



Glare and Glint

Glare (which occurs over a continuous period), and glint (a brief flash of light) can cause distraction and result in after-images in the viewer's sight. Each person experiences glare differently based on their pupil diameter and the distance from the pupil to the retina. However, there are some factors which affect glare, and these can include light intensity, glare source size, the extent of vision it occupies, and the distance from the source contribute to this variability. Both natural and man-made surfaces can induce glare and glint.

Solar Panels

Solar panels in solar farms feature low reflectivity glass and an anti-reflective coating to optimise sunlight absorption instead of reflection. The special coating not only minimises glare but also enhances energy yield by allowing more light to reach the solar cells.

Solar panels are often positioned at different angles, which ensures the panels scatter reflections in various directions, mitigating any localised impact. This is a result of the tilting panels typically tracking the sun, ensuring the panel surfaces remain mostly perpendicular to the angle of the sun. Therefore, glare or glint impacts on surrounding areas is unlikely.

A glint and glare assessment has been prepared by Urbis for relevant receptors within 1km of the Project.

The proposed site layout will be designed to ensure there are no glare impacts expected for the Project for all assessed receptors within 1km of the Project.

Furthermore, risk of glare and glint for road users and surrounding residences around the project may be eliminated by proposed perimeter buffer landscaping which, once established, will ensure that surfaces of the panels are not visible, screening any reflections that would have occurred across the terrain.

Professional Assessment

As part of the development phase, BrightNight has commissioned an independent consultant to conduct a Glint and Glare Assessment for Mortlake Energy Hub. This assessment will consider factors such as sun position, panel orientation, and surrounding landscape features, and it will determine the likelihood and extent of glare and glint effects.

Throughout the duration of the project – from development through to operation – BrightNight will conduct ongoing monitoring to ensure the glint and glare impacts are regularly assessed and addressed.

Key takeaways:

- Solar panels are designed to absorb sunlight, not reflect it.
- Solar panels are positioned in various angles mitigating glare impact.
- Solar farms are safely operational in many environments, including airports and military bases.
- An independent assessment will be undertaken to determine glint and glare effects.