

# INTRODUCING CleanARC® ANTI-REFLECTIVE GLASS COATING



Did you know that a dirty solar module can be 30% less effective in tough climates?\* CleanARC® glass coating available exclusively from Yingli helps keep modules clean.

## DURABILITY

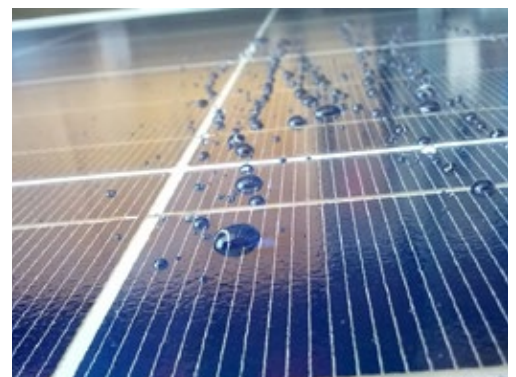
CleanARC® anti-reflective coated glass is built to last, even in harsh environments. Many traditional coatings degrade over time under adverse environmental conditions such as sandstorms, sea mist, high humidity, and extreme temperature fluctuations.

## PERFORMANCE

Innovative CleanARC® coating, manufactured by Enki Technology, provides unparalleled durability and self-cleaning, hydrophobic properties. It effectively reduces the effects of soiling caused by a variety of common environmental conditions, including dust, dirt, and pollen.

## SAVINGS

By both reducing dirt accumulation and enabling more effective cleaning, CleanARC® coating can shrink your operations and maintenance (O&M) budget by minimizing module washing expenses, allowing you to reap the rewards of lower O&M costs and additional energy harvest.

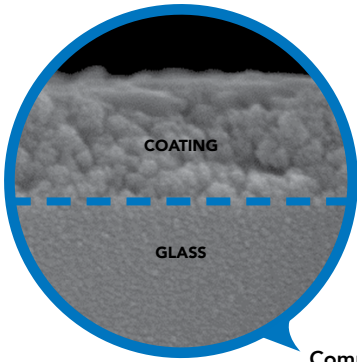


\*Source: Travis Sarver, Ali Al-Qaraghuli, Lawrence L. Kazmerski, et. al. Elsevier. Renewable and Sustainable Energy Reviews 22(2013)698–733 "A Comprehensive Review of the Impact of Dust on the Use of Solar Energy."

# COATING COUNTS: A NEW WAY TO INCREASE ROI AND SYSTEM PERFORMANCE

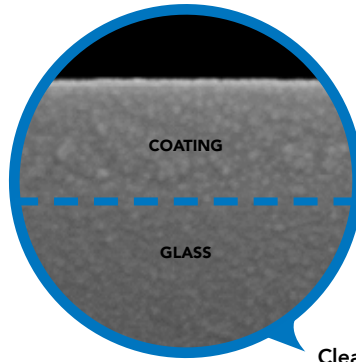
## Putting CleanARC® Coating Under the Microscope

When magnified 200,000 times, it's easy to see the advantages of CleanARC® coating.



**Competitor Coating**

The darker areas visible around the particles in the competitor coating show that it is internally porous. This porosity makes it more susceptible to degradation over time, especially in harsh environments.



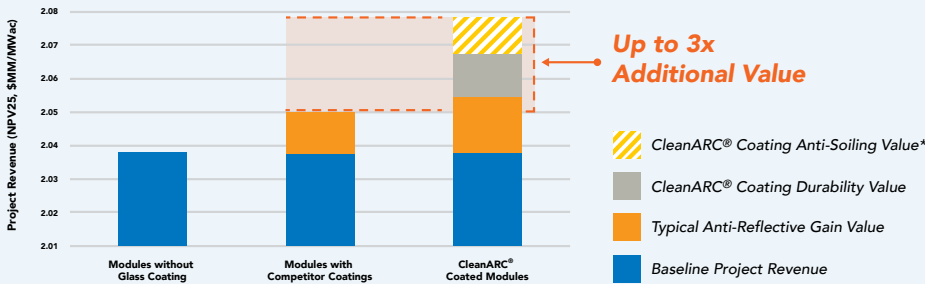
**CleanARC® Coating**

CleanARC® coating is smooth and dense. This means it more effectively repels dirt and moisture and withstands aggressive abrasion and wear, driving increased power over the module's lifetime.

## A Coating that Can Increase Your Project's ROI

CleanARC® coating can increase your project's energy yield and ROI through its anti-soiling properties and long-term durability. The chart below, which is representative of a California project, shows that modules with CleanARC® coating can deliver up to 3 times more value than competitor coatings, resulting in over 1% additional energy production over the modules' lifetime.

**Project-Level Value Creation**



\* Project-level anti-soiling and cleaning value varies based on site specific conditions. The example assumes the solar project is located in central California with a baseline production of 1,738 MWh/MWdc; PPA rate of \$70/MWh; 6% discount rate; 0.5% baseline annual power degradation; 4% baseline soiling loss fraction, and one module wash per year.

CONTACT US TO LEARN MORE OR  
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YINGLISOLAR.COM // info@yingliamericas.com

