

ReElement and Jupiter Lithium sign joint development agreement to commercialize world class Nigerian lithium deposit

The Jupiter Critical Minerals Project is a significant lithium deposit set to become Nigeria's flagship lithium mine

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“

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Mark Jensen

Corporation (“ReElement”), a leading provider of high performance refining capacity of rare earth and critical battery elements, announced today that it has entered into a partnership with UK-based [Jupiter](#) Lithium Ltd (“Jupiter Lithium”), owner of Basin Mining Ltd and Range Mining Ltd, to develop Nigeria's first large-scale lithium deposit spanning 442 square kilometers of high-quality, lithium-rich terrain.

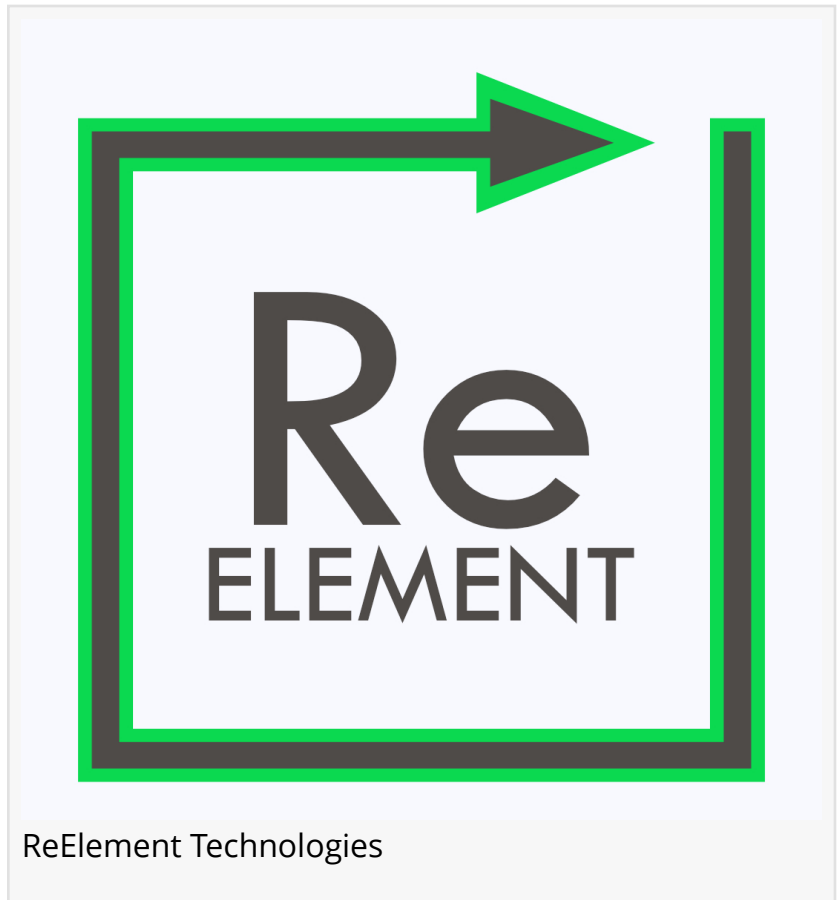
The Jupiter Critical Minerals Project is poised to become a transformative project for Nigeria, with the potential to

establish the country as a regional hub for lithium mining and downstream battery and electric vehicle (EV) manufacturing. The project is expected to develop significant production capacity, supporting a robust local industry. Jupiter Lithium is focused on expanding its operations from the current contract mining to large-scale owner operations. This includes a spodumene concentrator facility to produce an initial 55,000 tons of 6% lithium spodumene concentrate annually. The first concentrate production from the plant is scheduled for the first quarter of 2025, ramping up 167,000 tons within two years. Pursuant to the MOU, ReElement is designing for the construction of its lithium and critical mineral refinery to refine spodumene concentrate into high-purity, battery-grade lithium carbonate and other critical minerals produced.

Mark Jensen, Chief Executive Officer of ReElement Technologies, emphasized the significance of this partnership to catalyze advanced manufacturing in the region with local partners stating, "We are excited to sign our first large-scale spodumene supplier partnership to be refined in the region. We have a technology that is environmentally safer, more cost efficient and able to be deployed throughout the world. This enables partnering nations to maximize the value of their natural resources while advancing job creation through expanded and innovative

industrialization. The Jupiter team and project are absolutely world class, and we believe together we can quickly unlock the potential to be one of the largest lithium projects worldwide that can be produced in the lowest quartile of costs."

Stephen Davis, Chairman of Jupiter Lithium Ltd, noted that, "This remarkable discovery caps two decades of work in Nigeria understanding Nigeria's minerals endowment. The scale of the Jupiter lithium discovery has the potential to provide the momentum required to commence Nigeria's transition from a reliance on oil and gas to clean, solid energy". Davis added, "The downstream processing of the ore to concentrate and carbonate in-region opens the door to a new phase in the development of Nigeria's energy and mining sector and numerous economic opportunities."



Investment in Refining Technology:

ReElement intends to build a state-of-the-art lithium carbonate processing facility in the region, leveraging its innovative chromatographic separation and purification technology to support the renewable energy industry throughout Africa, and to produce battery-grade material to meet the increasing demand of western manufacturers. ReElement is working with its partners on site selection as well as financing options with potential regional investors to enable the long-term growth and diversification of the Nigerian economy.

Phased Development with Government Support:

The Jupiter Critical Minerals Project is being developed in a multi-stage, phased approach, with ongoing exploration and development activities planned, followed by mining and downstream processing. This staged approach ensures economic feasibility, and long-term risk minimization and benefits from the support of the Nigerian Government.

Beyond the immediate economic benefits created by the Jupiter Project and its related activities, the project is expected to significantly contribute to Nigeria's economic diversification. The project will support foreign exchange generation through exports of lithium products,

strengthening the Nigerian Naira and promoting the development of a robust local non-oil export sector.

Exclusive Offtake and Local Community Benefits:

ReElement Technologies' exclusive offtake for the Jupiter Project will provide the local market with 99.9%+ pure lithium carbonate. This project will not only catalyze downstream advanced manufacturing but is also expected to create sustained local improvements in host communities through infrastructure upgrades, including access to potable water, electrification, and education scholarships. By developing its domestic lithium resources, Nigeria has the potential to become a major player in the global battery metals market. This project represents a significant step forward for both companies and the future of electric vehicle development.

Jupiter Project Partnership Highlights:

- This partnership will be the first of its kind to expand the renewable energy manufacturing sector in Africa through an integrated value chain approach;
- ReElement Technologies will build a lithium carbonate processing facility in the region to help Nigeria maximize the value of their resources with the ability to expand such facility over time based on feedstock produced;
- Catalyzes the growth of downstream manufacturing of lithium-ion batteries, EVs, and home battery storage;
- Supports forex generation to strengthen the Naira and local non-oil exports;
- The scale of this project will elevate the global position of Nigeria as lithium increasingly powers the world; and
- Importantly, the Jupiter Project is focused on sustained local improvement in host communities.

ReElement's Mineral Processing Technology Snapshot:

ReElement utilizes its patented technology for a more efficient separation and purification phase of rare earth and critical battery and defense material refining. This innovative approach uses a longstanding technology to maximize the surface area interface by using industrial scale chromatography, rather than acids and hazardous solvents typically used in solvent-based, liquid-to-liquid, hydrometallurgical processes. The unique characteristics of ReElement's processing method enables a material reduction in initial CapEx investment, physical footprint, environmental impact, chemicals and associated OpEx to create the separation and purification of rare earth and critical minerals. The technology was designed over decades of commercially-deployed operating processes in the separation and purification of fructose and glucose in the sugar industry and the commercial production of insulin in the pharmaceutical industry.

ReElement Technologies is committed to leading the supply chain for refined rare earth and critical battery elements in the electrified economy and national security needs. The Company

has proven that its patented chromatographic separation and purification technology is a low cost, scalable, flexible and environmentally safe replacement to the legacy environmentally and socially toxic alternatives used for critical and rare earth element separation and purification. As the Company executes and scales the production at its facilities, it will significantly reduce the United States' dependency on foreign nations for the supply of these critical raw materials while also creating a true circular life-cycle solution.

About Basin Mining Limited and Range Mining Limited:

Basin Mining Ltd and Range Mining Ltd, both legally established under the Federal Republic of Nigeria's laws and officially registered with the Corporate Affairs Commission, have joined efforts to develop lithium and critical minerals within their extensive Kaduna State tenements. Operating under the framework of the Companies and Allied Matters Act 1990, both companies hold Mining Leases and Exploration Licenses, granting them exclusive rights authorized by the Mining Cadastre Office to explore various minerals within Kaduna State. Their combined focus on the southern region, near Kafanchan township, has led to significant discoveries of Lithium and Critical Minerals. See www.jupiterproject.co and www.linkedin.com/company/jupiterproject for additional information.

With contiguous tenements spanning 442 square kilometers, Basin Mining and Range Mining have united under the "Jupiter Project" to drive collaborative mineral development. The identified mineral exposures suggest the potential for a substantial lithium district, possibly becoming a significant source of high-grade lithium ore. This discovery could catalyze Nigeria's Lithium industry, subsequently facilitating entry into the battery storage and electric vehicle market. Basin Mining Ltd and Range Mining Ltd's partnership marks a notable stride in Nigeria's mineral exploration landscape, underscoring innovation and collaboration's role in shaping industries and unlocking new opportunities.

About Jupiter Lithium Limited and the Jupiter Critical Minerals Project:

The Jupiter Critical Minerals Project is a Tier 1, world class Lithium deposit and its development is the first step towards launching Nigeria's Lithium battery and EV industry.

Jupiter Lithium Limited, a UK company, is funding the development of the Jupiter Critical Minerals Project which is a collaborative arrangement between the Nigerian tenement owners, Basin Mining Limited and Range Mining Limited.

The 11 tenements are all under Mining Leases issued by the Nigeria Mining Cadastre Office and covering 442 square kilometers in Kaduna State and valid for 50 years, extending out to 2074.

The owners have been working with the local host communities for over seven years delivering important community projects including schools, scholarship programs, water, power and other infrastructure improvements in the area whilst undertaking further exploration activities.

The Nigerian Government is very supportive of mining developments including the downstream processing in-country which will accelerate the transition of the Nigerian economy to a clean energy economy, a future beyond oil.

The mine is being delivered in economically structured stages from exploration and development, to mining and then to downstream processing. The Jupiter Project is already demonstrating to the world that Nigeria is a new force in the global clean energy economy and is attracting further international investment, using best practice and proven African, US, UK and Australian technologies, creating jobs and diversifying the economy.

The Jupiter Critical Minerals Project is set to become Nigeria's flagship mining project, launching Nigeria's Lithium battery and EV industry and is a major contribution by Nigeria to reducing the world's carbon emissions.

About ReElement Technologies Corporation:

ReElement Technologies Corporation, a wholly owned subsidiary of [American Resources Corporation](#) (NASDAQ:AREC), is redefining how critical and rare earth elements are both sourced and processed while focusing on the recycling of end-of-life products such as rare earth permanent magnets and lithium-ion batteries, as well as coal-based waste streams and byproducts to create a low-cost and environmentally-safe, circular supply chain. ReElement has developed its innovative and scalable "Capture-Process-Purify" process chain in conjunction with its licensed intellectual property including 16 patents and technologies and sponsored research partnerships with three leading universities to support the domestic supply chain's growing demand for magnet and battery metals.

About American Resources Corporation:

American Resources Corporation (NASDAQ: AREC) is a next-generation, environmentally and socially responsible supplier of high-quality raw materials to the new infrastructure market. The Company is focused on the extraction and processing of metallurgical carbon, an essential ingredient used in steelmaking, critical and rare earth minerals for the electrification market, and reprocessed metal to be recycled. American Resources has a growing portfolio of operations located in the Central Appalachian basin of eastern Kentucky and southern West Virginia where premium quality metallurgical carbon and rare earth mineral deposits are concentrated.

American Resources has established a nimble, low-cost business model centered on growth, which provides a significant opportunity to scale its portfolio of assets to meet the growing global infrastructure and electrification markets while also continuing to acquire operations and significantly reduce their legacy industry risks. Its streamlined and efficient operations are able to maximize margins while reducing costs.

ReElement Technologies Corporation

ReElement

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