An Alternative: The Transformation of mining brown field sites into renewable energy power production sites.

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Internationally and domestically, brown field mining sites are becoming centres of renewable power generation, relieving pressure on bushland and green field areas. Renewable power generation includes pumped hydro, solar and wind or a combination of two or more of the technologies. This in turn assists in the reduction of global emissions and carbon footprints. It stimulates employment, innovation and research.

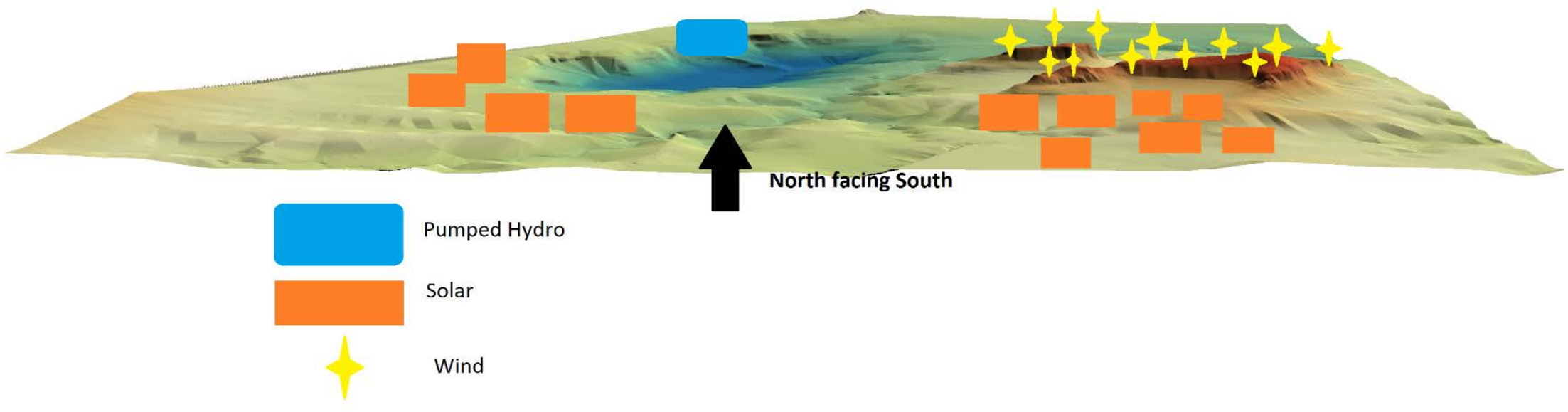
Case scenarios applying GeoFluv-Natural Regrade can be applied for maximum positive outcomes.

A) Using abandoned and disused mine sites as energy producing sites.

A) Abandoned mines in Queensland and other states could be converted into solar and pumped hydro energy projects, with the use of GeoFluv optimising natural landforms to capitalise on maximum exposure as well as stabilising the land.

B) Using existing brown field mine sites as energy producing sites.

B) Existing mines such as Mangoola, could use their progressive rehabilitation processes, which includes GeoFluv to generate solar and wind power while the mining towards the final void. The landscape around the final void could be moulded, at the end of mining operations to facilitate a pumped hydro plant.



C) Using existing brown field mine sites as community owned energy producing sites

C) Mining operations that have recently closed and area in the process of final rehabilitation such as Glencore operations in west Lake Macquarie could use GeoFluv technology to utilise potential renewable energies opportunities. Under a power purchase agreement the site could be owned by a community owned operation such as CLEANaS and local council.

Conclusions: All of the above case scenarios have the ability to use GeoFluv- Natural Regrade technologies to harness the opportunities of renewable energy technology, whilst undergoing the rehabilitation process. This utilisation of brown field mining sites for renewable energies will see an increase in employment opportunities and the reduction in carbon footprints.

References:

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