

## **Coolimba Power Project takes cleaner coal base load power to closer realization**

Producing cleaner base load power through coal, with use of Carbon Capture and Storage (CCS) technologies, is a step closer to realisation with the scheduled release of Coolimba Power's Public Environment Review documents next week and the launch of their new website.

The Coolimba Power project is located 270km north of Perth, where a 2.4 million tonnes per annum coal mine and 400-450MW coal fired power station is planned, with provision for a 360MW gas fired power station and up to 2.9 million tonnes per annum carbon sequestration project. The project is being jointly developed by local integrated energy company Aviva and global power company AES.

"Coolimba is now a project of global significance and is attracting the interest of leading organisations pursuing carbon mitigation, including power developers, equipment suppliers and financiers," Aviva's Chief Executive Officer Lindsay Reed said.

"It will address a critical energy and fuel shortfall in Western Australia and provide the opportunity for a world scale demonstration of CCS technologies."

Mr Reed said as the only base load fuel resource to the north of Perth, Coolimba will greatly enhance the efficient use of major electricity transmission infrastructure, gas pipelines, large mineral resource developments and extensive wind resources in the Mid West region.

"Energy diversity and security is a key issue for the South West Interconnected System (SWIS) and the State. The lack of available gas at requisite quantities and price leaves coal as the only competing fuel for new base load generation developments in the near term," he said.

"The high proportion of gas used in existing power generation in WA will see industrial gas customers struggling for supply at competitive prices. WA has only two regions with coal reserves, Collie at the southern end of the grid and Coolimba at the northern end."

Mr Reed said the time has past when "conventional" coal fired power stations could be developed or old ones given extended lives.

"The community rightly demands that coal fired power stations employ the latest low emission technologies to minimise impacts on the environment," he said.

In a first for WA, the Coolimba Power project will use circulating fluidised bed boiler (CFB) technology to remove sulfur and nitrous oxides.

More importantly, and in a first for Australia, the project will be constructed to be CCS ready to store the plant's carbon dioxide (CO<sub>2</sub>) through the deployment of CCS

technologies.

Mr Reed said Coolimba is investigating a range of Carbon Capture technologies that are being deployed around the world and will construct the power station so that it can be converted to capture CO<sub>2</sub> with minimal disruption to power supply. Carbon Capture is already employed by AES which captures up to 12% of the flue gas emissions at two of its CFB power plants in the USA, including the Shady Point power station featured on Coolimba's new website.

"Long-term underground storage of CO<sub>2</sub> (geosequestration) is the critical component of CCS. Carbon Capture technology can potentially be applied to most newer coal plants, however Coolimba is unique in that it has a number of carbon storage sites located near to the power project," Mr Reed said.

Aviva and Mid West oil and gas producer, AWE Limited engaged world leading CCS specialists CO<sub>2</sub>CRC to investigate carbon storage potential in the North Perth Basin. The study, funded by Aviva and utilising oil and gas exploration data from AWE, concluded that the carbon storage potential in the North Perth Basin was of the order of 500Mt. The emissions from Coolimba over its life are estimated at 87Mt.

Aviva has worked closely with the WA Government to bring the Coolimba CCS project to the attention of the Federal Government on the basis that its proximity to carbon storage sites provides an opportunity for a world class CCS project attached to a commercial power station.

Last week Prime Minister Kevin Rudd launched the Global Carbon Capture and Storage Institute (GCCSI) in Canberra, noting that no commercial integrated capture and sequestration power project currently exists anywhere in the world. Mr Rudd has committed Australia to fund the GCCSI for up to \$100million with a goal of achieving 20 flagship demonstration CCS projects globally by 2020. Coolimba has made a submission to the GCCSI presenting its credentials as a world class flagship CCS project.

The Coolimba Power Project has also been shortlisted by WA's largest energy retailer, Synergy, in its wholesale power procurement program. The development partners will submit a proposal to sell most of the power generated to Synergy but discussions with resource and infrastructure customers in the Mid West region will continue.

"The project is of critical importance for the development of industry and infrastructure in the Mid West, for the security of energy in WA and for kick-starting global carbon mitigation," Mr Reed said.

**For further information go to: [www.coolimbapower.com.au](http://www.coolimbapower.com.au)**

**To view the fact sheet on the Shady Point Power Plant go to:  
[www.coolimbapower.com.au/images/stories/pdf/Fact\\_Sheets/AES\\_Shady\\_Point.pdf](http://www.coolimbapower.com.au/images/stories/pdf/Fact_Sheets/AES_Shady_Point.pdf)**