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NEW POWER SOURCE FROM WASTE GAS

Premier Mike Rann says an innovative upgrade to the energy plant at the Bolivar Wastewater Treatment Plant will see up to 85 per cent of the power used at the plant generated on site through wastewater gases.

Mr Rann says the State Government is investing more than \$25.8 million in the project to upgrade the power supply at Adelaide's largest wastewater treatment plant by converting the wastewater gases to biogas.

“Once complete, the project will more than triple the amount of electricity produced at the plant by capitalising on an existing renewable energy source,” he says.

“SA Water's Bolivar plant already produces about 10 gigawatt hours of electricity from biogas, which is produced when the waste which enters the plant is broken down.

“Following the upgrade of the plant's electricity generation capabilities, approximately 35 gigawatt hours of electricity will be produced, which equals about 85 per cent of the plant's annual electricity requirements.”

Mr Rann says the project is linked to the State's Strategic Plan to reduce greenhouse gas emissions and support the development of renewable energy.

“This upgrade will reduce greenhouse gas emissions, lower SA Water's carbon footprint and reduce the amount of electricity purchased from electricity providers from 30 gigawatt hours to 5 gigawatt hours per year,” he says.

“This means SA Water will not only be reducing their electricity costs, they will also be reducing greenhouse gas emissions from the plant by more than 11,000 tonnes of CO₂e annually.

“SA Water reduced its greenhouse gas emissions by 56 per cent between 2008-09 and 2009-10 which was one of the largest reductions by a water utility across the nation,” Premier Rann says.

Water Minister Paul Caica says the upgrade will give the plant greater power supply alternatives and improve the reliability and the supply of electricity.

“This very important waste water treatment plant receives about 60 per cent of all of Adelaide's wastewater and treats approximately 135 million litres of residential and industrial wastewater per day,” he said.

“This upgrade will improve the facilities that treat the waste of up to 1.3 million people.”

Mr Caica says the upgrade will include works to:

- Install new reciprocating engines to create more electricity from biogas;
- Build a chemical dosing plant to reduce the formation of hydrogen sulphide which is a by-product of biogas production;
- Connect natural gas;
- Convert the existing gas turbine to run solely on natural gas; and Make further electrical modifications throughout the site to utilise all electricity

Construction work at the plant is expected to start at the beginning of 2012 and it is anticipated the project will be completed in the second half of 2012.

The project will be submitted to the State Government's Public Works Committee in July.