

Bioenergy - Unlocking the Circular Economy Geelong Bioenergy Networking Event

26 June 2024 Forum 27th June 2024 Site Visits Warun Ponds Estate

Victorian BioEnergy Network

Geelong BioEnergy Networking Forum Program – Final

Location: Deakin University Waurn Ponds Estate | Date: Wednesday, 26 June 9:00 am -5:10 pm & Site Visit to Colac Waste Water Treatment Plant on the 27th June – Meet at site at 9:45

Registration at Waurn Pond Estate						
8:30 – 9.00 am	30 min	Registration and tea/coffee				
9.00 – 9.10 am	10 min	Welcome: President, Victorian BioEnergy Network	Elizabeth Lewis–Gray			
9.10 am – 9.25 am	15 min	Official Opening: [The challenges and opportunities of developing renewable energy infrastructure to facilitate decarbonization (TBC)]	Juliana Addison			
9:25 – 9:35	15 min	Bioenergy as a circular economy solution - utilising organic feed, delivering on-demand energy and growing regional jobs	Ragini Prasad EO, Victorian Bioenergy Network			
9.35 – 9:55	20 min	Building a future flush with renewable gas	Brent Davis Jemena			
9:55-10.15	20 min	Deakin University's world class research hub focused on the bioeconomy and the management of organic waste	Colin Barrow Deakin University			
10:15 to 10:25	10 min	Questions				
10:25 - 10.55 am	Morning	Morning Tea				
Delivering Bioenergy Solutions						
11.00 - 11.05	5 min	Session Chair, Introduction				
11.05 - 11.25						
11.05 11.25	15 min	Leadership in the Barwon in the treatment of organic waste and the production of bioenergy	David Snadden CEO, Barwon Water			
11.25 - 11.40	15 min 15 min	Leadership in the Barwon in the treatment of organic waste and the production of bioenergy Viva Energy's decarbonisation journey and how we are working with our customers to provide solutions	David Snadden CEO, Barwon Water Stuart Wood Viva Energy			
11.25 - 11.40 11.40 -11.55	15 min 15 min 15 min	Leadership in the Barwon in the treatment of organic waste and the production of bioenergy Viva Energy's decarbonisation journey and how we are working with our customers to provide solutions Current production and benefits of biogas by LMS in Victoria and nationally	David Snadden CEO, Barwon Water Stuart Wood Viva Energy Emma Mountjoy LMS			
11.25 - 11.40 11.40 -11.55 11:55 - 12.05 pm	15 min 15 min 15 min 10 min	Leadership in the Barwon in the treatment of organic waste and the production of bioenergy Viva Energy's decarbonisation journey and how we are working with our customers to provide solutions Current production and benefits of biogas by LMS in Victoria and nationally Questions	David Snadden CEO, Barwon Water Stuart Wood Viva Energy Emma Mountjoy LMS			
11.25 - 11.40 11.40 -11.55 11:55 - 12.05 pm 12.05-12.50	15 min 15 min 15 min 10 min 45 mins	Leadership in the Barwon in the treatment of organic waste and the production of bioenergy Viva Energy's decarbonisation journey and how we are working with our customers to provide solutions Current production and benefits of biogas by LMS in Victoria and nationally Questions Workshop – Identifying and removing the roadblocks for bioenergy projects in Victoria	David Snadden CEO, Barwon Water Stuart Wood Viva Energy Emma Mountjoy LMS Facilitator: Matt Nelson Sustainability Victoria			

	Key Industry Operators			
1.50 – 1:55 pm	10 min	Session Chair, Introduction	Peter Hansford Director, Deakin Energy Network Victorian Cleantech Cluster	
1:55 -2.10pm	15 min	Investigation of implementing a food organic waste facility at the Western Treatment Plant at Werribee: Melbourne Water	Ellen Tao, Engineer, Specialist Service Planner	
2.10 -2.25 pm	15 min	Decarbonising transport through biofuels	Simon Roycroft Future Fuels CRC	
2.25 – 2.40pm	15 min	Accelerating the pathway for renewable gas use in Victoria	Claire Minns, Marketing Manager, AGIG	
2.40 – 2:50	10 min	Questions		
2:50 – 3:20	30 min	Coffee Break & Networking		
	Bioenergy in the Agricultural & Waste Sector			
3.20 – 3.25	5 min	Session Chair: TBA		
3.25- 3.40	15 min	Enviroment Protection Authority – digestate and engaging with industry to structure a pathway for the bioenergy sector	Chester Foley EPA	
3:40-3:55	15 min	Digestate trials - Organic 'waste' is the answer now what's the question?	Joe Finneran, MADE Energy	
3:55-4:10	15 min	A local sustainability success story – Bioenergy at Meredith Dairy	Sandy Cameron, Meredith Dairy	
4:10-4:25	15 min	Dairy Australia - The Opportunity of Anaerobic Digestion in the Dairy Industry: Turning Waste into Energy	Jhin Bagchi, Dairy Australia	
4:25 -4:40	15 min	Utilising Anaerobic Digestion to produce bioenergy in chicken farming	Emily Scholes Pavilion Farms	
4.40-4:50	10 min	Questions		
4:50-5:00	10 min	Wrap up and close		
5:00 pm	VBN Workshop ad Event Concludes			
6:00 pm	Dinner begins			

Day	2
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Site Visit to Colac RON Project – meet at site at 9:30am



Colac Renewable Organics Network

The Colac Renewable Organics Network (Colac RON) is helping our water reclamation plant in Colac run on clean, green and low-cost energy.

Australian first

We're working with the Colac-based Australian Lamb Company and Bulla Dairy Foods to take organic trade waste and convert it into renewable electricity.

The solid and liquid waste is added to a large, covered pond where natural bacteria breaks down the waste and transforms it into biogas that is captured and converted into renewable energy.

Project benefits

The Colac RON will deliver significant environmental, economic and community benefits to the region, including:

- reduces greenhouse gas emissions by 6,300 tonnes per year
- produces 5.5 gigawatt hours of clean, green, low-cost energy each year
- reduces the high energy cost of treating sewage and wastewater, helping to keep Barwon Water customers' bills affordable
- creates 17 construction jobs and 45 ongoing jobs
- limits landfill and reduces our carbon footprint.

Image caption: Aerial view of the Colac RON's covered ponds



Next steps

In further exciting news for the project, the Department of Energy, Environemtn and Climate Action (DEECA) has announced \$50,000 circular economy funding for concept design of a possible stage three of the Colac RON.

We'll investigate the feasibility of processing solid organic waste in the Colac region, which could mean taking kerbside organic waste collected by Colac Otway Shire, or other solid organic waste from Bulla Dairy foods, ALC, Colac Area Health, and wood packaging business CMTP.

We're committed to listening and learning from our community. We'll continue to develop the project and keep our community updated.

Regional Renewable Organics Network

About a third of the waste, we throw out at home is organic material, mainly food scraps, which create greenhouse gases when sent to landfill. We're planning a world leading Regional Renewable Organics Network (RRON) facility at the Black Rock Water Reclamation Plant in Connewarre.

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 (biochar) 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.

Key benefits include:

- The facility will process 40,000 tonnes of organic waste annually.
- Reduce greenhouse gas emissions by at least 10,000 to 15,000 tonnes annually.
- Produce 60,000 gigajoule (Gj) of renewable energy each year.
- Create 75 construction jobs and 36 ongoing jobs.
- Produce biochar for use in agriculture and opportunities for agribusiness and manufacturing.

About Barwon Water

Barwon Water is Victoria's largest regional urban water corporation. We have a proud history supporting regional prosperity by providing excellence in water, sewerage and recycled water services to our customers and the community for more than 110 years.

We deliver high-quality, affordable and reliable water services to more than 340,000 permanent residents – reaching up to 545,000 people during the peak holiday periods.

92% of our customer base is residential, with the remaining 8% a mixture of commercial, industrial, and agricultural customers.

Around 30% of metered consumption is attributed to non-domestic customers.

Our region of responsibility stretches over 8,100 square kilometres, from Little River and the Bellarine Peninsula in the east, to Colac in the west, and from Meredith and Cressy in the north, to Apollo Bay on Victoria's south-west coast.

Stay informed.

Stay up to date by visiting our website: <u>https://www.barwonwater.vic.gov.au/about-us/major-projects/renewable-organics-networks</u>