

PRIORITISE ENERGY OPPORTUNITIES IN EXISTING AND DECOMMISSIONED MINES

MOTION 63

The LGAQ calls on the State Government to undertake a comprehensive investigation, develop policy, remove impediments in legislation and invest in the repurposing of new and existing mines for energy production and storage. Including pumped hydro energy storage (PHES), Gas, Underground and Gravity Energy Storage (UGES) systems and other energy production.

DESIRED OUTCOME

There are three desired outcomes from this motion:

Feasibility Studies

That the State Government conduct state-wide assessments to identify suitable existing and decommissioned mine sites for PHES, Gas, UGES and other energy production opportunities.

Policy Development

Create regulatory frameworks, review and amend legislation to remove impediments to the repurposing of existing and decommissioned mines into energy storage and production facilities.

Investment

Allocate funding for projects and infrastructure development to support the conversion process and diversification of existing and decommissioned mines.

BACKGROUND

Across Queensland there are a significant number of existing and decommissioned mines that have capacity to support energy storage and production.

Current State Government policies and legislation require mines to be progressively rehabilitated and returned to their pre mining state with infrastructure removed.

Additionally current net zero and critical mineral policies ignore opportunities to harness naturally occurring methane, blue hydrogen and other Coal Seam Gas to support the nation's energy demands.

These policies deprive Queensland communities of secondary benefits associated with large scale projects and are counterintuitive to the clean energy efforts of the state and nation.

Instead of investing billions in new gas plants, renewable energy storage facilities and energy generators, the government could diversify the existing mining industry to achieve their net zero targets.

Many of the active and decommissioned mines have critical infrastructure including water and transmission lines that would provide cost efficiencies by significantly reducing construction costs for new energy projects and minimise environmental impacts.

By repurposing and value adding to mines across Queensland, the State Government would be providing a cost-effective, sustainable, long-term energy storage solution that supports the push for renewable energy whilst also helping the mining sector to achieve decarbonised operations.

By working with local government to progress this motion the State Government would significantly improve progress towards state renewable energy targets and provide a social and economic revitalisation for Queensland's resource regions.



CASE STUDY/EXAMPLE

A recent example of Queensland repurposing a mine site for renewable energy storage is the Kidston Pumped Hydro Project in Far North Queensland, Australia.

This project is transforming a decommissioned gold mine into a pumped hydro energy storage facility.

It involves converting the large mining pits into reservoirs, where water is pumped between two levels to generate electricity during peak demand periods and store excess energy during low demand times.

Additionally, the Commonwealth Government "Future Gas Strategy Analytical Report" provides insightful context and details about the Bowen Basin Gas Pipeline, highlighting its significance as a key infrastructure project. This pipeline is crucial for addressing supply imbalances

and ensuring a consistent supply of gas to meet both domestic and industrial demands, forming part of a broader strategy to secure and stabilize gas supply across key regions in Queensland.

Designed to transport gas from the resource-rich Bowen Basin to various industrial and domestic consumers, the project aims to balance the east coast gas market and address potential supply shortages projected to occur from 2028.

The Bowen Basin Gas Pipeline is poised to play a significant role in Queensland's economic framework by bolstering the gas industry, which directly contributes to the state's GDP.

Additionally, it aligns with the Queensland Government's strategic objectives to ensure energy security and support the transition to a cleaner energy future.