

Learn more about the plans for Wood Mulching Industries' Swanbank site



Wood Mulching Industries (WMI) have lodged a development application to Ipswich City Council to redevelop part of our Swanbank site (7006 Unnamed Road, Swanbank) into Queensland's first enclosed biogas and composting facility. Using state-of-the art, best practice technology, the proposed facility will process organic waste in a way which significantly reduces odour, improves air quality and generates renewable energy. The facility will reduce the amount of organic waste going to landfill, reduce greenhouse gas emissions and help achieve the targets set out in the State government's Waste Management and Resource Recovery Strategy.

Read on to learn about the proposed works and development approval process.

About WMI

We are a Queensland family-owned company that have been undertaking recycling and composting operations in Swanbank since 1999. Today, we employ over 20 staff and process over 150,000 tons of materials.

Waste management and recycling is an essential part of our cities and regions, and we all have a shared responsibility for the waste we generate and how we dispose of it. With an estimated 67 million tonnes of waste generated by Australians every year, finding solutions that reduce waste going to landfill is vital to protect our environment and safeguard public health.

We understand the waste management and recycling industry is changing, as are community expectations. Our vision to redevelop our site into Queensland's first enclosed biogas and composting facility and lead the way for more innovative waste technologies and best practice solutions in the area. Through this proposal it will be possible to substantially reduce odour emissions associated with existing operations, create bio-energy and use it to offset fossil fuel consumption and decrease the amount of organic waste going to landfill. This is better for the environment, our community and local liveability.

“Our vision to redevelop our Swanbank site into Queensland's first enclosed biogas and composting facility and lead the way for more innovative waste technologies and best practice solutions in the area.”

Provide your feedback

The development application for this project is being formally advertised. The purpose of the public notification is to allow the public to review the entire development application and provide feedback. You will have until 24 June 2021 to make a submission on relevant planning grounds to Council. You can view the application here: <https://www.ipswich.qld.gov.au/services/searches-and-enquiries/application-enquiry>.

If you have any questions of the project team or would like to discuss the key aspects of the proposal in greater detail, please email us at qldengagement@ethosurban.com.

About the proposal

The application is seeking approval for the development of an enclosed composting and biogas facility. It has been designed to comply with all relevant planning and environmental requirements. The development will occur in two stages:

Stage 1: Composting operations

Stage 1 of the proposal involves establishing a new 1.4-hectare composting shed to transition our existing open-air composting operation into a fully enclosed building. This 12m high building will centralise our facility and reduce odour impacts. Only green waste, mulch and finished products will be stockpiled outdoors, before being shipped to the local landscaping industry. Other components which will be established on site during Stage 1 include:

- A new maintenance shed
- Stockpile area
- Storage and screening area
- 2 x stormwater ponds.

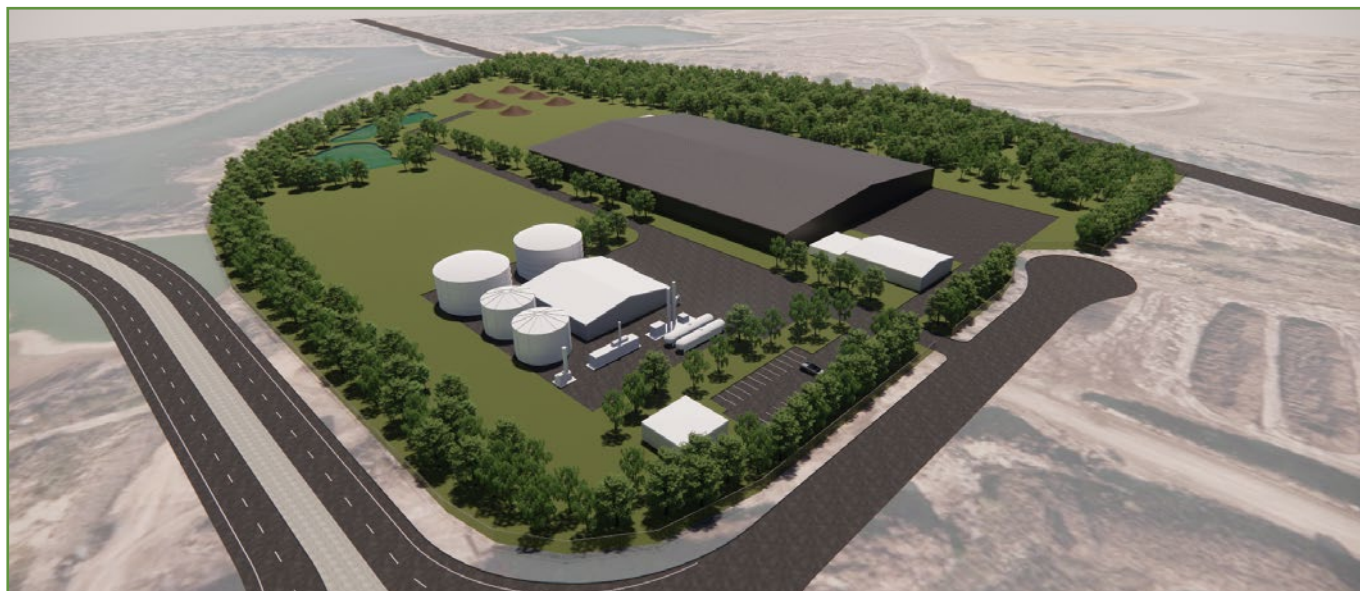
During this stage, the composting operations will continue to use the site's existing access, car parking and office facilities.

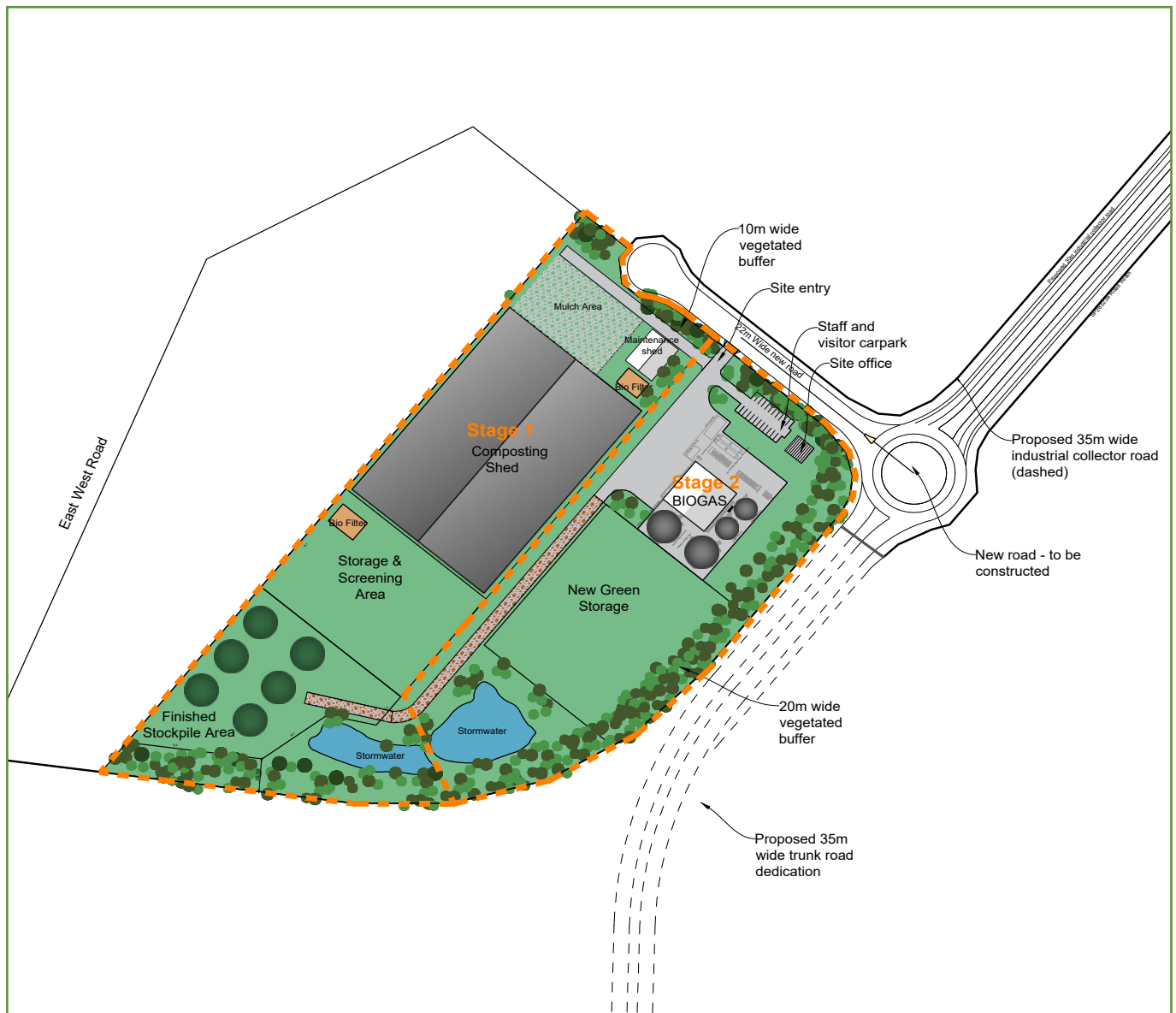
Stage 2: Biogas operations and ancillary infrastructure

Stage 2 involves the development of the new biogas facility. It will have a maximum height of 8.5m, total building footprint of approximately 6,800m² and be located adjacent to the composting shed. Other components which will be established during Stage 2 include:

- New public roads:
 - A dual-lane industrial road between the site and the current roundabout on Wesley Way and Mount Juillerat Drive
 - A new access road off the industrial distributor to provide access to the site.
- New site office
- New car parking area for commercial vehicles and staff (23 spaces)
- A 10m wide landscape buffer along the frontage of the north-eastern boundary and access road
- A 20m wide established vegetation buffer along the site's southern boundary to conceal the development from the adjacent industrial road and surrounding areas.

Once completed, the new access, carparking and administration functions will be shared by the composting and biogas operations.





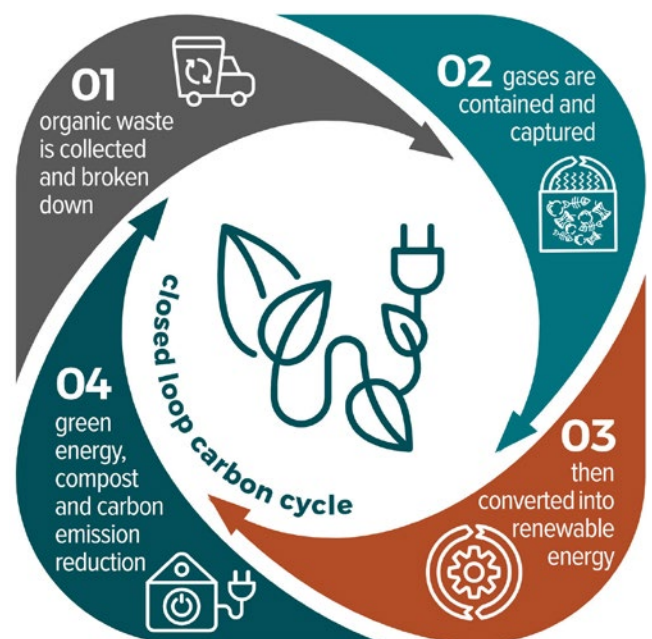
What's Bio-Energy?

Bio-energy is generated through the natural process of decomposition (anaerobic digestion) of organic materials like food and green waste.

The renewable energy created will be used in several ways, including:

- Converted to electricity which can be used to power the operations and activities of the site, charge electric vehicles, power adjoining industrial sites and/or feed into the national electricity grid
- Heating to enhance the decomposition process and/or to heat adjoining sites.

Once complete, the facility will be eligible for accreditation by the Clean Energy Regulator to help Australia meet its renewable energy target.



Compost back to soil and Bio-energy back to the community
Source: Byron Shire Council, 2020

What are the impacts?

A comprehensive environment management and monitoring program will be in place to monitor impacts over time – including odour, dust, water quality and noise. This program will be conditioned as part of the development permit (if approved) and will be enforceable by the Department of Environment and Science.

Odour

A key benefit of the proposal is that it consolidates existing site operations onto a smaller footprint and encloses composting and odorous activities into negatively pressured sheds. An air quality assessment found odour and dust emissions associated with the new development are substantially lower than the current operations and would comply with regulatory requirements.

Traffic

The proposal will not exceed the number of daily vehicle trips that are currently allowed to the site. A traffic impact study found that the proposal will not have any significant impacts on traffic flow to the site and surrounding area. The road upgrades proposed as part of the development will also improve the safety and efficiency of the road network.

Vegetation

The proposed development has been designed to maximise the retention of protected vegetation. This helps to retain environmental values while providing a wide natural buffer to conceal new buildings from adjacent areas.

Visual impacts

The proposal will consolidate and enclose the current composting and mulching operations, and reduce the overall footprint of the facility. New buildings will be well setback from public roads, and extensive landscaping is proposed around the site's perimeter to improve its appearance from surrounding areas.

Stormwater

There will be no impact from stormwater runoff on surrounding properties. On-site detention / retention ponds will be constructed to manage the stormwater volumes for the entire development.

Noise

Biogas facilities typically do not generate loud noise inside or outside the facility. A noise impact assessment found that the development will comply with regulatory noise standards during the day and night and will not have any adverse impacts on existing and future residential areas.

Hazards

There are hundreds of biogas facilities operating across the world. The risk is of major incidents (e.g. fire, explosion) associated with these types of facilities is low, a bit like a service station. Biogas operators must implement strict precautionary measures – such as good work practices, gas sensors, safety walk-throughs, protective equipment for staff and adequate ventilation – to ensure any hazards and risks associated with biogas production are minimised.

The facility will have a compliant, high temperature enclosed flare to burn off any excess biogas and ensure the facility is operating safely.

The benefits

- Significant improvement from current – lowers odour, operates on a smaller footprint and reduces greenhouse gas emissions
- Meets industry best practice standards
- Aligns with State government target for diverting 90% of waste to landfill by 2050
- Supports the Federal Government renewable energy target of 33,000GWh by 2030
- Utilises technology that creates greater work efficiency.

Council's Temporary Local Planning Instrument (TLPI)

Ipswich City Council introduced a Temporary Local Planning Instrument in 2018. The TPLI provides interim planning requirements to address concerns about landfill and waste industry uses in the Swanbank / New Chum industrial area.

The development application contains an assessment of how the proposal addresses relevant TLPI criteria. The proposed facility will operate on a smaller footprint compared to the current facility, it encloses all odorous operations on site, and specialist reports demonstrate that it will not have adverse impacts on existing, approved and planned residential areas.

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Council's Temporary Local Planning Instrument (TLPI)

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The proposal complies with the relevant TLPI criteria as it will operate on a smaller footprint compared to the current facility, it encloses all odorous operations on site, and specialist reports demonstrate that it will not have adverse impacts on existing, approved and planned residential areas.

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There will be no impact from stormwater runoff on surrounding properties. On-site detention / retention ponds will be constructed to manage the stormwater volumes for the entire development.

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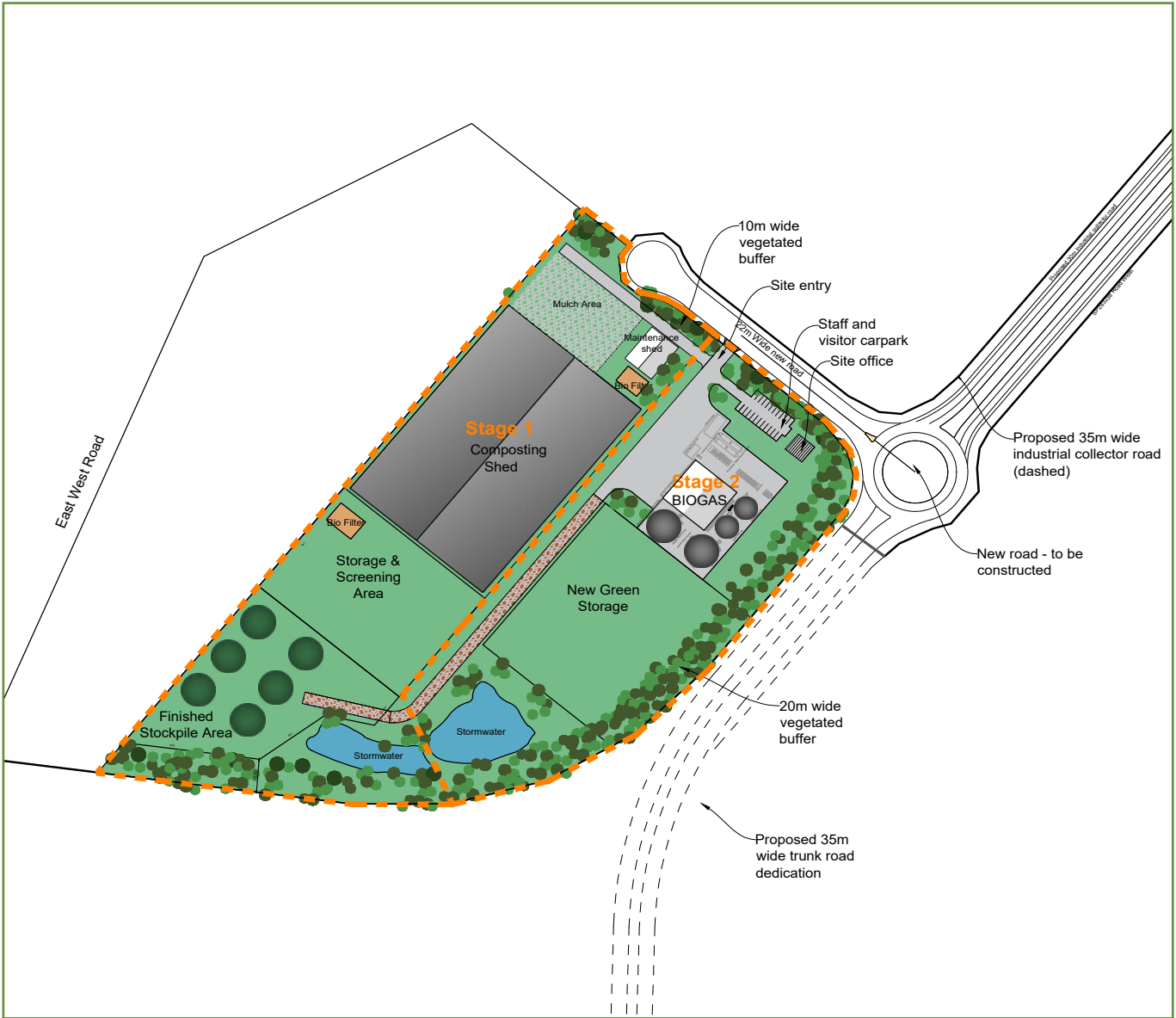
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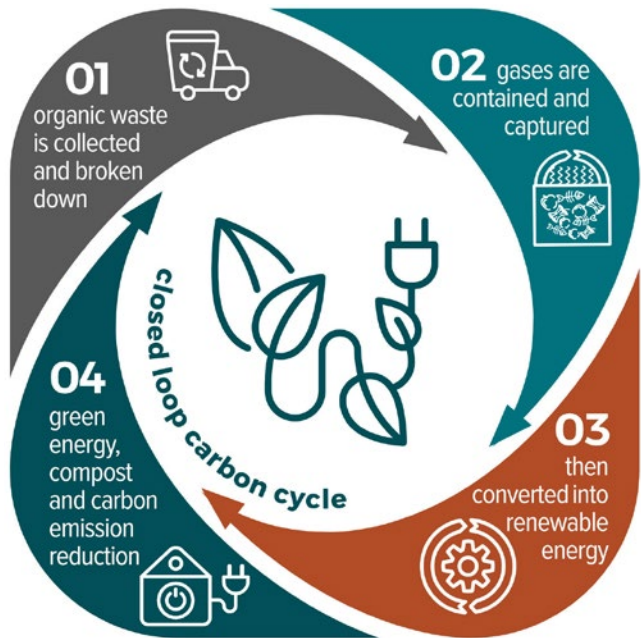
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