

Caring for Country through the energy transition: Exploring how holistic sustainability will save the world

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ABSTRACT

Across the globe, the demand for minerals and metals will continue to rise exponentially to deliver the infrastructure required to decarbonise the resource industry as fossil fuels are phased out and demand grows. Stakeholders in resource industries are becoming increasingly aware of the crucial role that mining plays in the energy transition.

To satisfy the Paris Agreement, Australia is required to be net zero by 2050; a tight time frame considering the leading role fossil fuels have played for 200 years. Hard and fast GHG emissions targets are crucial to slow global warming, but the anxiety around these targets has led to tunnel vision, especially in resources industries, which shadows out other crucial considerations such as biodiversity and land and water stewardship, usage and degradation.

Often when sustainability is spoken about the train of thought goes straight to GHG emissions, and understandably so, given most presentations on sustainability are on net zero, the energy transition and renewables. This has led to promises of countless low and no carbon projects, requiring enormous increases in renewable energy. To successfully reach these targets, hundreds of hectares of solar panels and hundreds of millions of litres of (often desalinated) water are required every week to produce enough renewable energy. This is not a long-term sustainable or economically viable solution. We are leading ourselves through one crisis to the next, we can tackle the energy transition with renewable energy, a similar land or water transition may not be so simple.

To address these issues, it is crucial to take a holistic view on the impacts of a project. Indigenous Australians have been embedding these principles by caring for Country for millennia. Consultants and engineers are in the front seat to reframe the narrative and ensure that a holistic view of sustainability is embedded in projects to avoid future resource constraints while decarbonising the industry. Ensuring that land, water and biodiversity are integrated and considered equally will allow us to truly create a more sustainable world

This paper will explore how stakeholders can emulate Indigenous sustainability principles for resource production to consider energy transition projects in a holistic, more sustainable approach.