



1 August 2019

TO:

Circular Economy Policy Team
Department of Environment, Land, Water and Planning
PO Box 500
East Melbourne VIC 8002

Subject: Committee for Gippsland members response to Issues Paper Survey for Circular Economy

Please find enclosed Committee for Gippsland's response to the circular economy survey.

Gippsland welcomes the opportunity to partner with Government to establish our region as leaders of the circular economy.

We believe our value proposition is highly complementary and offers Government a long term sustainable circular economy solution.

We offer the following opportunities:

- Skilled workforce – engineering and technical based workforce (transitioning from traditional coal generation to new emerging sectors such as circular economy);
- Industrial landscape and precincts;
- Existing capability – Organics reprocessing; Paper and Cardboard recycling; Residual waste capacity with new and emerging Energy from Waste technology; and
- High education leadership to develop training and development packages to reskill workers in readiness to access new jobs emerging in new sectors;
- Transport and logistics network and industry capability.
- Social license supporting industrial footprint.

The Committee for Gippsland welcomes the opportunity to meet with Government to further progress this opportunity.

Should you require additional information please contact me on (03)562332189 or Jane.Oakley@gipps.com.au

Yours sincerely

Jane Oakley
Chief Executive Officer



Circular Economy for Victoria

Your feedback will help the Victorian Government to understand the benefits and limitations of a circular economy in Victoria and determine which areas to prioritise for further work. You can answer the following questions on our Engage Victoria website until 2 August 2019:

Q1: Is this a useful definition of circular economy? How would you change it?

Committee for Gippsland (C4Gipps) supports the proactive nature of the Government's definition as defined in the issues paper July 2019. C4Gipps embraces the important concept that there must be a level of stewardship in understanding what is built and where it goes at the end of life and that industry have a key role to play. Government policy must facilitate and incentivise such behaviours in transforming both production and consumption systems.

Another key area to be included in the definition is raising awareness and empowering business and community through education.

We encourage Government to keep the definition succinct and easy to understand for example a google definition is 'the transition to a more circular economy, where the value of products, materials and resources is maintained in the economy for as long as possible and the generation of waste minimised'.

In the Gippsland Water response, we will also be highlighting that there is a deficiency in not recognising the contribution resource recovery from waste streams also makes to the Circular Economy.

The proposed definition focusses on avoiding waste and pollution through good design and efficient practices and that products can be easily 'repaired, reused and recycled' at end of life.

We suggest that beyond these bounds, resource recovery post end of life (energy, carbon, precious metals, biomass etc) should be acknowledged in the definition of Victoria's Circular Economy.

Q2: Do you think Victoria should pursue a more circular economy? Why or why not?

Yes. Gippsland welcomes the opportunity to be recognised as 'circular economy' leaders. As the region transitions from brown coal power production, circular economy offers a new industry opportunity, demanding a (engineering and technical) skilled workforce. Gippsland recognises this as a major opportunity to transition workers (from our traditional energy sector) successfully, whilst working with Federation University and TAFE Gippsland to design curriculum to attract and build future workforce skills.

Gippsland is well placed to bring the circular economy alive with the capability to de-engineer (pull it apart) and re-engineer for a purpose (existing and new emerging markets). Government assistance is facilitating investment in infrastructure, services and potential markets would be of significant long-term economic sustainability.

Several Gippsland businesses are exploring innovative ways of producing and purchasing recycled materials in a bid to replace costly inputs from both a commercial and environmental perspective.



Gippsland is well placed to accommodate large scale industrial precincts to foster a vibrant long sustainable economic circular economy. We also believe there is a high level of community appetite for such investment.

C4Gipps encourages the Government to consider a decentralised model and a policy framework that supports the use and processing of recyclable materials, making it cost competitive for industry to source recyclables and/or reprocess materials (compared with buying virgin products).

Gippsland also offers the Victorian Government a viable low-emissions landfill replacement solution with the impending Australian Paper Energy from Waste solution (to be housed at Maryvale).

Progressing this opportunity will avert a landfill crisis in 2025 with the closure of the Hallam site. This project will require a committed volume over time (650,000tpa of residual waste x 25 years) and will require a level of Government intervention.

Energy from Waste by-product (bottom ash) will also be re-purposed for road-base however again will require Government intervention to ensure Victoria's road construction standards are modified to accommodate this recycled product.

Agree with C4G comments.

In the Gippsland Water response, we will also be very supportive of the State pursuing a more circular economy as this aligns very strongly with our business model.

Referring back to our view of resource recovery from end of life waste streams should also be considered circular economy, our business model includes waste water recovery for irrigation, co-digestion of biomass to produce electricity as well as composting of biomass, green and food waste streams to produce compost and land rehabilitation soils.

Q3. Are there other benefits of a circular economy that should be considered in developing the policy?

Circular economy offers higher value job opportunities than today's waste disposal model. Food security issue to ensure food does not go to landfill and ensure the highest value is placed on food. Green waste is already providing secondary value in terms of composting this can be complemented by food waste capture.

Greater research (and funding) must be invested in the repurposing textiles back into the system. Current systems are demanding an ever-growing demand in the use of water and energy. At the recent Oz Water Conference, we were told that the suit we were wearing and the takeaway coffee cup we were drinking out of, required a volume of water that exceeds typically what a human would drink in a lifetime. Textiles are sophisticated products made specifically to meet a need but the after useful life not well thought-out.

Circular economy offers the opportunity to explore new life options in the system. For example, once paper and cardboard fibres breakdown then it moves onto composting. Improved R&D investment will uncover new life options further removing disposal to landfill.

Decentralising circular economy is an important policy consideration and committing volumes over time to grow existing and secure new markets to deliver a sustain regional economy.



Government policy should also factor in funding models that will assist regional economies with infrastructure investment particularly in the early developmental stages. And either mandate the use of recycled materials or incentivise to stimulate the use and growth of recycle materials. Businesses should be rewarded for implementing closing the loop systems.

Government policy should review levies and gate fees associated with landfill disposal, so it becomes an unviable option.

R&D to ensure continuous improvement with the introduction of innovative technology.

Agree with C4G comments.

Gippsland Water will also be offering comment on the benefits to water resource security through the more productive uses of water resources as well as re-use and re-cycling of wastewater.

With future climate projections predicting further stress on water systems throughout the state, a circular economy approach to water management will contribute to enhancing water resource security for a growing Victorian population.

Q4. Which parts of the economy, which materials, or which activities should be a priority focus for Victoria's circular economy policy? Why?

Provide a redundancy network of MRF's and processing plants based on forecast demand connecting Melbourne with regional solutions. A whole of state connected transport solutions should be considered to minimise truck movements across the road network delivering improved environmental and safety outcomes.

Key materials that policy should focus on include:

- Glass;
- All plastics;
- Food;
- Paper and Cardboard
- Textiles
- Aggregate – Quarry and Asphalt plants
- Metals.
- Whitegoods

Another key priority area is that of social license – does the community have an appetite for the circular economy and it being built in their local area?

Economy focus areas include those regional areas going through structural adjustment; access to skilled workforce; available industrial land for major infrastructure builds i.e. MRF's; Processing plants etc. Access to markets.

Agree with C4G comments.

Gippsland Water will be focussing our response on green waste and food waste resource recovery in our submission given our significant capacity for composting within our organics recycling facility at Dutson Downs.



Regarding materials that should be a priority focus, we will suggest that it will be important to understand the current economics regarding costs to acquire virgin materials as a comparison to existing costs of accessing these materials through circular economy structures.

There is a significant gap right now which serves as a disincentive for businesses to participate in a circular economy.

Understanding of the magnitude of the gaps would be necessary to put forward a strategy for prioritising the materials as part of formulating and rolling out Victoria's circular economy policy. This will also help identify where and how much incentive may be necessary to enable the transition to circular economy principles.

It will also be important to understand which industries most are readily positioned to take up recovered, reused, recycled materials so that the prioritisation process takes readiness to act/prepare/re-tool into consideration.

Q5. What issues will the government need to consider or manage in the shift to a circular economy? Commodity prices, viability and cheap imports.

The cost of recovering what little product is commercially viable out of e-waste is well beyond the commodity price making the market unviable.

Carboard prices and plastic prices are also dropping with increased collection volumes which is natural considering demand/supply equilibrium price. The government, however, needs to act on decreasing cheap imports that would replace the internal demand for Australian product to balance the marketplace and sustain pricing that supports continued domestic recycling and product Consumer education; point of use is the natural place to commence the sorting process and would significantly reduce the impact on the post collection process for industry. Additional bins will be required to facilitate this however, it is only 1-extra bin. Food waste requires a bin as well as recyclables but the key issue with the recyclables is that Glass MUST be sorted separately to all other recyclable materials (which can be easily sorted at MRF's).

Shattered glass contaminates and other recyclable products will always exist however practices and education over time will continue to reduce contamination rates.

Decentralised model with connectivity to Melbourne.

Embracing new emerging technology and setting policy to secure volumes for market participants.

Agree with C4G comments

It will be important that government has clear visibility of existing capabilities to support the implementation of a circular economy policy. Gippsland Water has significant capabilities in supporting Circular Economy principles in the way resources are recovered from green waste and food waste.

In the past there has been investment by governments towards new entrants in the food and green waste recycling industry and existing significant organics recycling facilities (such as our own) which represent great potential have been overlooked for investment.



Understanding the nature of the gaps between costs associated with accessing virgin materials as compared to materials made available through the circular economy will be crucial.

There will need to be financial incentives in place to encourage the transition to circular economy. A key incentive is the landfill levies currently being charged across the state. This is a direct lever that needs to be considered to incentivise the transition.

It will also be important that the role of all three tiers of government as regulators, policy makers, administrators and investors is considered.

A key to enabling the shift will be driving down the cost of resource recovery from waste streams. Source separation of waste will be a big financial and behavioural challenge and it is important that every party in the resource/supply/waste chain make equitable investment towards this (e.g. Education, Logistics, Innovation).

A circular economy transition also creates an arena for targeted innovation. Victoria is recognised as having created a vibrant innovation ecosystem attracting global attention. There is an opportunity for the state to seek out and support deliberate start up activity in the circular economy space. There is massive potential for scalability of successful circular economy innovations which would further contribute to the state's economic output and align with government policy on the role of the start-up economy.

Q6. Would the shift to a circular economy adversely affect your industry? How could government mitigate these effects?

C4Gipps members make the following points:

Currently collect all paper/cardboard forms including books, newsprint along with soft clear plastics. Have streams for all products to be re-produced.

Soft plastic volumes will reduce as the push away from plastics continues as the consumer level.

Energy from Waste will only be viable if volumes over time are secured.

Gippsland existing structures will only be strengthened with greater investment and regional deployment of a circular economy. Our existing organic re-processing plants would continue to operate and provide viable pathways to the re-processing of organics to compost. Both plants have indicated the capacity to grow and re-process greater volumes if commercially viable and security of materials.

Agree with C4G comments.

As mentioned in response to Q5, it will be important for government to have clear understanding of existing capabilities to support the shift to circular economy (e.g. existing recyclers, resource recovery businesses, composters etc).

Energy from Waste as well as organics recycling and composting is made more viable where feedstock volumes are secured.

Gippsland Water's organics recycling facility does have the capacity to grow both in capacity as well as in the scope of materials that could be recycled, if there were to be government investment



forthcoming to realise this potential. (e.g. greater volumes of green waste and food waste recycled, extending into recycling new waste products such as compostable/biodegradable packaging).

Q7. How do you think the Victorian Government should measure and report on progress toward a more circular economy?

- Reductions of waste to landfill by tonnes;
- Emerging markets and growth in re-processing by tonnes
- Closure of landfills across the state and/or the slowing down of new cells being built;
- Carbon emissions – reduction in landfill methane levels; transport movements etc.
- GDP growth (and regional domestic product);
- Job creation in the circular economy sector:
- Private and public sector investment and return.

Agree with C4G comments.

Gippsland Water will also be suggesting in our submission that stockpile volumes also be measured. Now there are significant volumes of waste materials that may not have made it to landfill however are stockpiled causing environmental risks. In a circular economy that is functioning well, stockpile volumes should be minimised as value is actively extracted from waste streams through efficient and effective recycling, repurposing and resource recovery.

Q8. What are the most effective actions the government can take to shift Victoria to a circular economy?

- Incentives for reducing landfill and increasing resource recovery;
- Infrastructure investment in regional areas (or investment model that attracts private investment);
- Assist with mapping current regional capability and capacity;
- Education programs – build community capacity and affirm social licence;
- Committed volumes to facilitate investment – build market confidence (i.e. facilitate long term contracts / volume);
- Review and enable standards which restrict the use of recycled products in manufacturing;
- Skills transition and preparedness – invest in the future of skills for the future (migration pathway for brown coal production workers and new entrants).

Agree with C4G suggestions.

Gippsland Water also suggest that government considers providing a framework enabling industry to successfully identify favourable end uses. (e.g. weighing up energy recovery vs. waste minimisation, or reusability vs. resource recovery).