

## Media Release

### **Innovative irrigator trial in Gloucester showing early succes**

**16 May 2013**

For the first time in New South Wales, produced water from deep in coal seams will be blended with fresh water and used to irrigate crops at Gloucester in an innovative trial, with early results proving successful.

AGL Energy Limited (AGL) is conducting the irrigation trial at its Tiedeman site as part of the exploration phase of the Gloucester Gas Project. Crops are currently thriving since seeding in April.

In conducting the trial, AGL hopes to assess the sustainability of irrigating crops with blended water, which combines produced water from deep in coal seams with fresh water sources.

John Ross, Manager Hydrogeology, said that he was pleased with how the trial was proceeding.

"We want to assess if, when blended with fresh water, produced water can be beneficially re-used for agriculture in a way that is safe and environmentally sustainable. If successful, this means that the community will have access to water for farming that would otherwise be unavailable, and means more fresh water for other community uses. At the same time it will produce additional fodder for livestock," he said.

"This is the first time in New South Wales there has been a trial of this kind and demonstrates AGL is serious about protecting and understanding water."

Water from coal seams typically is treated and used for other purposes like brick making. "In undertaking this trial, we hope to uncover another sustainable use for it," said Mr Ross.

Located approximately 15 kilometres south of Gloucester, the trial integrates with existing agriculture, grazing and gas operations.

The irrigator operates across 16 individual trial plots (about 12 hectares in total area) and will cultivate salt tolerant crops over the next 18 months to two years. Produced water is blended at a ratio of 3:1 with fresh water which substantially reduces the salinity.

The first crops to be grown within the trial include forage triticale - a common cereal crop - and lucerne. There is also a trial area planned for the more typical kikuyu pasture, over sown with red clover and chicory. These crops are salt tolerant and are intended for use as stock fodder on AGL properties.

The trial was approved by the New South Wales Department of Trade and Investment (Division of Resources and Energy), the New South Wales Office of Water, and the Environment Protection Authority.



Soil and water monitoring systems are in place to monitor the effectiveness of the trial. For example, to assess background conditions and the impact of irrigating with blended fresh and produced water, a soil and water monitoring network has been established.

Baseline monitoring was carried out for the 12 months leading up to the start of the trial and more intensive monitoring has been underway since the trial commenced in early April.

Utilising advanced technology, including a built-in GPS, soil moisture probes and controlled application rates, the linear move irrigator is a highly efficient method of irrigation.

With a maximum sweep length of 1,036 metres, the irrigator conserves water by applying only the amount of water that is needed, where it is needed to optimise crop growth and to minimise runoff.

For further information on AGL's water studies visit the [AGL Gloucester Project](#) website.

Notes for editors: Produced water is the term used to describe groundwater that is produced when coal seam gas is extracted from deep coal seams.

#### **Further inquiries:**

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#### **About AGL**

AGL is one of Australia's leading integrated renewable energy companies and is taking action toward creating a sustainable energy future for our investors, communities and customers. Drawing on over 175 years of experience, AGL operates retail and merchant energy businesses, power generation assets and an upstream gas portfolio. AGL has one of Australia's largest retail energy and dual fuel customer bases. AGL has a diverse power generation portfolio including base, peaking and intermediate generation plants, spread across traditional thermal generation as well as renewable sources including hydro, wind, landfill gas and biomass. AGL is Australia's largest private owner and operator of renewable energy assets and is looking to further expand this position by exploring a suite of low emission and renewable energy generation development opportunities.