

GEOLUX®

By  SOLMAX

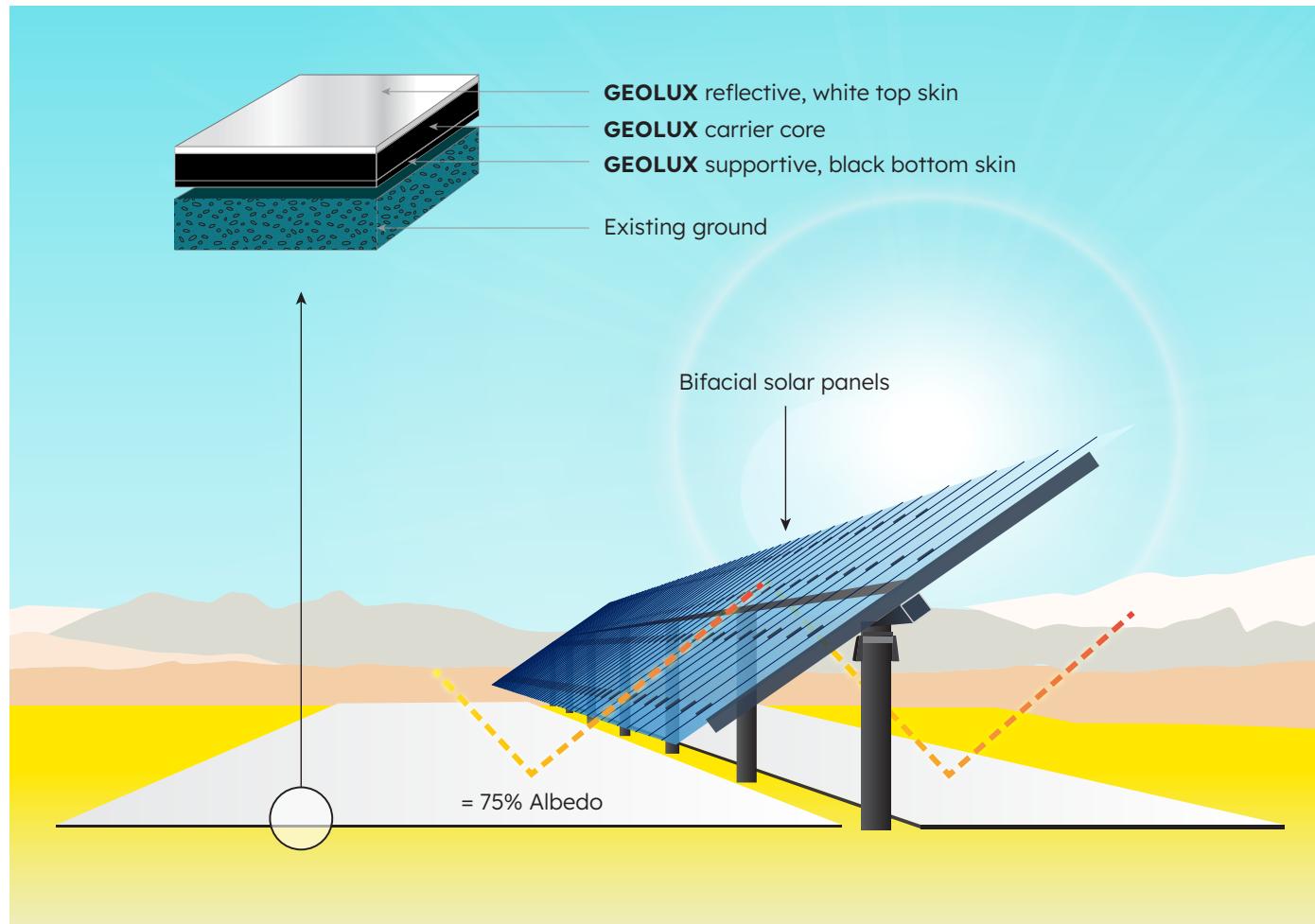
Albedo enhancement solution



GEOLUX® provides a maximized level of Solar Energy Reflectance to increase the ground albedo to approximately 75%, resulting in an optimum increase in the power gained from bifacial solar panels.



Ideal for large scale utility solar installations, GEOLUX offers the most cost effective means to harness greater solar energy.



Designed to maximize efficiency

GEOLUX is anchored beneath bifacial photovoltaic panels which increases the natural albedo of the ground, reflecting both direct and diffuse irradiance onto the underutilized rear-side of the bifacial panel. This substantially increases the bifacial gain resulting in a significant increase in overall yield, typically ranging from 5-15%.

This resultant value will significantly decrease the Levelized Cost of Energy, increasing operational profits and efficiency of the solar park.

Albedo enhancement

Albedo, the measure of the diffuse reflection of solar radiation out of the total solar radiation, is crucial for maximizing the performance of bi-facial solar panels.

For comparison, grass may have an albedo of 20%, however **GEOLUX** will have an albedo of approximately 75%. This in turn maximizes the solar radiation that is reflected onto the underside of the bifacial panels, thus increasing the yield of the solar farm, and reducing the Levelized Cost of Energy.

Weed management

Weed maintenance forms a significant portion of the OPEX on a solar farm, and is often overlooked in the earlier project development phases. **GEOLUX** will eliminate weed growth, thus offering significant additional value to the life of the project. Upon completion of the project **GEOLUX** can be recycled and the ground reinstated.



GEOLUX can increase the returns on a solar farm and lower the levelized cost of energy.



ADVANTAGES OF USING GEOLUX

- ✓ Proven long term exposed durability with service-life exceeding 30 years.
- ✓ Tested to ASTM E903-20 Solar Energy Reflectance of 75%.
- ✓ Reduces Levelized Cost of Energy.
- ✓ Custom lengths and widths to suit project needs.
- ✓ Return on investment could be as low as two years.
- ✓ Prevents the growth of weeds beneath solar panels removing need for expensive vegetation maintenance.
- ✓ Excellent resistance to UV radiation.
- ✓ Quick and economical installation.
- ✓ No plasticizers, with no chemicals leaching into the ground.
- ✓ Fully recyclable upon completion of project.
- ✓ Suitable for new projects and retrofitting to existing under-performing sites.
- ✓ Optimal cost-benefit solution.

GEOLUX was designed with the focus on increasing the long-term ground albedo. Solmax relies on 40 years experience of engineering materials used in extreme environments.

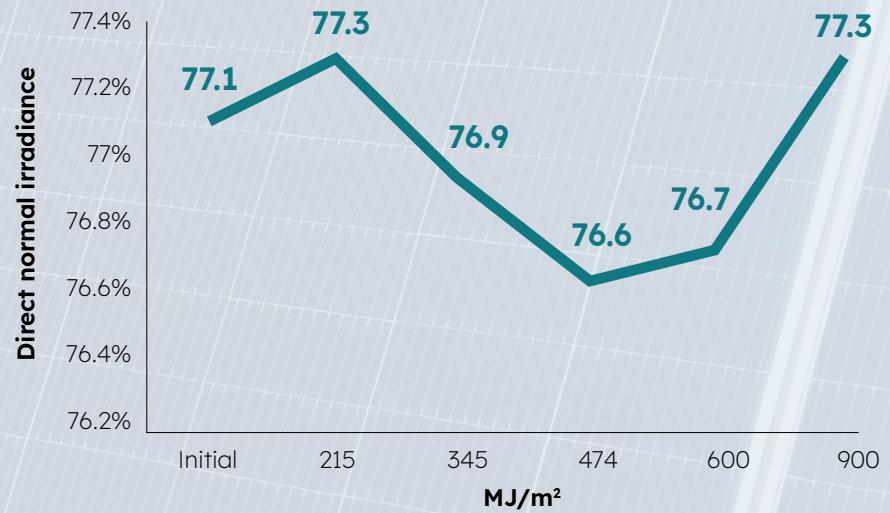


LONG TERM PERFORMANCE

GEOLUX was developed by building on Solmax's 40-year experience of engineering high quality materials designed to protect the environment from aggressive waste and chemicals in the harshest climates, and combining with an ultra-high reflective finish. This combination gives long-term performance and durability, with a service life in excess of 30 years whilst maintaining a highly reflective surface. Once **GEOLUX** is installed, you will never need to replace it until it is recycled or re-used at the end of your project.

Solmax have undertaken advanced UV aging testing (NF EN 12224-2000) with repeated Solar Energy Reflectance Testing (ASTM E903-20) showing to date showing consistent levels of reflectivity as **GEOLUX** is subjected to UV aging.

Effects on reflectivity with UV aging



Experience innovation with Geolux by Solmax

At Solmax, we've leveraged our 40 years of expertise in creating durable materials to develop Geolux—an advanced product with a brilliant white finish, designed to maximize the efficiency of bifacial solar panels.

Dedicated to your success

Our team is committed to ensuring your solar projects are both highly efficient and environmentally responsible. We recognize that every solar installation is unique, which is why we offer comprehensive, tailored services that support your project's success. From precise pin layout plans to detailed calculations of bifacial gain and ROI, we're here to help every step of the way. We also provide custom roll widths, ensuring every detail of your project is optimized for maximum performance.

Why choose us?

With a strong legacy of quality and innovation, Solmax is the ideal partner for your solar projects. Our global presence and industry-leading expertise allow us to deliver superior products and unparalleled service, empowering you to achieve your objectives with confidence.

