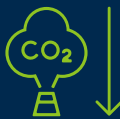




Biogas Captured
179.5 thousand m3



Carbon Abatement
1705 tonnes



Seedlings Planted
28.4 thousand seedlings
planted for 10 years



Cars off the road
368
(Last 12 months)

As of January 2025

Slashing carbon emissions at the Esk landfill

Flaring Methane for a Cleaner, Greener Community

A groundbreaking partnership between Somerset Regional Council and LGI is transforming the Esk Refuse and Recycling Centre and Landfill, turning waste into a climate solution. With the installation of a new biogas capture and flaring system, the site is actively reducing methane emissions—one of the most potent greenhouse gases—while aligning with national sustainability goals.

In 2024, LGI designed and installed a customised biogas management system featuring the LGI250 biogas flare, which safely burns methane gas, converting it into significantly less harmful carbon dioxide. The system includes:

- 26 Vertical gas extraction wells
- 6 Lateral wells
- 27km Pipeline connecting the wells to the flare unit

By extracting landfill gas and flaring methane, the project is expected to reduce up to 80% of Somerset Regional Council's landfill gas emissions, making it one of the region's most impactful emissions reduction initiatives. Given that landfills account for approximately 10% of Australia's total methane emissions, this project represents a major step toward achieving the Federal Government's target of a 43% reduction in greenhouse gas emissions by 2030.

A key benefit of this partnership is that the project required no upfront investment from Council and will not come at a cost to ratepayers in the future. LGI covers the cost of system installation and operation, while Somerset Regional Council can earn revenue through its share of Australian Carbon Credit Units (ACCUs). These credits, awarded for independently verified emissions reductions, provide ongoing revenue for the Council while incentivising sustainable waste management practices.



**CLEAN ENERGY &
CARBON ABATEMENT**

The Esk landfill project stands as a best-practice example of sustainable landfill management, delivering measurable environmental and economic benefits.

- ✓ Cuts methane emissions by up to 80%
- ✓ Best practice landfill management
- ✓ Supports infrastructure development
- ✓ Generates revenue through carbon credits
- ✓ Improves air quality and reduces landfill odours
- ✓ Helps align with national climate targets

By capturing and converting landfill gas, LGI and Somerset Regional Council are not only making a local impact but also contributing to a nationwide push for cleaner energy and reduced carbon footprints and that's good for everyone.

**People engineering,
clean energy, zero
carbon future**

07 3711 2225
enquiries@lgi.com.au
www.lgi.com.au



Council is always looking for cost-effective ways to reduce its emissions and the partnership with LGI will help us get there

Jason Wendt
Somerset Regional Council Mayor

LGI will operate and maintain the carbon-cutting infrastructure at the Murrumba Road site, delivering optimal gas extraction and carbon abatement.

Jarryd Doran
CEO of LGI

