Partnerships for Circularity Tackling the Critical Raw Material Value Chain

World Circular Economy Forum 2024 Accelerator Session

THE OUTCOME REPORT

Goal

The role of Strategic Partnerships to establish mutual benefits for the EU and the Global South

Industry

Governmental organizations Think tanks Businesses

Co-hosts



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SUMMARY

The World Circular Economy Forum (WCEF) 2024 included a pivotal Accelerator Session focused on "Partnerships for Circularity - Tackling the CRM Value Chain." This session spotlighted the vital role of international cooperation in enhancing circular economy practices globally, particularly in managing the critical raw materials (CRMs) necessary for Europe's green and digital transitions. The assembly facilitated dynamic discussions among experts, policymakers, and industry leaders to forge actionable, sustainable economic growth and resilience strategies.

Key insights from the session included the importance of strategic partnerships in the area of global trade in relation to critical raw materials, emphasizing collaboration between the Global North and South to ensure a stable and fair supply of CRMs. As Lasse Miettinen, the Director for Sustainability Solutions in the Finnish fund Sitra, highlighted, these partnerships are aimed at establishing mutual benefits, which include supporting circular business models and enhancing recycling practices for the green industrialization of the Global South.

In that context, the presentation of Eline Blot, Senior Policy Analyst at IEEP, and Arpit Bhutani, COO of Circular Innovation Lab, revolved around the ECRMA's significant role in shaping international relationships and securing the supply of strategic raw materials for the EU. It was underscored that the Act called for diversifying the EU's sources of critical raw materials, shifting the focus from Free Trade Agreements to strategic partnerships as potential solutions that could prove vital for securing the materials necessary for the EU's transition to a cleaner and more technologically advanced economy.

The session also stressed the need for policy innovations to support the efficient management of CRMs. Recommendations called for enhanced investment in technology and increased focus on recycling capabilities within the EU and partner countries. Additionally, the need for robust frameworks on a global level to support environmental and social standards in CRM sourcing was emphasized.

The panel discussion, which occupied the second part of the session, also produced insightful talks on the challenges and opportunities within the CRM value chain for the EU and its strategic partners. Each panelist took the floor and provided practical examples of how sustainable practices must be adopted and scaled up through international cooperation and policy support. Additionally, they examined the socioeconomic dimensions of circular economy practices for CRMs in developing countries, highlighting how they can drive job creation, economic competitiveness, and sustainable development.

In sum, the Accelerator Session at WCEF 2024 successfully outlined the critical need for an integrated approach to managing CRMs, advocating for solid international partnerships between the EU and the Global South and innovative policies to promote a global shift towards circular economic models. The session outcomes set a path for embedding circular economy principles in global CRM value chains, ensuring sustainability and resilience in the face of growing material demands.

INTRODUCTION

The World Circular Economy Forum 2024 (WCEF2024) was a pivotal event held from April 15-18 in Brussels and online, focusing on enhancing the global shift towards circular economy practices. Hosted at the SQUARE convention center and organized by the Finnish Innovation Fund, SITRA, and its international partners, the forum brought together experts, policymakers, and practitioners. Over the course of the event, attendees engaged in plenaries and parallel sessions that delved into various aspects of the circular economy, underscored by a series of accelerator sessions. These sessions aimed to translate the discussions into actionable strategies, particularly emphasizing the importance of international partnerships between the Global North and the Global South. Such collaborations were highlighted as crucial for improving governance, finance, employment, and innovation, enabling a sustainable transition to a circular economic model.

The WCEF delved into various issues, including the role of critical raw materials in the circular economy and their importance in sustaining global economic and environmental health. The circular economy is a systemic approach to economic development designed to benefit businesses, society, and the environment. It entails transitioning from the traditional 'take-make-waste' linear model to a circular model where resources are kept in use for as long as possible, the maximum value is extracted from them while in use, and products and materials are recovered and regenerated at the end of their service life. The conference explored how the efficient management of critical raw materials plays a pivotal role in this process, fostering resilience, promoting recycling, and reducing waste, all of which are vital for a sustainable future.

On April 17th, 2024, the Institute for European Environmental Policy (IEEP) and the Circular Innovation Lab jointly hosted the Accelerator Session on "Partnerships for Circularity - Tackling the Critical Raw Material Value Chain." The session's focus was the vital role of strategic partnerships and projects between the EU and the resource-rich Global South, particularly in securing a stable supply of critical raw materials (CRMs) necessary for Europe's green and digital transitions. Highlighting the EU's 2023 Critical Raw Materials Act, the discussion centered on establishing mutually beneficial practices prioritizing circular CRM projects and sustainable business models. This event underscored the importance of economy circular integrating principles globally to support sustainable development without compromising third-country standards and ecosystems.



Apoorva Arya CEO, Circular Innovation Lab

The 90-minute WCEF2024 Accelerator Session was initiated with the opening remarks offered by Apoorva Arya (CEO of Circular Innovation Lab). Lasse Miettinen (Director for Sustainability Solutions, SITRA) proceeded to give a keynote speech on the need for trade cooperation and policy support to manage critical raw materials for global sustainable development. After that, Eline Blot (Senior Policy Analyst, IEEP) and Arpit Bhutani (COO of Circular Innovation Lab) took the floor with a presentation on the role of strategic projects in prioritizing both circular CRM projects and business practices to establish mutual benefits for the EU and the Global South, securing both economic and environmental value addition.

Apoorva Arya then moderated a 40-minute panel discussion with five experts in the field: Joost de Kluijver from Closing the Loop, Godfrey Ogbemudia; the Programme Manager Energy and Circular Economy, EU Delegation of Nigeria & ECOWAS, Dr. Mohamed Kadah, Assistant Secretary-General – Programmes, COMESA, Eddy Kioni, CEO, Buenassa and Oliver Bauchie, Senior Advisor to Minister, Environment, Science, Technology & Innovation Government of Ghana.

The remaining time was allotted for an interactive Q&A together with the audience.

KEYNOTE SPEECH



Lasse Miettinen Director for Sustainability Solutions, Sitra

After Apoorva Arya opened the session by welcoming the audience with a few brief opening remarks, Lasse Miettinen (Director for Sustainability Solutions, Sitra) proceeded to give a keynote speech on the role of strategic partnerships and policy innovation for critical raw materials as vehicles for the advancement of circular economy.

In his address at the Accelerator Session, he highlighted several critical intersections between circular economy practices and the broader objectives of sustainability and economic growth. He noted significant positive developments, particularly in accelerating decarbonization and electrification efforts, which signal a strong move towards reducing carbon emissions. However, he pointed out that this shift has significantly increased the demand for critical raw materials, such as lithium for batteries and rare earth metals for wind turbines and electric vehicles. This surge underscores the urgent need for innovative resource management strategies within the circular economy framework to ensure that this demand does not outstrip supply and lead to unsustainable exploitation of resources.

Miettinen emphasized that managing these critical raw materials effectively addresses environmental concerns and competitiveness, drives economic growth, and job creation. The circular therefore, doesn't economy, just contribute positively to environmental resilience and development. This dual benefit makes the circular economy essential in modern economic policies and practices.

Much of his speech was dedicated to the importance of global trade and cooperation. Miettinen argued that the current geopolitical landscape makes fostering international collaborations that benefit all parties involved more crucial than ever. These partnerships ensure a stable, fair, and sustainable supply chain for critical materials across borders.

The European Critical Raw Materials Act specifically targets these needs. establishing frameworks for cooperation that ensure mutual benefits: European access to necessary materials and third countries' sustainable development and economic growth. By promoting fair trade practices and fostering local economic development through these strategic partnerships, the Act helps create win-win scenarios that align with global sustainability goals.

Furthermore, he called for concrete adopted actions to be in policy frameworks, explicitly pointing out the need for technological advancements through increased investments in research and development. He also advocated for promoting technology transfers through joint ventures and licensing and enhancing the capacity for recycling and processing within strategic partnerships to foster greater value addition in third countries. As highlighted in the IEEP briefing, these recommendations are strategic and necessary steps toward integrating circular economy principles into the core of European and global economic systems.

Miettinen's call to action was clear: these initiatives must be supported by policy robust measures and incorporated into the upcoming agendas of the European Commission and Parliament to ensure that the circular economy can fully deliver on its promise for both the economy and nature. His speech effectively mapped out a path for how circular economy principles could be further integrated into policy and practice, emphasizing that such integration is essential for sustainable development in the face of increasing material demands and environmental challenges.



PRESENTATION

Strategic Partnerships between the EU and the Global South: Navigating the European Critical Raw Materials Act

Following the insightful keynote, the stage was set for a presentation on the European Critical Raw Materials Act (ECRMA). Eline Blot and Arpit Bhutani delivered a comprehensive presentation that explored the EU's strategic initiatives for sourcing critical raw materials and its partnerships with the Global South.

Eline began by outlining the background of her organization, the Institute for European Environmental Policy (IEEP), a Brussels-based think tank with over four decades of experience in sustainability policies. The IEEP focuses on addressing the EU Green Deal and global sustainability challenges by engaging a variety of stakeholders and producing evidence-based research.

Arpit then introduced his organization, the Circular Innovation Lab, a think tank based in Denmark that collaborates on global circular economy projects. He mentioned its expertise in circular economy attained through its collaborations with international bodies like UNDP and UNEP and highlighted a recent project developing a toolkit for the Global South on the Critical Raw Materials Act.

The core of the presentation focused on the ECRMA, established in 2023, to ensure the EU's access to essential materials for its clean energy transition. Eline highlighted the Act's two primary objectives: firstly, to source 10% of strategic raw materials through domestic extraction, 40% through domestic processing, and 25% from recycling by 2030, with the remainder to be imported.



Eline Blot Senior Policy Analyst, IEEP

Secondly, to diversify imports effectively, ensuring that no non-EU country supplies more than 65% of any critical raw material, thus reducing dependency.

"EU has introduced new chapters in trade agreements to establish market principles and harmonize standards"

Then, Eline proceeded to clarify for all attendees the distinction between critical and strategic raw materials under the ECRMA into two categories: critical and strategic raw materials.

Critical raw materials were identified as 34 key substances essential to the EU economy and at high risk of supply disruption, with strategic raw materials as a subset of 16 materials deemed crucial for future EU demands in renewable energy, digital technologies, and defence. Afterward. Eline outlined EU's the strategies for securing raw materials, focusing on two main approaches. First, recent she noted that ΕU trade agreements include energy and raw materials chapters aimed at standardising market principles and regulatory practices.

"EU's goal is that no one country should supply over 65% of EU's strategic raw materials."

However, these often lack incentives for green industrialisation and added value for trade partners. Second, she discussed the EU's strategic partnerships and projects, which aim to foster long-term cooperation through technology transfers, capacity building, and joint research but frequently fall short in enforcing environmental, social, and governance standards. Eline emphasized the need for more robust frameworks to ensure the sustainability and mutual benefits EU's of the external engagements.

specifically, More Eline expressed concerns regarding the sustainability of the EU's strategic partnerships and projects, highlighting several significant gaps. She noted the absence of binding commitments for high environmental and social standards, the lack of initiatives for local value addition to promote green industrialization, and the insufficient focus on circular economy projects, which are crucial for sustainable material management. These gaps, she argued, undermine the potential long-term effectiveness and sustainability of these collaborations.

Concluding her presentation, Eline stressed that existing trade and cooperation agreements fail to adequately address the need for value addition in partner countries. She advocated for forming partnerships that include binding commitments to uphold the highest ESG standards. Additionally, she emphasized the need for adequate financing and a strong focus on circular projects, compatibility with WTO laws to ensure smooth implementation, and the facilitation of a global market for secondary raw materials, which are critical for establishing a thriving global circular economy.

"CRM act seeks to secure agreements through strategic partnerships or strategic projects with third countries."



Arpit Bhutani COO, Circular Innovation Lab

Arpit took the stage to explore further the impact of the EU's partnership strategies for CRMs. especially concerning the Global South. He emphasized how the ECRMA has fostered numerous strategic partnerships, notably a recent one with Rwanda in March 2024.

These collaborations, including significant and with Zambia. Ukraine. ones Kazakhstan, not only enhance the EU's supply chain security for critical materials like copper, titanium, and uranium but also boost economic growth, technology sharing, and job creation in partner countries. Arpit highlighted these in modernizina partnerships' role extraction and refining processes. contributing to economic and market stability in these regions.

Arpit emphasized the environmental advantages of these partnerships. particularly their role in promoting sustainable practices such as urban mining and the circular economy. He explained that the Critical Raw Material Act focuses on reducing the demand for new materials by enhancing the recycling and reuse of existing resources. This approach is integral to the EU's green transition, especially in renewable energy and aims to minimize sectors. environmental impact.

However, Arpit highlighted significant gaps that could hinder its effectiveness and sustainability. He expressed concerns about the absence of robust ESG standards, which are crucial for ensuring and responsible mining recycling practices. Another notable shortfall is the lack of support for informal recycling sectors in the Global South. where recycling operations often lack formal management and integration into broader economic systems. Additionally, Arpit criticized the insufficient market incentives for recycling, noting that recycling costs often exceed those of obtaining virgin materials. These gaps, he arqued, pose substantial challenges to the goal ECRMA's of establishing а sustainable and effective materials strategy.

Concluding his presentation, Arpit critiqued the limitations of the ECMA, particularly its lack of adequate provisions for the informal recycling sector prevalent in the global South and weak market incentives for recycling. He suggested that these issues could undermine the effectiveness of the ECRMA. To address these challenges. recommended specific Arpit actions, such as integrating critical raw materials into the EU's Ecodesian regulations, labeling electronic products to indicate the presence of these and materials. enhancing market incentives to support a robust secondary market for recycled materials. He stressed that these steps are crucial for achieving a sustainable and effective critical raw materials strategy.

PANEL DISCUSSION

The panel discussion began with the moderator - Apoorva Arya - introducing the panelists. The first panelist, Eddy Kioni, Founder and CEO of Buenassa, a mining processing company in the Democratic Republic of Congo (DRC), was asked to comment on the latest Critical Raw Materials Partnership between the EU and DRC and what it means for the country and mining companies such as Buenassa, specifically in the context of cobalt. Given DRC's rich strategic and critical raw material reserves, Eddy Kioni highlighted the need for a just and equitable benefitsharing between the Global North and South. "The DRC as a country can play a positive role as a contributor to the reaching of the energy transitions that we would like to see as just and as equitable as possible."

He noted that while the DRC is open to providing opportunities for the EU, the US, and China, the past lack of value addition from industrial processes in materials such as cobalt remains a concern. He also highlighted the need to rebalance the supply of critical raw materials (CRMs) in the DRC, given the stemming current instability from national security challenges and industrial process issues. Lastly, Kioni expressed openness to free trade agreements with the EU, aiming for mutually beneficial collaborations.



Eddy Kioni CEO, Buenessa

"We would like to make sure that the DRC can benefit from this momentum so that we can have access to an industrialization process that will bring prosperity to the country."

Next, Oliver Boachie, Senior Advisor to Ghana's Minister of Environment. Science. and Innovation, discussed the recent discovery of uranium deposits in Ghana and the government's strategy outlined in the national circular economv roadmap. He emphasized the need to revise Ghana's approach to partnering on CRMs and mining, noting that past efforts, such as the 2017 Aluminium Processing Facility, while steps in the right direction, have not fully capitalized on the country's mineral resources and there remains significant potential for further value addition.



Oliver Boachie Senior Advisor to Minister, Environment, Science, Technology & Innovation Government of Ghana

Oliver Boachie concluded by expressing Ghana's readiness to collaborate with EU countries, aiming for mutually beneficial outcomes. He also advocated for an equitable energy transition in Ghana, emphasizing proper waste management to enhance its reuse in production and consumption cycles within the region. "Ghana is very open to partnering with other countries to exploit our minerals and other critical raw materials, but it will be based on a new paradigm."

Dr. Mohammed Assistant Kadah, Secretary-General for COMESA. addressed the role of COMESA in securing sustainable CRM supply amidst challenges faced by the Global South under the ECRMA. He highlighted Africa's crucial role in the global supply of critical raw materials like cobalt. platinum, and uranium. Dr. Kadah noted that despite Africa's rich resource base, the continent struggles with poverty and deprivation due to intense competition over its natural resources by other regions, including China, Turkey, and the US.

"The use and the benefaction from these resources does not help those countries, does not help those people."



Dr. Mohamed Kadah Assistant Secretary General (Programmes) of COMESA

Dr. Kadah identified the EU as a key development partner for Africa and COMESA, noting that current efforts are to enhance free trade beyond the limitations of the African Continental Free Trade Agreement (ACFTA). He emphasized COMESA's focus on specific sectors like automotive and pharmaceuticals and on strengthening regional and national value chains through improved policy, leadership, and coordination among member states. To foster more effective trade partnerships, he suggested that future EU-COMESA collaborations should include funding, building, raising awareness capacity about the importance of CRMs, and support in science and technology.

Next, Godfrey Ogbemuda, a clean energy expert working as program manager for energy and circular economy in Nigeria, provided his input on Nigeria's activities and cooperation with the EU within the CRM value chain.

"Our initial scoping of the circular economy potential showed that in terms of trade balance, it will save around 4.4 billion EUR for Nigeria, as well as increase the GDP by about 3.2%."

Ogbemuda discussed Nigeria's environmental challenges and inefficient mining practices, advocating for updated frameworks and policies focused on waste management, particularly for legacy batteries.

He outlined three critical objectives for policy reforms: updating existing policies to incorporate circularity into value chains, identifying opportunities for circular economy practices, and leveraging new technologies in these efforts. He highlighted the importance of Nigeria's national development plan for 2021-2025 in guiding these initiatives. Finally, Ogbemuda concluded by calling for a trade partnership with the EU and stressed the need for ongoing oversight of foreign private sector activities in Nigeria, particularly criticizing Tesla's lithium extraction plans for their lack of local value addition.



Godfrey Ogbemuda Programme Manager Energy and Circular Economy, EU Delegation of Nigeria & ECOWAS

"Since 2022, Nigeria said they were not going to export minerals without proper value addition to these critical raw materials."

Joost de Kluijver, CEO of Closing the Loop, discussed his organization's role in liaht of the ECRMA regulation, emphasizing its potential for regulators policymakers and and enhancing business competitiveness. He highlighted the importance of involving businesses in the circular transition of critical raw materials alongside think tanks and Joost addressed academia. the challenges of informal markets and the insufficient regulation and capacity to manage waste effectively in Africa,



Joost de Kluijver CEO, Closing the Loop

including the illegal export of metals. He also outlined how Closing the Loop contributes to local value addition in electronic waste recycling.

Joost de Kluijver stressed the critical importance of collaboration between the Global North, which brings expertise in business model creation and Extended Producer Responsibility (EPR) policies, and the Global South, which offers strengths in waste collection, storage, and local value addition.

He highlighted the challenges Closing the Loop aims to address, including value chains regulating CRM and ensuring equitable conditions. Joost expressed his enthusiasm for more companies to engage in the circular transition and waste reduction within the electronics industry. Finally, he cited the EU-funded project Closer as a significant paradigm shift in this transition.

"We create value, and that value is used to work with the informal markets in Ghana and Nigeria, reducing electronic waste as a challenge that it is at the moment and turning it into materials that benefit society." Concerning increasing accountability standards and competitiveness, Eddy Kioni was asked to provide his insight from the perspective of a mining company and its compliance with high processing standards from the EU.

"I think at the beginning we probably need to rethink both on the Global North and Global South side, on how do we see the future of or the evolution of our consumption pattern."

Mr. Eddy advocated for reevaluating the Global South's adoption of the linear economy model of the Global North, suggesting a shift towards prioritizing services over products. He highlighted the automotive industry and Cobalt production Sulfate as examples, stressing the importance of developing a complete ecosystem for batterv production in the Global South with assistance from the Global North. Additionally, he emphasized the role of policy innovation in integrating local value chains and reshaping continental markets.

"My view is that, of course, we need the policy, but I tend to believe that we have to be very concrete in the way we try to achieve our goal to follow exactly what the market needs." Key points highlighted the UN's backing through specialized agencies like

UNIDO advocates for both bottom-up and top-down strategies. Examples included Nigeria's plastic waste recycling and Zambia's circular economv endeavours. Financial institutions like the African Development Bank were noted for supporting investments and providing technical assistance in Africa, emphasizing transparent supply chains and value addition along transport corridors. Successful initiatives like the SWITCH to Circular Economy in East and Southern Africa were discussed.

conclude. the WCFF 2024 То "Partnerships for Circularity: Tackling the CRM Value Chain" accelerator session provided an insightful synthesis by the Circular Innovation Lab (CIL) and the Institute for European Environmental Policy (IEEP) on the Critical Raw Materials Act (ECRMA). The session highlighted ECRMA's pivotal role in advancing a circular economy through international trade between the Global North and South. Additionally, it delved into the challenges of implementing circular economy strategies across Africa, enriched by discussions during the panel and the interactive Q&A session.

The panel discussion was concluded with a Q&A with the audience, further emphasizing the vital role of collaboration between the Global North and South in securing a stable supply of critical raw materials.

THE WAY FORWARD

Keynote speaker Lasse Miettinen underscored the urgent need for strategic partnerships and policy innovations to manage CRMs within the circular economy framework effectively. He emphasized the dual benefits of such initiatives, addressing environmental concerns and driving economic competitiveness and job creation. Specifically, the presentation highlighted the importance of global trade and cooperation, stressing the need for international collaborations that ensure a stable, fair, and sustainable supply chain for critical materials between the Global North and the Global South.

The subsequent European Critical Raw Materials Act (ECRMA) presentations by Eline Blot and Arpit Bhutani delved into the EU's strategic initiatives for sourcing CRMs and its partnerships with the Global South. While acknowledging the progress, they also highlighted gaps in current strategies, particularly regarding environmental and social standards, local value addition, and circular economy projects. Their insights underscored the need for more robust frameworks to ensure sustainability and mutual benefits in the EU's external engagements.

Complementing the contributions offered by the representatives of CIL, IEEP, and SITRA were the panelists of the session, representing COMESA, ECOWAS, Ghana, Nigeria, and businesses including Closing the Loop and Buenassa. The panel discussion elucidated the importance of collaborative efforts, showcasing examples of successful initiatives and emphasizing the need for holistic approaches that integrate bottom-up perspectives alongside top-down frameworks. A key common challenge discussed by the panelists was the lack of value addition in the African region, the lack of funding and capacity building, and the stress of the significance of transparent governance and value addition in critical raw material value chains.

Moving forward, it's crucial to implement the insights discussed into actionable strategies. This involves fostering partnerships through initiatives like the ECRMA, particularly with regions in the Global South such as COMESA and ECOWAS. Additionally, there is a pressing need to promote value addition by investing in processing capabilities, technology transfers, and capacity building. Panelists also emphasized the importance of enhancing policy frameworks at both national and international levels to encourage circular practices and support them effectively Global South in developing these policies. Investment in research and innovation, particularly in waste management and business model development, is also vital. Lastly, creating opportunities for meaningful engagement and dialogue with stakeholders across various sectors and regions is essential for consensus-building and sharing best practices in CRM value chains.

Overall, the session highlighted the interconnectedness of global supply chains and the imperative for inclusive and equitable partnerships to achieve a circular economy. It emphasized the need for concrete actions, robust policies, and innovative solutions to address the challenges posed by the increasing demand for CRMs while ensuring environmental integrity and social equity. With increased collaboration, stakeholders can leverage their strengths and expertise to forge a path towards a more sustainable and resilient future.



ACKNOWLEDGEMENTS

We would like to thank the Institute for European Environmental Policy (IEEP) for their support in co-hosting the event "Partnerships for Circularity: Tackling the CRM Value Chain" with Circular Innovation Lab. We would also like to thank the SITRA Foundation for organizing the WCEF 2024 and supporting our Accelerator Session and the Press Club Brussels for providing the venue space. We also thank Eline Blot (Senior Policy Analyst, IEEP) and Antoine Oger (Research Director, IEEP) for their valuable insights and knowledge on the Critical Raw Materials Act.

Testimonies from Eddy Kioni, Oliver Boachie, Godfrey Ogbemuda, Joost de Kluijver and Dr.Mohammed Kadah brought light and insightful contributions to the discussion over current challenges for critical raw material supply and trade. Lastly, we would like to extend our thanks to all participants of this WCEF2024 event who joined both in person and online.

Disclaimer: The opinions documented in this report are from the participants only and do not represent the views of their organisations.



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