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CRITICAL MINERALS & ESG SCOTLAND

Moore Global is a leading advisory and assurance professional services network The multi-disciplinary and multi-commodity professional team spans the Moore Global Member Firm network with specialist teams in centers of excellence in key markets. Critical minerals have become a particular area of focus across the value chain and across Sectors in the Moore Global network.

Lithium-ion batteries and Environmental, Social, and Governance (ESG) considerations are intertwined in the context of sustainable energy and responsible business practices. Mark Stewart, Head of Energy, Infrastructure and Sustainability at Johnston Carmichael explores how they are connected:

Environmental (E):

- Lithium Mining: The extraction of lithium, a key component of lithium-ion batteries, can have significant environmental impacts, especially when not conducted responsibly. It can lead to habitat destruction, water pollution, and other negative effects on ecosystems.
- Battery Recycling: Proper recycling of lithium-ion batteries is crucial to minimize the environmental impact. Recycling helps recover valuable materials like lithium, cobalt, and nickel while reducing the need for new resource extraction.
- Carbon Footprint: The use of lithium-ion batteries in electric vehicles (EVs) and battery energy storage systems (BESS) can contribute to a reduction in greenhouse gas emissions when compared to traditional fossil fuel-based alternatives.

Social (S):

- Supply Chain Ethics: The mining of materials for lithium-ion batteries, such as cobalt, has raised concerns about labour practices in some regions. There have been instances of child labour and unsafe working conditions in some mining operations.
- Battery Production: Ensuring fair labour practices and safe working conditions in battery manufacturing facilities is essential for upholding social responsibility.
- Access to Clean Energy: The adoption of lithium-ion batteries in renewable energy systems can improve access to clean and reliable energy sources, particularly in remote or underserved areas.

Governance (G):

- Corporate Governance: Companies involved in lithium-ion battery production and related industries should adhere to strong corporate governance practices, including transparency, accountability, and responsible management of resources.
- Regulatory Compliance: The production, use, and disposal of lithium-ion batteries are subject to regulations aimed at minimising their environmental and social impacts.
- Innovation and Research: Investing in research and innovation to improve battery technologies and address their limitations (such as resource scarcity, performance, and lifespan) is an important aspect of responsible governance.

Overall, the adoption and use of lithium-ion batteries for various applications, including renewable energy storage and electric mobility, have the potential to contribute positively to ESG goals. However, it's important to consider the entire lifecycle of these batteries, from material extraction to manufacturing, use, and end-of-life disposal, to ensure that their benefits outweigh their potential negative impacts. As the energy sector evolves, businesses and policymakers need to prioritise sustainable practices and technologies that align with ESG principles.

To find out more about the opportunities for your business in the Energy, Mining and Renewables sector, please contact one of our Moore experts below.

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