#### circular.economy@pc.gov.au



Dear Sir/Madam

# Re: Submission to the Productivity Commission Inquiry into "Opportunities in the Circular Economy"

Council thanks the Productivity Commission for the opportunity to provide a submission in respect to the inquiry into opportunities in the Circular Economy.

For Dubbo as a large regional City and the largest urban settlement in the Central West and Orana Renewable Energy Zone, the Circular Economy presents the potential for a multifaceted approach to waste management, economic growth and to further build community understanding of the importance to our national net zero pathway.

Dubbo Regional Council is committed to reducing greenhouse gas emissions to achieve Net Zero for Council operations by 2050. To ensure this outcome is achieved, Council has adopted a Net Zero Strategic Framework, which includes our priority areas and goals for emission reduction and setting short-, medium- and long-term emission reduction targets. Council's leading source of operational emissions, and priority area for action, is 'waste to landfill'. As a key component of Council's Net Zero journey, waste entering Council's landfill facilities contributes up to 62% of Council's overall carbon footprint.

The amount of waste being sent to landfill will continue to increase with population growth driven by Dubbo's strategic location, industrial growth and development and as a result of the 39 renewable energy projects currently proposed in the Central West Orana REZ. Adopting a 'circular' rather than a 'linear' approach to waste management will be essential for Council to achieve our Net Zero targets and we cannot do this in isolation. Council is cognisant of the fact that we need to work closely with all levels of government, residents, business and industry to reduce operational emissions.

Council is currently developing a Waste Strategy to detail how we can best work with government, residents, business, and industry to reduce waste to landfill and adopt a circular economy. Our priority areas for waste reduction includes Solar Panels, Timber Pallets; Construction and Demolition Waste; and Bio-solids / Animal Waste (that can't be composted).



In relation to the Terms of Reference, the following table provides our barriers, opportunities and support required.

Barrier	Opportunity / Support Required
NSW legislation and regulations do not support circular economy principles or practices, especially across all local government areas. As an example, currently the NSW Regulation prohibits the thermal treatment of waste for energy recovery unless it is undertaken in the Parkes Activation Precinct or West Lithgow Precinct respectively.	Amend State legislation and regulations to better support circular economy principles and allow for circular economy opportunities to be realised across all local government areas.
More emphasis needs to be placed on renewables projects in the Orana Central West REZ to incorporate waste management plans and to utilise sustainable procurement which could support a circular economy in our region.	Ensure approvals for renewable developments in the CWO REZ include conditions for waste management and sustainable procurement to support CE principles.
Requirements for material flow data to be able to plan for circular economy at a local and regional level.	Support the collection of and provide access to material flow data that could assist councils in planning for a circular economy at a local and regional scale.
Circular economy planning needs to be undertaken on a regional scale.	Support for the development of local and regional circular economy precinct plans.
Government funding is required to install circular economy infrastructure (e.g. a biochar facility for biosolids)	Provide adequate funding for circular economy infrastructure.
Further staff resources are required to coordinate circular economy projects.	Provide 'placed based' circular economy coordinators to help deliver on priority waste or circular economy focus areas.

There is a need to expand where place based circular economy activities (e.g. industrial precincts and others enabled by urban planning and development) are being located. As an example, currently NSW Legislation prohibits the thermal treatment of waste for energy recovery unless it is undertaken in the Parkes Activation Precinct or West Lithgow Precinct respectively. There is an opportunity to extend the treatment of waste for energy recovery to locations based within Renewable Energy Zones.

Housing circular economy activities in Renewable Energy Zones will complement the main objective of a circular economy, where the utilisation of new production practices and innovative technologies meet customer demands in more sustainable ways and ensure economic growth does not occur to the detriment of the environment and/or resources. Renewable Energy Zones will deliver multiple benefits for NSW via private sector investment and support, reduction in wholesale electricity costs, reliable and cleaner energy production, emissions reductions, and local community benefits and enhancement funds. The Central West Orana Renewable Energy Zone has the ability to leverage from the above stated benefits and ensure circular economy infrastructure are located within the precincts nearby to manage the solid and liquid material streams generated during construction, commissioning and during the life of the projects.

The following also provides a number of key Council projects and policy settings that Council is focused on that would assist in achieving a range of circular economy benefits and ensure our community can continue to benefit from development in the Central West and Orana REZ.

Project examples are listed below:

#### 1. Renewable Energy Awareness and Career Training Centre (REACT) Wellington NSW

The REACT project will deliver a Renewable Energy Training Campus to train the renewable energy workforce, as well as employees for the construction phase, including supporting vulnerable employment cohorts into sustainable careers, and a Renewable Energy Science and Technology Discovery Centre, to build engagement in STEM and renewable energy careers, whilst providing a centrepiece tourist attraction for Wellington.

Total Project cost \$37.7 million. \$11.25 million is earmarked for the project through the NSW Government. A business case has been developed for the project, projecting \$1.4 billion in direct and indirect economic and social benefit over the life of the project.

## 2. Biochar and Biogas Activation Precinct

The project is designed to attract industry to use the waste materials generated by the REZ and other key regional industries to generate green power and carbon sequestration opportunities, to provide firming potential for renewable power providers.

Total cost \$10 million including initial enabling infrastructure, master planning, feasibility development and investment attraction. The investment would underpin private investment in processing facilities.

This also addresses our waste facilities carbon footprint (our biggest liability) as well as diverting organic matter away from landfill thus saving space for material that can't be used for other things.

# 3. Circular Economy Activation

#### (a) Solar Panel Processing

A Solar panel processing facility based in Dubbo will provide a local processing and resource recovery location for damaged panels (during transport, construction and commissioning) and end of life solar panels. Tipped to soar from 2,500 tonnes of waste in 2023 to a predicted 9,000 tonnes by 2035 on top of Dubbo's high level, end of life domestic solar panel waste.

Total project cost \$30 million which will result in the diversion of up to 9, 000 tonnes from landfill and the creation of valuable product streams, including silver, aluminium and copper.

### (b) Commercial Material Recycling Facility

The construction of a commercial, industrial, construction and demolition Material Recycling Facility (Commercial MRF) to allow REZ project materials such as concrete, treated timber, non-treated timber, pallets, steel, plastics and plasterboard to be recovered and available to the circular economy industry for processing, instead of to being transported back to the east coast or landfilled in regional waste facilities.

Total project cost \$12 million. The project will support approximately 40,000 tonnes of municipal waste in addition to REZ construction material being diverted from landfill in the initial stage.

# 4. Temporary Worker Accommodation - Urban Incentive Fund

The establishment of a fund to incentivise renewable energy project proponents to develop temporary worker accommodation projects in urban areas rather than traditional "donga" style camps in isolated locations. This will maximise the economic benefit of this temporary workforce to regional communities and minimise issues associated with this workforce. The fund would help to offset the additional cost of building in an urban area (estimated at 20%) to the proponent and would be distributed via application from local governments.

Total project trial cost in Dubbo \$15 million over three projects (based on the current partnership between Dubbo Regional Council and Squadron Energy). The initiative would support an annual contribution to the Dubbo economy of \$36 million annually from three urban temporary accommodation projects.

Council looks forward to the results of the Inquiry and would welcome to discuss any of the points raised in the submission.

Should you have any enquires in this matter, please contact the undersigned during normal office hours.

Yours faithfully

Steve Jennings
Director Development and Environment