

Stoney Creek EIS

Introduction

Geni.Energy welcomes the opportunity to make a submission on the Stoney Creek Battery Energy Storage System Environmental Impact Statement. Geni.Energy supports responsible renewable energy developments in our region and actively participates in government assessment processes to help improve project design, strengthen community outcomes, and build long term social licence. Geni.Energy is a not for profit organisation established in 2020 based in northwest NSW.

We support the Stoney Creek Battery project. The proposal has several positive attributes, including its location on previously cleared and disturbed farmland, the limited need for new transmission infrastructure, and its ability to provide essential grid support services that are increasingly required as renewable generation grows. The project also represents an opportunity for economic diversification within the Narrabri Shire at a time when the region is experiencing significant development pressure.

This submission is intended to be constructive. It focuses on areas where additional clarity, stronger commitments, or improved assessment would strengthen the project and its contribution to both the electricity system and the local community. In particular, we address greenhouse gas displacement, local capacity building and social licence, bushfire and emergency risk, transport impacts, and transparency around grid services and community benefits.

Greenhouse Gas (GHG) Displacement Assessment

We would like to see a better assessment of the GHG's that this project displaces from the grid. It is our understanding that because it stores excess solar and wind that is currently being curtailed (limited) from renewables it produces none of its own GHG emissions.

On the other hand, Wilga Park power station (located near Narrabri and is powered by the appraisal gas from the Narrabri Gas Project) in 22/23 produced 143,000 MWh of electricity according [NGER](#) and created 81,776 tonnes of Scope 1 emissions.

This battery, if it fully cycles once daily, will store and provide when needed, about 365,000 MWh per year, or more than double that provided by Wilga Park, with no annual emissions.

Currently NSW and ACT's combined average daily gas consumption used for electricity generation according to AER ([here](#)) in the last 12 months has been 29 TJ/day or 10.59 PJ/year.

Other reports such as a 2021 [Northmore Gordon](#) report singles out NSW from the NSW/ACT numbers and puts gas consumption for electricity generation at 5TJ per day, or 1.8PJ/year.

Assuming that to generate electricity from gas it takes 10-12 GJ with an Open-cycle peaker (OCGT) to produce 1 MWh of electricity ([ref](#)).

The Stoney Creek Battery as a 1,000MWh battery, charging once per day from renewables and fully discharging once per day will therefore displace the need for 10-12 TJ/day of gas or between 3.6 and 4.4 PJ/year.

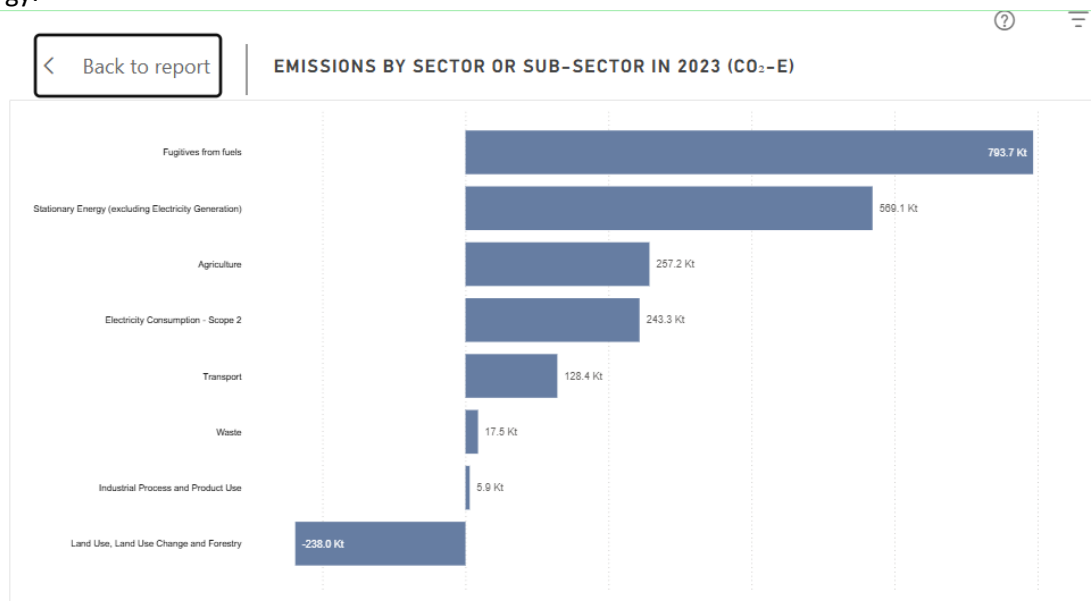
Depending on how much gas is used each year in NSW for electricity generation (1.8PJ through to 10.59PJ), it can be shown that the Stoney Creek Battery will displace (between 3.6PJ to 4.4PJ) anywhere between 34% to 244% of the gas currently used.

Recent media has shown this at a National Electricity Market (NEM) wide level as well with headlines such as [“Australia's battery revolution is pushing gas out of the grid support business”](#).

“Recent planning by the [Australian Energy Market Operator](#) (AEMO) indicates that the influence of batteries will continue to grow, and we contend will quickly outpace traditional gas and hydro resources in the coming decade.

In the National Electricity Market (NEM), a major milestone was reached when [large batteries discharged more energy in November than peaking gas generators](#) for the first time (Figure 1). This shift reflects both the rapid rollout of new battery projects and increased market volatility, which favours fast, flexible storage technologies.”

For Narrabri LGA, this is particularly relevant due to our current massive per capita GHG footprint. Due to the comparatively large number of fossil fuel projects in the Narrabri Shire, the [NSW government SEED portal](#) shows Narrabri Shire LGA in 2023 was 1,777kt of scope one and two CO₂-e, mostly from fugitives from fuels and stationary energy.



With a current population of around 12,754, this is a per capita emissions profile of 139 tonnes of CO₂-e per person. Compared with the NSW average of 114.5Mt in 2023 for a population of 8.6 Million people, which is a per capita average of 13 tonnes each. The Stoney Creek battery may play some roll in bringing the Narrabri LGA per capita emissions down and having this outlined in greater detail by the proponent could be useful.

Local Capacity Building and Social Licence

Geni.Energy has held a range of meetings with the proponents to discuss ways to build local capacity from this project. We see great benefit in collaborating to help build local skills in the renewable energy transition.

The community benefits listed as part of the LTESA are a great start (including the community fund of \$30,000 p.a.), however we would like to see these benefits clearly quantified in the EIS and committed to in the conditions of consent for the project to ensure longevity and accountability.

Any community benefits fund amounts should be indexed to inflation and align with the project life span. We would like to see that they are overseen by a local committee with representation across the community with transparency and annual reporting of expenditure.

Geni.Energy could provide the administrative function to manage these benefits.

Geni.Energy has been working to demonstrate that local ownership and local governance is key to local social licence for renewable energy projects. For example the [Wellington BESS](#) has made a landmark arrangement with the local First Nations, Wiradjuri people, providing a 5% equity share in the battery. This is a great example that could also be used with the Stoney Creek battery.

The SIA lists (6.12.2 Table 25 page 117) a range of other initiatives that could create positive outcomes for the community and we encourage the proponents to further explore these and commit to them. In particular:

- Education and engagement programs around the importance of storage in the transition
- Co-located community energy project that allows for local governance and ownership models
- Bolstering local training opportunities in renewable energy
- Formalising a local procurement strategy and prioritising local hires and contracts

This is an ideal collaboration opportunity with Geni.Energy who has similar strategic goals.

We also encourage targets for local employment and apprenticeships (including for young people and First Nations people) and a transparent local contractors register and regular engagement to actually place local work.

We suggest that the community would appreciate a physical presence locally that can respond to queries and provide genuine engagement, avoiding consultation fatigue from “drop in” sessions. This is also an area of potential collaboration with Geni.Energy.

We also recommend programs such as those delivered by [Democracy Co](#) that may help to work through the conflict and consultation fatigue being experienced by the number of major developments currently under consideration in the region.

Bushfire Assessment

The Bushfire Assessment does not suitably analyse what happens if a bushfire reaches the battery installation nor how toxic smoke would disperse in the unlikely event of thermal runaway. Likewise

there is not enough detail at this stage about how fire fighting water would be managed to avoid contamination of surrounding land and water. Worst case scenario modelling of these disasters may be needed.

Transport Impacts

The project will add over 19,000 vehicle trips to a normally quiet rural road. This will be a significant change for local residents. We would like to see a commitment for more communication on road closure, changed traffic conditions and oversize movements.

Grid Support Services

The SIA notes that community members wanted to understand if the project would benefit Narrabri in terms of electricity support. It is disappointing to read in a few places the EIS gives the impression this battery will provide back up power or grid benefits locally, which is not the case due to its connection to the Transgrid line. This should be made clearer in future communications and education programs.

Conclusion

The Stoney Creek Battery has the potential to deliver substantial benefits at both a system and local level, particularly through the displacement of gas fired generation, improved grid flexibility, and contribution to the renewable energy transition. In a local government area with an exceptionally high per capita emissions profile, the role that large scale storage can play in reducing reliance on fossil fuel generation is particularly relevant and could be more clearly articulated in the EIS.

At the same time, there are areas where further work is required to ensure the project proceeds responsibly and with strong community confidence. This includes a more robust assessment of greenhouse gas displacement, clearer and enforceable commitments around community benefits, stronger analysis of bushfire and contamination risks, improved communication around construction traffic impacts, and greater transparency about what grid services the project can and cannot provide locally.

Geni.Energy sees genuine opportunities for collaboration between the proponent and local organisations to build skills, support local employment, and explore innovative community energy and governance models. Strengthening these elements through clear commitments and conditions of consent would help ensure the project delivers lasting benefits and maintains social licence over its full operating life.

We encourage the consent authority to consider the matters raised in this submission as part of the assessment process and to require additional detail and commitments where necessary to improve project outcomes for the Narrabri community and the broader electricity system.