



Your E-Waste, Our Responsibility

Making the environment better for everyone



Apart from eWaste recycling, Green Tech also provide the following services

- > Secure Data Destruction
- > Brand Destruction

Some of our customers includes hospitals, schools, government agencies, telecommunication companies and commercial applications

Currently actively involved with both the computer & television and battery product stewardship schemes

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LGI designed, built and operates a renewable power station in Bunya, Queensland.

Hidden potential

LGI IS HELPING COUNCILS UNLOCK BIOGAS OPPORTUNITIES AT REGIONAL LANDFILLS TO ACHIEVE CARBON ABATEMENT TARGETS. CO-CHIEF EXECUTIVE OFFICER JESSICA NORTH EXPLAINS.

Jessica North has long held a desire to save the world one landfill at a time.

The Co-Chief Executive Officer of LGI, formerly Landfill Gas Industries, has travelled the world for the past 25 years helping to establish solid waste management projects, consult on waste strategies, and develop waste and carbon credit projects.

It was while working in Thailand that she realised waste management didn't just require a technical solution, but behavioural change was also necessary. A change that is now resonating both globally and within Australia.

"So many communities within Australia have been directly impacted by the increasing frequency of severe climate events," Jessica says. "Having

100-year floods twice in two years is not normal.

"People realise we have to move towards the global imperative of a decarbonised future. Carbon abatement of the biogas from landfills can play an important role."

LGI recovers biogas, formed in landfills by natural anaerobic decomposition of waste, to abate carbon emissions and in some cases generate renewable energy.

It has developed and operates 26 biogas projects on landfill sites, mostly owned by local councils across Queensland, New South Wales and the ACT. Fifteen of these projects are registered to generate carbon credits and help councils cost-effectively reduce their greenhouse gas emissions.

Biogas comprises about 50 per cent methane and 50 per cent carbon dioxide. The methane component can reach explosive levels, cause asphyxiation at high exposure and impact local ecology. It also has a global warming potential 28 times that of carbon dioxide over the same time.

Jessica says that while active landfill biogas capture and combustion has been occurring on some of Australia's largest landfills since the 1980s and '90s, many regional councils don't have the resources or are unaware that their landfills could be viable carbon abatement projects.

Others assume their landfills are not producing enough gas for it to be worthwhile.



Jessica North, Co-Chief Executive Officer, LGI.

“Biogas from landfills can account for 60-80 per cent of a local council’s carbon footprint. Imagine, for a community that wants to sign up for net zero or a zero-carbon target, what a fantastic opportunity it would be to have a carbon abatement project both reducing that footprint and generating carbon credits to offset other council activities.

“The council would have a system that’s going to pull down their carbon footprint and meet their community targets.

“It’s a fantastic opportunity for a local government to lead the way and not only do the right thing by the environment and the community, but also have a great asset to take ownership of.”

Jessica says there have been few drivers to manage biogas from landfills. With few or no neighbours, the risk of migrating gas from a landfill causing concern is low.

This can be exacerbated by methane in the biogas being colourless, odourless and tasteless, and hence not readily viewed as a problem by the general community.

Community pressure to do the right thing from a climate perspective is increasing, resulting in more local governments seeking carbon-effective, and cost-effective, solutions to implement locally.

LGI can design, build and maintain a gas extraction system, for either open (active) landfills or closed sites, to vacuum out the biogas and combust it.

For regional landfill sites that don’t produce enough methane in sufficient quantity or quality to fuel an electricity generator, flaring the biogas is the solution to combust the methane component and convert it to less harmful carbon dioxide and water molecules.

“By abating the methane, carbon credits are created,” Jessica says “Depending on the size of the site, it can be possible to return a portion of carbon credits to the councils. Some sites will generate enough credits to provide a commercially viable service.”

The biogas from landfill sector has been involved in delivering carbon abatement for many years, and with an increased focus on the climate impact of methane since COP26, this abatement effort has even more relevance.

“As an industry sector, we can deliver even more abatement, and help achieve Australia’s strengthened emissions targets. The ability to support projects through creation of carbon credits is key, especially where some of those projects are also being developed to produce baseload, fast-response, renewable energy,” Jessica says.

“It’s a fantastic opportunity for a local government to lead the way and not only do the right thing by the environment and the community, but also have a great asset to take ownership of.”

Jessica North, Co-Chief Executive Officer, LGI

“As fossil fuel generators are retired and more intermittent renewables enter the system, the need for clean, dispatchable energy is becoming increasingly important. LGI’s renewable power generation being located on the distribution network also improves the reliability of power supply to local communities.”

Jessica encourages metropolitan and regional local governments not to underestimate the important role capturing biogas from their landfills can play in immediately reducing harmful greenhouse gas emissions and expediting a zero-carbon future. ■

For more information, visit: www.lgi.com.au



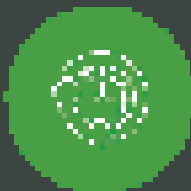
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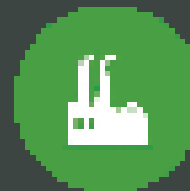
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