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## **PROSPECT HILL WASTE TO ENERGY FACILITY SUBMISSION OPPOSING APPLICATION # 1004200**

We appreciate the opportunity to provide a submission regarding the proposed Prospect Hill Waste to Energy Facility at Lara. Geelong Sustainability is deeply opposed to this proposal, which takes our region in the wrong direction. Geelong is a designated UNESCO City of Design and its shared vision is based upon building a clever and creative future. Incinerating waste is neither clever nor creative!

1. The proposed facility would mostly incinerate reusable waste and is contrary to Victorian and Local Government waste management policies.
2. There is no reliable argument that the facility would reduce greenhouse gas emissions.
3. No guarantee that expected current volume of red bin waste will actually go to the Lara facility.
4. Volume of red bin waste will reduce in future as more waste is diverted from landfill and particularly when food waste is diverted to food organics processing.
5. Calculations regarding "displaced demand for energy" seem unfounded and will rapidly become inaccurate as Victoria's energy mix becomes greener.
6. No guarantee that energy will be able to be fed into the grid.

These concerns are discussed in more detail below.

### ***About Geelong Sustainability***

Established in 2007, [Geelong Sustainability](http://www.geelongsustainability.org.au) (GS) is a not-for-profit, volunteer-led, incorporated community association, registered environmental organisation and charity. Our mission is to empower people to protect and regenerate the planet. GS inspires hope through action and effectively delivers a wide range of community projects, events and advocacy work within the Greater Geelong and G21 region.

Our new Strategy 2025, aligned to the UN Sustainable Development Goals (SDGs), seeks to position our region for the bold transformative action required to become a net zero emissions region before 2040. We know a fast and fair transition can deliver economic opportunities and ecological benefits for Geelong and its people. Our operations fall under four pillars aligned to 4 SDGs: 1) Climate Action, 2) Renewable Energy, Sustainable Cities and Communities and 4) Circular Economy - the focus of this submission.

### ***1. The proposed facility would mostly incinerate reusable waste and is contrary to Victorian and Local Government waste management policies***

Prospect Hill's Works Approval Application claims that the proposal "aligns with Victorian Government waste policy... (which) supports energy from waste as a transition solution to reducing the use of landfill and allowing energy to be generated from materials that cannot be recycled. Similarly, EPA's wording on the Engage Victoria consultation page states that "the facility will only take residual wastes currently destined for landfill".

These suggestions that the facility would only be used to incinerate waste which would otherwise proceed to landfill are shown to be incorrect by the detail of the application. In reality, it appears that around two thirds of waste that would be incinerated is reusable.

Prospect Hill expects that the facility's feedstock will be around 35% food waste, 9% garden waste, 3% soil and other organic waste, 13% plastic and 5% glass (Works Approval Application Part 1, Table 8.2). In total, 65% of waste proposed to be incinerated could be reused. Nearly half of all waste is organics alone. Across our region, food waste makes up to 50% of the average household rubbish bin. However, it is expected that the City of Greater Geelong will reduce its annual ~50-55 millions tonnes of waste going to landfills by ~12 million tonnes in its proposed program of collecting Food Organics.

While we understand that governments cannot prevent all reusable waste from being placed in red bins, we consider that choosing to incinerate red bin waste which we know to be reusable rather than investing in solutions to reuse that resource would be astonishingly short-sighted. It is our considered opinion that this proposal does not encourage waste reduction and recycling initiatives and is out of line with state and local government policies which emphasise the need for reduction of waste and development of circular economies.

This proposal is inconsistent with Victorian Government statements on the Waste to Energy framework. For example, stated to be a transition technology, but this plant has a lifespan of 25 years; Infrastructure Victoria's has stated warnings over investing in this kind of technology and the number of proposed Waste to Energy sites will more than exceed the cap of 1 million tonnes per year.

In the Greater Geelong area, where the facility is proposed to be built, the [Waste and Resource Recovery Strategy 2020-2030](#), there is a strong community desire to reduce waste and recycle more items (even if new recycling services cost them more) (page 17). All councils in the G21 Geelong Region Alliance are developing climate change response plans which include goals for consumption and waste. Specifically to reduce municipal waste, especially food waste and soft plastics, by implementing various zero waste and circular economy initiatives.

Once a facility like Prospect Hill is built, it will create an incentive to continue to burn reusable waste, despite any policy direction to the contrary. It will become a simple solution for councils who would otherwise need to take more responsible steps to reduce waste and divert more of their waste to reuse or recycling. In particular it will reduce the incentives to invest in innovative solutions which support circular economies.

Worse still, if this facility is built, Victorians may find themselves paying to have waste delivered to it for incineration even if better and cheaper options exist. Experience from the US has been that contracts for incineration facilities have "put or pay" clauses which require governments to deliver a certain volume of waste for incineration or pay a fee. The result of these terms are to create disincentives for the reuse of waste, as well as introducing a financial burden for local governments. (Zero Waste Houston Coalition, 2014, *It's Smarter to Separate: Why Houston's Trash Proposal Would Waste Our Resources, Pollute Our Air and Harm Our Community's Health*, p 16)

Far from being a "transition solution" as claimed by Prospect Hill's Approval Application (Part 1, Page 1), building this facility would embed outdated, linear economy approaches and slow our transition to a circular economy for the next 25 years.

## **2. There is no reliable argument that the facility would reduce greenhouse gas emissions**

We consider the predictions regarding the facility's ability to reduce greenhouse gas emissions unconvincing, for the following reasons:

- There is no guarantee that the facility will receive the projected 400,000 tonnes of waste each year, which throws all of the estimates regarding greenhouse gas savings into doubt.
- It is unclear where the waste will be sourced from and how many kilometers per annum trucks will undertake in round trips to deliver waste to the facility.
- Even if the projected volume of supply exists now, it will not exist in future as we recycle and compost more waste.
- It is unclear how savings relating to "displaced energy demand" are calculated, but we expect they will become rapidly out of date as Victoria's energy mix becomes consistently greener over time.
- It is unclear if the facility will use potable water for cooling towers instead of low water options such as refrigeration for water cooling.
- There is no guarantee that surplus energy created can be fed into the grid.
- There is no guarantee that the 20% residual ash will find a local sustainable market and not end in landfill, with the potential to contaminate groundwater.

## **3. No guarantee that expected current volume of red bin waste will actually go to the Lara facility**

Firstly, all predictions regarding greenhouse gas savings rely on the facility processing 400,000 tonnes of waste annually, and thereby saving around 300,000 tonnes of CO2 equivalent being created by dumping

the waste in landfill (Works Approval Application Part 1, Table 11.4.2). But it is not at all clear that the proposed facility will be able to collect this amount of waste.

The predicted 400,000 tonnes is to come from many different parts of Victoria, including 60,000 tonnes from Greater Geelong and nearby areas; 200,000 tonnes from Western Melbourne; and a combined 80,000 tonnes from other Melbourne and other regional LGAs (Works Approval Application Part 1, table 8.1).

However, this supply may never eventuate. Prospect Hill's application notes that they have not yet entered into arrangements with any supplying councils (Approval Application Part 1, paragraph 8.1). In other words, the bulk of the predicted greenhouse gas emissions reductions rely entirely on local governments agreeing to have all or a significant quantity of their waste incinerated at this plant.

#### ***4. Volume of red bin waste will reduce in future as more waste is diverted from landfill***

Secondly, even if the projected amount of waste exists now, it is unlikely to exist in future as more of Victoria's red bin waste gets diverted to recycling or composting. To take the City of Greater Geelong as an example, the city's Waste Resource and Recovery Strategy 2020-2030 notes that Geelong's kerbside collection services collected 45,000 tonnes of household red bin waste in 2018-2019 (page 12), with around 33% being food organics (page 16). This is consistent with the Works Approval Application, which indicated that the expected proportion of food waste in the facility's feedstock would be 35 per cent (Works Approval Application Part 1, table 8.2).

However, the Waste Resource and Recovery Strategy indicated overwhelming community support for building more infrastructure to divert food waste from landfill (page 16) and committed to developing a business case to do so (page 25, strategic actions 2.2 and 2.3).

If that trend is consistent across other Victorian Councils (as we expect it would be), the Prospect Hill facility looks to lose around a third of its municipal waste feedstock.

Municipal waste makes up 320,000 tonnes of the projected 400,000 tonne capacity of the proposed plant (Works Approval Application Part 1, table 8.1). So, removing 35% of municipal waste could reduce demand for the proposed plant 112,000 tonnes per year. Even if food and garden waste is not entirely removed from red bins, other moves will reduce red bin volume, including reduction in supply of plastics (which make up 13% of the projected municipal waste feedstock) as bans on single use plastics come into effect in 2023. <https://www.premier.vic.gov.au/victoria-taking-action-single-use-plastics>.

#### ***5. Calculations regarding "displaced demand for energy" seem unfounded and will rapidly become inaccurate as Victoria's energy mix becomes greener***

The Works Approval Application also claims that by creating "clean" energy and feeding this into the grid, the facility displaces need for other energy which would have created greenhouse gas emissions. The Application estimates that, by burning 400,000 tonnes of waste, the facility will be able to displace 255,000 Megawatt hours, saving 209,000 tonnes of CO2 equivalent (Table 11.7).

Apart from some threshold concerns with this argument we have already mentioned above (for example, how "clean" is energy which is created by burning waste which is 65% either organic or recyclable? Will the facility even burn 400,000 tonnes of waste per year?), it simply isn't clear how this saving is being calculated or what "dirty" energy is being used as a comparison.

We can only assume that the Application cites figures relating to average greenhouse gas emissions from existing Australian power generation. If this is the case, these projected emission savings will quickly become incorrect as Australia continues to move away from coal to green energy sources. We would expect that if the facility is built and it runs for its expected 25 year lifespan, any energy demand this facility displaces will be far greener than energy created by burning waste.

#### ***6. No guarantee that energy will be able to be fed into the grid***

It is unclear how Prospect Hill intends to feed the projected 255,000 megawatt hours into the grid each year. Our understanding is that to do this would require additional investment in energy infrastructure as

well as an agreement with a distributor, neither of which appear to be discussed in the Works Approval Application. We understand that other energy generation projects built in Victoria have struggled to settle arrangements to feed energy into Victoria's grid because of these hurdles.

Until these arrangements are in place, we are not convinced that the proposed facility is capable of producing the energy suggested, or displacing demand for dirtier energy sources.

Thank you for the opportunity to make this submission.

Yours sincerely,

Vicki Perrett, President, Geelong Sustainability Group Inc.

**w:** [www.geelongsustainability.org.au](http://www.geelongsustainability.org.au)

