

Waste management

To help achieve our purpose: create a world without waste to preserve our planet, Sims Resource Renewal is aiming to build several resource renewal facilities globally by 2030. We are proposing the first resource renewal facility will be located at 1904 Hume Highway, Campbellfield, Victoria. The proposed facility will be our first step in eliminating approximately one million tonnes of waste to landfill. Our aim is to transform the waste material into useful products for society.

We will use plasma gasification to transform automotive shredder residue (ASR), left over once we have removed as much metal as possible as part of our metal recycling process, into a synthesis gas (syngas). The syngas is then further processed to produce products including hydrogen, carbon dioxide and a glass like vitrified product. Hydrogen and carbon dioxide will be captured and on-sold from day one.

Overview

Sims Limited, and the Sims Resource Renewal Programme, ultimately aim to enable a circular economy by reducing the waste we currently send to landfill.

We want to take responsibility for our own waste today so it is not left for future generations to manage. Through our Resource Renewal programme, at our proposed facility we will aim to divert approximately 60,000 tonnes of ASR each year from landfill.

We will process the ASR into useful products for society, and in doing so, will generate a small amount of waste that will be disposed of in accordance with the new [Environment Protection Act 1970](#).

Key findings

The residual waste from reusing the ASR, is estimated to be approximately 3,000 tonnes each year, and is significantly lower than the 60,000 tonnes of ASR currently being sent to landfill each year. It is anticipated that residual waste will be classified as general industrial waste, priority waste or reportable priority waste, in accordance with the Environment Protection Regulation 2021. Where not preclassified, the waste will be categorised to determine the waste code and type, prior to lawful disposal.

Reportable priority waste will be transported only by authorised vehicles and mandatory tracking of waste during transportation to a facility licenced by EPA Victoria for disposal.

Assessment

At the proposed facility, we will be receiving, generating and transporting waste materials either for use or to process a range of waste streams including:

- demolition and construction waste
- filter media and small stream of non-volatile solids
- catalysts and adsorbents
- wastewater
- sewerage and general municipal waste.

Wherever possible, we will reuse wastes within the process to create a new product. Examples include recirculating non-volatile solids generated through the syngas treatment process to generate vitrified product for use in construction, and reusing wastewater as process water.

Under [new laws](#), waste generators, transporters and receivers will share the responsibility of making sure waste ends up at an EPA authorised site. To comply with the new laws, all waste streams to and from the site will be classified and any disposable waste will be sent to a waste disposal site with an EPA licence, permit or registration.



For more information on this study or to speak to someone from the team please contact Sims Resource Renewal on 1800 570 530 or info.srr@simsmm.com