Glencore's proposed carbon capture and storage project Submission 7

National Farmers Federation

Senate Inquiry into Glencore's Proposed Carbon Capture and Storage Project

May 2024



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The National Farmers' Federation (NFF) is the voice of Australian farmers.

The NFF was established in 1979 as the national peak body representing farmers and more broadly, agriculture across Australia. The NFF's membership comprises all of Australia's major agricultural commodities across the breadth and the length of the supply chain.

Operating under a federated structure, individual farmers join their respective state farm organisation and/or national commodity council. These organisations form the NFF.

The NFF represents Australian agriculture on national and foreign policy issues including workplace relations, trade, and natural resource management. Our members complement this work through the delivery of direct 'grass roots' member services as well as state-based policy and commodity-specific interests.

NFF Member Organisations



Leading Australian Agriculture

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02 May 2024

Committee Secretary Senate Standing Committees on Environment and Communications PO Box 6100 Parliament House Canberra ACT 2600

Phone: +61 2 6277 3526 ec.sen@aph.gov.au

RE: Senate Inquiry into Glencore's Proposed Carbon Capture and Storage Project

Dear Committee Secretariat,

Overview

The NFF membership welcomes the opportunity to provide a formal submission to the Senate Inquiry into Glencore's proposed Carbon Capture and Storage project by subsidiary group *Carbon Transport and Storage Corporation* (CTSCo) in the Great Artesian Basin (GAB). The NFF membership retains serious concerns over the project's potential risks and impacts on water quality and agriculture's capability to produce safe, nutritious food and fibre for domestic and international consumption. The scientific understanding behind associated risks is complex and has attached significant uncertainty. As such, based on a precautionary principle approach, we remain ironclad in our opposition against this proposed project and maintain a firm view that the Senate Inquiry recommend against greenlighting this proposal of significant consequence. We note that this is also a view supported by many community groups and industry bodies in the GAB.

The NFF recognises that detailed analysis on this matter has been conducted by AgForce Queensland Farmers Ltd., Queensland Farmers Federation, and Australian Pork Limited. We endorse the views of our member organisations and their respective submissions put forward in response to this Inquiry.

Background

The GAB is a significant Australian natural resource spanning across 1.7 million square kilometres and is one of the world's largest groundwater reserves. The GAB is a critical natural water resource, asset, and lifeblood for regional communities and has played a critical role in the development of Australian agriculture and farming businesses across the Northern Territory, Queensland, and New South Wales. Many agricultural operations are reliant on the groundwater resources of the GAB as it extremely challenging to support intensive operations entirely through the direct capture of overland precipitation flow. The GAB also holds significant cultural importance to First Nations groups, who derive unique spiritual connections and use-values to the GAB's sparce water resources.

The proposed three year-trial to inject and store liquefied Carbon-Dioxide (CO2) into an underground Precipice Sandstone Queensland aquifer in the GAB as proposed by CTSCo is an extremely sensitive issue to the Australian agriculture sector, regional communities, and



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farming families. CTSCo's proposal is novel and significant and has the potential to inflict unacceptable risk to the Australian agriculture sector, public trust and confidence in domestic food production, public health and human security, and the pristine environment of the GAB which spans across several State and Territory jurisdictions.

The critical issue involves the risks associated with injecting large volumes of CO2 into a significant groundwater reserve. The total quantity of the project is also alarming, 110,000 tonnes of industrial waste is intended to be injected into the GAB annually. In comparative terms, this exceeds the Safeguard Mechanism minimum threshold, which to-date captures approximately 219 facilities responsible for almost one third of Australia's national emissions. This puts the scope of the proposed project into perspective, it is irresponsible to trial a significant project and technology of consequence in one of the world's largest and clean natural water resources that supports over 180,000 Australians, 7,600 businesses, and 120 towns.

The Senate Inquiry is seeking comment on the implications of Glencore's proposed CCS project in the GAB on eight specific matters as outlined in the Terms of Reference; our submission has responded to these matters at a high-level.

Precautionary Principle Approach

Based on a precautionary principle approach (an internationally recognised standard), the current scientific modelling indicates that the proposed project should not go ahead until further scientific work is undertaken.

Potential Risks and Impacts

A large contingent of reputable hydrologists have expressed concern that the proposed project may turn the environment of the underground aquifer acidic, potentially resulting in the dissolution and leaching of heavy metals including lead, arsenic, and cadmium (via chemical reaction) into the underlying groundwater resource.

If perverse environmental outcomes are present, injected industrial waste cannot be recovered at-scale rendering it impossible for the original intact condition of the aquifer to be restored.

Other risks include but are not limited to:

- Compromised water quality and available quantity to support productive activities and other derived use-values.
- CO2 injection may also cause a 'clogging' effect of existing cracks and fissures within the aquifer groundwater resource, limiting available locations for new bore installations and/or existing flows.
- Negative implications for financial investment.

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The NFF notes that many primary producers have secured new land title and water allocations to support an expansion of their existing business operations. The implications of potential project risks must consider these critical aspects.

Conclusion

The NFF thanks the Senate Inquiry for undertaking the time and critical resources needed to investigate this issue of significant consequence. We await further engagement with the Committee. Please do not hesitate to contact Warwick Ragg, General Manager, Natural Resource Management, via e-mail: at the first instance to progress this discussion.

Yours sincerely,

TONY MAHAR Chief Executive Officer



Leading Australian Agriculture

NFF House 14-16 Brisbane Avenue Barton ACT 2600

Locked Bag 9 Kingston ACT 2604 (02) 6269 5666 reception@nff.org.au nff.org.au



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@NationalFarmers