

Verified Emissions Reduction Certificates

>VERs or Verified Emission Reduction units come from the Australian Government's Greenhouse Friendly (GHF) program. AGL one of the founding members of GHF program, has been involved in this fledging market since it's inception.

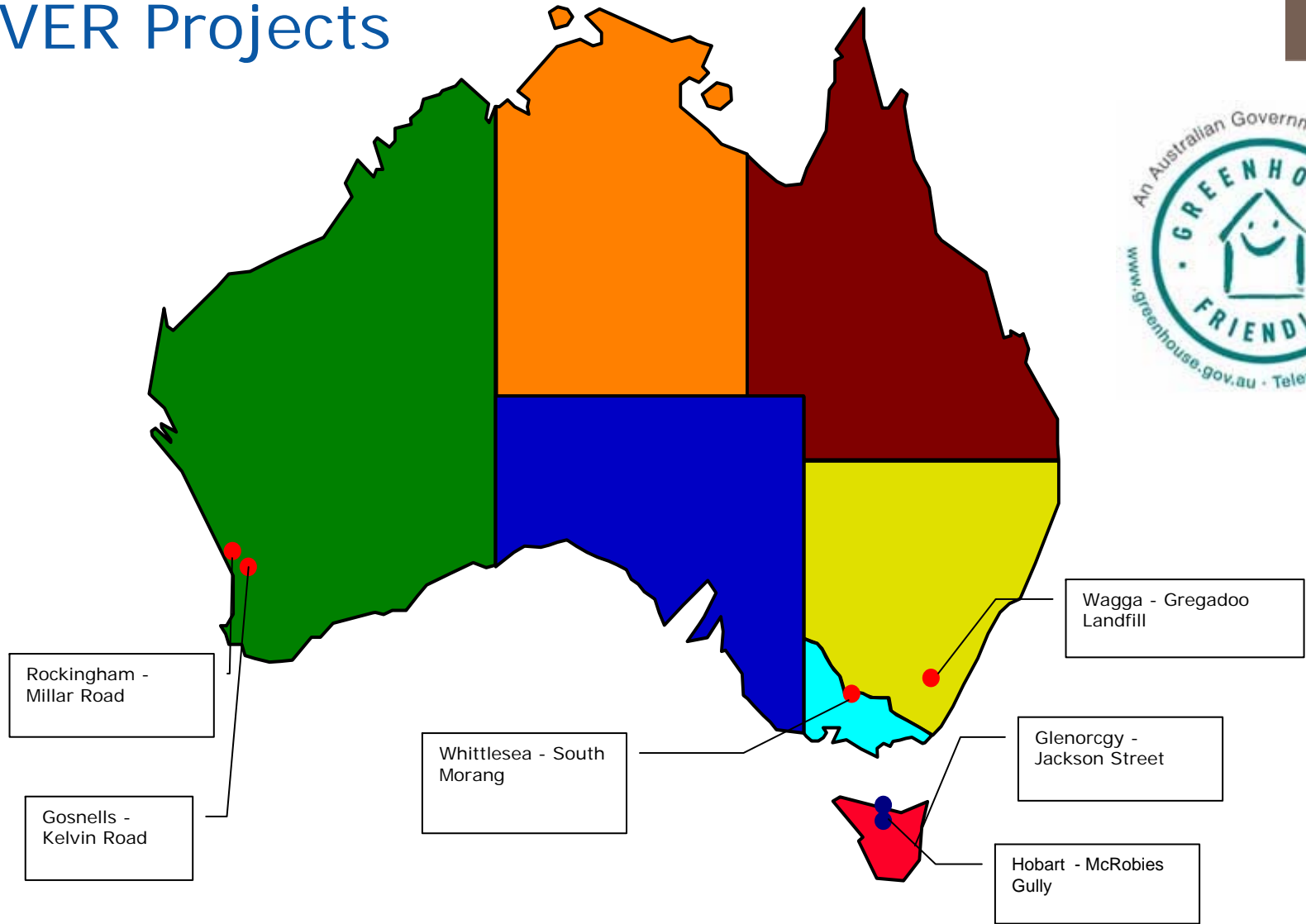
>VERs are sourced from Australian projects, that have to fulfil rigorously additionality criteria and are audited by the Federal Government's Department of Climate Change (DCC).

>AGL's VERS are created through landfill gas flaring projects across Australia.

- > prevent methane gas (CH₄) from the decomposition of rubbish escaping into the atmosphere. CH₄ has a global warming effect 21 times that of Carbon Dioxide (CO₂).
- > Clean Air-Cool Planet's December 2006 report says that the capturing and flaring of methane is the *Highest Quality** offset.

*Page 10, <http://www.cleanair-coolplanet.org/ConsumersGuidetoCarbonOffsets.pdf>.

AGL's VER Projects



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South Morang Gas Extraction and Flare Facility, Whittlesea Vic

Landfill gas flaring facilities City of Whittlesea landfill gas extraction and flaring (VIC) - AGL built, owns and operates a landfill gas extraction and combustion system at South Morang, Victoria under an agreement with the City of Whittlesea Council.

The plant extracts gas from the landfill through an array of wells and a network of buried plastic gas pipes. An electric blower is used to actively draw the landfill gas into the extraction system. Adjustments made to the electric blower unit and each individual well facilitates the efficient operation of the landfill extraction and combustion system.

The gas is metered before combustion in a flare. The extraction and flaring operates 24 hours a day, 7 days a week.



Abatement: 14,000 tonnes CO₂-e/pa
Removing 3,986 cars from the road pa

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Kelvin Road Waste Disposal Facility, Gosnells WA



Gas is extracted from the landfill through an array of wells interconnected by a network of buried pipes. A blower is used to actively draw the landfill gas into the extraction system. Two generators run on landfill gas. High voltage electricity is exported to the grid from the transformers. The station can be remotely controlled and monitored.

Abatement

40,000 tonnes CO₂-e/pa

Removing >9,300 Cars from the road pa

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Offsets using CCX CFIs

>AGL can source offsets from Chicago Climate Exchange (CCX) Carbon Financial Instruments (CFIs). These certificate can come from many places in the world*; and are sourced from a pool of projects including methane destruction, forestry and baseline emission reduction.

> *CCX Members come from the US, South America, Europe, Asia and now Australia

> As these certificates are sourced both locally and internationally these offsets are appropriate for companies wishing to offset emissions from international travel.

>AGL joined the Chicago Climate Exchange in March 2007 and became the first energy company in Australia to do so. We have signed up to emission reductions on AGL owned and operated plant from 2007 to 2010. Our achievements have been recognised externally.

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NSW Greenhouse Gas Abatement Certificates

- >NGACs or abatement sourced from projects accredited under the NSW Greenhouse Gas Abatement scheme are another credible source of carbon offset.
- >Every project that creates NGACs is accredited by the NSW Independent Pricing and Regulatory Tribunal (IPART), projects that create these certificates include methane destruction, carbon sequestration (forestry), demand side abatement (energy efficiency) and generator efficiency*.
- >Each certificate is individually number and accounted for on a registry run by the NSW Government. AGL can assign NGACs from any type of project – at the customers discretion.

AGL NGAC Project

> Biogas Utilisation Facility at the Melbourne Water WTP in Werribee.

> AGL Energy Services owns and operates a 7.7MW generation facility and sells generated energy to Melbourne Water

> Abatement:

- > 200,000 tonnes CO₂-e/pa
- > Removing 52,000 Cars from the road pa



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AGL NGAC Project



Coopers Brewery -

AGL owns and operates a cogeneration facility at Coopers Brewery in South Australia.

The steam generator produces steam by recovering the exhaust heat generated by the gas turbine.

The facility's capacity is 4.4MW and also generates up to 21 tonnes of steam per hour.

2MW is supplied to the brewery and the excess is exported to the grid.

>Abatement:

- > 7,000 tonnes CO₂-e/pa
- > Removing 1,800 Cars from the road pa

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