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Building an EV and Critical Mineral Supply Chain Agreement

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About the American Leadership Initiative

The American Leadership Initiative (ALI) is working with elected officials and other stakeholders to develop a 21st century vision and policy agenda for American global leadership, using diplomacy and economic policy tools to promote a more inclusive, sustainable, and secure world. Our work focuses on four pillars: advancing inclusive and sustainable growth, meeting the China challenge, developing new trade and industrial policy paradigms, and promoting democracy, human rights, and rule of law.

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Executive Summary

The road to the Administration's EV goal of 50% of all U.S. vehicles sales to be electric by 2030, lies at the intersection of its three key priorities: to meet ambitious climate goals, to reinvigorate America's manufacturing base, and to reduce our dependency on China for key technologies.

The Administration has turbocharged its efforts towards this audacious goal through unprecedented investments in the Inflations Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA), yet the road to EVs remains under construction.

While the U.S. can and should continue to encourage and support domestic suppliers, negotiating an EV Supply Chain Agreement (EVSCA) is an important step both to meeting America's EV and climate goals and reducing our dependency on China.

Negotiating an EV Supply Chain Agreement will help meet America's climate goals and reduce our dependency on China.

Meeting EV global demand will require at least 384 new mines by 2035, according to Benchmark Mineral Intelligence.[1] This will necessitate significant investment globally in the mining and metals industry as well as recycling facilities over the next 15 years to secure sufficient supply of cobalt, nickel, and other critical metals. Given long lead times from permitting to successful operating capacity, now is the time to act.[2]

Today, Chinese companies control 80 percent of all critical mineral mines and are the largest processors of copper, nickel, cobalt, lithium and rare earth elements. They have more than three-quarters of the world's manufacturing capacity for EV batteries, and a single Chinese company, CATL, controls one-third of the entire global battery market.[3]

Dependence on China for critical minerals and batteries also creates serious supply

1. https://source.benchmarkminerals.com/article/more-than-300-new-mines-required-to-meet-battery-demand-by-2035
2. Ernst and Young, Critical Minerals Supply and Demand Issues, http://www.ey.com/en_us/mining-metals/crtical-minerals-suppy-and-demand issues
3. SAFE, Center for Critical Minerals Strategy, A Global Race to the Top; March 2023
4. China announces export restrictions on graphite, an essential material in EV battery production | TechSpot

chain vulnerabilities for the U.S. We have seen China restrict these minerals in response to various disputes, such as in 2010 when it restricted mineral exports to Japan in 2010 in response to a maritime dispute, or most recently when it announced a global export restriction of gallium, germanium and graphite,[4] in response to Western restrictions on exports to China of semiconductor manufacturing equipment. U.S. dependence on China for critical minerals has a broader impact than EVs, impacting many U.S. technology and threatening our national security.

The concentrated supply chain in China, combined with the massive demand projections, presents a daunting challenge for U.S. EV manufacturers as they seek to align sourcing and secure their own critical mineral supplies.

The IRA's strict requirements for EV tax credits will be a challenge for automakers given China's current dominance.

The IRA and the IIJA provide an important catalyst for domestic investment at home, both to help with the minerals value chain, as well as to increase domestic battery manufacturing. However, the IRA's strict requirements for vehicles to qualify for consumer tax credits will be a challenge for automakers given China's current dominance.

To receive the full value of the Inflation Reduction Act's Clean Vehicle Tax Credit a portion of the vehicle's critical minerals must have been extracted or processed in the United States or in a country with which the U.S. has a free trade agreement. Vehicles purchased before January 1, 2024, must contain at least 40% domestically sourced critical minerals to qualify, ratcheting up through 2027, after which the percentage required is 80%.[5]

Meeting critical minerals requirements accounts for half the value of the Clean Vehicle Tax Credit. The other half requires that a certain percentage of the vehicle's battery components were manufactured or assembled in North America. At present, batteries must contain at least 50% domestically manufactured or assembled components; starting on January 1, 2028, this increases to 100%.

5. Cullen S. Hendrix, https://www.piie.com/blogs/realtime-economics/made-america-puts-brakes-electric-vehicles-hopes-push?
6. https://ustr.gov/about-us/policy-offices/press-office/press-releases/2023/march/united-states-and-japan-sign-critical-minerals-agreement#:~:text=WASHINGTON%20%2D%2D%20United%20States%20Trade,Critical%20Minerals%20Supply%20Chains%E2%80%9D).

Starting in 2025 for critical minerals and 2024 for battery components, no vehicle will qualify for the EV tax credit if any of these materials were sourced from a "foreign entity of concern," such as China.

Given that most of the minerals and battery components are not found in countries with which the U.S. has a free trade agreement, the U.S. has looked for other solutions. In March of this year, the U.S. and Japan signed an Agreement to Strengthen Critical Minerals Supply Chains,[6] which reaffirms the US and Japanese commitments on prohibition on export restrictions, collaborative efforts to address unfair trade practice and non-market policies, best practices on investment screening, and labor rights. The US is negotiating similar agreements with the EU and the UK. Other countries, such as Indonesia and Vietnam have also indicated interest.

While these agreements offer a short-term fix for the immediate challenge, negotiating a comprehensive EVSCA is a more strategic approach to reduce vulnerability of the complex EV supply chain, and would and facilitate the transition to EVs. Stable and secure access to the minerals and products in the EV chain is essential to both the U.S. economy, national security, and our clean energy goals.

To adequately address the challenge the U.S. must have both suppliers and purchasers in such an agreement and have robust standards. While most of the advanced economies with critical mineral resources already have governance structures that provide for worker, environmental and social protections, these protections are often weak and implementation nonexistent in many of the less developed, resource rich countries.

The developed countries in the agreement must commit to work with their funding agencies and NGOs to put proper legal and governance frameworks in place and provide capacity building and technical assistance to assist the lesser developed countries in the agreement to elevate and implement higher standards. These standards should include: worker protections, environmental standards and sustainable mining, community and stakeholder consultation, transparency and traceability, anti-corruption and trade facilitation.

These governance frameworks should ensure compliance with an enforcement of strong labor and environmental laws and regulations for mining, smelting and refining operations. This is a critical component to making the EVSCA a success. Countries that join and meet the high standards of such an agreement should meet the criteria to qualify for the tax credit under the U.S. IRA legislation.

Negotiating a comprehensive EVSCA is an opportunity for the U.S. to be a global leader and work with its allies to create a supply chain that incorporates high standards and American values- one that is transparent and accountable, upholds human rights, enforces sustainability, and supports U.S. allies while providing economic sustainability for low-income countries that are resource producers. This is the moment to negotiate a comprehensive EV Supply Chain Agreement to achieve EV adoption goals, advance America's climate and national security goals as well as provide a values-driven alternative to China's approach and standards.

Introduction

The road to the Administration's goal to have 50 percent of all U.S. vehicles sales to be electric by 2030 lies at the intersection of its three key priorities: to meet ambitious climate goals, to reinvigorate America's manufacturing base, and to reduce our dependency on China for key technologies.
While the Administration has turbocharged its efforts toward this audacious goal through unprecedented investments in the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA), the road to electric vehicles (EVs) remains under construction.

Bridging today's reality to U.S. EV ambitions will require long-term commitment paired with urgent action to resolve a range of global and domestic challenges. While the U.S. can and should continue to encourage and support domestic suppliers, negotiating an EV Supply Chain Agreement is both an important step to meeting America's EV and climate goals as well as a strategic initiative to reduce our dependency on China.

Bridging today's reality to U.S. EV ambitions will require long-term commitment and urgent action.

The U.S. is not alone in its quest to transition to electric vehicles. Global demand for mineral inputs for EVs and battery storage is expected to grow at least 30-fold by 2040 according to the International Energy Administration.

Meeting this global demand will require at least 384 new mines by 2035, according to Benchmark Mineral Intelligence.[1] Recycling battery materials in sufficiently large quantities could reduce the number of new mines needed to 336.[2] This would necessitate significant global investment in the mining and metals industry, as well as recycling facilities, over the next 15 years to secure sufficient supplies of cobalt, nickel, and other critical metals. Given long lead times from permitting to successful operating capacity, now is the time to act.[3]

Today, Chinese companies control 80 percent of all critical minerals and are the largest processors of copper, nickel, cobalt, lithium, and rare earth elements. They have more than three-quarters of the world's manufacturing capacity for EV batteries and a single Chinese company, CATL, controls one-third of the entire global battery market.[4]

Of the five critical minerals needed for EV production — lithium, nickel, cobalt, manganese, and graphite — three of them, cobalt, manganese, and graphite, are not found or produced in North America in meaningful quantities.

Dependence on China for critical minerals and batteries also creates serious U.S. supply-chain vulnerabilities. We have seen China restrict access to access to these minerals in response to various disputes, such as when it restricted mineral exports to Japan in 2010 in response to a maritime dispute, or more recently when it announced a global export restriction on gallium, germanium, and graphite, in response to Western restrictions on exports of semiconductor-manufacturing equipment.[5] U.S. dependence on China for critical minerals impacts more than EVs – it also affects a wide range of U.S. technologies and threatens our national security.

The concentrated supply chain in China, combined with the massive demand projections, present a daunting challenge for U.S. EV manufacturers as they seek to align sourcing and secure their own critical mineral supplies.

The IRA and the IIJA provide an important catalyst for domestic investment, both to help with the minerals value chain, as well as to increase domestic battery manufacturing. Since President Biden has entered office, American automakers announced $85 billion in investments in EVs and battery manufacturing in the U.S.[6] However, The IRA's strict requirements for vehicles to qualify for consumer tax credits will be a challenge for automakers given China's dominance.

To receive the full value of the Inflation Reduction Act's Clean Vehicle Tax Credit (up to $7,500 for qualified purchases), a portion of the vehicle's critical minerals must have been extracted or processed in the United States or in a country with which the U.S. has a free trade agreement.[7] Critical minerals recycled in North America can also fulfill this requirement. Vehicles placed in service before January 1, 2024, must contain at least 40 percent domestically sourced critical minerals to qualify; these thresholds ratchet up yearly through 2027, after which 80 percent is required.[8]

Meeting critical minerals requirements accounts for half the value of the Clean Vehicle Tax Credit. The other half requires that a certain percentage of the vehicle's battery components were manufactured or assembled in North America. At present, batteries must contain at least 50 percent domestically manufactured or assembled components; starting on January 1, 2028, this increases to 100 percent.

Starting in 2025 for critical minerals and 2024 for battery components, no vehicle will qualify for the EV tax credit if any of these materials were sourced from a "foreign entity of concern," such as China.

Given that most of the minerals and battery components are not found in countries with which the U.S. has a free trade agreement, the U.S. has looked for other solutions. In March of this year, the U.S. and Japan signed the "Agreement to Strengthen Critical Minerals Supply Chains," which reaffirmed the U.S. and Japanese commitments to prohibiting export restrictions, collaborating to address unfair trade practice and non-market policies, as well as investment screening and labor rights best practices.[9] The U.S. is negotiating similar agreements with the EU and the U.K. Other countries, such as Indonesia and Vietnam have also indicated interest.

While these agreements offer a short-term fix for the immediate challenge, negotiating a comprehensive EV supply chain agreement is a more strategic approach to reducing EV supply chain's vulnerability, and would facilitate the transition to EVs. Stable and secure access to the minerals and products in the EV chain is essential to the U.S. economy, national security, and our clean energy goals.

Negotiating a comprehensive EV supply-chain agreement is an opportunity for the U.S. to be a global leader and work with its allies to create a supply chain that incorporates high standards and American values – one that is transparent and accountable, upholds human rights, enforces sustainability, and supports U.S. allies while being economically sustainable for low-income countries which produce these key resources.

A High Standard Agreement

Critical minerals mining is an industry that has faced pervasive global environmental challenges and human rights abuses. Negotiating a comprehensive EV supply chain agreement is an opportunity for the U.S. to lead globally and work with its allies to set rules that insure fair, humane, and sustainable mining practices throughout the supply chain. A comprehensive agreement with allies will also send a stronger signal to the market regarding complying with these standards.

Currently, there are no internationally agreed upon standards for sustainable mining. Establishing clear standards and guidelines for sustainable mining, including recycling and reuse, is vital to creating a high standard, sustainable supply chain. There are a number of existing initiatives upon which an EV agreement could build, including

guidelines set by the Energy Resource Governance Initiative (ERGI), the Initiative for Responsible Mining Assurance (IRMA), the Extractive Industries Transparency Initiative (EITI), and the OECD's Due Diligence program. Our allies are also addressing this issue with the EU recently passing its European Critical Raw Materials Act establishing certain due diligence requirements.[10] Coordinating with local environmental and community groups in resource rich countries is vital to ensuring that any solution includes local concerns.

Historically, the global mining industry has been plagued with human rights abuses, exploitation, and corruption. While there have been a variety of recent government and industry initiatives to develop standards to combat these challenges, implementation has been spotty and is largely dependent on local regulations.

As part of the 2012 Dodd-Frank legislation, the U.S. issued a ruling requiring companies reporting to the Securities and Exchange Commission to disclose if their products contain conflict minerals – such as tin, tantalum, tungsten, and gold – originating from the Democratic Republic of Congo (DRC) or its neighbors.[11] While the rule didn't mandate a specific form of disclosure, the Responsible Minerals Initiative created a Conflict Minerals Reporting Template which many companies have used.[12] These initiatives, however, have not looked at production across the supply chain. An EV supply-chain agreement must develop human rights and labor standards at every step of the supply chain.

As the demand for critical minerals and EVs grows, this is the moment for the U.S. to work with its partners to develop high-level and transparent standards for environment, labor, and human rights standards across the supply chain. Developing standards that reflect American values will give the U.S. a competitive advantage, especially regarding low-income, mineral rich countries, who have suffered from China's low standard labor, human rights, and environmental practices.

Many critical minerals are found in countries where corruption is widespread, especially in mining permitting, offtake agreements, and other parts of the process.[13] U.S. high standards on preventing corruption, such as the Foreign Corrupt Practices Act, and ensuring transparency in the mining process are important elements in an agreement. Reducing corruption will also enable more responsible actors to invest in these mineral rich countries.

As the U.S. partners with mineral rich, low-income countries that are less developed it will be important to build their capabilities to move up the production chain and

support economic growth. This will require coordination with mining companies, manufacturers, communities, and financing institutions to ensure adequate funding for training on sustainable practices, worker safety, and enforceable commitments to fundamental labor and human rights.

The U.S. and its trusted partners should establish standards ranging from permitting frameworks to good governance structures for labor and the environment to safe and effective waste management and recycling. Establishing clear rules will give manufacturers and governments greater certainty, encourage offtake agreements to increase sustainability, and reduce harm and offer sustained economic growth to mining communities. Having high standards in place combined with community consultations could also reduce potential legal challenges faced by companies looking to make mining investments.

It is important to help resource rich countries move up the production chain.

The U.S. can meet the challenge only by establishing trusted partnerships that reflect our commitment to the environment, human rights, and economic opportunity for all. Finally, negotiating such a comprehensive agreement could serve as a foundation for a broader clean energy and environmental goods supply chain agreement to facilitate achieving both domestic and global climate goals.

Existing Arrangements

In addition to the agreement with Japan negotiated earlier this year, the U.S. is involved in a number of critical mineral task forces and working groups to advance cooperation in this area.

The Energy Resource Governance Initiative (ERGI), established by the State Department in 2019, focuses on promoting mining governance and resilient supply chains.[14]

In June 2022, the U.S. announced the Minerals Security Partnership (MSP) to bolster critical mineral supply chains.[15] It is designed to foster public and private investment, increase transparency, and promote high environmental and governance standards throughout critical minerals supply chains and ensure that they are produced,

processed, and recycled in a manner that helps countries realize their resources' full potential.

Members include Australia, Canada, Finland, France, Japan, the Republic of Korea, Norway, Sweden, the United Kingdom, the United States, and the European Union. Other mineral-rich countries, including Argentina, Brazil, the DRC, Mongolia, Mozambique, Namibia, Tanzania, and Zambia are not members but have attended meetings.

In December 2022, the U.S. signed a Memorandum of Understanding with the DRC and the Republic of Zambia, two of the world's largest producers of cobalt and other key minerals.[16] According to the MOU, the participants will cooperate in feasibility studies and technical assistance to facilitate transparent, competitive tenders. The U.S. committed to supporting the development of an EV-battery value chain in the DRC and Zambia in a manner consistent with preventing corruption and with the obligations under the U.N. Convention Against Corruption. The U.S. intends to encourage both public and private financing and investment in this initiative.

Elements of an EV Supply Chain Agreement (EVSCA)

The U.S. has taken important steps to both facilitate access to critical minerals and negotiate agreements with selected countries with which we do not have free trade agreements, along the lines of the one completed with Japan and those in process with the EU and U.K., to allow their EVs and EV components to comply with the IRA requirements. A more comprehensive approach is needed, however. The MSP is an important vehicle to encourage and facilitate investment in mining and processing projects, but that is a long-term effort. The U.S. needs a complementary initiative that will secure short- and medium-term access to critical minerals and batteries from sources other than China and Russia.

This is the moment to negotiate a comprehensive EV Supply Chain Agreement to achieve EV adoption goals, advance America's climate and national security goals, and provide a values-driven alternative to China's approach and standards. Countries that join and meet such an agreement's high standards should qualify for the Inflation Reduction Act's EV tax credit.

To adequately address the challenge the U.S. must have both suppliers and purchasers in such an agreement. The agreement should have the goal of including the MSP countries of Australia, Canada, Japan, Finland, France, Germany, Korea, Sweden, the United Kingdom, the United States, and the European Union, as well as key mineral producing countries in Latin America, Africa, and Asia – including Chile, Colombia, Argentina, Peru, Mexico, Zambia, the DRC, South Africa, Indonesia, and Vietnam.

Mandate the elimination of child and forced labor from the supply chains.

An EVSCA should have robust standards. While most of the advanced economies with critical mineral resources already have governance structures that provide for worker, environmental, and social protections, those structures are often weak and implementation nonexistent in many of the less developed, resource rich countries.

The developed countries in the pact must commit to work with their funding agencies and NGOs to provide technical assistance and capacity building for the lesser-developed nations in the agreement to put proper legal structures in place in order to elevate and implement higher standards.

It should also assist countries to establish regulatory frameworks that ensure good governance, from permitting and licensing to promoting social benefits. These frameworks should have environmental and labor protections and ensure compliance with and enforcement of strong environmental laws and regulations for mining, smelting, and refining operations. This is a critical component of making the agreement successful.

An EVSCA should include the standards detailed below. It is necessary, however, to keep in mind that the ultimate goal is to diversify and facilitate U.S. access to minerals and batteries. Given that goal, it is critical that low-income countries be allowed to gradually phase in these standards. Developed countries should provide adequate aid and financing for those countries to be able to implement and reach these standards. Without this type of assistance, the mineral supply could be dampened by countries being unable to meet these standards.

Standards

Worker Protections

Mandate robust worker protections, including eliminating child and forced labor in the supply chain, ensuring safe conditions for workers, and the enforcement of local labor regulations. Enforcement should include using mapping, traceability, and transparency tools in value chains to prevent child and forced labor.

Environmental Standards and Sustainable Mining

Uphold both high environmental standards and sustainable mining practices. Currently, there are no internationally agreed upon standards for either sustainable mining or protecting the environment and communities around mines. The EVSCA should have clear sustainable mining standards, which will send powerful signals for investment, ensuring a race to the top rather than the bottom for mining practices. These standards could draw from existing guidelines developed by the OECD, the Energy Resource Governance Initiative, and the MSP.[17]

Community and Stakeholder Consultation

Require meaningful community consultation and engagement early in the process for citizens as well as local and indigenous communities to have a voice in the process. These consultations should strive to ensure that the projects provide benefits for local communities and that projects maintain safe, fair, inclusive, and ethical conditions in the community.

Transparency and Traceability

Require transparency and traceability in the supply chain. The battery supply chain is opaque, which makes it difficult to know where minerals are sourced, whether they were mined sustainably, and without child or forced labor. Transparency should cover those minerals' refining and processing the processing facility's environmental performance.Such requirements can be a challenge, however new software and blockchain tools are improving the ability to have transparent sourcing and supply chains.[18]

Anti-Corruption

Require transparent fiscal frameworks that provide accountability and reduce the opportunity for corruption in order to protect workers and communities and minimize environmental impact. Mineral-rich countries should adhere to standards like those defined by the Extractive Industries Transparency Initiative (EITI), to which 50 governments currently belong.[19] EITI was established to combat corruption and increase of payment- and revenue-transparency in the mining sector.

Trade Facilitation

EVSCA countries should agree not to impose export restrictions on critical minerals. Export controls on critical raw materials have increased five-fold since the OECD began collecting data in 2009.[20] While China leads the pack on such restrictions, other countries, including Argentina, Vietnam, the DRC, and Kazakhstan, have acted similarly.[21]

Benefits to Countries that Join the EVSCA

The resource rich countries that join the EVSCA and meet the standards should have preferential market access to sell their minerals in the partner nations. One avenue is through access to lucrative government- procurement markets. Governments have tremendous power to leverage their procurement dollars by purchasing only from mines that adhere to high environmental and labor standards. Establishing best practices for government "green" procurement can reinforce sustainable mining and refining and high standards for environmental and worker protections.

Countries that join the EVSCA should be treated as meeting the IRA standards for minerals and batteries.

Using these standards for U.S. government EV procurement would have a significant impact. In December 2021, the Biden Administration issued an Executive Order calling for most federal vehicle purchases to be zero-emission vehicles (such as EVs) by 2035. This order will affect about 380,000 federal vehicles as they need to be replaced, meaning that agencies will need to acquire roughly 30,000 zero-emission vehicles each year.[22]

The U.S. is already pursuing green procurement initiatives in different venues.

The U.S. and the EU are negotiating the final agreement under the Global Arrangement on Sustainable Steel and Aluminum, which will provide preferential trade and procurement to low-carbon steel and aluminum.[23] Similarly, the U.S.-EU Trade and Technology Council has a work program on green public procurement "to pave the way for better policies and practices for environmental considerations in government procurement that can make a substantive positive impact."[24]

These efforts dovetail with domestic U.S. green procurement initiatives. In December 2021, the Administration issued an executive order on "Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability," which calls for using public procurement to model sustainable, environmentally sound purchasing to reduce greenhouse gases and other forms of pollution.[25]

A similar policy requiring the U.S. government to purchase EVs and critical minerals only from countries which comply with EVSCA standards could advance responsible production and help de-risk private investment in targeted projects.

Countries that join the EVSCA should be treated as meeting the Inflation Reduction Act standards for batteries and critical minerals. As discussed earlier in this paper, limiting the U.S. to EVs, batteries, and critical minerals produced domestically or by our free trade agreement partners will not be adequate to meet our green energy goals. And it will also allow China to continue to expand its EV and critical mineral dominance.

Other Considerations

In addition to the primary EVSCA elements discussed above, there are some additional elements to consider which would increase the agreement's effectiveness.

Moving Up the Value Chain

The U.S. and the developed countries in the EVSCA should provide technical assistance and capacity building to assist lower income, resource rich countries to move up the value chain from simply extracting minerals to processing them. They should commit to providing technical assistance and capacity building to help those countries establish processing facilities.

Ideally the purchasing countries in the agreement which are also Minerals Security Partnership signatories will pool resources for training and financing for new facilities that meet the high standards set out in both protocols. It would also be important for the U.S. to allocate additional funding from the U.S. Export-Import Bank, the U.S. International Development Finance Corporation, and USAID to support these initiatives. Availability of financing and capacity building assistance for countries to develop processing capabilities are essential components in U.S. competitiveness and in efforts to counter China's economic stronghold in the EV and clean energy supply chain. Working with our trusted partners, the U.S. can offer less developed, mineral-rich countries a model that genuinely enhances sustainable economic growth and development.

Public-Private Partnerships

Government policies and funding have the power to drive private sector investments, which has been evidenced by many announcements following passage of IRA.

All of the standards and criteria discussed for the EVSCA will require close collaboration between governments, communities, NGOs, and the private sector. The EVSCA should have mechanisms for public-private partnerships in a range of areas to facilitate reaching the agreement's goals. These could include partnerships for developing the blockchain tools necessary for facilitating supply chain traceability, working with NGOs to track and address forced and child labor, battery "passports," which would mark batteries as meeting EVSCA standards, and more.

Conclusion

Negotiating an EVSCA is an ambitious but important undertaking – a critical tool to secure an adequate and stable supply chain for America's EV goals as well as for loosening China's monopoly as a supplier of batteries and critical minerals for EVs. It is also an important opportunity for the U.S. to set high standards in an industry known for rampant human rights violations, corruption, forced and child labor, and mining practices that are harmful to the environment and surrounding communities. Such standards would also offer lower income, resource-rich countries an opportunity to move away from China's low standard practices, as well as move up the value chain to receive greater benefits from their resources.

To have an even more meaningful impact, and incentivize compliance, Congress should pass such an agreement with enforcement provisions for the labor standards, as well as funding for technical assistance and capacity building to assist the resource rich countries to implement the standards and attract investment.

Such an agreement could be initially negotiated with a small group of countries to expedite the process and then expanded over time. The U.S. has already started tackling this supply chain problem through the standards set in the Minerals Security Partnership, the bilateral agreement negotiated with Japan (and the similar agreements being negotiated with the UK and the EU), and the Memorandum of Understanding with the DRC and Zambia, although the standards prescribed under these initiatives tend to be quite general.

Now is the time to negotiate a comprehensive agreement which would provide the U.S. with a high standard, stable EV and critical mineral supply chain that breaks U.S. dependency on China and protects our national security by diversifying the U.S. supply of battery and critical minerals.

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