



Lithium and energy materials investment in the **Goldfields-Esperance** region



Regional overview

The Goldfields-Esperance region is vast - the largest in Western Australia. It covers an expansive 771,276km², just under a third of WA's total land mass.

The Goldfields-Esperance region is known for its rich natural resources, with the mining sector representing more than half of regional economic output. The region has significant mining experience and expertise, with large-scale resource extraction dating back to the formative gold rushes of the late nineteenth century.

In addition to resource extraction and processing, the Goldfields-Esperance region has an established Mining Equipment, Technology and Services (METS) sector and hosts the Western Australian School of Mines (WASM) as well as the Kalgoorlie-Boulder Mining Innovation Hub, funded in part by the CRC Optimising Resource Extraction (CRC Ore).

The historic inland city of Kalgoorlie-Boulder sits at the centre of the region, home to half of its population and a mining services hub for the Goldfields. Kalgoorlie-Boulder is located approximately 600 kilometres from Perth on the Great Eastern Highway and can be reached by plane within one hour.

The town of Esperance is a regional centre situated on the southern coastline. Esperance is located around 400 kilometres from Kalgoorlie-Boulder and features the deepest port in southern Australia.

Regional advantages

A top-tier mining jurisdiction, the Goldfields-Esperance region is one of the most resource rich areas on the planet. It is home to a suite of critical materials - lithium, cobalt, vanadium, tantalum, nickel and graphite - used to produce energy storage devices, such as lithium-ion batteries. The region also possesses non-battery minerals used in the manufacturing of electric vehicles and energy storage systems, including significant deposits of rare earths.

The rapid global uptake of electric vehicles, smart consumer devices and battery-based energy storage devices to support renewables is driving a wave of energy material exploration and investment in the region. With its demonstrated prospectivity, expertise in mining and secure investment environment, the Goldfields-Esperance region is well placed to become a key player in the global battery industry value chain.

A long-established mining centre, Kalgoorlie-Boulder is positioned close to key energy minerals and is supported by road and rail access. The city has industrial land close to major infrastructure, a skilled workforce and a significant METS sector, including education and training, to support mineral processing. It is also home to the Mining Innovation Hub, which is focused on harnessing the development and deployment of new mining technology to unlock additional value.

The region is connected to international markets through the strategically-located Esperance Port, which is one of the biggest regional ports in southern Australia and serves as an attractive alternative to metropolitan ports. Export of lithium almost quadrupled through Esperance during 2018.

Investment opportunities

The Goldfields-Esperance region is primed for economic expansion due to its accessible, high-grade deposits of lithium and other energy materials, sophisticated geoscience and extractive metallurgy capability, skilled workforce, developable industrial land and access to all modes of transportation. Global battery consumption predicted to increase five-fold over the next decade.

The Goldfields-Esperance region is already an established and expanding producer of some of the key minerals for the global lithium-ion battery supply chain. Current Goldfields-Esperance lithium mining operations include the Bald Hill project near Kambalda, the Mount Marion project near Coolgardie and Mount Cattlin in the Shire of Ravensthorpe. A number of locations around the region have been shortlisted for possible lithium refinery.

The Mount Weld mine, near Laverton, ranks as one of the richest major rare-earth deposits in the world. Lynas Corporation, which operates Mount Weld, has announced its intention to develop an upstream processing plant in the Goldfields in a move that will further consolidate the region's position as one of the premier rare earths producing jurisdictions outside of China.

The Goldfields-Esperance region offers unique advantages in new energy materials and can provide reliable security of supply.

In addition to energy material extraction, processing and research, opportunities abound to invest in the region's world-leading METS sector, which continues to develop a range of innovative technologies and services that support mining profitability and sustainability. The region also has the potential to become a world leader in the storage, processing and recycling of battery material waste.

Supporting lithium and energy materials investment

The State Government is committed to growing Western Australia into a leading exporter of future battery minerals, materials, technologies and expertise. The State Government's *Future Battery Industry Strategy* aims to support the development of WA's future battery industry and transform it into a significant source of economic prosperity, diversification, jobs and skills.

The Goldfield-Esperance Development Commission is a member of the WA-based Future Battery Industries Cooperative Research Centre, which is providing an industry-led research capability to enhance Australia's competitiveness and contribution in the global battery industries value chain.

Further information

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Important disclaimer

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