



VHL ENTERPRISES

LET'S POWER THE FUTURE

Pioneer & First in INDIA to develop Smart Ground-Surface
Technology for Bifacial Solar Modules

THE BIFACIAL REVOLUTION

Market Evolution

Since 2019, the industry has rapidly transitioned. Over 70% of new utility-scale projects now deploy bifacial modules that capture light from both sides.

Higher Yields

Bifacial technology is no longer an option but a standard. It offers lower Levelized Cost of Electricity (LCOE) by maximizing land utilization.

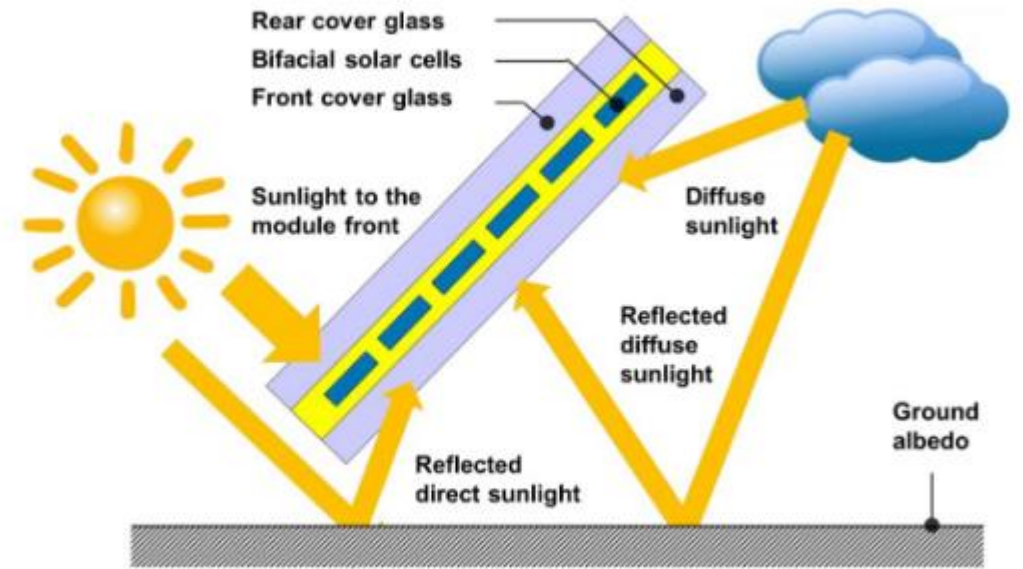


THE EFFICIENCY GAP

The Albedo Link

While bifacial modules are powerful, their rear-side performance is limited by ground reflectivity. Standard dirt or dry grass reflects **less than 15%** of light.

VHL Reflective Sheets bridge this gap, ensuring rear cells receive maximum irradiation.



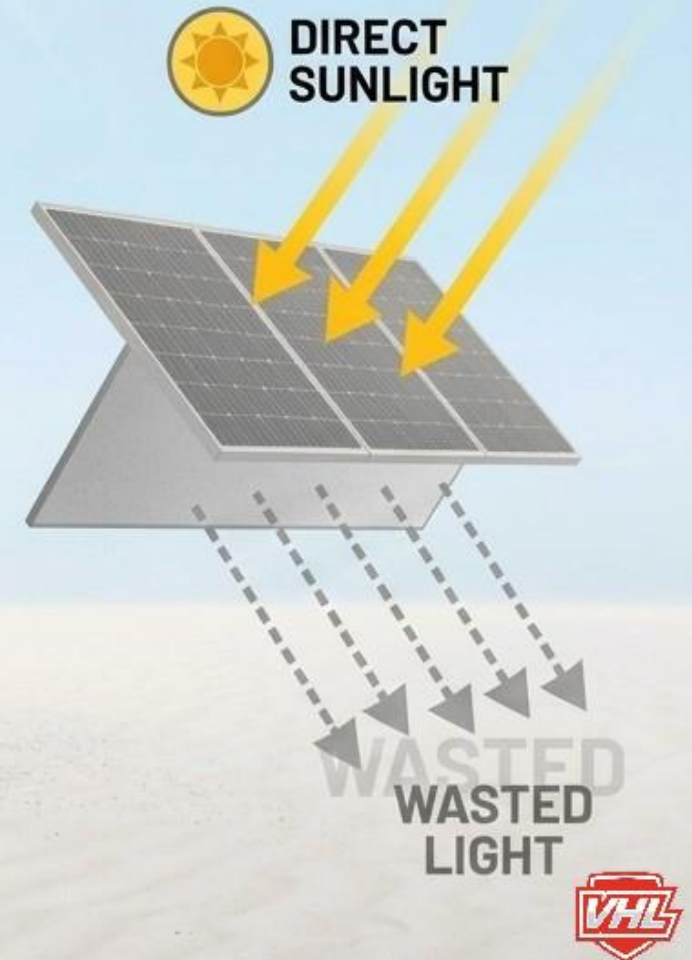
BIFACIAL MODULE

(The New Standard)



MONOFACIAL

(Old Standard)



REFLECTIVE INNOVATION

VHL Reflective Sheets act as an industrial-grade ground mirror, engineered specifically for harsh solar environments.

We transform low-reflectivity terrain into a high-performance surface, maximizing the return on your Bifacial module investment.



| RAPID, HASSLE-FREE INSTALLATION

Pre-Fitted Polypropylene Rivets

To eliminate operational difficulties at the solar farm, VHL reflective sheets come **Pre-fitted with heavy-duty Polypropylene (PP) rivets with UV resistance** .

- ✓ Spaced evenly at convenient gaps of **1 to 1.5 meters**
- ✓ Significantly reduces field labor requirements
- ✓ Ensures uniform stretching and alignment beneath Bifacial modules



1 Meter Gap



INDUSTRIAL ANCHORING SYSTEM



Premium TMT Anchoring Nails

Securely fastening ground sheets against heavy winds and outdoor elements is paramount to avoiding O&M complications.

High-Quality TMT Construction

VHL explicitly supplies high-grade, structurally sound TMT nails designed to punch through tough ground surfaces and maintain absolute tension over the lifespan of the sheets.



| PROVEN GENERATION BOOST

4-6%

Average Yield Increase

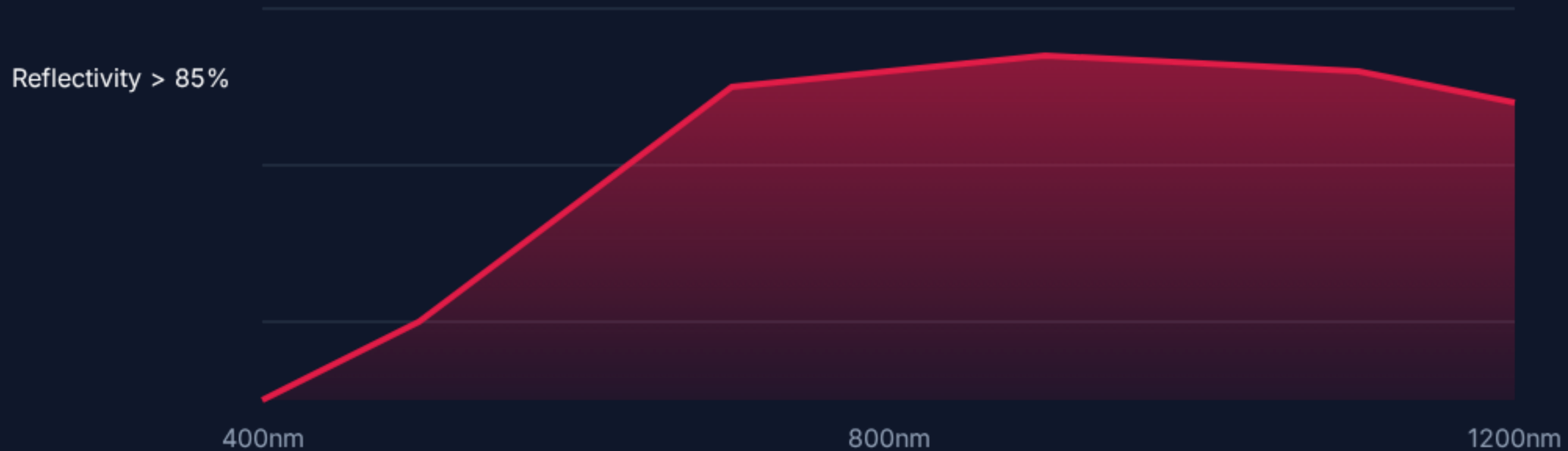
Field-Verified Results

Data from active plants in **Maharashtra and Karnataka** confirms a consistent generation uplift between 4% to 6%.

This extra generated power directly impacts the plant's bottom line without increasing the physical footprint of the project.



SPECTRAL EXCELLENCE



Optimized diffuse reflection across the entire spectral response of silicon solar cells (400nm to 1200nm).



| MAINTENANCE HURDLES SOLVED



Weed Control

Blocks >90% of PAR light, preventing photosynthesis beneath panels.



Time Saved

Reduces O&M manpower for weeding by an impressive 80%.



Shading Guard

Eliminates the #1 cause of shading-related losses in ground-mount plants.



OPERATIONAL EXCELLENCE

3+ Years

Continuous Field Performance

- ✓ Zero Degradation in reflectivity levels
- ✓ Stable performance in high UV environments
- ✓ Field-tested across diverse Indian climates



| THE VHL ADVANTAGE

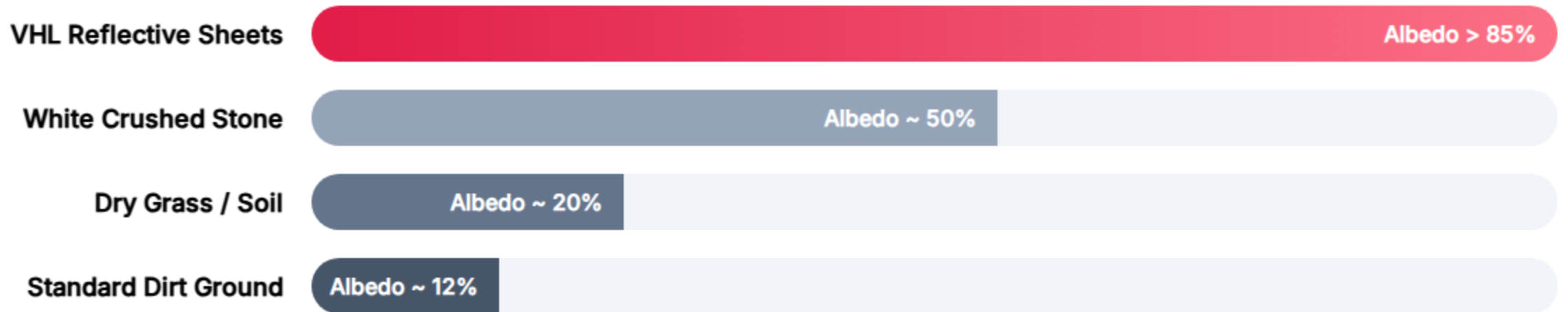
- ✓ **Pioneer Status:** Among the first in India to develop specialized reflective ground sheets for PV.
- ✓ **Durability Focus:** High mechanical integrity against vegetation and site maintenance traffic.
- ✓ **Customization:** Tailored roll sizes and sheet dimensions for specific site table lengths.
- ✓ **ROI Focused:** Dual-action technology (Power + Weed) ensures fastest payback in BOS components.

Balance of System (BOS)

VHL Reflective Sheets represent a minimal CAPEX investment with recurring O&M savings and immediate revenue uplift through increased generation.



COMPARATIVE ANNUAL GAIN



Relative gain from rear-side bifacial harvest (Based on standardized field data and PVSyst models).



UNIVERSAL SCALABILITY

Application	Strategic Benefit	Target Sector
Utility-Scale Parks	Yield optimization for PPA targets	Large Ground-Mount Arrays
Retrofit Projects	Increase site capacity without new land	Existing PV Power Plants
Agrivoltaics	Managed light for generation & crops	Dual-Use Solar Farms



LET'S POWER THE FUTURE

Enhancing Solar Efficiency with Innovative Reflective Technology



www.vhl-Albedosheets.com



Maharashtra, India

