# Abrasion-Resistant Anti-Soiling Coating for PV

## *CUNY-ARLD Team*

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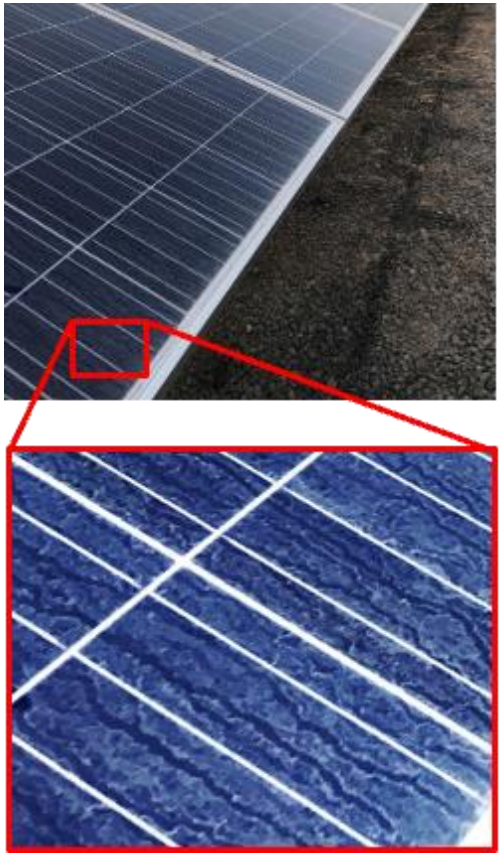

**The problem:** Dust decreases the efficiency of solar PV

- Losses up to 50% in regions with heavy soiling
- Losses up to 15% in agricultural areas
- Dew and light rain accelerate soiling losses

**The challenge**: Hydrophobic anti-soiling coatings are abraded away by periodic cleaning and natural erosion

**Our solution:** An abrasion-resistant coating that uses nanotechnology to create a hard surface that is hydrophobic, anti-soiling, and optically transparent.

- The coating formulation is inexpensive, non-toxic and designed to be applied using conventional coating equipment thereby ensuring low costs.
- The coating will reduce LCOE by increasing energy yields and reducing operation and maintenance costs.

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