



Advanced Recycling Victoria – Altona
Community Information Session

Who we are

- Advanced Recycling Victoria (ARV) are part of Licella, an Australian technology development company.
- Licella have a process to chemically recycle End-of-Life (waste) plastics.
- Licella have spent 15 years developing our technology and have a demonstration facility in NSW.
- ARV is bringing Licella's Australian advanced recycling technology to Victoria.



The problem we are helping to solve

The size of the plastic problem
in Australia:

3.4 million tonnes
of plastic consumed during 2019-20

2.5 million tonnes
reaching their End-of-Life with

13% recovered.¹



We will not reach our National Waste Targets for plastic without advanced recycling.

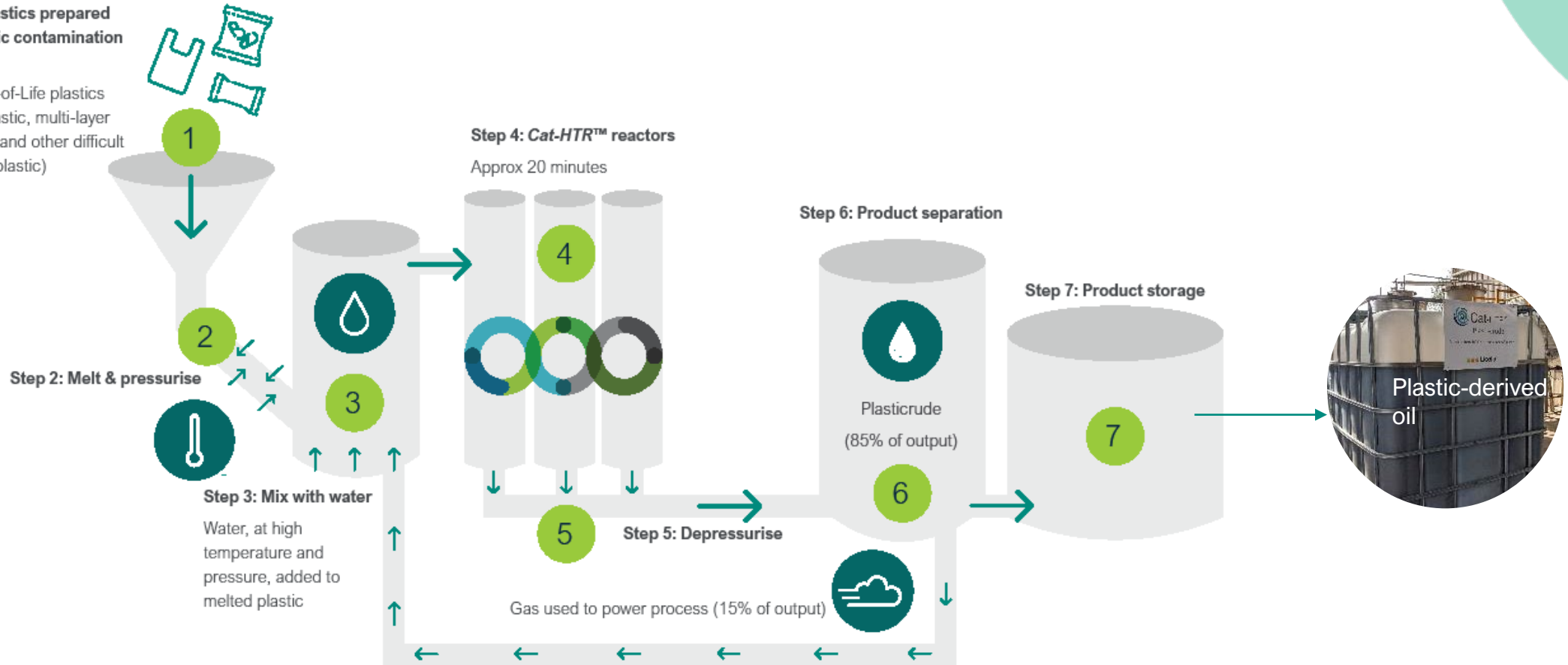
1. Based on Primary Research conducted by consultancy Envisage Works (2021).

Our technology: Hydrothermal Liquefaction



Step 1: Plastics prepared
(non-plastic contamination removed)

Mixed End-of-Life plastics
(flexible plastic, multi-layer packaging and other difficult to recycle plastic)



Advanced manufacturing + Circular Economy

A first of its kind advanced recycling facility enabling a Circular Economy for plastic

Our proposed advanced recycling plant would:

- Initially process 20,000 tonnes per annum of End of Life plastics with the potential to expand to **120,000 tonnes per annum**
- Producing 17,000 tonnes (increasing to over **100,000 tonnes**) per annum of oil that could be used back in the local plastic supply chain
- Have the potential to produce over 15,000 tonnes (increasing to almost **100,000 tonnes**) per annum of recycled plastics

Significant job creation and economic benefits from proposed plant:

- 31 long term jobs** for plant operation and project development,
- 57 indirect jobs** in long term across the supply chain.
- Modular design allows for easy expansion, meaning over **200 people could be employed over the next 10 years** and the facility contributing over \$100 million a year to the local economy.



A new vision for our industrial areas



Project Timeline

KitKat pilot

- First time food-grade recycled packaging made in Australia
- Proved it is possible to make recycled packaging content locally
- Announced March 2021



Feasibility study

- Led by Licella
- Demonstrated significant economic and environmental benefits from a local plastics circular economy
- Catalyst for ARV
- Published Nov 2021



Community engagement

- Licella engaged Capire Consulting Group in 2021
- 2021: 3 focus groups (HBCC & Inner West Air Quality Network)
- 2021-2022: 4 community information sessions (virtual)
- 2023: In-person community sessions
- Ongoing commitment to listen, inform and support.

Approvals

- Development Licence from EPA Victoria granted in December 2022.
- The project meets the HBCC's SUZ3 land zoning requirements.
- Currently undergoing site planning permit with HBCC.



Build and operate

- Approx 18 months construction timeline (estimate second half 2024)
- Stage 1: 20K T per annual processing capacity.

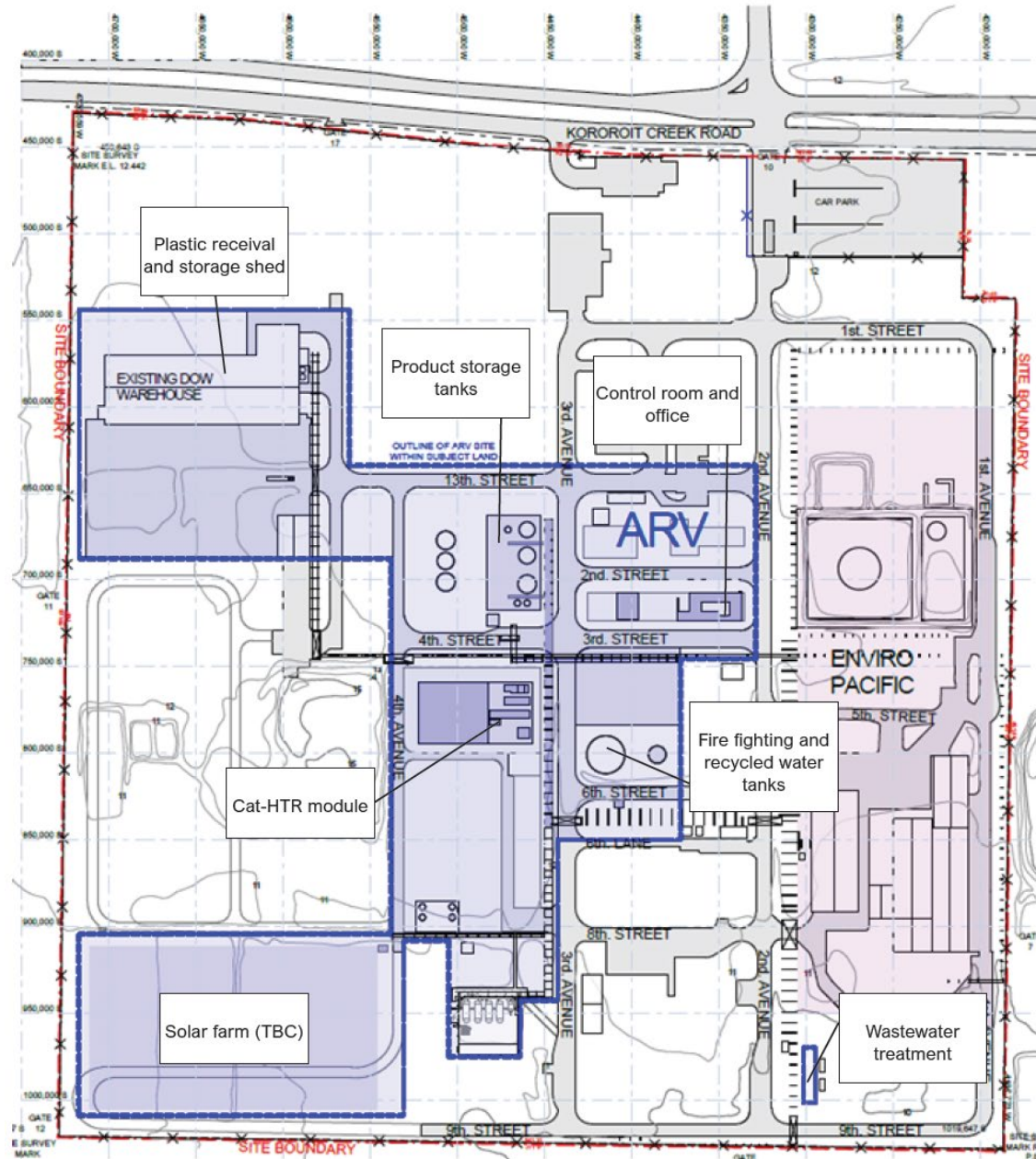
Location of proposed facility: 541-583 Kororoit Ck Rd, Altona

- The area is zoned for petrochemical use (SUZ 3)



Proposed site plan

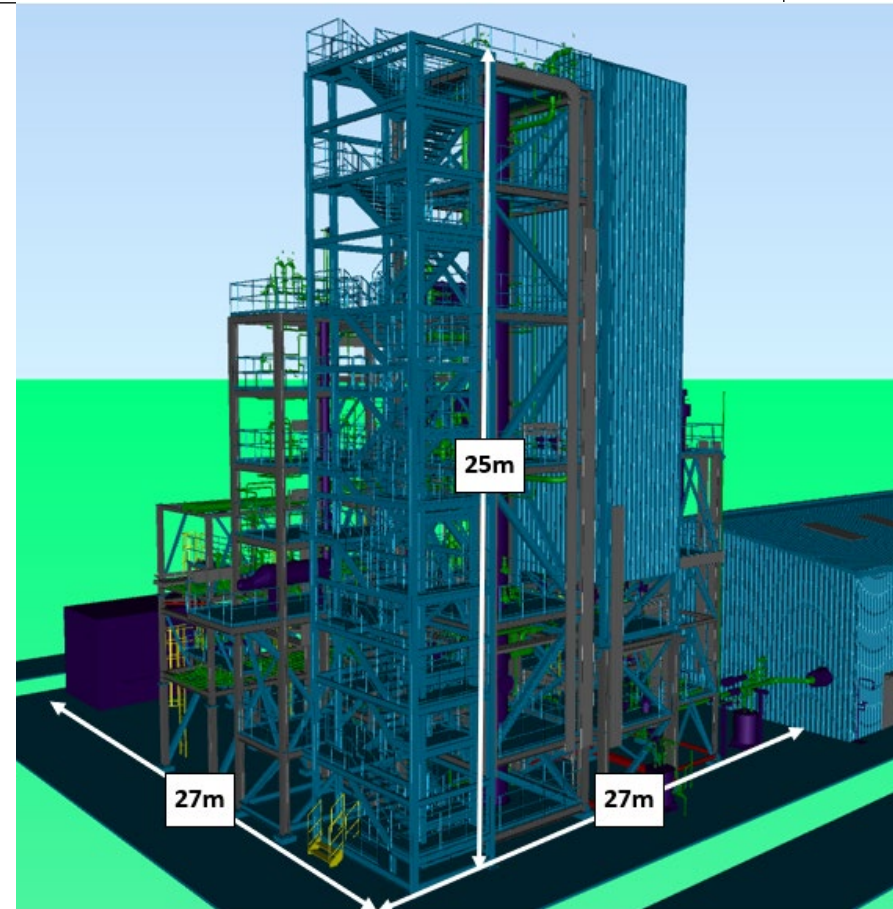
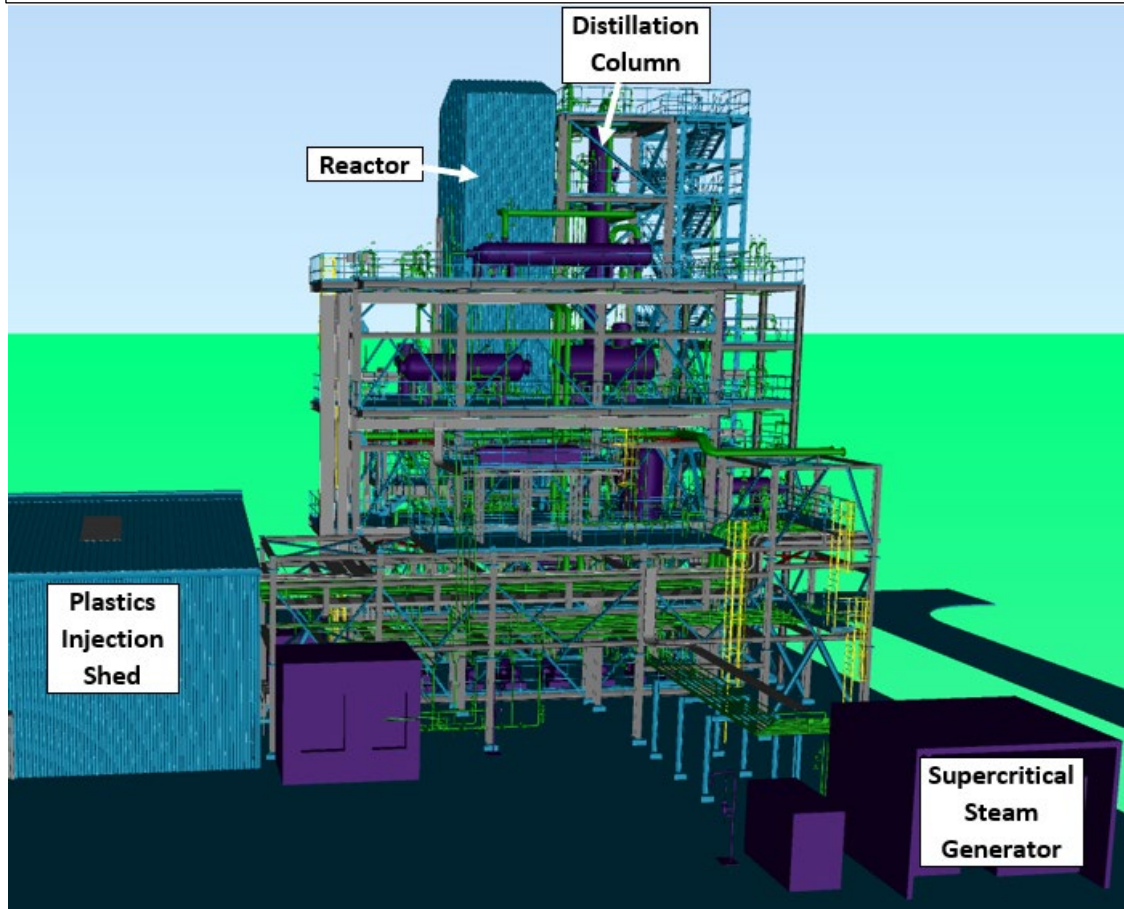
- Cat-HTR™ module 25m x 35m
- Front End Bldg 25m x 36m
- Plastics Prep Bldg 100m x 125m



Our proposed advanced recycling facility



- Cat-HTR™ module.
- The location is 340m south of Kororoit Creek Road.



About us



Our technology



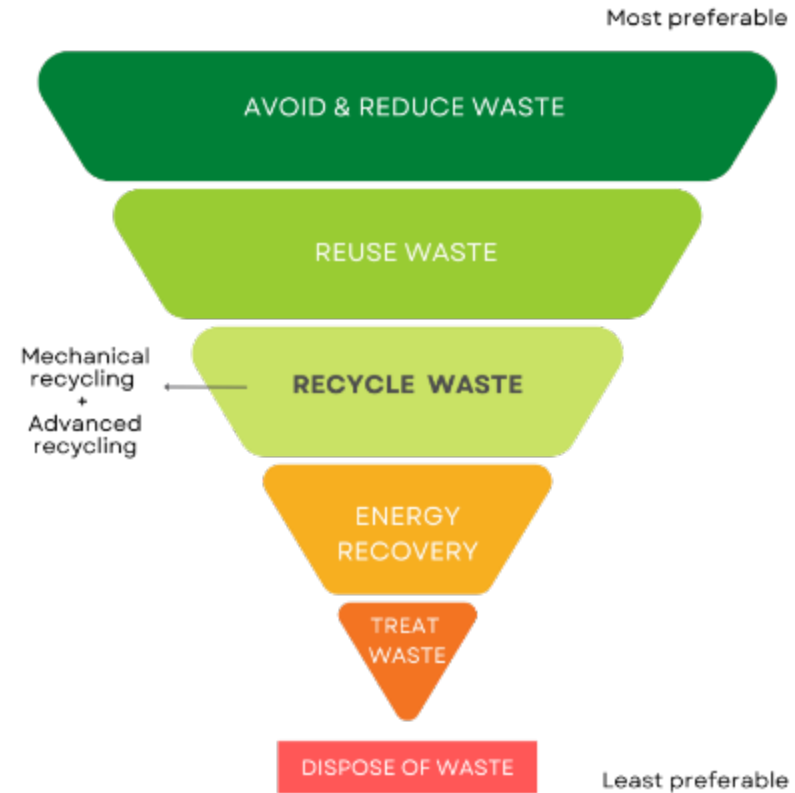
Advanced recycling technology, developed over 15 years.

Proposed Altona advanced recycling facility

Large-scale demonstration facility, operating in NSW since 2008.

Issues raised by the community

- Air quality impacts
- Road congestion & truck movements
- Storage of plastic on site
- Competing with waste to energy





Q&A

Air Emissions Modelling

Table 4 - Modelled maximum GLC showing maximum level for any gridded receptor¹³. - before flue gas scrubbing

Substance	Assessment criteria		Facility emission only		Background only		Facility with background	
	Averaging period	GLC (ppm)	Modelled value (ppm)	% of criterion	Recorded value (ppm)	% of criterion	Modelled value (ppm)	% of criterion
NO _x	1 hour	0.12	0.0056	4.6%	0.052	43%	0.055	45%
	1 Year	0.03	0.00042	1.4%	.010	34%	0.011	36%
SO ₂	1 hour	0.2	0.00044	0.22%	0.062	31%	0.062	31%
	1 day	0.08	0.00018	0.23%	0.019	24%	0.019	24%
	1 year	0.02	0.000041	0.21%	.0026	13%	.0027	13%
NH ₃	1 hour	4.6	0.0015	0.03%	-	-	-	-
	1 day	1.7	0.00035	0.02%	-	-	-	-
	1 year	0.1	0.00009	0.09%	-	-	-	-

