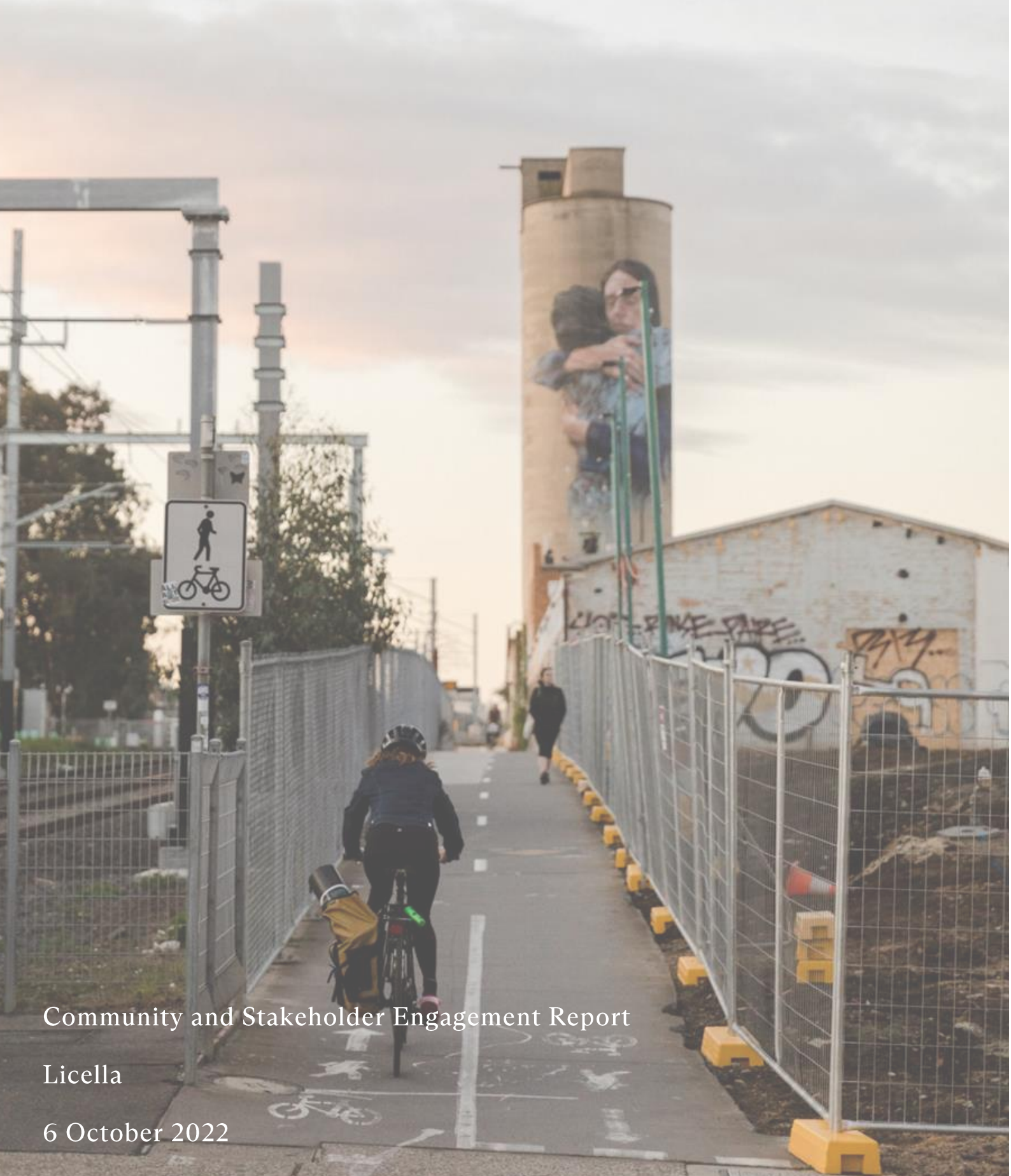


# Advanced chemical recycling of plastics in Altona



Community and Stakeholder Engagement Report

Licella

6 October 2022

# Giving every person a voice.

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Capire acknowledges  
and deeply respects the  
Wurundjeri people and  
the Traditional Owners  
of the Victorian land.



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## Privacy

Capire Consulting Group and any person(s) acting on our behalf is committed to protecting privacy and personally identifiable information by meeting our responsibilities under the Victorian Privacy Act 1988 and the Australian Privacy Principles 2014 as well as relevant industry codes of ethics and conduct.

For the purpose of program delivery, and on behalf of our clients, we collect personal information from individuals, such as e-mail addresses, contact details, demographic data and program feedback to enable us to facilitate participation in consultation activities. We follow a strict procedure for the collection, use, disclosure, storage and destruction of personal information. Any information we collect is stored securely on our server for the duration of the program and only disclosed to our client or the program team. Written notes from consultation activities are manually transferred to our server and disposed of securely.

Comments recorded during any consultation activities are faithfully transcribed however not attributed to individuals. Diligence is taken to ensure that any comments or sensitive information does not become personally identifiable in our reporting, or at any stage of the program.

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## Consultation

Unless otherwise stated, all feedback documented by Capire Consulting Group and any person(s) acting on our behalf is written and/or recorded during our program/consultation activities.

Capire staff and associates take great care while transcribing participant feedback but unfortunately cannot guarantee the accuracy of all notes. We are however confident that we capture the full range of ideas, concerns and views expressed during our consultation activities.

Unless otherwise noted, the views expressed in our work represent those of the participants and not necessarily those of our consultants or our clients.

## Definitions

### COMMUNITY

The term community refers to a group of people that has something in common such as identity, behaviours, interests or values. A community often share a sense of place in a given geographical area (e.g. a country, city, town, or neighbourhood) or in virtual space through communication platforms.

### STAKEHOLDER

The word stakeholder refers to individuals, groups or organisations with a stake or interest in the outcome of a decision. Stakeholders may also have the ability to influence the decision given their role or position.

### ENGAGEMENT

Engagement is defined as a planned process with the purpose of working with communities and stakeholders to inform decisions, share knowledge and strengthen relationships.

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# 1 Introduction

## 1.1 Purpose of this document

This document provides an overview of the promotion, communication and engagement activities undertaken by Capire Consulting Group on behalf of Licella. The engagement program was carried out throughout 2021.

This document presents a record of feedback from participants collected through a range of engagement activities. It is not intended as a social research report. Rather, this report presents the breadth and depth of feedback received.

This document has been prepared for Licella to inform regulatory approval processes at local and state government levels.

Community feedback will be considered alongside operational and technical considerations to help Licella make decisions about the design and commissioning of advanced chemical recycling in Altona.

The report was updated in October 2022 to incorporate additional activities undertaken following a Development License Application submission to EPA Victoria.

## 1.2 About Capire

Capire Consulting Group (Capire) is a specialist community engagement firm. Capire was engaged by Licella to assist in the design, delivery and reporting of community engagement to support the advanced chemical recycling of plastics in Altona.

Capire worked collaboratively with Licella throughout 2021. The engagement approach was developed to align with guidance prepared by International Association of Public Participation (IAP2).

## 1.3 Project background

Licella are developing a proposal for an advanced chemical recycling facility in Melbourne's West to recycle soft plastics into a food grade quality product.

A Feasibility Study for the project was conducted in 2021 in partnership with Coles, Nestle, LyondellBasell, Amcor and iQ Renew.

The proposal is looking at the former Dow Chemical site in the Altona Chemical Complex in Melbourne's West.

The core facility will use an innovative Australian technology called CAT-HTR (Catalytic Hydrothermal Reactor). The application of this technology to plastics recycling provides a higher order solution to traditional mechanical soft plastics recycling. The facility will process in Stage 1, 20,000 tonnes per year of waste plastic. The project then will consider expansion in further stages.

As demonstrated in image 1 below, the technology occupies an elevated position on the waste hierarchy above mechanical recycling for the soft plastics waste stream. The key point of difference is the ability for this technology to regenerate food-grade quality soft plastics.

Image 1 shows where an advanced recycling facility sits on the waste hierarchy. Understandably, the aim is to prevent plastic use and reduce single use plastic packaging. However, notwithstanding elimination of plastic use, the chemical recycling process provides a way to manage plastic waste that has low emissions and repurposes the plastic. The process can ultimately be repeated until all plastic circulation within our industries and communities is recycled within the circular economy.

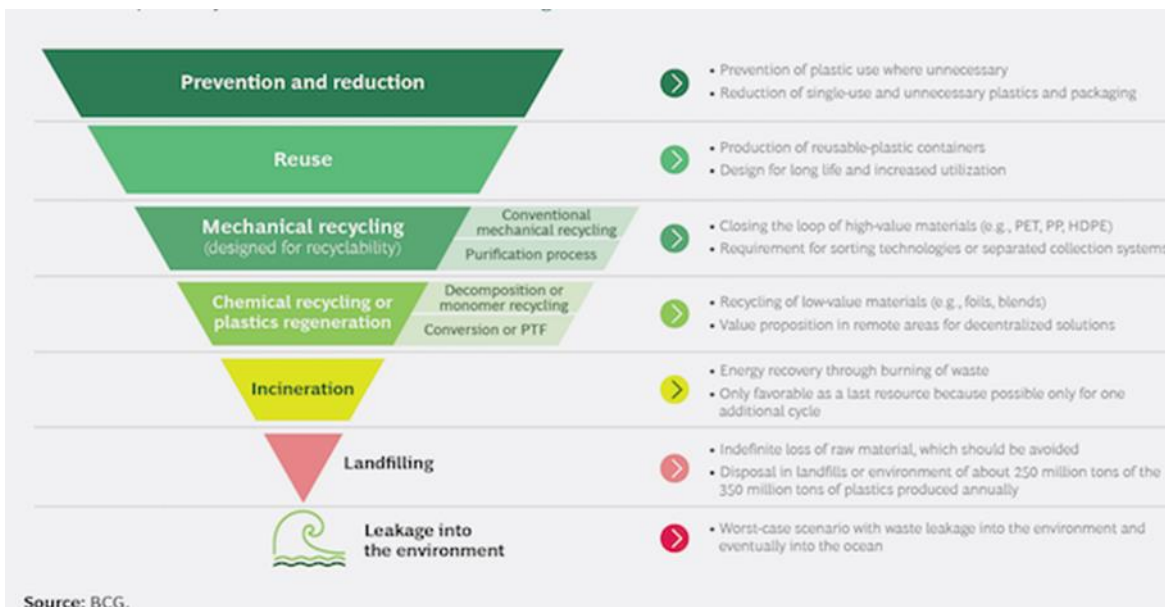


Image 1 The Waste Hierarchy

Licella engaged Capire Consulting Group to plan and deliver a range of community and stakeholder engagement activities. The purpose of the engagement is to understand community and stakeholder concerns and issues with the proposed facility and identify options to mitigate those concerns through the proposal. The objectives of the engagement were to:

- Determine the technical, economic and environmental benefits of a local advanced recycling industry.
- Build community and stakeholder understanding of the Cat-HTR™ advanced recycling technology, and how this contributes to a circular economy.
- Build trust in Licella and their partners.
- Identify community and stakeholder concerns early in the development of the proposal.
- Engage with key stakeholders to develop a baseline of what issues need to be addressed in the Development Licence application process.
- Work with key stakeholders to develop options which mitigate community concerns and issues to the greatest extent possible.

Clear negotiables and non-negotiables were defined and communicated to stakeholders during the engagement process to ensure they understand how their contributions may influence decisions. This allowed management of stakeholder expectations at the outset, and continual alleviation of any potential for misunderstanding during the engagement.



Table 1 Proposal negotiables and non-negotiables

Negotiables	Non-negotiables
Positioning within the site (micro siting), e.g., move away from road or to the back corner of the block.	Spacing between the facility and housing (e.g. the minimum required separation distances between industry and sensitive land uses).
Waste preparation and sorting is negotiable as to whether it is done on site or off site. If done on site the hours negotiable, e.g., only during the day and not sorted at night If done off-site traffic management plan will need to be negotiated.	Site location (based on appropriate zoning and other technical restrictions).
Visual amenity from the street – site layout is negotiable. e.g., micro-siting of certain buildings can be negotiated.	The height of the reactors.
The colour of stacks can be changed.	The use of the Cat-HTR™ technology and advanced recycling process.
Volume – If this proposal is a success, Licella would be looking to scale operations up to processing capability of 120,000 tonnes of feedstock per annum. The initial application is for 20,000 tonnes per annum	Hours of operation (24/7).
Works scheduling during construction, e.g., can negotiate no work on weekends, no night works etc.	
Methods of engagement of engagement with community and stakeholders.	
Procurement strategy – the use of contractors during construction and operations is negotiable. There is an opportunity to use local content and workforce.	

## 1.4 Engagement risks

During preliminary engagement, risks emerged regarding the engagement process. Overall, environmental organisations and community groups were supportive of Licella’s objectives to find a solution to soft plastic recycling. However, key points will need to be addressed and mitigated so the community can feel involved and comfortable with the proposal. Risks identified through preliminary engagement are summarised in Table 2. The risks identified were managed or mitigated throughout the engagement process.

Table 2 Preliminary risks and proposed mitigation

Risk	Description	Risk rating	Mitigation
Poor community perception of the proposal	Historical issues about air quality and waste managed at Altona will create negative association for Licella	High	Develop key messages and communications material in line with “risk communication” principles that clearly convey and acknowledge community concerns.
Low levels of understanding	People mis-understand / mis-trust information about Licella’s proposed technology and process	High	Ensure people are provided ample time and multiple opportunities to engage in the technical detail. Conduct an education campaign with independent experts publicly

Risk	Description	Risk rating	Mitigation
			assessing the proposed technology / processes
Low levels of understanding	The Cat-HTR™ technology is complex, and it may be challenging to break through pre-conceived notions of chemical recycling	Moderate	Develop and distribute materials that explain Licella and the technology in plain English, supported by visual materials and follow up conversations
Low trust in proposal	Trust in Licella is eroded as people don't feel involved or heard in the process	Moderate	Engage with stakeholders early and ensure that people have time to process information and can make informed submissions. Clearly convey the timeline of engagement to date on collateral and online. Facilitate personal relationships between stakeholders and Licella.
Engagement conversations are dominated by the loudest voices	There are a variety of different stakeholders and community groups with potentially polarising views and varied interests in the proposal	Moderate	Ensure that participants are representative of the targeted stakeholder groups identified as priority. Promote the opportunities to be involved in the community engagement process widely across the community. Use a range of techniques to provide participants different ways to contribute to face-to-face activities such as worksheets or dotmocracy (dot voting).
Proposal is political	Elected Councillors may use polarised community views on the proposal as political tool.	Moderate	Facilitate 1:1 conversation with each Councillor to understand potential questions or concerns about the project. Provide briefing packs with accessible information to explain the technology and process and articulating the local benefits including reduced air quality emissions (on balance), local jobs, local investments.



# 2 Engagement approach

Underpinning the engagement activities are three goals including:

1. Build the community knowledge and understanding of the CAT-HTR™ technology.
2. Establish relationships between the community, Licella and planning authorities as a basis for trust building.
3. Inform decisions about strategies that mitigate community concerns with the proposal.

## 2.1 Engagement stages

The engagement program was stepped out into two phases:

- **Phase 1:** foundational engagement, desk top study, interviews with environmental advocacy groups and community networks to identify type of issues community are concerned with and their preferred approach to being consulted.
- **Phase 2:** community presentations and focus group sessions to understand specific community concerns of the proposal and determine satisfactory mitigation strategies.

Following Phase 2 and submission of the proposal to EPA Victoria for a Development Licence Application, an additional community meeting was hosted online. The purpose of the additional meeting was to provide an update on the proposal and answer any further questions from the community.

Licella wanted to ensure community networks engaged during phase 1 and 2, had the opportunity to consider the final proposal. To ensure community outreach was as exhaustive as possible, local community networks (listed on the next page) were invited over the phone and via email. There are two more additional phases of engagement planned following planning and environmental approvals. These phases include:

- **Phase 3:** procurement and construction, communicating progress and managing impacts of the community, to keep community and stakeholders informed during construction process.
- **Phase 4:** Commissioning, convening community reference groups, conducting site tours and community education campaign about the role of advanced recycling in sustainability and circular economy.

## 2.2 Assumptions and limitations

This report details the participants' perceptions, concerns and ideas as expressed during the engagement activities. Capire is confident this report provides a true account of the feedback provided.

## 2.3 Engagement and COVID-19

The engagement approach was designed to ensure that activities could continue while maintaining the safety of the public, staff and team members due to planned lockdowns throughout the pandemic. These were further strengthened in response to the ongoing Covid-19 stay-at-home orders throughout the engagement period.

These included:

- Holding all workshops online via Zoom and providing phone call drop-in sessions and enhanced opportunities for web and email enquiries or submissions to substitute for face-to-face community events
- Increase focus on targeted promotion through phone and email of community networks in the local area
- Working with existing community reference groups and community leaders, including elected officials.

# 3 Summary of participants

## 3.1 Overall participation

During phase 1, Capire engaged and interviewed relevant environmental groups and community groups proximate to the proposed Altona Cat-HTR™ site. The purpose of the preliminary engagement was to test interest and concern with advanced/chemical recycling of soft plastics in general.

Licella’s advanced recycling project was not specifically mentioned during the initial interviews. The project was introduced following an announcement of the feasibility study of a local advanced recycling industry and potential sites in Victoria.

The peak environmental advocacy groups were selected based on their reputable and broad reaching influence on recycling issues at local and national levels, and included:

- Boomerang Alliance
- World Wide Fund for Nature (WWF)
- Australian Conservation Foundation
- Geelong Sustainability
- Environment Victoria.

In phase 2, Capire facilitated community presentations and focus group sessions to understand specific community concerns of the proposal, as summarised in table below.

Event	Date	Stakeholder group
Focus group	July 2021	Hobsons Bay City Council – Council staff
Focus group	August 2021	Hobsons Bay City Council – Councillors
Focus group	September 2021	Inner West Air Quality Network representatives
Technical Presentation	November 2021	Community network representatives
Community presentation	December 2021	Community network representatives
Community Presentation	September 2022	Community network representatives

Local community networks were selected and invited based on their connections to the local community in Altona, their broad and diverse reach across communities and specific interest, and included:

- Altona Laverton Historical Society (Altona Homestead)
- Friends of Skeleton Creek
- Friends of Stony Creek
- Hobson’s Bay Wetlands Centre
- Altona Coast Park
- Inner West Air Quality Network
- Nature West
- Geelong Sustainability
- Hobsons Bay City Councillors
- Altona Primary School
- St Mary’s Primary School
- Altona Cricket Club
- Altona City Soccer Club
- Altona Lakes Public Golf Course
- Altona Badminton Centre
- Altona Yacht Club
- Altona Hockey Club
- Altona Tennis Club
- Koorringal Golf Club
- Altona Lacrosse Club
- Altona Magic Soccer Club
- Altona East Phoenix Soccer Club

- Mount St. Joseph Girl's College
- Seaholme Primary School
- Altona College
- Somers Parade Kindergarten
- Altona Early Years Hub
- Seaholme Kindergarten
- Goodstart Early Learning Altona
- Altona Little Athletics - Altona Rockets
- Altona Memorial Park
- Bright Creek Library - Free Street Library
- Hobson's Bay Men's Shed
- Lions Club of Altona
- Friends of Cherry Lake Inc.
- Altona Community Gardens
- Lawrie Emmins Reserve (dog park)

Capire also engaged with EPA Victoria and Hobsons Bay City Council, critical stakeholders to enable the planned facility to proceed.

The decision not to conduct a "letter box drop" to local residents was made when planning the overall engagement program. This decision was based on three reasons:

1. The nearest residential neighbour is 1.4 kilometres from the proposed site.
2. Licella is a pre-revenue company with limited budget to spend.
3. Metropolitan Melbourne was in lockdown due to COVID-19, making it difficult to mobilise engagement directly with community.

Instead of direct community engagement, the project team felt engaging existing community networks would ensure a good understanding of community concerns was heard. All the local community networks were called over the phone or sent an email inviting them to the various engagement opportunities.



# 4 Summary of findings

A summary of the key messages from initial conversations with these stakeholders included:

- Most community and stakeholder representatives are supportive of finding a local solution to soft plastics recycling.
- Establishing trust and credibility within the community and environmental groups was considered paramount to success.
- Fundamental concerns about the volumes of plastics still in circulation that end up in the environment
- Key concerns about cumulative local air quality impacts from industry on local community.
- Concerns about the practicality and reliability of people taking their plastics to collection points for recycling and the manual extraction on assembly lines.

## 4.1 Air quality impacts

Air quality impacts represented the chief concern of community and stakeholder groups.

- Community is concerned the Australian Standards for air quality are not high enough and there is poor regulation of residual air emissions and pollution.
- There is a perception that there are 'no safe levels' of particulate matter to be emitted into the air.
- Community is concerned of the cumulative impact on air quality and feel air quality in Altona is already poor.
- There is a general mistrust of data modelling for air quality with the view that experts can manipulate a model to suit pre-determined conclusions.
- Community is concerned about residual waste products of recycling processes and how these are disposed of.
- Community is concerned about toxic waste and how the EPA regulates this waste stream generally.

## 4.2 Road congestion and truck movements

Stakeholder raised the ongoing critical impact truck movements have on the overall public health and amenity of the community throughout the West.

- Community is concerned about additional truck movements in and around residential communities throughout the West including Laverton and Altona.
- The main concern is the risk and impact of additional truck movements along Millers Road, a common route trucks take to avoid tolls.
- Community is seeking assurances the movement of trucks to and from the site would use Kororoit Creek Road.

## 4.3 Competing with waste-to-energy

Stakeholders noted the large number of recycling facilities currently being developed and the risk of creating unwanted assets and illegal stockpiling of waste.

- Community is concerned about the reliability and validity of industries which provide solutions to complex issues such as waste recycling. The risk is associated with where the 'feedstock' for the recycling comes from and how it is sorted.
- On the other side of the equation, community feel once a facility is operating, industry will be driven to "feed a hungry beast" with disregard to original intentions of a project.
- Community is wary of stated performance of technology. They require evidence on international experience and comparison of real data between technology options.

Previous proposals in the area show a fear of "cheap technology" which does not meet best-practice standards.

#### 4.4 Approach to engaging with community

Licella received feedback about the approach to engaging community late during EPA Victoria's public exhibition phase of the Development Licence Application. Two members attending the online meeting during public exhibition felt a letter should have been sent to nearby residents; that engaging only through local community networks is not enough; that they only found out about the project in the final days of the public exhibition.

Licella accept more community engagement is better than less and that letter box drops to the closest residents (1.4km from the site) could have better met the community's needs and expectations.

As a result of this feedback, Licella are planning a comprehensive engagement program with the community during the construction and commissioning phases of the project. The purpose of this engagement program will be to ensure information about the project is communicated with nearest residential neighbours on a regular basis; that relationships with the community are strengthened; that local community and environment aspirations are understood and where appropriate, are addressed by Licella, e.g. tree planting on site.

Licella's subsidiary Advanced Recycling Victoria (ARV) Pty Ltd, the company that will own and operate the proposed Altona facility, has established a website for the community [www.advancedrecyclingvictoria.com](http://www.advancedrecyclingvictoria.com). This website describes the project and enables documentation on the project, such as ARV's "Best Available Technology and Techniques" document, to be downloaded. The website includes a Community page (<https://advancedrecyclingvictoria.com/community>) with an FAQ section based on the questions received from engagement with community. It also includes a Contact form and a Subscribe option, where interested parties can register to receive news and updates in the future.

#### 4.5 Detailed issues raised during engagement

Throughout the engagement process, key questions were raised by community and stakeholders. Representatives of Licella addressed the questions during technical presentations, 1:1 meetings and stakeholder meetings. The following written response to each question was documented and responded accordingly and sent to stakeholders.

Table 3 Community and stakeholder questions and responses

No	Question	Answer
1	Have you operated a plant anywhere else in the world or in Australia?	The Cat-HTR technology for processing end-of-life plastics is a breakthrough new technology. Licella's patented Catalytic Hydro-Thermal Reactor (Cat-HTR) technology was developed in Australia and has successfully been demonstrated on four scales of pilot plants at Licella's advanced engineering facility in Somersby NSW. Commercial Cat-HTR facilities are currently under construction in the UK and Japan. The proposed Altona facility will likely be the third commercial Cat-HTR facility to become operational in the world. As such, design and operational experience from the UK and Japan will likely be available.
2	We are nervous about pollutants and new industries, why are you setting up in metro, why	The site at Altona Dow Chemical has the correct industrial zoning for our operations. This site has all of the utilities that we need including recycled industrial water supply, trade-waste water discharge, potable water supply, natural gas supply, industrial electricity connection and nitrogen supply. The site has an excellent road connection so that the



	not outside of Melbourne?	trucks that service our site can come directly to and from the freeway without passing through any nearby residential or commercial areas. Most of the energy used for our operations will be from electricity and we will be contracting green electricity supply for our industrial use.
3	What is the upper limit of plastics throughput?	We will be processing end-of-life plastics that would otherwise go to landfill. We plan is to commence operations at Stage 1 - 20,000 tonnes per year feedstock. Additional stages will be considered based on the economics of the project. Assuming this happens then we plan to increase feedstock throughput in stages, probably in 20kt increments as availability of waste plastics is determined. We believe in time this could increase to 120,000 tonnes per year.
4	What is the nature of the product? Is it flammable? It will burn, right?	The Cat-HTR produces 2 main products. The principal product is a synthetic crude oil called "plasticrude". This product will be tankered to a facility such as the Geelong Viva Refinery. The second product is a "product gas" which is formed during the processing of the end-of-life plastic feedstock. The gas is collected and used as fuel onsite. These products are designed to substitute traditional fossil fuels and are designed to burn in similar manner to their traditional counterparts. Processing of the end-of-life feedstock along with storage of the products will be carried out in accordance with relevant Australian Standards in correctly designed and rated equipment and storage tanks.
5	What is the total storage volume of synthetic crude at stage 1 of the project?	In Stage 1 it is planned to manufacture 44 tonnes per day of plasticrude. Total storage capacity for plasticrude is estimated to be 583 tonnes which will allow for 13.4 days production if required. Tankers will transport the product from site 2 or 3 days per week.
6	How will product be stored on site?	The oil products will be stored in tanks. The tanks will be built and maintained to all relevant Australian Standards. The gas product will be used as part of the Cat-HTR process or sold to nearby customers (such as EnviroPacific). If there is any excess gas this will be combusted.
7	How many trucks for stage 1?	In Stage 1 operations there will be ~ 40 truck movements per week. Trucking will take place Monday to Saturday.
8	What is the catalyst used in the process? (reference to catalytic hydrothermal reaction)	When water reaches its supercritical state, it acts as a catalyst to assist in the depolymerisation of the plastics.
9	Are there sulphur compounds in the feed plastics?	In general there are no sulphur compounds in the feed plastic. The qualifier for this is that, whilst the plastics will be cleaned, any sulphur residue on the plastics remaining after the plastic is discarded may get into the process. Most residue not removed during plastics pre-cleaning will dissolve into the superheated water and be removed in the water cleaning process.
10	What happens to residual waste segregated from soft plastics such as metals?	Wherever possible residual contaminants such as metals will be collected and recycled.
11	Any odour emissions to be concerned about?	Feedstock end-of-life plastics will be baled and loaded into 40ft containers by others then delivered to site. The containers of plastics will not be opened until the feedstock is to be fed into the process. In Stage 1, 3 x containers will be emptied per day. Any odours from the waste plastic will be managed within process shed.
12	Will the offloading shed have some ventilation system? Will you monitor odour?	The offloading shed will have an open end to allow for the containers of plastics to be delivered and emptied. It is not planned to monitor odour. Licella has extensive knowledge with Municipal Recycling Facilities) MRFs through the development of this project and the experience with MRFs (which handle much larger waste volumes) is that odours are minimal and restricted to inside the shed.
13	What is the threshold level of ammonium odour in air? Will the facility exceed this?	The table below shows the EPA limits for Ammonia and the modelling that has been done for the facility and how this reflects against these limits. As can be seen in all cases its under significantly under 1% of the EPA allowable level.



		<table border="1"> <tr> <th colspan="4"><i>EPA allowable levels for Ammonia (NH3)</i></th> </tr> <tr> <td></td> <td><i>1 hour av.</i></td> <td><i>1 day av.</i></td> <td><i>1 year av.</i></td> </tr> <tr> <td>ppm</td> <td>4.6</td> <td>1.7</td> <td>0.1</td> </tr> <tr> <th colspan="4"><i>Modelling Max ammonia within 400m</i></th> </tr> <tr> <td>ppm</td> <td>0.0015</td> <td>0.0035</td> <td>0.00009</td> </tr> <tr> <td>%age of EPA level</td> <td>0.03</td> <td>0.02</td> <td>0.09</td> </tr> </table>	<i>EPA allowable levels for Ammonia (NH3)</i>					<i>1 hour av.</i>	<i>1 day av.</i>	<i>1 year av.</i>	ppm	4.6	1.7	0.1	<i>Modelling Max ammonia within 400m</i>				ppm	0.0015	0.0035	0.00009	%age of EPA level	0.03	0.02	0.09																											
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14	Is there gas emissions control?	We will adopt industry best practice to treat the emissions from the boiler which will be similar to a natural gas boiler. We are currently investigating options.																																																			
15	Any particulate matter?	We do not expect particulate matter. The Cat-HTR is a hydrothermal process, and product gas is manufactured when the end-of-life plastic breaks down in the presence of water. Any particulates that are present are trapped in the water system and are processed through the water treatment plant.																																																			
16	Any fugitive emissions from the gas produced? Eg CO emissions?	<p>Fugitive emissions contained in the supercritical boiler exhaust are very low levels of NOx, SOx and NH3 (which has been described earlier). Because the supercritical boiler has almost complete combustion of the product gas, there will be negligible CO.</p> <p>The modelling shows:</p> <table border="1"> <tr> <th colspan="3"><i>EPA allowable levels for NOx*</i></th> </tr> <tr> <td></td> <td><i>1 hour av.</i></td> <td><i>1 year av.</i></td> </tr> <tr> <td>ppm</td> <td>0.12</td> <td>0.03</td> </tr> <tr> <th colspan="3"><i>Modelling Max NOx within 400m before scrubbing</i></th> </tr> <tr> <td>ppm</td> <td>0.0056</td> <td>0.00042</td> </tr> <tr> <td>%age of EPA level</td> <td>4.6</td> <td>1.4</td> </tr> <tr> <th colspan="3"><i>Modelling Max NOx within 400m after scrubbing</i></th> </tr> <tr> <td>ppm</td> <td>0.00112</td> <td>0.000084</td> </tr> <tr> <td>%age of EPA level</td> <td>0.92</td> <td>0.28</td> </tr> </table> <p>Note: NOx does not have EPA 1 day av.</p> <table border="1"> <tr> <th colspan="4"><i>EPA allowable levels for SOx</i></th> </tr> <tr> <td></td> <td><i>1 hour av.</i></td> <td><i>1 day av.</i></td> <td><i>1 year av.</i></td> </tr> <tr> <td>ppm</td> <td>0.2</td> <td>0.08</td> <td>0.08</td> </tr> <tr> <th colspan="4"><i>Modelling Max NOx within 400m before scrubbing</i></th> </tr> <tr> <td>ppm</td> <td>0.00044</td> <td>0.000118</td> <td>0.000041</td> </tr> <tr> <td>%age of EPA level</td> <td>0.22</td> <td>0.23</td> <td>0.21</td> </tr> </table>	<i>EPA allowable levels for NOx*</i>				<i>1 hour av.</i>	<i>1 year av.</i>	ppm	0.12	0.03	<i>Modelling Max NOx within 400m before scrubbing</i>			ppm	0.0056	0.00042	%age of EPA level	4.6	1.4	<i>Modelling Max NOx within 400m after scrubbing</i>			ppm	0.00112	0.000084	%age of EPA level	0.92	0.28	<i>EPA allowable levels for SOx</i>					<i>1 hour av.</i>	<i>1 day av.</i>	<i>1 year av.</i>	ppm	0.2	0.08	0.08	<i>Modelling Max NOx within 400m before scrubbing</i>				ppm	0.00044	0.000118	0.000041	%age of EPA level	0.22	0.23	0.21
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<i>Modelling Max NOx within 400m before scrubbing</i>																																																					
ppm	0.0056	0.00042																																																			
%age of EPA level	4.6	1.4																																																			
<i>Modelling Max NOx within 400m after scrubbing</i>																																																					
ppm	0.00112	0.000084																																																			
%age of EPA level	0.92	0.28																																																			
<i>EPA allowable levels for SOx</i>																																																					
	<i>1 hour av.</i>	<i>1 day av.</i>	<i>1 year av.</i>																																																		
ppm	0.2	0.08	0.08																																																		
<i>Modelling Max NOx within 400m before scrubbing</i>																																																					
ppm	0.00044	0.000118	0.000041																																																		
%age of EPA level	0.22	0.23	0.21																																																		
17	Extra trucks on Millers Road?	Given the location of our site to the freeway, there is no reason why trucks servicing our site should travel on Millers Rd. and we will make it a condition of delivery that they do not except in exceptional circumstances e.g. if the freeway is closed																																																			
18	What if there is breakdown on Kororoit Creek Road or if truck drivers avoid tolls?	Kororoit Creek Rd is a four lane road. It would be most unusual for Kororoit Creek Rd to be blocked. However, if Kororoit Creek Rd was blocked, then trucks could use Grieve Parade to access our site, not Millers Rd.																																																			



19	What pressure the boiler is running at?	Specific operating conditions are confidential information however the supercritical boiler will be designed to be capable of operation up to 300bar (30MPa). Commercial operating pressure are expected to be much lower than that.
20	How many people will work at the plant?	For Stage 1 - 53 jobs during construction; 22 jobs at site for operations; 57 indirect jobs once operations commence.
21	Locals employed?	Yes locals will be able to apply for jobs.
22	Will there be a visible steam plume? Or a cooling tower?	The site will have a small cooling tower. It will be located 320m back from Kororoit Rd behind the boundary tree line and behind several buildings. Under certain weather conditions there may be a visible moisture plume however it is not expected to be of visual significance from Kororoit Creek Rd.
23	Are there safety systems in place for catastrophic failure of the boiler?	The supercritical boiler has an over-pressure relief valve, will have safety control systems and its construction and operations will meet all relevant Australian Standards and Vic WH&S operational requirements for boilers.
24	When will the plant be operational?	Our schedule has Stage 1 commencing operations mid 2023.
25	Where will the waste product come from?	We expect to source end-of-life plastics from several suppliers including RedCycle, Amcor and several MRFs.

# 5 Conclusions

Overall, the engagement presented some clear themes as well as highlighting some challenges that Licella will need to address during the construction and commissioning phases of the project.

There is general support for the objectives of Licella's project - tackling non-recyclable plastics, developing clean technology industries locally and improving environmental outcomes across the waste industry. However, it is acknowledged that, despite implementing best practices, the new operation may present some risks and minor impacts to the local community.

Education and ongoing engagement will be essential to continue to build understanding across the Altona community about the role and operation of the Licella project in the context of managing Victoria's waste challenges.

Ongoing community engagement will be essential throughout all subsequent stages of this project.

## 5.1 Next steps

Throughout 2021 ongoing Covid-19 stay-at-home orders have prevented Licella from meeting members of the community face to face. To ensure effective relationships are built with the community, Licella held a series of virtual meetings in 2021 and 2022, and is committed to holding further neighbourhood pop-ups and community events throughout 2023 to inform community about the project. Licella is committed to creating opportunities to provide further feedback and understand the best way to consult in the future will be sought.

