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Prospect Hill Waste to Energy Facility
Submission 2 - Opposing Application # 1004200

We appreciate the opportunity to provide a second submission regarding the proposed Prospect Hill Waste to Energy Facility at Lara. Geelong Sustainability attended the Community Conference in July.

In reviewing the answers provided by Prospect Hill International PHI to the community's questions, we were disappointed to find little if any new material. So unfortunately, our key questions remain.

- Where will the waste come from?
- Where is the social license for this project?
- Where is the business case that shows the plant is viable?
- How can this plant be a transitional waste solution when it will operate for more than 25 years?
- Why is there no front-end sorting of waste?
- Why is there no agreement with Powercor for energy off-take?
- How can PHI justify using 2.5Gl of potable water per day?

Lack of feedstock

- PHI claim most of the waste will come from the G21 and surrounding regions. However it clear that G21 councils don't require this facility and western Melbourne will be served by the already approved plant, Recovery Energy Aust. at Laverton [see Appendix a, Fig 1]
- Local councils have ambitious zero waste policies with plans to recover food, glass and other resources.
- The City of Greater Geelong (CoGG) has set a net zero waste to landfill target by 2030. CoGG has also started its food organics trial in Lara, which we'd suggest is sending the EPA a subtle message!

Lack of social licence for this project

- Lara residents are still dealing with the aftermath of the last disastrous waste facility, which is costing taxpayers millions to clean up.
- As the proponents have never operated any type of waste facility, the community is entitled to be concerned about their bona fides and capabilities to run the plant safely and efficiently.

Viable business model

- The community has continually called for a business model to be released showing that the plant is commercially viable. Transparency and accountability obligations should require that a strong business case exists to justify the investment. If not, they are entitled to be suspicious.

Incineration is not a transitional solution

- Incineration destroys the material forever, locking in an unsustainable linear approach and impeding innovative circular economy solutions.
- The plant has a lifespan of 25 years and hence this technology is inconsistent with Victorian Government statements on the Waste to Energy framework. We note that Infrastructure Victoria warned the state government about over investing in this kind of technology. There was meant to be a cap of 1 million tonnes per year and 3 other plants have already been approved [see Fig 1, Appendix A].

No front end sorting to remove hazardous items

- It's unacceptable for council waste to be fed directly into the hopper without screening and removal of dangerous and toxic materials like batteries and paint cans etc. This practice would be a major health hazard for the community and a workplace health and safety risk.

No energy off-take agreement with Powercor

- Despite years of planning, PHI has no agreement with Powercor for if or how the produced energy will be fed into the grid. We understand significant additional infrastructure would be required, which must be costed int the business case.
- CoGG is already capturing methane at its Drysdale landfill site via a 1MW plant. Many of PHI generalised statements are insufficiently contextualised to our region.

Excessive water requirement

- It is unclear if the facility will use potable water for cooling towers instead of low water options such as refrigeration for water cooling. Knowing the impending shortfall in town water supply for our region, it's inappropriate that the plant wants to use 2.5 Gigalitres of potable water in its cooling towers each day.
- Understandably, Barwon Water has raised its concerns. It remains unknown (and unlikely) that the plant could readily access recycled water. PHI has indicated it doesn't want to use more expensive cooling options that reuse water. This should another key issue to be explored thoroughly before approval.

Rationale for Environment Effects Statement

We believe the nature and scale of the proposed Lara WtE plant are such that they warrant an official Environmental Effects Statement (EES).[1] Specifically in relation to these EES criteria under the Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978. [2]

1. Potential extensive or major effects on the health, safety or well-being of a human community, due to emissions to air or water or chemical hazards or displacement of residences.
2. Potential significant effects on the amenity of a substantial number of residents, due to extensive or major, long term changes in visual, noise and traffic conditions.
3. Potential exposure of a human community to severe or chronic health or safety hazards over the short or long term, due to emissions to air or water or noise or chemical hazards or associated transport.
4. Potential greenhouse gas emissions exceeding 200,000 tonnes of carbon dioxide equivalent per annum, directly attributable to the operation of the facility.

Additional reasons to reject the proposal

Europe is abandoning incineration

Waste management practices in many European countries have been used to justify the PHI proposal. However, there are many differences and contrasts between these countries and Australia with regard to the methods for handling waste and generating power. Firstly, European countries do not have the same degree of access to capturing solar energy as we do, so there is a greater need for alternatives such as WtE, even if they are not emission free. Secondly, population and housing density makes it more difficult to guarantee separation of waste items for re-use and recycling. And while Europe and other northern hemisphere countries had previously embraced waste incineration, there is now a trend away from this technology. [3], [4]

Government policy is working to reduce waste

The City of Greater Geelong, and indeed the entire Barwon South West region are moving to a Circular Economy for waste, with the ultimate goal of zero waste to landfill. [5], [6] None of the councils in the G21 region need this facility and it seems implausible that a state government would impose a waste facility on a LGA whose traditional role is looking after roads, rates and rubbish!

All societies, locally and globally, need to reduce overall waste. Developed countries are leading a lifestyle which is inconsistent with sustainability, the burden of which we are leaving for the next generation and

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[1] https://www.planning.vic.gov.au/environment-assessment/what-is-the-ees-process-in-victoria
[2] https://www.planning.vic.gov.au/__data/assets/pdf_file/0026/95237/DSE097_EES_FA.pdf
[3] https://www.no-burn.org/europewasteburning/#resistance
[4] https://e360.yale.edu/features/in-europe-a-backlash-is-growing-over-incinerating-garbage
[5] https://geelongaustralia.com.au/common/Public/Documents/8d7ec5c40d76376-28042020councilagenda-wasteandresourcerecoverystrategy2020-30-strategyattachment3.pdf
[6] https://www.reduce-recycle.com.au/about-us/regional-plan/

under-developed countries. Under state government policy, all local councils are gradually introducing separate household waste bins for food waste & garden vegetation, glass, and recyclables. [7]

Regional Renewable Organics Network

Further evidence why allowing the establishment of a WtE facility would be short-sighted is the progress being made on the Regional Renewable Organics Network at Black Rock. Barwon Water is working with local councils - the Borough of Queenscliffe, Colac Otway Shire, City of Greater Geelong, Golden Plains Shire, Surf Coast Shire and the neighbouring Wyndham City Council - to explore opportunities for processing food and garden waste from households across the region. They will be able to take local commercial, industrial and household food and garden waste - known as 'organic waste' - and convert it safely into nutrient-rich products that improve soil for agricultural uses and capture carbon in the ground, as well as clean, green energy. [8]

Project benefits include:

- Processes 40,000 tonnes of our region's organic waste each year, concentrating it into 8,000 tonnes of high value, nutrient rich soil enhancers to support local agriculture.
- Reduces the region's emissions by between 10,000 to 15,000 total carbon emissions per year, the equivalent of taking more than 4,000 cars off the road.
- Saves energy costs, keeping water bills affordable for our customers
- Provides a local, long-term and lower financial and environmental cost waste solution for councils
- Generates 2.5 gigawatt hours of electricity, enough to power 14% of Black Rock's energy needs or the equivalent of 500 homes
- Creates 75 construction jobs and 36 ongoing jobs
- Leads the way in our region's transition to a circular economy, where materials are continually reused and recycled to increase their life span and reduce waste.

Thank you for the opportunity to make this additional submission.

Geelong Sustainability urges the EPA to reject the proposed WtE facility at Lara on the multiple grounds described above. We also believe that the scope of the proposed facility with its potential to threaten multiple environmental values warrants the application of an Environmental Effects Statement.

Geelong Sustainability contends the incinerator is not required and it would push our region in the wrong direction ~ away from our objective for a clean energy circular economy.

Yours sincerely,

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[7] https://www.vic.gov.au/transforming-recycling-victoria
[8] https://www.yoursay.barwonwater.vic.gov.au/rron

APPENDIX A

Figure 1

1.1. Existing facilities

Pre-existing approved facilities not subject to the cap

Facility	Annual feedstock	Electrical output	Thermal output	Notes
Australian Paper (Maryvale)[5]	650,000 tonnes	45 MW_e	225 MW_{th}	Electricity and heat to supply on-site paper mill
Recovered Energy Australia (Laverton)[6]	200,000 tonnes	15.1 MW_e		Output excludes 2.1 MW_e for plant operation; proposed capacity to provide thermal output to nearby properties in future
Great Southern Waste Technologies (Dandenong South)[7]	100,000 tonnes	7.9 MW_e		
TOTAL	**950,000 tonnes**	**68 MW_e**	**225 MW_{th}**	

Figure 3 Already approved WtE facility capacity

[5] https://engage.vic.gov.au/epa-works-approvals/australian-paper-wa
[6] https://engage.vic.gov.au/epa-works-approvals/recovered-energy-australia
[7] https://engage.vic.gov.au/epa-works-approvals/GSWT