



GRAFFISOLTM

Graphene-Solar Coating



10–15% Energy Efficiency Gain



Surface Temperature Reduction



Hydrophobic Nature



9H Hardness & Scratch Resistance

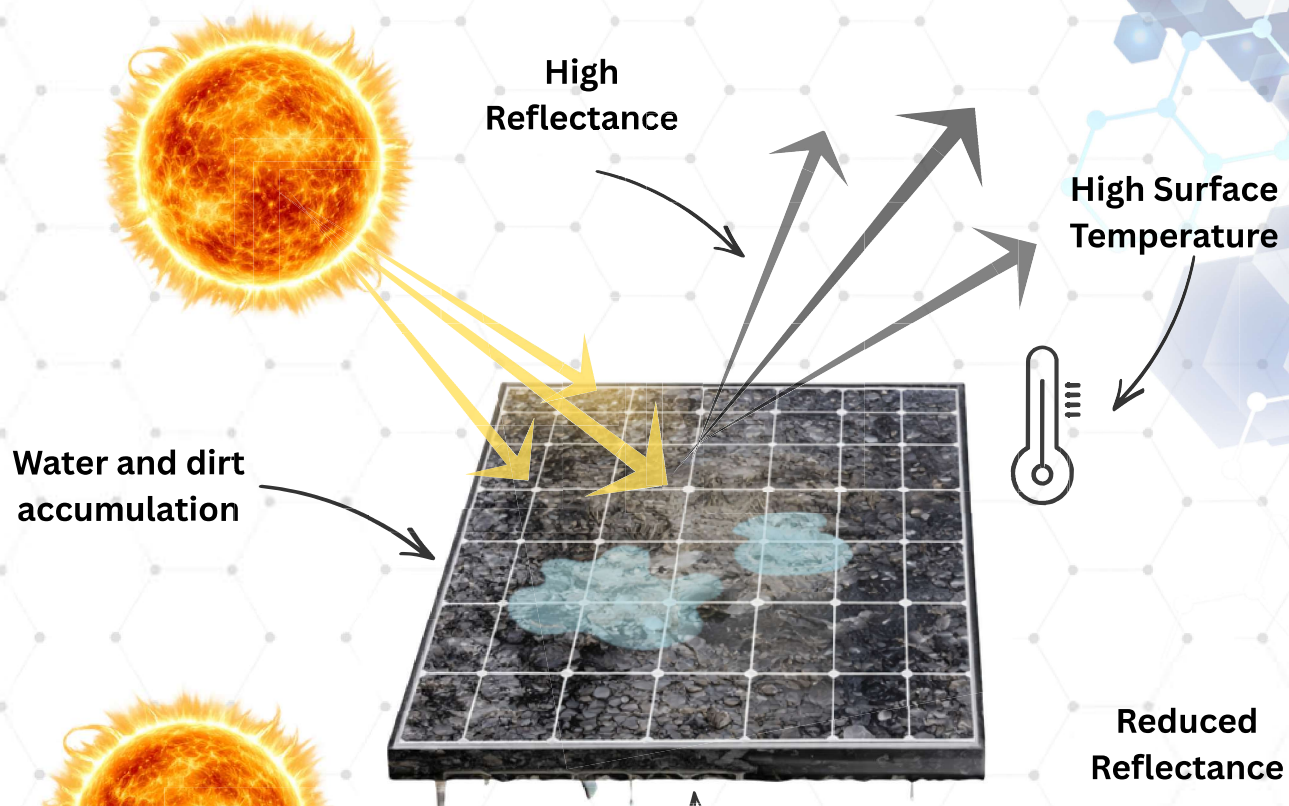
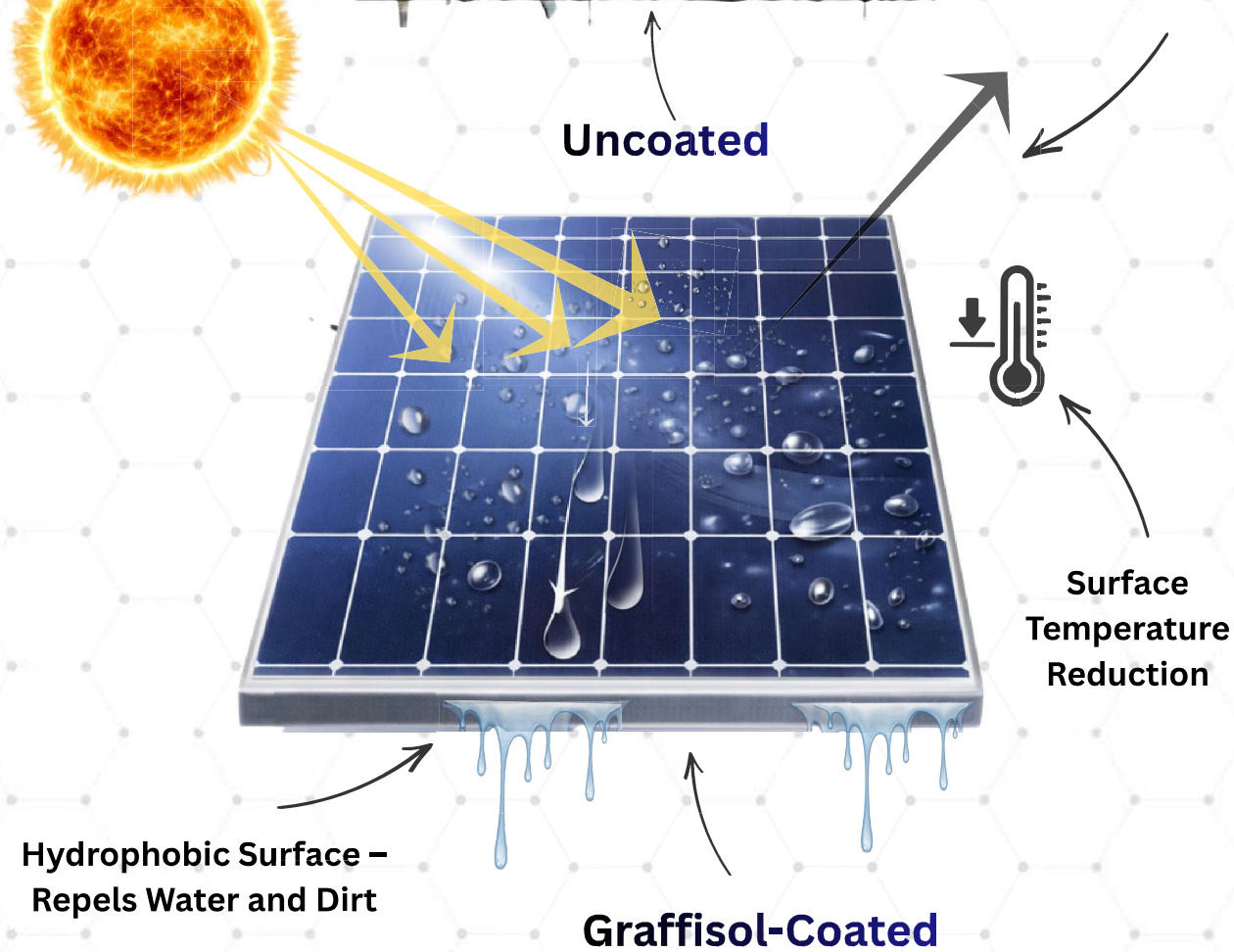
What is Graffisol?

Graffisol is a transparent graphene nanocoating applied to solar panels to optimize performance, boosting energy output by up to 15% through anti-reflective properties, thermal regulation, and self-cleaning capabilities.

How does it work?

A precisely engineered graphene-infused transparent coating modifies the optical and thermal behavior of solar panel surfaces by:

- **Energy Efficiency Gain (10%–15%)**
Reduces optical reflectance and enhances light transmission, increasing photon absorption by photovoltaic cells.
- **Surface Temperature Reduction**
High thermal conductivity enables rapid heat dissipation, minimizing hotspots and thermal losses.
- **Hydrophobic Nature**
Low surface energy creates a water-repellent layer that limits dust adhesion and contamination buildup.
- **9H Hardness & Scratch Resistance**
Forms a high-hardness protective layer that improves resistance to mechanical abrasion and surface damage.



Graffisol vs. Anti-Reflective Coating (ARC)

Graffisol

- Graphene-infused transparent protective coating
- Improves light transmission while reducing reflectance
- Creates a hydrophobic surface that repels water, dust, and contaminants
- Enhances heat dissipation due to graphene's high thermal conductivity
- Adds scratch resistance and environmental protection

ARC

- Optical coating designed mainly to reduce surface reflectance
- Improves light transmission into the solar cell
- Limited thermal management capability
- Provides minimal surface protection and durability

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