



# Enhancing safety and light reliability while reducing maintenance costs



## REGION

United Kingdom



## INDUSTRY

Tunnelling & Industrial



## SOLUTIONS

24-36V Standard Range



## METRES SUPPLIED

515m



Tunnel shaft entrance un-lit

## Challenge

Adequate lighting is fundamental to every tunnel project regardless of size, complexity, or location due to the natural darkness, confined spaces and limited access. These demanding tunnelling challenges mean a well-designed, safe and reliable lighting system is an absolute requirement for every tunnel.

A long-standing water utility client of an international services company sought a solution to replace failing lighting systems within their Service reservoir access shafts and tunnels. This case study looks at an upland water storage site which has a 22-metre shaft with 6 levels leading to a 159m long tunnel

The confined tunnel entrance points required a reliable, low-profile lighting system. In addition, the environment where the lights needed to be installed required a water-resistant solution that was low maintenance and provided maximum visibility with no “dark spots” to improve safety and make it easier for personnel to work.

**“Because the tunnels and shafts within these buildings are infrequently used, the current lighting tends to get damp and collect water. This means that when they are required to work, the lighting generally fails.”**

Neil - Project Engineer

## Requirements

- High protection against moisture and dust
- Low maintenance
- Energy efficient
- High, consistent illumination
- Corrosion resistant
- Enhances safety
- Maximise visibility

## Solution

MineGlow worked with the energy services company to provide 345m of the 24-36V x-Glo Standard Range LED Strip lighting. Factory tested and certified to operate in damp (IP67) and corrosive conditions, reliability for at least five years. MineGlow's x-Glo Standard Range LED lighting solution is purpose-built for harsh environments with little to no maintenance.

The 24-36V LED Strip lighting solution which provides 350 lumens per meter was installed in the various entrances of the shafts and tunnels and ensured anyone entering would have adequate and reliable lighting for the task at hand.

**Proven failure rate of less than 0.4%.**

## Outcome

The MineGlow x-Glo Standard Range enabled the energy services company to improve the lighting levels and safety of personnel while eliminating reliability and high maintenance issues in the future. The company recently installed a further 170m of MineGlow's Long Range LED strip lighting to illuminate three additional tunnel areas for maintenance inspections, with further upgrade installations planned.

## Contact us today

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Mineglow is the exclusive Asia Pacific distributor for x-Glo LED strip lighting **x-Glo**

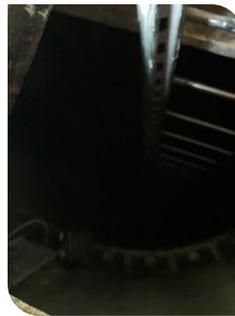
[mineglow.com.au](http://mineglow.com.au)



## Results

- ✓ Reduced maintenance
- ✓ Higher visibility
- ✓ Increased safety
- ✓ Improved energy efficiency

## Results



Before: Shaft entrance un-lit



During: Shaft entrance torch lit



After: Shaft entrance Long-range lighting

“We used MineGlow because their product suited the environments in which we would be installing the lighting, and we didn't find another product that met all of our requirements. Our client is very happy with the installs we have completed so far.”

**- Neil, Project Engineer**