SUSTAINABILITY OF ENERGY SUPPLY AND RESOURCES IN NSW

Organisation: CLEAN Cowra Inc

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NSW Parliament Legislative Assembly Committee on Environment and Planning

Letter of Support

We provide this letter of support to Jemena for their submission to the "Inquiry into sustainability of energy Supply and resources in NSW", specifically the terms of references around energy reliability and sustainability.

CLEAN Cowra Inc. and CLEAN Core Development Ltd. as part of the CLEAN Cowra Biomass Project Development, have been exploring the potential utilisation of biogas production for injection into the local natural gas network in Cowra , NSW.

The CLEAN group have been working in collaboration with Jemena to explore this possibility.

CLEAN's vision is to build capacity for regional development around sustainable, low carbon intensive communities, addressing aspects related to climate, water, energy, resources, that present local challenges faced by the region.

CLEAN Cowra initiated this innovative project which has been under development over a number of years. As a community organisation and advocate for bioenergy as an appropriate regional solution, it has the support of Cowra Council and local community in achieving its identified goals and outcomes.

CLEAN Core Development, is the recently established, commercial entity of the initiative, with the role of ensuring the late stage development of the project and establishing the financial viability and investment into the project.

The CLEAN initiative aims to unlock the value of resource recovery by the generation of clean energy to produce a local circular economic model that can be replicated and scaled throughout Regional NSW. Outcomes will significantly reduce emissions and cost of energy to the local community.

As regional agricultural, industrial and logistics hub, Cowra consumes significant energy, which is all imported to the region in the form of electricity, gas and fuel. CLEAN is developing local energy projects to stimulate the local economy and tap into local resources, such as biomass, waste products and other renewable energy such as solar and storage. By establishing a cluster of agricultural and industrial processors, the project contributes to these strategic outcomes, providing economic benefit to local business and industry and additional local employment prospects within multiple sectors of energy, agriculture, food processing and transportation.

The project feasibility and development has established solutions for solving local issues regarding waste management, energy demand and security, particularly in intensive industry processes. Distribution of local energy is a key element to the projects CLEAN is establishing. It is estimated that enough biomass feedstock and waste products is available to provide over 10 MW of electricity generation in Cowra providing over 60% of town energy needs.

This project has identified the potential benefits to regional sustainability in terms of renewable energy generation and distribution, resource recovery and demonstrate the local circular economic outcomes for regional communities like Cowra. These multiple benefits have been identified to the local community and as well as Council itself through numerous presentations and workshops over the years. Cowra Council as part of it Regional Economic Development strategy has identified one of its objectives in supporting innovation within Industry and Infrastructure and Clean Energy solution within the NW industrial precinct.

In collaboration with Cowra Council, local industry, NSW Government through support of Sustainability Advantage and partners drawn from around Australia, the CLEAN initiative will result in new clean energy assets being developed.

These new assets will be shared between several local energy customers (industrial, agricultural and other companies), and therefore will be invested in, owned and managed by CLEAN utilising investment by the local community, including residents and industry.

Whilst bioenergy technology is widely proven internationally, as identified by the Clean Energy Finance Corporation, its development in the Australian context is limited. The CLEAN Cowra Biomass Project Development is unique as it looks to provide additional benefit and efficiency through:

- Aggregation of local biomass resource to produce more biogas,
- Distribution of energy produced, both thermal and electrical,
- Development of a community enterprise model that is commercially viable whilst providing significant environmental and social impact.

Biomass is considered a resource for producing clean energy and currently less than 2 % of Australia's energy output is derived from bioenergy. As part of the CLEAN project, this technology will include anaerobic digesters for biogas production, renewable energy generation from bioenergy, solar & storage and energy networks. Bioenergy technology is highly suited to applications where an otherwise local wasted resource is available with potential to supply energy locally. The project outcomes will provide numerous range of benefits for our community and demonstrate capacity for other regional towns to achieve similar impact. As the Natural Gas Network distributer, Jemena have commenced investigation with the CLEAN group for the Cowra project to potentially provide up-graded biogas for distribution into the local network. Over the past four months, in conjunction with their Renewable Gas Division, the parameters for specification of the Biomethane produced at the facility are being determined for its suitability for compression and odourisation prior to injection into the network. The infrastructure and connection requirements and their associated costs are being established so that the opportunity and viability can be examined.

For the above reasons, CLEAN supports this submission, and will continue to provide input to assist the implementation of this Biomethane gas-upgrading component of the Cowra project where appropriate.

For further information, please make contact with the organisation.

Yours Sincerely

Dylan Gower

for CLEAN Cowra inc. and CLEAN Core Development



