in selling electrification electrified cars as part of a global climate change mandate trick from a trade policy point of view is the US needs some Indonesian nickel, you know, we will, we have a lot of battery plants here in the United States and a lot of jobs depending on those. So how do we create balanced trade opportunities that get, you know, good nickel into the United States and into our cars and and reject substandard commodities. And that's just a brief example of some of the challenges I think on the, on the policy side. And last I would point out, I would make is capital markets and risk and how we deploy capital sort of technical points. But I think we need to separate exploration from mining. They are different industries with different risks and difficult capital requirements. I think I can say after 40 years in the industry and having worked in 60 different countries, nobody likes exploration risk. There's a handful of Canadians and a handful of Australians that pretend to like it and are reasonably good at it. We need capital formation to be able to do that. And I'd point out in, in Australia at the moment, they've banned computerized algorithmic trading of short selling in their markets because of the damage it's doing to capital formation. I think the Canadian government needs to follow suit and protect, you know, high risk equity markets from sort of predatory international trading that would be necessary to fund exploration to, to make the discoveries to continue independent supply chain development. The second point on risk, which is probably more pointed to the room here, is, you know, since the end of the Cold War, you know, we developed a, a risk policy around resource development, but in a broader sense, and that risk has been mitigated through compliance, and compliance has been enforced through liability. And the accumulation of that is, I think we, we may have developed this, the extent of our reduction in risk appetite independent of considerations of national security, global climate impact and economic security. So while we were reducing risk for investors and reducing risk for credit in, in lending to and funding resource development, we had no consciousness that the result of this would be we're not developing enough mines in North America, resources are being developed globally. And at the end of 30 years of that we've ended up in a situation where we have economic and national security risk as a result of that. So I think it's important if we're going to enable large amounts to capital, to flow, to resource development, we're need to going to redefine how we perceive our management of risk in order to rebalance risk to consider these other considerations that I think were ignored. Thank

>> You Keith. I, I wanna turn it over to Rowena now. Is this a challenge that countries can tackle on their own? From your experience working in Australia and South Korea, how important is global collaboration and are we seeing enough of that happen fast enough?

>> Thanks Christine. In my experience, global collaboration is essential. You know, these are complex supply chains and there are multiple steps that need to

be established simultaneously in order for it to function. You know, in the case of rare earths, yes you need exploration and mining, but then you need to take the product through to a concentrate, then to a carbonate, then to an oxide, then to a metal, then to an alloy, then to a magnet. And all of those processes need to be in place before you've got a product that is really of use to the manufacturing industries, you know, so we need to be, if we're gonna establish all of that rapidly, then we need to be working in partnership. We need to work in partnership company to company, but also jurisdiction to jurisdiction and play to the established strengths that jurisdictions already have along that supply chain. We need to be working collaboratively in funding between public and private funding and we need government to government collaboration. So, you know, is it happening fast enough? No, it's not, you know, there's, there's too much talk, there's not enough action. I think that, you know, fairly typifies the experience that we are having at the moment. But where we are seeing it at its best is where there is really strong government to government alliance established. And you know, certainly in my experience, a good example of that is between the US and Australia, where late last year, very senior members of both governments really established a very strong policy position to work. Not just giving priority to establishing these critical mineral supply chains, but as a priority doing it together. And what we've seen then is that's flown through into the behaviors of the various different government departments. We've had very positive engagement with US EXIM and the Department of Defense here in the states as a direct result of those policy positions and encouragement from both governments. And where that's resulted for us is we've had a, a very material letter of interest from US EXIM for participating in funding of our project in New South Wales, Australia, but also importantly US EXIM have got a product that is called the engineering multiplier program that helps to fund the last bit of feasibility work and what's been really pleasing as we got a letter of support for that as well. And as we've been working through the due diligence, there's been really strong collaboration with the Australian equivalent, the EFA with US EXIM working through problem solving, how they can work together to fund that activity. So that kind of collaboration in my opinion is essential if we're gonna get these projects into production.

>> Thanks Rowena. Chris, I'm curious about the experience of junior companies here trying to get into the game. If you're a firm that's hoping to get a mining project off the ground, what kind of landscape are you navigating? Can you tell us a little bit more about the kinds of programs or support available to them?

>> Christina, thanks for the question and thanks everyone for the time today. It's a really interesting question. From our perspective at our firm, we've worked with companies throughout their development lifecycle and across commodities. And as we think about critical minerals and the options available to critical miners and contrast those against other commodities, it really is the dynamic of an evolution in the capital markets. And if we think five, 10 years ago a developer miner would've a lot of options in the public equity markets and a lot of the mines were funded predominantly in the public equity markets, public debt markets, as well as project financing alternatives. What we've seen in the public markets is investors moving more towards more advanced projects, more established commodities. And as we think about what does that mean for the critical minerals miner today with all of these mines that need to get built, we need to get the minerals through the supply chain. As, as Keith and Rowena have mentioned yet we have a public capital markets that's shifting a bit more towards existing producing mines and commodities that have a bit more of a multi-decade track record as opposed to some of the critical minerals which are emerging. And what we see as the funding options there is quite interesting in that there are a few new entrants and new options for these companies and we've seen end users and over the last couple of years we started to see end users of the product, whether it's OEMs or other end users of the product, step in and say we need to invest to get these mines built. And it's gonna take that and more of that to continue to advance the, the critical minerals developers in the landscape that we're in in the public markets. The other element and what we're here today to certainly speak about are programs like EXIM bank programs and programs like the US government funding programs under the IRA as well as

other programs to support miners develop their minds and stand there alongside public capital in order to advance the projects. And what we have seen is a trend where as companies put out announcements and as companies have that government support, they're able to leverage that and attract public market investment alongside that. So to answer your question, Rowena or sorry Christina specifically, it's a combination of both that we, we would view as the steps for critical minerals to get financed in terms of some of these, what we would call newer options available to critical minerals that might not have been as traditional alongside the traditional more public financing alternatives.

>> Thanks Chris. Brian, given how high risk this environment is, would you say Washington is doing enough to encourage the private sector as part of its broader push? What should it be doing differently if not,

>> Thanks, Christina. We as TechMet have been very fortunate to be beneficiaries of now three rounds of direct equity investment from the DFC as a US government funding agency. And that's been enormously valuable for us and a partnership that's really facilitated an acceleration of a lot of our investment and development across these critical supply chains globally. And we are active in the US North America, south America and Europe. And, and there needs to be a great deal more of that. I mean the world needs 20 of us yesterday, so unusually we are very supportive and encouraging of competition 'cause we can't in any way make anything like the difference we'd like to make alone. And, and, and we are busy with Department of Energy and with EXIM and with some other US government agencies at the project funding level. And therefore we are, you know, I do have an opportunity to get a view of how much progress there has been with respect to understanding and analysis and prioritization of engagement in critical mineral supply chain security across the Washington ecosystem. So there's, there's progress is enormously important and, and rapidly evolving, not necessarily rapidly enough. And it's, it's easy for everybody to say, okay, we just need more of this, what is being done and we need it more quickly and we need more efficient deployment of capital and support in order to balance this enormously important and challenging global supply chain picture and global geopolitical and national security picture. And it's not, and, and that's all true, but it's, it's, it's a matter of how and how these agencies need to be supported from a legislative point of view in order to be more effective. It's not really good enough to say we can't out China, China and therefore we should put up high walls and just hope for the best and do a little bit of, of, of, of domestic supply chain localization support in order to be a little bit more resilient and secure. It's not true. We can out innovate China, we can out regulate China and we can hold our own in terms of funding supply chains favorable to US industrial needs and national security needs and US standards from a point of view of what the EXIMs and DFCS and d Oovs world can do if they are adequately, legislatively and politically supported. And I think that's what we need more of. We need EXIM to be in their reauthorization process, be allowed to take greater risk and be unleashed and resourced to a point where they can do a lot more of what they are now doing, likewise with DFC and their reauthorization process. We need the political and reauthorization support to allow them to be more flexible with respect to countries that they're able to support projects in with respect to the ability to do more debt with your expect of the budgetary support and political support to build capacity in order to be able to execute and deliver on a larger scale than they are able to do today. And and likewise with other agencies, perhaps the DOE should be allowed to expand their mandate to engage in non-US projects as part of US supply chain support and security as opposed to just domestic projects. So there's a wide range of what needs to be done in all of these areas and I think, you know, we do need to see these challenges and these remedies to this massive challenge in the context of the present market environment, which has been alluded to that is getting worse, you know, in a presently depressed nickel and lithium and cobalt market as a result of temporary short-term oversupply and encouraged and su pushed by the Chinese in terms of over-hyping their investment programs and oversupply, medium term structural undersupply of these critical minerals is growing every day. And Chinese control over these global supply chains is growing every day. So the urgency that we saw when we founded Tech Me seven years ago, all has been

increasingly focused on and prioritized by government agencies in Washington over the last three and four years is becoming that much more urgent and that much more pressing and the consequences of our ongoing failure to adequately supply in alignment with us interest in the medium term are very, very considerable. So we do need to, you know, panic is the wrong word, but we do need to all from our, all of our respective elements of the, the equation redouble our efforts to focus on all of these multifaceted, innovative, and aggressive solutions to a key to industrial competitiveness, a key to grow jobs, a key to growth, a key to climate change mitigation, and a key to national security and geopolitical global geopolitical balance.

>> Thanks Brian. Abigail, I'll turn our last, last question over to you. I'm curious about the current mood on Capitol Hill. What are the latest policy moves that we've seen to boost global partnerships and as we approach the US presidential election this fall, do you also expect the US critical minerals agenda to change?

>> Great question. I think maybe less the mood on Capitol Hill, more kind of the activity across the world with many of the agencies that have been alluded to today. We've seen this huge rush in terms of international collaboration that I think needs to be really solidified through legislative action. You know, this month we have the conference on critical Minerals and materials, which is formerly called the Triad Convening G seven Plus to talk about kind of leveling the standards playing field and then potentially, you know, changing the, the model leapfrogging China through innovative collaboration leveraging the expertise that exists in our national labs. But those of also our, our really important allies like Australia and Canada, you know, we're partnered with the mineral security partnerships. Safe is standing up a minerals investment network with the MSP through the State department. The MSP's done an incredible job in actually supporting projects. The US is the chair of that, trying to usher, usher in kind of collaboration where you're able to leverage expertise from Belgium and, and Yuma core and then use, you know, equity potential through JOGMEC in Japan to help have a germanium concentrate projects stand up in the DRC that's gonna contribute to 20% of the world's germanium at a time when we've seen rising export controls there, right? So that's nothing to, to overlook. I really do wanna emphasize what Rowena and Brian said though, that we have kind of this, this mad rush to the ball and, and there's a lot of great efforts on the part of our diplomats, our commercial diplomats, and then of the agencies that are implementing all of these programs. But unless we're doing it in sequence, unless we're doing it with a connection of the dots between why are we putting money from the Defense Production Act north of Quebec to support graphite to graphite concentrate if it doesn't kind of come to the right purification levels to support graphic production that will go into the anode side of the batteries in the United States. When that's been a clear challenge for us with concentrations with China there. Just to, to Keith's point, I think that, you know, you're seeing a lot of efforts to kind of help surrounding infrastructure investment in the nickel markets beyond the incredible work that Skiff has been doing out of USAID for premium nickel, you also have the partnership for Global Infrastructure investment that is putting it the Luzon corridor. So similar, we've heard a lot about the libido corridor that's getting DFC support, but the Luzon corridor following the, the trilateral between the Philippines, Japan, and the United States is gonna be kind of a new infrastructure corridor in the Philippines where we can have support for surrounding infrastructure that will hopefully lead to further transformation of nickel that we need to kind of help with that highly concentrated market we're seeing in Indonesia right now that's having a distortive effect on prices. So how, how do all these things fit together? And then especially with our elections this year, how are we making sure that we're not throwing the baby out with the bath water to use a bad analogy, but really trying to build instead of rebrand. You know, we have a habit of of loving to rebrand things every time we have elections in this country. And given the kind of long lifeline of this, of this commodity market, you really do need certainty and consistency for industry. And so we really need to build rather than restart, you know, in the change of elections. I will say though, you know, I'm not super concerned about

any change in the White House on this issue. I, I was talking backstage with Brian about how the first equity investment that tech met received for DFC, for, I believe your nickel project started in the Trump administration and, and the Canada US working group on critical minerals that started in the Trump administration. DFC got reauthorized through the BUILD act or recreated, rebranded, so to speak, again through the Trump administration. EXIM got its longest reauthorization, so there's a lot here that we can take advantage of, but I, I hope that kind of the next phase of it is really, you know, not acting disparately, but really pulling all of these programs together so that we have more cohesive and resilient supply chains to actually compete with China.

>> Thanks Abigail. We're

>> Unfortunately out of time so

>> That our session, but a huge, huge thank you to our panelists for making the time to be here today. And thank you all again for joining us here.