# **HiQ Energy-from-Waste**





#### Creating a circular economy hub for Sunbury

HiQ is proposing to invest in state-of-the-art energy generation and expand its treatment, recovery, and reuse solutions at the Sunbury Eco-Hub, located at 570 Sunbury Road, Bulla.

The Eco-Hub currently provides a soil processing facility, resource recovery, quarrying, engineered disposal, and an organics centre. The new facilities will complement these services to provide integrated solutions that protect and preserve precious resources, divert waste from landfill, and deliver jobs and economic benefits for Sunbury, Bulla and wider Victoria. Our existing buffer zones of up to 1.3km are in place to protect the surrounding environment and community.



# What is Energy-from-Waste?

Energy-from-Waste (EfW) refers to the process of converting non-hazardous waste that can't be recycled or recovered into energy sources such as heat, electricity, gas, and liquid fuels.

EfW is an established and commonly used way of generating energy, helping to reduce reliance on fossil fuels and divert waste away from landfills.

There are more than 1,600 EfW facilities operating around the world, including in major cities such as Paris, London, Tokyo and Copenhagen. Australia has started implementing Energy-from-Waste, with two facilities under construction in Western Australia, due to be operational in 2025. Four facilities have obtained approvals in Victoria, and two are proposed in NSW.

EfW means that instead of simply throwing away our products, we can use them to bolster our energy system and support our community by creating jobs and providing direct, local electricity.





## What is HiQ proposing?

HiQ is proposing to partner with world-leading technology provider Hitachi Zosen Inova (HZI) to construct and operate an EfW facility within HiQ's existing Sunbury Eco-Hub at 570 Sunbury Road, Bulla.

The proposed facility will process up to 300,000 tonnes of non-hazardous waste that would otherwise be sent to landfill, including household waste (Municipal Solid Waste) and pre-sorted materials from construction, building, and business operations (Commercial and Industrial waste).

The proposed facility would generate up to 29,000 kilowatts of electricity per hour, enough to power approximately 36,000 homes.



Artist impression of proposed Energy-from-Waste facility

HZI is a global greentech company that has been building and maintaining EfW plants for over 90 years.

HZI designed the East Rockingham EfW facility in Western Australia and has engineered and built facilities in the UK, Switzerland, Dubai, Finland, Germany, Japan, and many more.

In December 2023 it announced its 19th facility in England alone.



### A proven four-step process

HiQ's proposed facility will follow a four-step process:



Non-hazardous material arrives at the facility, including household waste from nearby councils and construction and demolition and commercial and industrial waste that isn't able be reused or recycled in accordance with Victorian Government requirements.



Waste is processed through a control system where it goes through an enclosed system before it is turned into energy.



Two types of residue material will result from the system and safely captured in storage areas. The first, known as bottom ash, is likely to be recovered into construction material and recycled metals. The residue material resulting from the air pollution control would be safely disposed of.



Energy is distributed to local users, site facilities and to bolster Victoria's electricity grid.



#### Protection measures in place

- Robust technical assessments inform the design and application
  We have undertaken extensive technical assessments, including noise, visual, air quality, human, health odour, dust and vibration. You can read more details on these assessments in the Technical Assessments Fact Sheet.
  Full reports will be available as part of EPA Victoria's public exhibition process.
- Extensive buffers are in place to protect surrounding areas Our existing site buffers provide extensive protection to surrounding areas. We have a 1.3 kilometre FOGO buffer in place, as well a 500-metre landfill and quarry buffers, all of which adhere to EPA guidelines.

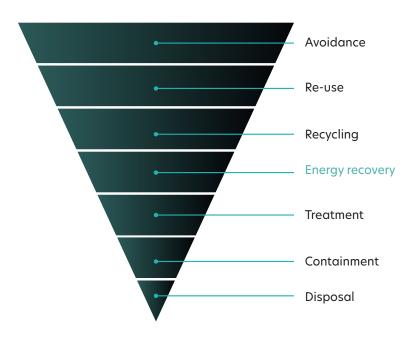


# Upholding global best practice

HiQ's proposed EfW site will be designed, constructed and operated with strict oversight from EPA Victoria and in-line with European Union best practice requirements, including meeting the Best Available Technologies (BAT) Reference Document for Waste Incineration.







Improving our waste system is complex. We first need to avoid and minimise waste when we make and use products.

However, there will always be waste that cannot be recycled or reused. In these circumstances, EfW is a safe and proven way to divert waste away from landfill, and an important part of a fully integrated waste system.

HiQ is investing in a range of technologies within our Sunbury Eco-Hub to address many layers of the waste system, including recycling, treatment, and reuse.

The Victorian Government's Waste-to-Energy Framework places a one million tonne maximum on the amount of waste that can be processed through these facilities to ensure recycling and reuse remains a priority.

All approved EfW facilities would be closely monitored and assessed by EPA Victoria and Recycling Victoria. Read more about the policy at www.vic.gov.au/waste-energy.

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#### What are the benefits?

- 1. **Generating energy:** It is expected that the facility will generate 29,000 kilowatts of energy each year, which would be shared with nearby users, to support Victoria's electricity grid, and supply the site's energy.
- 2. Creating local jobs: This facility would create up to up to 600 direct jobs during construction and 50 jobs for the life of the facility. It would also contribute to hundreds of additional indirect jobs.
- **3. Reducing greenhouse gas emissions:** The facility would divert waste from landfill and help to remove methane and other greenhouse gas emissions from the atmosphere.

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#### INDICATIVE TIMELINE

Late 2023 - early 2024 Technical assessments completed, including noise, vibration, visual, air quality, human health and

• Early 2024: where we are now Technical assessments complete Community engagement underway

• Mid 2024

Community consultation period closes and feedback is assessed Proposals updated based on community and stakeholder input Applications submitted

- Mid to late 2024 Public exhibition of proposed Energy-from-Waste facility and technical assessments
- Late 2024-2025 Application outcomes
- Early 2025 mid 2026 Detailed design and engineering
- Mid 2025 early 2026 Construction of resource recovery and recycling facilities
- Mid 2026 mid 2028 Construction of EfW facility
- Late 2025 mid 2026 Operations commence at resource recovery and recycling facilities
- · 2029-2030

As we progress, we are committed to keeping the community up to date.

We operate a dedicated phone line and email address and encourage anyone with questions to reach out at any time.



You can contact us at any time by calling 03 9021 0678 or by emailing getintouch@hiqualitysunbury.com.au



#### About HiQ

HiQ is one of Australia's leading waste management providers. Our sites around Australia provide advanced recycling, recovery, treatment, and disposal facilities that support some of the country's biggest projects.

