

Everything happening in carbon
abatement & renewable energy in

2025



LGI Quarterly Update

Jan | Feb | March 2025

- **Canberra Open Day** - Landfill Gas to Renewable Power
- **WRIQ** Technical Tour of Bunya Renewable Hybrid
- **Grafton** Landfill Gas System Expansion Update
- **Staff Spotlight** - Connor - Data Engineer and Muso

Impact to Date

A snapshot of totals as of March 2025

Biogas
Captured



886 million m3

Energy
Generated



619 GWh

A fantastic open day at our largest site in Canberra

LGI had the privilege of hosting Council leaders from across New South Wales for an open day of our LFG and Renewable Power Project at the Mugga Lane Resource Recovery Centre, ACT.



The event was an opportunity to showcase the exciting developments on our largest site, including a 50% increase in power generation thanks to the addition of two new 1MW generators in late 2024, and the in-progress upgrade to include a 12MW battery energy storage system (BESS).

A big thank you to all who attended, and a special mention to ACTNoWaste and Remondis who collaborated with us to organise the event.



WRIQ visits the grid scale battery at Bunya

It was a pleasure to welcome guests to our Landfill Gas to Renewable Hybrid project, at the City of Moreton Bay Council's Bunya Waste Management Facility during February, as part of the Future Waste Resources Symposium.



Our team discussed the use of flaring, renewable energy generation and the integrated battery energy storage system (BESS) on site, and the immense benefits to councils and the community.

Thank you to the Waste Recycling Industry Association (QLD) inc (WRIQ) for including LGI as part of their technical tour, and to all who attended for their time and insightful questions.



Current Projects Map



North meets South - A collaboration of LGI staff from the ACT, Qld & NSW working at Mugga Lane - Canberra

LGI forging ahead at the Clarence Valley Council landfill in Grafton

LGI staff are thrilled with the substantial progress of our expansion of the landfill gas extraction system at the Grafton Regional Landfill & Resource Recovery Centre.



The Clarence Valley Council recently awarded their tender for full service landfill gas management to LGI, enabling us to really optimise landfill gas extraction. Since contract award we have worked in close collaboration with Council's staff to design the expanded and upgraded system. **Already we have increased the landfill gas flow rates by more than 80% within three months of signing the new contract!**

We will continue to ***chase the gas*** with ongoing investment in the system, including more lateral (horizontal) and vertical wells to optimise extraction and beneficial use of the landfill gas.

A special thanks to Richard Roper, Andrew (Buck) Buchanan and their team from Council for their willing assistance on site.



Staff Spotlight Connor

- Data Engineer

This edition's Staff Spotlight features Connor, one of our deeply talented engineers, discussing what makes him so passionate about the work he does.



Hi, I'm Connor. At LGI, I work across software, data and SCADA engineering, with a focus on building systems that make processes more efficient and save time. Most of my projects involve developing new solutions to streamline operations and improve data management. I've been interested in the National Electricity Market (NEM) for quite a while—particularly in how generators and consumers manage the balance of supply and demand. It often feels like a thousand spinning plates, and I find it both fascinating and rewarding to contribute in any way I can to keep them moving.

I'm most proud of the work we did on Dynamic Asset Control System (DACS). It took a massive effort from the Assets, Projects and Innovations team and the moment we could step back and watch it autonomously respond to market changes—while also generating forecasts more accurate than those from AEMO—felt like a huge achievement. It was a time when I really practiced the best advice I've ever received - to get over the anxiety in step one that it can't be done, start at step two and deal with that at the end.

Following the LGI value of "Do What's Right", I see energy distribution and storage as the biggest challenges facing our grid, and large-scale batteries will play a crucial role in solving them. Most people only see the energy market through their power bills, so they might be surprised by how volatile the wholesale market is, where prices can shift dramatically every five minutes, making it very clear just how crucial automation is in managing and responding to those rapid changes. With LGI already having developed a hybrid green energy plant at Bunya, I think we're in a great position to lead the way in building smart, responsive facilities.

Outside of work, I've played guitar most of my life and love writing music. My biggest challenge lately is trying to find the balance between spoiling my dogs and not letting them get fat!



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