



3. Sustainability

Ryan Wilson, Sustainability Officer at City of Kalgoorlie-Boulder will present his case study on “*GVROC Regional LED Streetlight and Solar PV Project*”.



Abstract

The City of Kalgoorlie-Boulder, acting on behalf of the Goldfields Voluntary Regional Organisation of Councils (GVROC), has secured \$5.6M in funds from the WA Government's Royalties for Regions program and the federal Community Energy Efficiency Program to manage the installation of over 3,000 LED streetlights and 7 solar PV systems across the Goldfields-Esperance region. This project is expected to reduce electricity consumption due to street lighting by over 55% in the 6 towns participating. Shire owned facilities scheduled to have solar PV systems installed will realise on average a 51% reduction in electricity consumption and solar PV systems will range between 10kW to 150kW in size. Total expected financial benefit to GVROC shires resulting from this project is approximately \$360,000/year, while total CO2 emission reductions are expected to be approximately 1,000 tonnes/year.

Dr. Lorne Butt, Sustainability Coordinator at TAFE Western and co-presenter **Paula Walker**, Manager, Infrastructure Planning, Procurement and Maintenance at TAFE Western will present their case study on “*Mudgee Learning Resource Hub: Innovation in Education and Infrastructure Design in TAFE NSW*”.



The Mudgee Learning Resource Hub is the first building of its kind in TAFE NSW, achieving a 5 Star Green Star Education design v1 certified rating from the Green Building Council of Australia in January 2015 - demonstrating Australian Excellence in environmentally sustainable design. This case study demonstrates how the Hub was designed to respond to changing educational and employment patterns in the Mudgee region, demonstrate adaptation of TAFE Western's sustainability framework to local conditions to reduce environmental impact, and build relationships with local, regional and metropolitan stakeholders to deliver innovative, state-of-the-art infrastructure design.



Ken Varcoe, Technical Director at Water Engineers United Pty Ltd will present on “*Safe Water from Common Salt? A Sustainability Technology Reality for Regional Australia and Beyond*”.

Abstract

Most urban-dwelling Australians take secure and safe water supplies for granted. This is not the situation across much of rural and remote regional Australia. This presentation is to introduce a sustainability technology for water disinfection using common salt that ensures safe water for all purposes. That is, they have an adequate quantity of water at a quality that can be used by people without harm from human or animal wastes, salinity and hardness or pollutants from agriculture and industry.