

## REGIONAL RENEWABLE ORGANICS NETWORK BLACK ROCK



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 is planning a world leading Regional Renewable Organics Network (RRON) facility at the Black Rock Water Reclamation Plant in Connewarre.

### A solution to our waste problem

The planned facility will take household food and garden waste, local commercial and industrial organic waste and organic materials from wastewater treatment and safely convert it into products that capture carbon for high value use in agriculture and advanced sustainable materials, and at the same time produce renewable energy. In doing so, it will divert volumes of organic waste away from landfill, reduce emissions and help reverse the cycle of burning fossil fuels.

We're partnering with local councils (Borough of Queenscliffe, City of Greater Geelong, Golden Plains Shire and Surf Coast Shire) along the way to align with state-wide Circular Economy initiatives and Recycling Victoria Policy.

The RRON will deliver significant environmental, economic and community benefits to the region.

### What will the RRON facility look like?

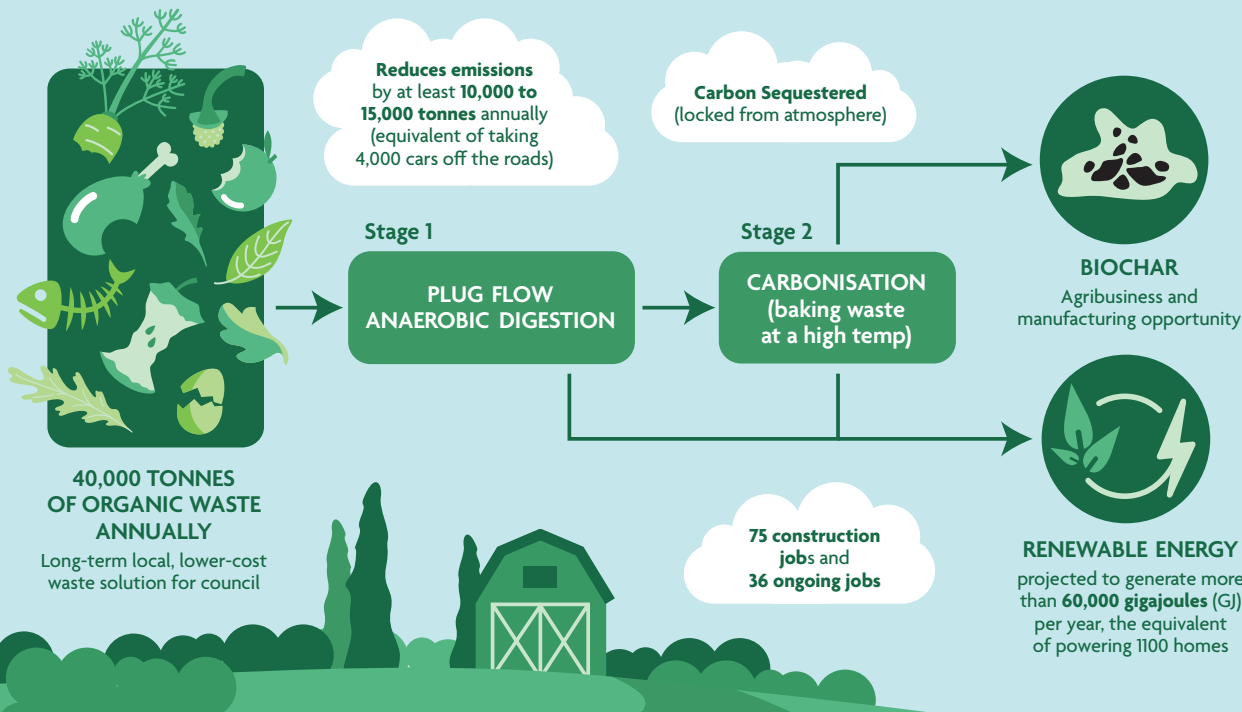
The RRON facility will be built on a vacant area of land near Barwon Water's existing Black Rock Water Reclamation Plant, which treats greater Geelong's wastewater and produces Class A and C recycled water.

The RRON facility will be compact with most equipment located within the main building. The digester tank, liquid waste receive area and the biofilter (which filters air from the building) will be located outside the main building. The height of the building is designed to provide enough clearance for operations, including trucks to safely drop off organic waste within the building. The facility will stand at 14 metres high (its tallest point, ~ 3 metres lower than the existing buildings at the site), will be ~ 100 metres long and ~ 45 metres wide – taking up a total of ~ 4,500 square metres or roughly 0.5% of the total Black Rock site.



# HOW IT WORKS

The facility will take household organic waste (such as food scraps and garden waste), organic commercial and industrial waste (like fats and oils) and organic materials from wastewater treatment plants. The process works in two ways:



## About biochar

Biochar is carbon rich and is extremely beneficial for soil health, helping plants grow. This baking process also produces a gas called ‘syngas’ that can be used to generate renewable energy, and the operating temperature helps manage contaminants the waste may have contained. Barwon Water is exploring opportunities through research partnerships with

Deakin and RMIT for using biochar, knowing it can be helpful in a variety of uses, in both soil and non-soil applications. In years to come, it could also be used in applications as broad as carbon fibre materials, sustainable batteries and green construction. Its ‘carbon-locking’ property sets it apart from composting and conventional soil conditioners and fertilisers.

## Next steps

We are committed to listening and learning from our community. We are continuing to develop the project and our community conversations will continue to inform and support the next stages of the project.

October to November 2021	We held extensive community conversations to share information about the project and understand what’s important to our community.
August 2021 to mid- 2023	We have shared the findings of community priorities, values and focus areas and will continue to share information to update the community about the progress of the project. Technical work is ongoing to prepare a functional design of the facility.
Mid-2023 onwards	We will listen to and learn from the community as we share the proposed functional design of the facility and outputs of the technical assessments. We will apply to the Environment Protection Authority to seek an approval to proceed with the project.
2024	If approved, construction of the RRON facility will commence.
2025-2026	Commissioning of the installed processing equipment will commence in 2025 with the facility planned to be in operation in 2026.

## Stay informed

Stay up to date by registering for updates on our project website: [yoursay.barwonwater.vic.gov.au/rron](https://yoursay.barwonwater.vic.gov.au/rron)  
Should you have any questions, please get in contact with us at [projects@barwonwater.vic.gov.au](mailto:projects@barwonwater.vic.gov.au) or 1300 656 007.