

Energy Transition and Sustainable Mining debated during FGV Europe Webinar

*Participants of the Webinar were: **Enir Sebastião Mendes** Director, Department of Mineral Transformation and Technology, Secretariat of Geology, Mining and Mineral Transformation (SGM), Ministry of Mines and Energy (MME); **Marcelo Ladeira**, Superintendent of Mining Policy, Energy and Logistics of the Secretariat of Economic Development of Minas Gerais (SEDE); **Eduardo de Albuquerque Ruiz Martins**, Mining Manager, Companhia de Desenvolvimento de Minas Gerais - Codemge; **Aksel Krieger**, CEO, BMW Group Brazil; **Ana Cabral-Gardner**, Chief Strategy Officer, Sigma Lithium Resources; **Rafael Haddad**, Executive Director, German Latin America Business Committee, Federation of German Industries (BDI); **Antonio Carlos Passos de Carvalho**, Fellow, FGV Europe. The event was moderated by **Marco Saverio Ristuccia**, Senior Economist, Coordinator of the initiative "Towards a Just Transition: An Opportunity for Minas Gerais", FGV Europe.*

This webinar is part of an agenda of activities planned until December included in the bilateral technical cooperation initiative Brazil - Germany "Toward a Just Transition: An Opportunity for Minas Gerais".

In this sixth edition that took place on November 11, 2020, FGV Europe discussed the theme "Energy Transition and Sustainable Mining". The objective of this webinar was to promote a reflection on the global energy transition - which foresees the introduction of renewable sources - that stimulates the demand for strategic materials. In this forum, Brazil, and specifically the State of Minas Gerais, will play a key role in the global energy transition and sustainable development.

The event was opened by the moderator Marco Ristuccia, highlighting how the mining industry plays a crucial role in the Just Transition process. Also emphasizing the relevance of Brazil's presence in value chains linked to technological innovation for the global energy transition, in which industrial development and the strengthening of productive chains in the mining sector and renewable energy in Brazil are extremely important, promoting sustainability practices throughout the productive chains.

Enir Sebastião Mendes, Director of the Mineral Transformation and Technology Department of MME, presented the Mining and Development program and the goals included in the "Mining from the present to the future" project. A total of 10 plans were presented, with 108 goals. Among them, the adoption of new technologies for the 4.0 industry. The Director underlined some plans and goals, such as the stimulation of technological integration in small and medium size mining companies. To conclude, Enir presented the approach of "critical" minerals for this technological innovation.

Rafael Haddad, Executive Director of the German Latin America Business Committee, *Federation of German Industries* (BDI), talked about the importance of German industry's demand for strategic minerals, and the possibilities of German cooperation between the German productive sector and the extraction and transformation activities of critical minerals in Brazil. Rafael explained some reasons why Germany is a strategic partner for Brazil, considering its experience in the transition process with the decommissioning of nuclear power plants, and the strong presence of German industries in Brazil. He also cited the sustainability of the environment and society as fundamental aspects. For example, he illustrated consumers' rising interest in the origin of the products. Rafael concluded by showing some examples of cooperation between Brazil and Germany, such as promoting bilateral trade in

minerals, machinery and technology, and encouraging dialogue between the various players in the process, among others.

Marcelo Ladeira, Superintendent of Mining, Energy and Logistics Policy of the State Secretariat of Economic Development of Minas Gerais (SEDE) highlighted the strength of Minas Gerais in photovoltaic energy, and the possible migration to other sources, presenting the state's energy matrix. Marcelo further presented the topic of Sustainable Mining, referring to the increased safety of mining in the state (maintaining the competitiveness of the sector), the elaboration of the state plan for Mining, the development of new production chains and the encouragement of sustainable practices.

Eduardo de Albuquerque Ruiz Martins, Mining Manager, Minas Gerais Development Company - Codemge, presented the operational strategies for mining activities, considering the application of these sustainability standards to the final consumer. Eduardo mentioned the agenda 2030, and the 17 Sustainable Development Goals (SDG). These include the fight against poverty, zero hunger, gender equality, among others. He outlined the regions with high potential for solar and wind energy production. Finally, he demonstrated how the energy transition can interact within the context of economic growth, sustainable cities and communities, and responsible consumption. "Mining can participate in sustainable development in all the objectives of the agenda 2030, and the energy transition represents only an important part within this context".

Antonio Carlos Passos de Carvalho, Fellow, FGV Europe, addressed the strategies Brazil is currently implementing related to the energy transition, including some measures taken by the United States of America at the international level.

Ana Cabral-Gardner, Chief Strategy Officer, Sigma Lithium Resources addressed a case study on the application of best mining practices and appropriate insertion into the local context. According to Ana, the energy transition is crucial in the area of mobility and energy transformation. Regarding mobility, it is important to mention the significance of the lithium-ion battery, which is light and uses little space to generate energy. In the post-pandemic scenario, there was an unexpected demand, related to vehicles, with Brazil having a 10% share in global lithium production. Ana concluded by presenting the differentials of the Sigma Company, like the production of lithium with the lowest carbon emission level in the world, at the second lowest cost worldwide and the most sustainable through the application of the ESG-Centric Strategy.

Aksel Krieger, CEO, BMW Group Brazil, presented the importance of technology and strategic minerals for the automotive sector. Aksel made a presentation of the company including a brief historical overview. He showed a graph, which indicated the CO² reduction in BMW's fleet, with almost 10% of the company's vehicles electrified. Aksel highlighted the importance of a sustainable production chain, from renewable energy to the possibility of recycling vehicles, with a 20% reduction in the use of plastics. The company has two wind power plants in Brazil, and is expanding to solar energy, both with zero CO² emissions. The company has also created an electrified road between Rio-São Paulo, where it is possible to charge your electric vehicle.

Moderator Marco Savério Ristuccia closed the event by holding a debate with the speakers and thanking them all.

For more information visit our websites:

Website FGV Europe:

<https://fgveurope.fgv.br/>

Website FGV Europe dedicated to Just Transition:

<https://fgveurope.fgv.br/projects>

Exclusive website for the Just Transition initiative/event, in Portuguese and English:

<https://eventos.fgv.br/transicao-justa>

<https://eventos.fgv.br/en/just-transition>

If you wish to contact our experts, please send an email to:

FGV Europe: fgveurope@eu.fgv.br