

ASHTON COAL, HUNTER VALLEY, AUSTRALIA



Project Summary

End User:

Ashton Coal Project.

Product:

EverGEN SE-20

Current equivalent is the EG-40

Benefits:

Workplace lighting without power.

No running costs and lower maintenance costs.

Dark sky friendly.

Sustainable and environmentally friendly.

Operating Profile:

Split night 5hr 25% 2hr

The Ashton Coal Project (ACP) is a coalmine located 14 km northwest of Singleton in the Hunter Valley region of New South Wales. The project includes an open cut coal mine, an underground coal mine, a Coal Handling and Preparation Plant and a rail siding.

A total of three water carts are used at Ashton Coal to manage dust generation from approximately 4.5km of haul road. To support the water carts, the water filling stations are required to operate year round from 7am to 10pm. Previously the sites had to run generators during the hours of darkness in order to provide lighting to the truck fill stations. This was costly, time consuming and unreliable.

Ashton decided to install solar powered lighting that would operate automatically at dusk and dawn and would provide the brightest light during the evening and first thing on winter mornings.

The solution was to supply an EverGEN SE-30 solar powered LED area light with a split night operating profile. This means that the light operates at 100% brilliance for 5 hours after dusk, then dims to 25% brilliance, returning to full power 2 hours before dawn.

Light Emitting Diodes (LEDs) are fast becoming the technology of choice for lighting applications in the mining industry. Unlike conventional light sources, LEDs are current driven low voltage devices. This enables never before solutions that meet regulatory requirements without expensive safety modifications. Due to the low voltages required, alternative energy sources such as solar can easily be used to power the light source.

One of the major benefits of that trend will be the higher level of safety that will be achieved as a result.