

What is advanced recycling?

Also known as chemical recycling, advanced recycling helps to close the loop on plastics that currently go to landfill. By taking plastic back to its chemical building blocks, a synthetic oil (comparable to refined fossil crude), it complements mechanical recycling and enables a circular economy for difficult to recycle plastics.

Advanced recycling enables food-grade recycled soft plastic to be made for the first time in Australia, from Australian waste plastic - enabling a true circular economy.

About ARV

ARV is a part of Australian technology company Licella, who have spent over 15 years developing their innovative Cat-HTR™ advanced recycling technology. Licella have a large demonstration plant on the NSW Central Coast.

ARV are working to establish an advanced recycling facility utilising the Cat-HTR™ platform in Altona, Victoria.



Our technology

The proposed facility will utilise Licella's Australian developed Cat-HTR™ (Catalytic Hydrothermal Reactor) technology. A form of hydrothermal liquefaction, the Cat-HTR™ uses hot, pressurised water to transform plastics back into oil for the local plastics supply chain, reducing our reliance on virgin fossil oil.

Our proposed facility

After twelve sites were considered, the Dow Chemical site at 541-583 Kororoit Creek Road, Altona, was selected as the preferred site for the ARV facility. ARV have received a development license for Stage 1 of the facility by the EPA of Victoria. The proposed facility has also received planning approval from the local council.

In Stage 1, the proposed facility would initially process 20,000 tonnes per annum of End-of Life plastics, producing 17,000 tonnes per annum of oil that can be used back in the local plastic supply chain.

From our Feasibility Study conducted in 2021, we found an estimated 649,000 tonnes of End-of-Life plastic was available for processing in Victoria alone.

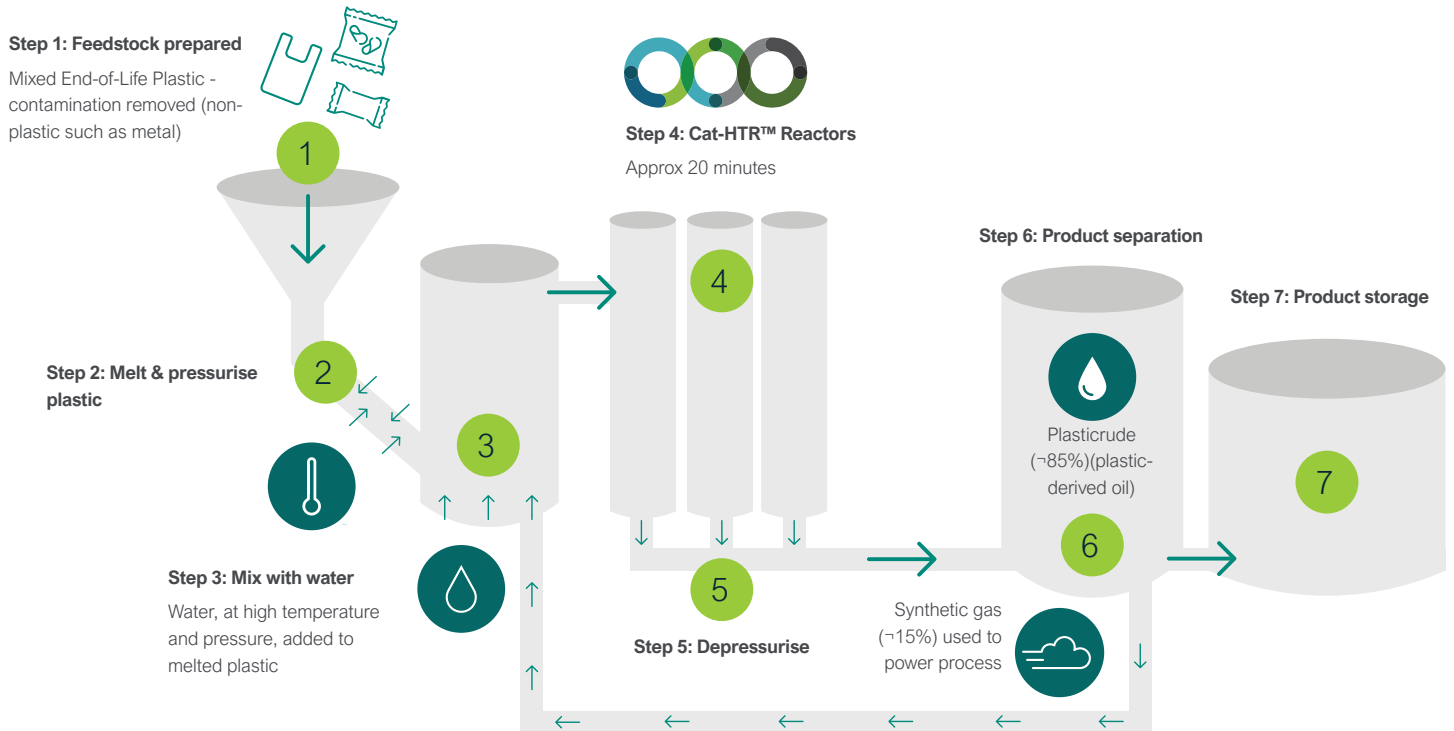
For more information, please visit

advancedrecyclingvictoria.com



The process

How hydrothermal liquefaction works



End-of-Life Plastic:

- Post-consumer packaging
- Agricultural plastics
- Plastic rejected by mechanical recycling
- Plastic from product stewardship schemes
- Plastic from C&I applications