

COBALT CONGRESS 2024

30th ANNIVERSARY EDITION

CONFERENCE SUMMARY



The **30th anniversary edition** of the Cobalt Congress took place on 13-14 May 2024 in New York, USA. The conference gathered almost **300 delegates from across the entire cobalt industry**, as well as representatives of automotive and tech companies, high-level policy makers, media, and academia. The participants highlighted the **essential role of cobalt in the green energy transition** and discussed opportunities for the US to secure access to cobalt supplies.

The conference speakers looked at the state of the cobalt market, debated on ways to build a robust cobalt value chain in the US, looked at the role of DR Congo and Indonesia in providing enough cobalt in the context of growing demand, and talked about opportunities for cobalt recycling.

Keynote remarks from high-level US, Indonesian and Congolese politicians and industry leaders, as well as the Cobalt Institute's Cobalt Market Report, generated media headlines across the world. Together with bespoke networking opportunities, this proved the role of the Cobalt Congress as a global forum for discussing the role of cobalt as part of the solution to achieving climate neutrality.

The summary below gives an overview of the Cobalt Congress sessions. More materials from the Cobalt Congress 2024 can be found <u>here</u>.





13 MAY 2024 OPENING REMARKS & KEYNOTE SPEECHES

The Cobalt Congress kicked off with opening remarks from Dinah McLeod, Cobalt Institute Director General, and keynote speeches from: Jose W. Fernandez, Under Secretary for Economic Growth, Energy, and the Environment, U.S. Department of State; Septian Hario Seto, Deputy of Investment and Mining Coordination to the Coordinating Minister for Maritime Affairs and Investments of Republic of Indonesia; and Guy-Robert Lukama, Chairman of Gecamines.

Under Secretary Fernandez highlighted the importance of cobalt for key technologies needed for the green transition, including power generation, EVs, and electrolysers. The US, just like other countries, will need to secure reliable supply chains. The US created the Minerals Security Partnership (MSP) together with its likeminded partners, consisting of 13 countries and the EU. The MSP Forum was launched to open a line of communication and enable easier collaboration. The MSP has a number of projects located all over the world. There are risks when supply chains rely on a single supplier. However, this can be solved with public and private partnerships and collaboration.

Septian Hario Seto reflected on the ambitions of Indonesia to become a strong cobalt supplier, as well as challenges it faces along the way. There are ongoing projects which will lead to the cobalt production capacity expansion doubling by 2030. Indonesia has been exporting nickel and this has contributed to its economic growth in the past few years. However, this will not be enough in the future and there is a need to provide the right incentives for future development, both fiscal and non-fiscal.

The last keynote speaker, Chairman of Gecamines Guy-Robert Lukama, stressed the need to promote sustainable industry development in the DRC and preserve the value of cobalt in the market. Consumption of critical resources and the global demand are growing. The DRC can contribute to achieving the global goals related to the green transition, but the world should also contribute to the DRC.





SESSION 1 | COBALT MARKET REPORT 2023 LAUNCH & STATE OF THE COBALT MARKET

Cobalt Institute launched the 2023 edition of its Cobalt Market Report on 13 May. The report is the most comprehensive publicly available market overview that gives unique insights on the global cobalt market. This year Cobalt Institute commissioned Benchmark Minerals Intelligence to produce the report.

Harry Fisher, Senior Consultant at Benchmark Minerals Intelligence, presented the main findings of the Cobalt Market 2023 report. The report shows that the mid to long-term outlook remains strong and the impact of the geopolitical aspect has been significant. Key considerations for cobalt's outlook are that cobalt remains important for the rapidly growing battery market, batteries will support market doubling in size, and supply growth that will be dominated by the DRC and Indonesia.

The first panel discussion debated on the report's findings and featured the following speakers.

- Kwasi Ampofo, Head of Metals and Mining, Bloomberg New Energy Finance;
- Grace Asenov, Base & Energy Metals Editor the Americas, Fastmarkets;
- **Gregor Spilker**, Director, Metals/Energy Research & Product Development, CME Group;
- Xu Aidong, Chief Expert of Antaike /Advisor of CNIA Nickel Branch and Cobalt Branch;
- Harry Fisher, Senior Consultant, Benchmark Minerals Intelligence.

Panellists reflected on the factors that are driving demand and supply of cobalt. Batteries for EVs make 45% of the market share for demand, which some argue might be considered as a risk. There have been discussions on substitution for cobalt, but with declining prices this conversation has settled down. The US is behind in terms of EVs, but the IRA will likely change this. The US has most growth potential while the EU will struggle this year. The US IRA has been a positive development for the battery industry. However, for the cobalt industry specifically, this is less clear.

While EVs are an important driving force of demand, cobalt used for superalloys is also important. The steady and low prices will help facilitate increasing consumption. There is plenty of supply of cobalt and there is no risk of disruptions in supply.

When it comes to stockpiling, the speakers stressed that countries should do it when prices are low. Cobalt production distribution is uneven, it is concentrated in the DRC and China, and most of other countries do not have any reserves. When the prices are low, countries should take the chance to reshape this distribution.

The speakers agreed that one of the main risks for 2024 is geopolitics. The EU and the US have elections this year and the geopolitical aspect could shift things in 2024. The EU will continue with the broader agenda, but in the U.S. things might change. It will be difficult to completely change the overall approach but the approach to China should be monitored.





LFP is a China story. Why do you think this will remain the case in the future?

On the demand side there are different consumer trends in China compared to the US. China has a well-developed mass market, LFPs sell very well. In the US, consumers want batteries that are high-performance, can last for long distances and fast speed EVs. LFPs are not the best solution for such demand. You can therefore see a clear divergence between these different markets.

In terms of policy towards the EVs industry in the US, we have seen divergence of views between the different government departments but also within them. When it comes to the downstream aspects, we also see divergence even within the same company. Do you think the US is confused on its critical raw materials policy?

We are just at the beginning stages of development. Although things are switching quite quickly, for example with the IRA, we certainly have challenges and will have more changes to come. It is a dynamic situation and there is more room to improve. This is why it is great that policymakers are open to feedback.







SESSION 2 COBALT IN THE US: ACHIEVING US CRITICAL MINERALS SECURITY OF SUPPLY

The second panel looked at how the US can secure supply of critical minerals domestically, and featured five experts:

- **Abby Wulf**, Head of the American Battery Materials Initiative, U.S. Department of Energy;
- Duncan T. Blount, Chief Executive Officer and Director, Chilean Cobalt Corp.;
- **Duncan Wood**, Vice President for Strategy & New Initiatives; Senior Advisor to the Mexico Institute, Wilson Center;
- Heather Smiles, Vice President, Investor Relations & Corporate Development, Electra;
- Dinah McLeod, Director General, Cobalt Institute.

The US, like many other countries, has realised the importance of critical minerals. In a short period of time, several policy solutions have been put in place. The main approach is to use funding as an incentive to move things along. Now there is a need for a more surgical approach and tailored policy tools. The MSP is a recognition that the US has only a certain number of reserves and there is a need to look into how the US can collaborate with other countries. By pulling together all countries that are part of the MSP, coordination can be more efficient.

The panellists emphasised the need to have a more balanced approach, as achieving one objective might lead to neglecting other important objectives. We need to be able to balance different factors such as sustainability, the geopolitical aspect, supply chains diversification, democracy, etc. If all these objectives are to be achieved at the same time, a relatively small range of options to choose from is left. These different objectives pull in different directions. The more you focus on one, the more you move further away from the other.





• China is very far ahead when it comes to the cobalt industry. What do you think China has done right, and how do you think North America can compete?

China is important for the cobalt market. There are many parts of the economy where China is needed and there are no other viable alternatives, at least not in the short-term. China is very far ahead when it comes to the cobalt industry. Chinese companies have been able to show up with Government support and with a wellthought-out plan. China can afford to manage volatility in prices because they have access to support for the low-price periods.

• For Europeans, the IRA is kind of scary because it will impact Europe too. It has been pulling investments from the EU. What recommendations would you make to Europe, for achieving their industrial goals?

Europe can learn from what the US has done. Even though there is money being given out, companies still need to spend it. Most powerful combination is government funding and strong entrepreneurship.

When the IRA was passed, it was very quick. Other jurisdictions have wondered why they have not been consulted. For EU, it was all about sticks, but now policymakers see the carrots are needed. How you present those carrots is what matters. What is important is the human capital knowledge and the R&D side of things. Europe has the ability to be highly innovative and should focus on innovation.





FIRESIDE CHAT WITH MARIE-CHANTAL KANINDA, PRESIDENT OF GLENCORE DRC, CHAIRWOMAN OF THE BOARD OF DIRECTORS KAMOTO COPPER COMPANY (KCC)

In a fireside chat, Dinah McLeod talked to Marie-Chantal Kaninda, President of Glencore DRC, Chairman of the Board of Directors Kamoto Copper Company (KCC).

Marie-Chantal Kaninda described the role of Glencore in building supply chains across the world, as well as the ambition to ensure they are responsible supply chains. Protecting employees and communities is critical as it is impossible to work without the acceptance of communities. Glencore has implemented high standards to ensure responsible and sustainable mining. It is often argued that operating in a difficult environment gives you the right to apply lower standards, but this is not the case for Glencore. Compliance with the right standards is needed across global operations.





SESSION 3 | DRC: STOCKTAKING COLLABORATIVE EFFORTS ON ASM COBALT

The third panel discussion took place in preparation for 2024 OECD Forum on Responsible Mineral Supply Chains. It featured six speakers and was moderated by Susannah McLaren, Head of Responsible Sourcing and Sustainability at Cobalt Institute.

- **Professeur Raphaël Matamba Jibikila**, Coordinator, Cellule Technique de Coordination et de Planification Miniere (CTCPM), Minister of Mines, Democratic Republic of the Congo;
- Éric Kalala, CEO, Entreprise Générale du Cobalt Vice-President of the Chamber of Mines of DRC;
- Assheton Stewart Carter, Co-Founder and Strategic Advisor, Fair Cobalt Alliance;
- **KaLeigh Long**, CEO, Westwin Elements, Inc.;
- **Richard Robinson**, Senior Minerals Advisor, USAID DRC;
- Louis Maréchal, Senior Advisor Minerals and Extractives, OECD.

The session focussed on issues related to artisanal mining of cobalt, and its role in the development of the cobalt market.

Professeur Raphaël Matamba Jibikila emphasized that the DRC is committed to exploiting the full potential of the cobalt sector, not only to feed the development of the DRC, but also of the whole world. Cobalt is important for the market economy and a sustainable economy. DRC has no interest in opposing initiatives that aim to build artisanal mining that respects ESG standards.

Éric Kalala, CEO, Entreprise Générale du Cobalt and Vice-President of the Chamber of Mines of DRC started the session with a presentation, explaining the role of EGC. EGC was created in 2019 with the aim to ensure that these artisanal mining operations comply with the highest standards of social and environmental responsibility and traceability. With global mining supply doubling, ASM supply has lost its market share. However, ASM still remains a single source of income for many people, and there is a need to foster a debate to ensure a sustainable cobalt ASM sector. EGC strives to improve working conditions of artisanal miners, increase revenues for diggers and cooperatives, ensure traceability of artisanal cobalt, and enhance DRC's international reputation.

The panellists stressed there has been a lot of success and progress. There is a shift in how we look at ASM. Previously, it was labelled as risky, associated with unfair pay, child labour and exploitation. If it is categorized as risky, people will lose jobs. That does not mean things can go on as they are, but that we need to invest and make efforts to fix the shortcomings. The shift in the narrative is needed, we need to look at it from the perspective of people who need to secure incomes, but in a safe and sustainable way.



Downstream companies have realized they just cannot stay away from the ASM. Everyone is needed to ensure the recent positive developments are consolidated in the future. ASM is not a negligible producer and contributes to the global cobalt market.







FIRESIDE CHAT WITH ERNEST SCHEYDER

Marina Demidova, Head of Communications at the Cobalt Institute, held a fireside chat with Ernest Scheyder, journalist and author of "The War Below" – a book that takes a look inside the US' ambition to achieve energy transition by securing access to key critical metals.

Ernest Scheyder gave insights into issues covered in his book, which focusses on the new economic war for critical minerals, as countries begin the race to secure supplies for the future. The IRA has sparked a lot of interest from manufacturers and there will be interesting opportunities for the cobalt industry. We are starting to see more and more countries active in this area. The US will have to compete for supply, and the supply is limited.

The main takeaway from his research is that people need to have more understanding of what mining is and why we need it, in order to make informed choices. Governments should foster a collective discussion about where, how, and why we want and need critical minerals.







14 MAY 2024 | EXPERT PRESENTATION: FOCUS ON CHINA

Dr Yanchen Wang, Managing Director at SMM (Shanghai Metals Market) UK, presented the role of China in the development of the cobalt industry. China has very limited cobalt reserves compared to other countries. They lie mostly in other countries (DRC, Australia, Indonesia, Cuba) with China holding only 1% of the global cobalt reserve. As the largest cobalt consumer in the world, China also needs a safer cobalt supply chain to meet the demand from manufacturers.

Chinese enterprises have increased their cobalt market share in the DRC to secure their supply. China contributed to 56% of production in the DRC. This move started a long time ago when the government introduced a policy to encourage companies to invest outside China.

Although global EVs market is facing headwinds, the trend of vehicles electrification is irreversible. In 2024, China will produce and sell more EVs. LFP battery cells enjoy prominent cost edge, while the share of NCM battery cells is declining. In China, production of LFP batteries is growing. Cobalt demand from the EVs industry is expected to keep growing. The demand from consumer electronics is also recovering and increasing. Technology development in the battery industry has a huge impact on the demand of different battery metals, including cobalt. This trend is expected to continue.





SESSION 4 | COBALT VALUE CHAIN IN NORTH AMERICA: CAN SUPPLY MEET DEMAND?

The fourth panel discussion featured four speakers and was moderated by Marina Demidova, Head of Communications at the Cobalt Institute.

- Jennifer Fendrick, Director of Public Policy, KoBold Metals;
- Matthew Zolnowski, President, Greyfriars LLC;
- **Michael R. Hollomon II,** Commercial Director / Member of the Board of Managers, US Strategic Metals;
- Navaid Alam, President and CEO, EVelution Energy.

As the transition to a green economy is upending established value chains and cobalt demand is expected to increase, the US is assessing its capabilities to build up cobalt value chain domestically. This panel looked at cobalt mining and refining potential in the US, and how partnerships can help the US.

Participants reflected on the US Government policies on critical raw materials and the main challenges. The key issue is to maintain a common thread of policy throughout the different administrations. The Biden administration has enacted many new policies in a short period of time but there is a need for long-term consistency. Permitting system in the US is broken, regardless of what kind of project is being built. The panellists recognized that the US cannot and should not do it alone. Friendshoring and onshoring should be part of the strategy.

When talking specifically about cobalt and the impact of the IRA, no money has been given to cobalt projects. There is a significant level of ambition to invest in supply chains, but it is unclear when the funds will be put into projects. Investors are afraid of volatility. Investors can try to diversify across different materials, but this is not easy. It is hard to argue for it when prices are extremely volatile. It is difficult to get the money out due to the fear of this volatility. The Government should come in to provide security.





Q&A

• A lot of imports are flowing into the US, why is Glencore always the "middle man"?

In the past, attempts to organise dialogue in the DRC often failed. Things have changed now. The US has been reaching out and was able to establish a connections with the Congolese miners. This is welcome as the US needs to be working directly the Congolese, and not only through Glencore.





EXPERT PRESENTATION: THE IMPACT OF CHEMICALS MANAGEMENT POLICIES ON THE US SUPPLY CHAIN: USING US EPA IRIS AS A CASE STUDY

Dr Vanessa Viegas (DABT, ERT), Head of Scientific and Regulatory Affairs and Principal Toxicologist (Human Health) at the Cobalt Institute held a presentation on the impact of chemicals policies on the US supply chain using the US EPA Integrated Risk Information System (IRIS) as a case study. IRIS develops human health assessments that provide health effects information on environmental chemical to which the public may be exposed.

In the last few years, there has been a considerable uptake in cobalt chemicals management. Unrealistic restrictions can have an impact on costs for companies, but also on other regulatory bodies across jurisdictions that are looking to develop their own national regulatory frameworks. Cobalt has a very diverse and widespread value chain that is interconnected, and it is essential to have a proportionate chemicals management policies. A safe exposure level for cobalt does exist.

There are currently 18 chemicals in IRIS, cobalt is one of them. The final stage entails the final IRIS report. It is a long multi-step regulatory process that can last for a decade. The Cobalt Institute has been dealing with it since 2022. The main areas to tackle with IRIS are transparency, science and default conservatism, stakeholder engagement (getting the whole value chain together), final toxicity values (the Cobalt Institute is undertaking an in-depth data programme), economic impacts (they need to be considered), and the timeline (which is very long).





SESSION 5 | UNLOCKING THE VALUE OF SECONDARY COBALT

In the last panel discussion, Tom Fairlie, Senior Sustainability Manager at the Cobalt Institute, hosted four speakers:

- Dr. Bill Fisher, Co-Founder and CTO, Exsolve Recycling Technologies
- Harry Kumar, Director of Government Relations, Li-Cycle
- Joe Kaderavek, CEO, Cobalt Blue
- Lynn Lupori, Head of Consulting North America, CRU

The session focused on the role of recycling and the development of a secondary cobalt market.

The panellists acknowledged that there are plenty of challenges to extract cobalt from products, but it is possible. Policy, collaboration, and investment can unlock value of the secondary cobalt market. Incentives for people to collect and recycle materials have to be driven by the Government. Tax incentives and other forms of incentives are lagging.

Used materials have mostly been flowing to China. To bring that back, a supportive framework, both for producers and users, must be built. It should not be automatically sent back to one location. To achieve this, we also need to have good infrastructure in place.

Cobalt drives a lot of the value in small appliances because of the ability to make smaller and more compatible applications. There has been a lot of talk about the LFP but cobalt will continue to be demanded due to its chemistry.

For both collection and processing of materials, legislation and incentives are needed. Not only the federal but also state and local levels need to be aligned. Manufacturers need to become more actively involved in the supply chain, processing, and manufacturing near each other. Having that is a critical portion of the overall system.

Recycling in general is not a new industry, it has been running for years. It will get there, but recyclers are still a small subset of the industry. When it comes to funding, there are complexities of going through the applications and the review processes are very long and tend to be delayed. Companies do not have the resources to go through them. It should be better streamlined. Part of the challenge is to balance getting more EVs on the ground, but also creating an industry of battery producers.

Panellists also touched upon the issues around traceability and due diligence on secondary materials. Sustainability and ESG have different markets and it is not yet clear what these mean for different people. They need to be further refined. The US is lagging behind the EU when it comes to traceability. It is harder to implement that in the US, the EU is a bit more far ahead in terms of sustainability awareness. Education of consumers and leaders to provide the policy and financial environment is crucial. Manufacturers also need to be educated on how they can promote their products.



Q&A

What is the outcome on the demand side?

It will be driven by consumer demand. Ultimately it will come down to what the implications for recycled materials are and for consumer to want to buy green products. Demand will increase, but the pace will be dictated by the broader policy environment.

What are some of the considerations for due diligence on secondary materials? Are there any risks of greenwashing, especially related to ASM?

There is a possibility it could happen very early on. It would be useful to have a passport or some kind of a tool for traceability, similar to what is being rolled out in Europe for batteries. The market is too new for that now.

• Would you say we need more regulation?

We do need more guidance. When it comes to regulation, potentially, but it is a question of what kind of regulation we need.

• How do we roll something out like green premiums, how do we give a choice to consumers? How do you deploy this? How do you get the consumers participate?

It is harder to implement that in the US, the EU is a bit more far ahead in terms of sustainability awareness. In the US, it is very much focused on costs at this moment. Education of consumers and education of our leaders to provide the right policy and financial environment is crucial. Manufacturers also need to be educated on how they can promote their products.









Contact us if you have any questions

- Phone: +44 1483 578877
- Email: ci@cobaltinstitute.org
- Address: 3rd Floor, 45 Albemarle Street, Mayfair, London W1S4JL UK
- Web: www.cobaltinstitute.org
 - in Cobalt Institute