Get involved!

We are in the development stages of planning and talking to our community to inform the next stages of the project, including a functional design and technical assessments.

The technical assessments will provide more information about how Barwon Water will meet EPA requirements and address things like traffic, noise and odour.

We are committed to listening to and learning from our community. This will be an opportunity to tell us what is important to you and what needs to be considered as the project progresses.

Visit **yoursay.barwonwater.vic.gov.au/RRON** for more information and to share your views.

Interpreter

We provide a free interpreter service. Contact the Translating and Interpreter Service (TIS) on 13 14 50 for assistance.

Renewable Organics Network

Barwon Water

IN PARTNERSHIP WITH

Borough of Queenscliffe
Queenscliff & Point Lonsdale, Victoria, Australia

City of Greater Geelong

Golden Plains Shire

Surf Coast Shire

Barwon Water

Barwon Water's Regional Renewable Organics Network at Black Rock

Get involved!

For further information

1300 656 007

info@barwonwater.com.au

yoursay.barwonwater.vic.gov.au/RRON

Our region is growing and the waste we generate is increasing at double the rate of our population.

At the same time, landfill space is running out and the cost of sending waste to landfill is on the rise.

About a third of the waste we throw out at home is organic material, mainly food scraps, that create greenhouse gases when sent to landfill.

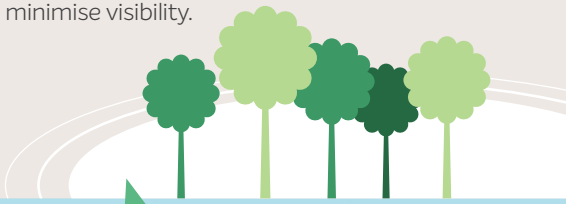
Barwon Water has drawn on its 110-year knowledge and expertise in managing water, wastewater and organic material to partner with local councils to transform food, garden, commercial and industrial and wastewater organic waste into valuable resources!

We are committed to being good neighbours and working with our community around traffic, odour and noise.

A local organic processing facility reduces the distance waste needs to travel across and out of our region. We estimate there will be 16 trucks moving to and from the site each day by 2033, and we will work to optimise truck movements during the design process.

Odour and noise managed to meet EPA requirements.

The facility will be set back from the site and trees will be planted to minimise visibility.



The Regional Renewable Organics Network

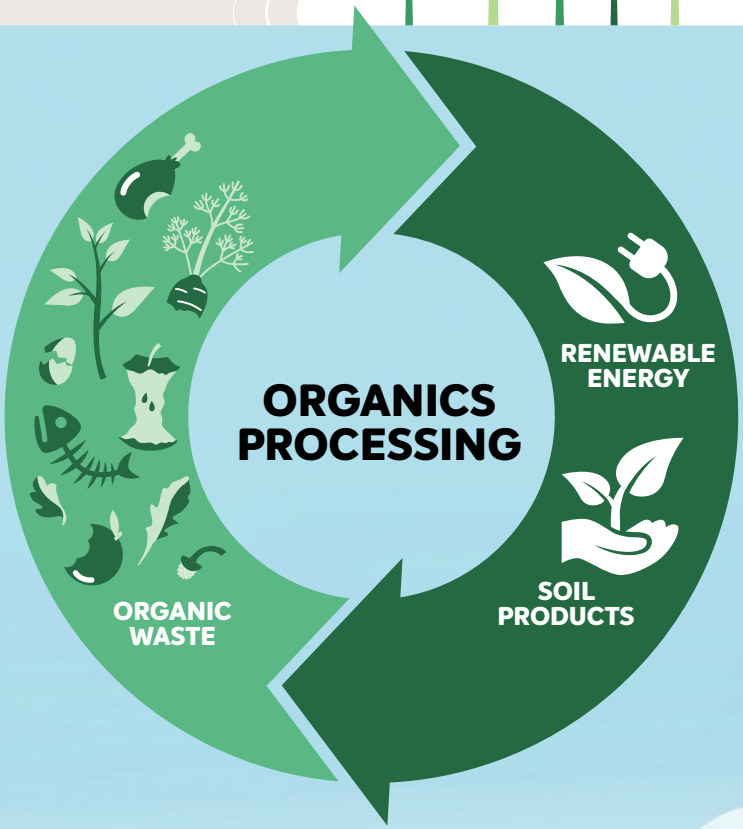
Barwon Water is planning to create a Regional Renewable Organics Network that would leverage our wastewater infrastructure at Black Rock to take local food, garden, commercial and industrial and wastewater organic waste and safely convert it into:

- nutrient-rich products that improve soil for agricultural uses, and
- renewable energy to help power our operations.

Our proposal would process 40,000 tonnes of household, commercial and industrial organic waste each year, diverting significant amounts of waste and wastewater from landfill.

Each year, it would produce 8,000 tonnes of soil products that improve soil quality and capture carbon in the ground.

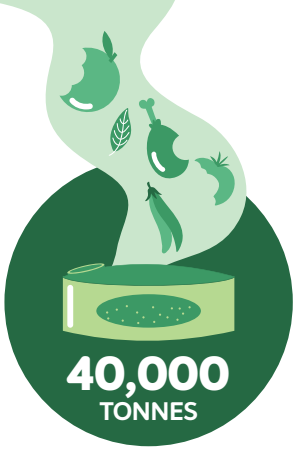
The state-of-the-art organics processing facility would deliver many benefits to the region and our community, including reducing greenhouse gas emissions and energy and waste costs, and creating local jobs.



We are partnering with local councils - the Borough of Queenscliffe, City of Greater Geelong, Golden Plains Shire and Surf Coast Shire - to recycle food and garden waste from households across the region.

Project Benefits

Processes 40,000 tonnes of organic waste each year, concentrating it into 8,000 tonnes of high value, nutrient rich soil enhancers to support local agriculture.



TOTAL CARBON EMISSIONS
10,000 - 15,000

Reduces the region's emissions by at least between 10,000 to 15,000 tonnes per year, the equivalent of taking more than 4,000 cars off the road.

Saves energy costs, keeping water bills affordable for our customers.

Provides a local, long-term and lower financial and environmental cost solution for councils.

Generates 2.5 gigawatt hours of renewable electricity, enough to power 14% of Black Rock's energy needs or the equivalent of 500 homes.

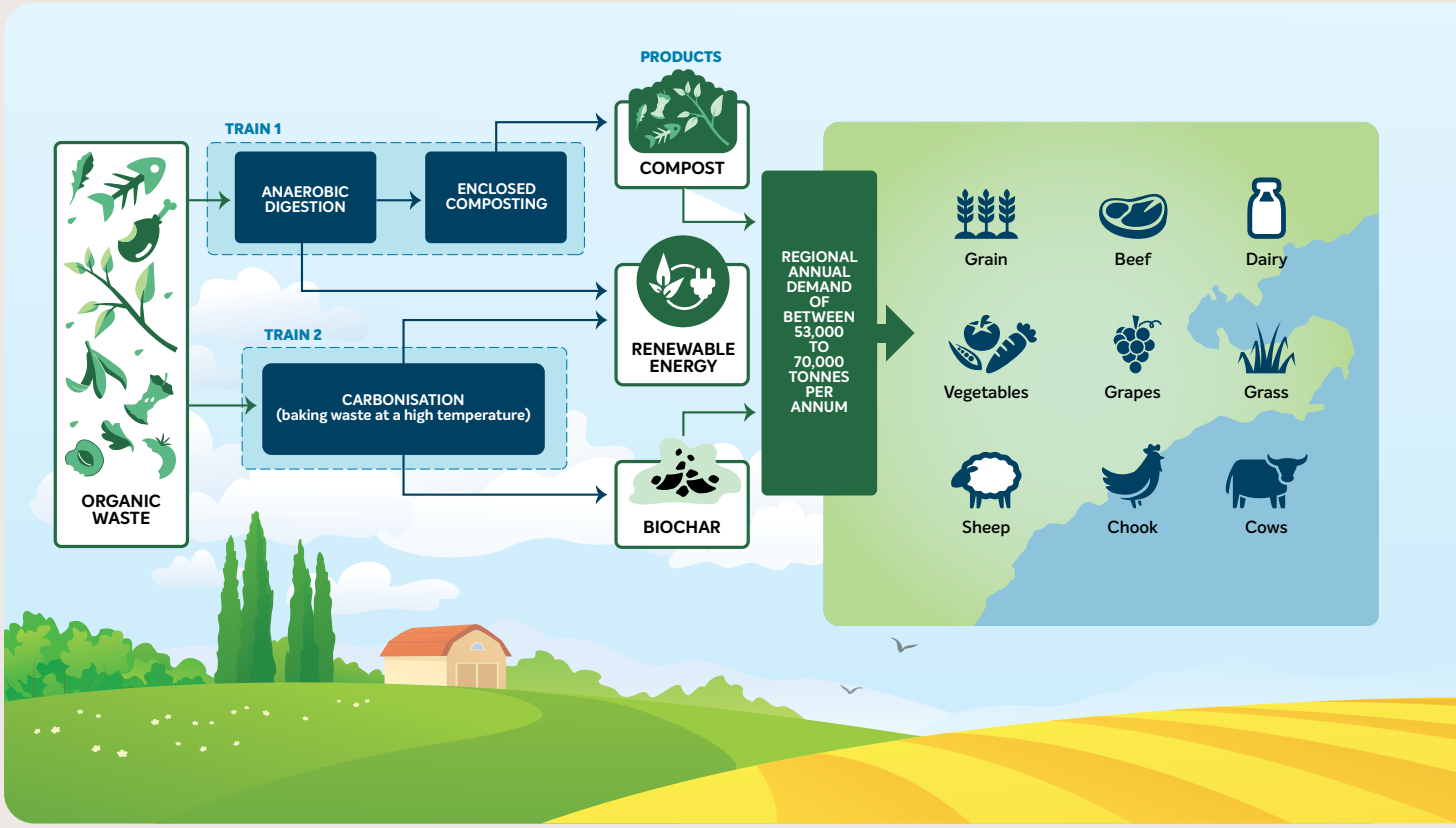
Creates 75 construction jobs and 36 ongoing jobs.

100+ JOBS

Leads the way in our region's transition to a circular economy, where materials are continually reused and recycled to increase their life span and reduce waste.

DEAKIN UNIVERSITY

Supports further research in partnership with Deakin University.



How it works

The process works in two ways.

1 Waste is **sorted** and fed into a sealed tank called an 'anaerobic digester'. Natural bacteria breaks down the organic material, much the same as our own bodies digest food, to produce a solid material called 'digestate' that is rich in nutrients.

2 Waste is **sorted**, dried and added to a tank where the material is heated at a high temperature. This process is known as 'carbonisation' because it returns organic material to its basic carbon form and locks carbon out of the atmosphere and into the soils. The process 'bakes' waste, differing from other facilities that incinerate waste, producing a biochar that contains carbon and nutrients from the organic waste.

The solid material produced by both processes become valuable products that can be sold to the agricultural industry.

The soil products – **enhanced** compost and biochar – have many benefits economic and environmental benefits.

Both processes also produce gas that can be converted into renewable energy that can be used when needed at our Black Rock plant. No harmful gases are released into the environment.

Every part of the organic material we collect becomes a new resource, continuing the cycle and ensuring nothing goes to waste!

The location

We are proposing to build the Regional Renewable Organics Network on vacant land at our Black Rock Water Reclamation Plant in Connewarre.

By locating the facility at Black Rock, we can make the most of our existing water and sewerage infrastructure and use the renewable energy we generate to power Black Rock water reclamation plant – Barwon Water's biggest energy user and carbon emitter.

Treating wastewater is energy-intensive, meaning Black Rock uses about 35 megawatt hours daily, roughly seven times more energy than a typical household uses in a whole year!

By reducing our energy costs we keep our customers' bills affordable, and by reducing our emissions, we decrease our environmental footprint.

The facility would be compact and would take up a small 3.4-hectare section of the broader 290-hectare Black Rock site, representing about 1.2 per cent of the Black Rock site.

Most equipment and sheds would range from two to twelve metres high.

Below is a basic image of how the facility may look, however this may change when a functional design is completed in early to mid-2022, in response to community feedback.

Our aim is for this to be well screened from the road with trees.

The Regional Renewable Organics Network will continue the evolution of the Black Rock site as a world-class facility for clean, safe resource generation, sustainable infrastructure and water security. The site is already home to a 3 megawatt solar farm that supplies up to 35% of the plant's electricity use and has the capacity to produce up to 2,000 million litres of Class A recycled water, 25,000 million litres of Class C recycled water and recycles 60,000 tonnes of biosolids per year.

Timeline

October to November 2021

We engaged with our community to share information about the project and understand what's important to our community in regards to the Regional Renewable Organics Network at Black Rock.

Mid to late 2022

Community feedback is helping us prepare a functional design of the facility and undertake technical assessments.

Late 2022 to early 2023

We will engage with our community again to share the outcomes of the functional design and technical assessments and understand if there are further issues that need to be explored.

Early to mid 2023

We will submit an application to the Environment Protection Authority, seeking an approval to proceed with the project. The EPA will publish the application on the Engage Victoria website for community feedback.

Late 2023

If approved, construction would commence in late 2023.

2025

It is proposed the Regional Renewable Organics Network would be operational by mid-2025.