

NANOPAC®

NANOTECHNOLOGY
FOR A BETTER FUTURE

NANO LIGHT ENERGY PANEL (NLEP)

Currently, Nanopac has taken another milestone in taking an exemplary and leading role in the new green technology and renewable energy industry sector through its latest nano-based third generation solar cell technology. Unlike solar panel, this new technology is utilizing natural light sources for the generation of electricity.



WHY NLEP?



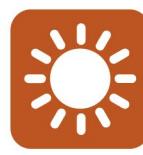
ENERGY
GENERATION



UV & IR
FILTER



THERMAL &
ACOUSTIC
INSULATION



NATURAL
ILLUMINATION



INNOVATIVE
DESIGN

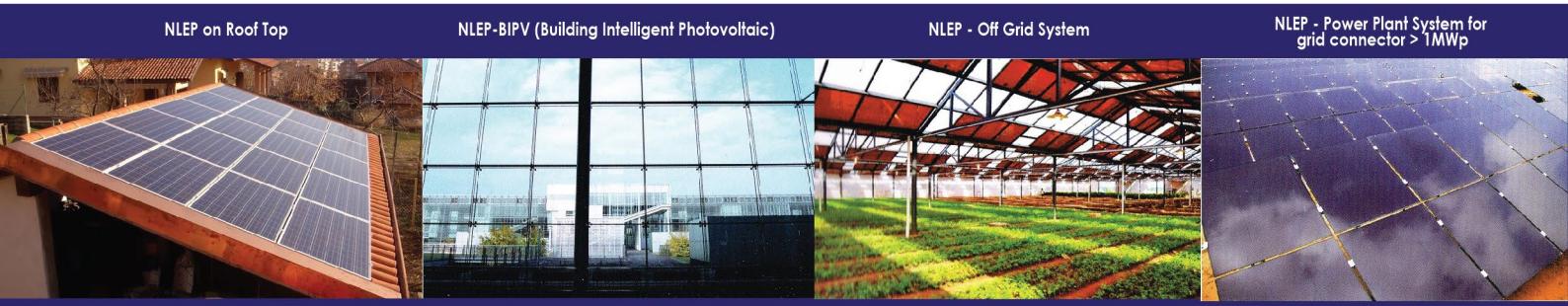
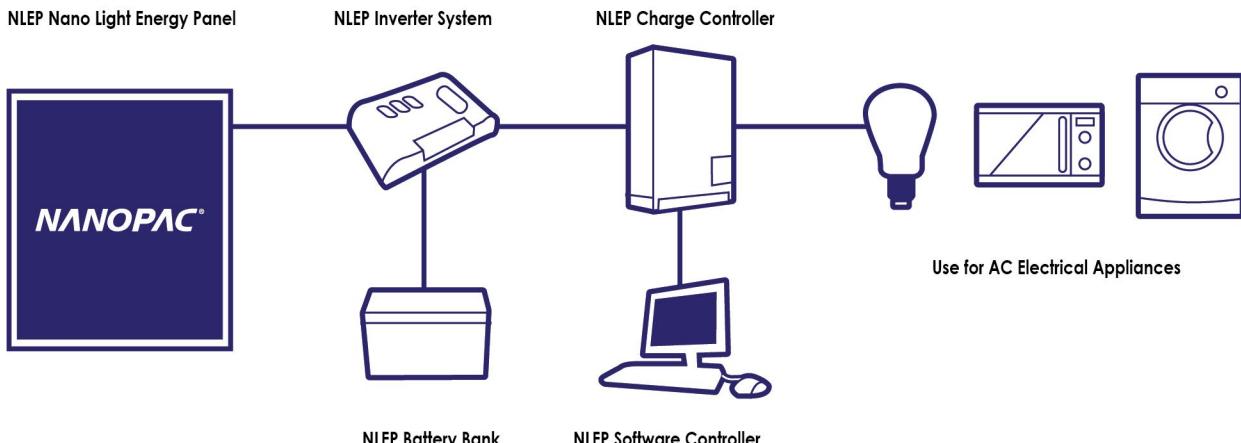


REDUCE
CO₂ EMISSIONS

NLEP APPLICATION MODELS

(NLEP) Nano Light Energy Panel Off

- 1) The NLEP system is able to monitor power generating capacity real time.
- 2) The system works on real time monitoring of the status and performance from the inverters, combiner boxes & other equipments.
- 3) The system is able to control system shut down & other operations via remote access.
- 4) The system intelligently controls the current charge compensation.
- 5) The system has an alert alarm function when the device is abnormal in a timely manner via email or SMS text messages alert.



NLEP on roof top flat surface - power plant

NLEP on curtain wall, visor, acoustic panels & others

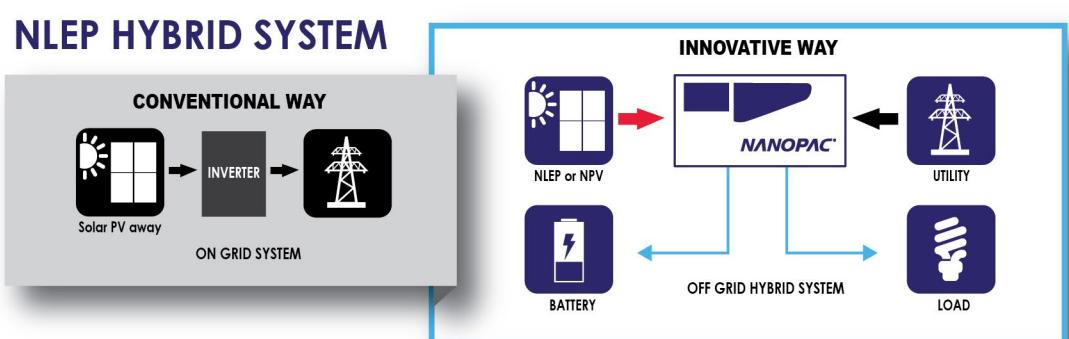
NLEP on skylight for agriculture power system/
remote power supply/portable power supply

NLEP on power plant/solar farm system

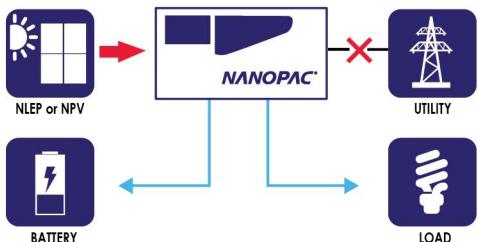


Nanopac new solar cell works in a wide array of lighting conditions that makes it suitable for a diverse range of shaded and diffuse light locations, without suffering from angular dependence of sunlight or light. It is able to generate electricity even on a cloudy day and with artificial light, such as fluorescent lighting, therefore providing longer hours of electricity generation. The application of newly created solar cells will be able to turn the whole city into a big generator. This will also be more cost effective than solar farms as there would be no land costs involved.

NLEP HYBRID SYSTEM

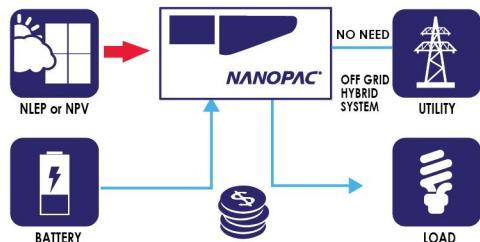


NLEP HYBRID SYSTEM



POWER BACKUP when Utility AC Fail Supply

NLEP HYBRID SYSTEM



Saving Energy by Discharging Battery for Self-Consumption

NANO PHOTOVOLTAIC (NPV)

NPV is a Solar Panel enhanced with nanotechnology enabled coating specially engineered for use on solar panels. Once applied, the nanotechnology coating fundamentally changes the surface, giving it hydrophobic and self-cleaning properties.

NPV BENEFITS

1 COAT **11 BENEFITS**

CLEAN SCENARIO



BETTER VISIBILITY

DRY SCENARIO



DIRT REPELLENT



OIL REPELLENT



ANTI GERMA
(BACTERIA &
VIRUS)



SCRATCH RESISTANCE

WET SCENARIO



NO WATERMARK



ANTI CORROSION



REDUCE CONDENSATION
OR FOGGING



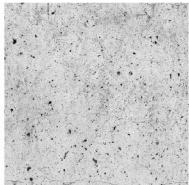
SELF CLEANING WITH
WATER OR RAIN



ROOF



SOLAR
PANEL



CONCRETE



GLASS



TILES &
MABLE



METAL STEEL
(ANTI - CORROSION)



ALUMINIUM
PANEL

CLEAN

- GREASE & DIRT
- WATERMARK

ANTI

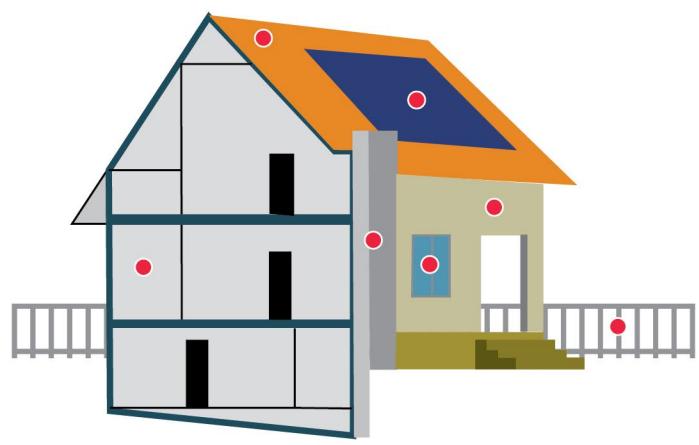
- DUST
- FUNGUS
- MOLD
- REFLECTION

PROTECT

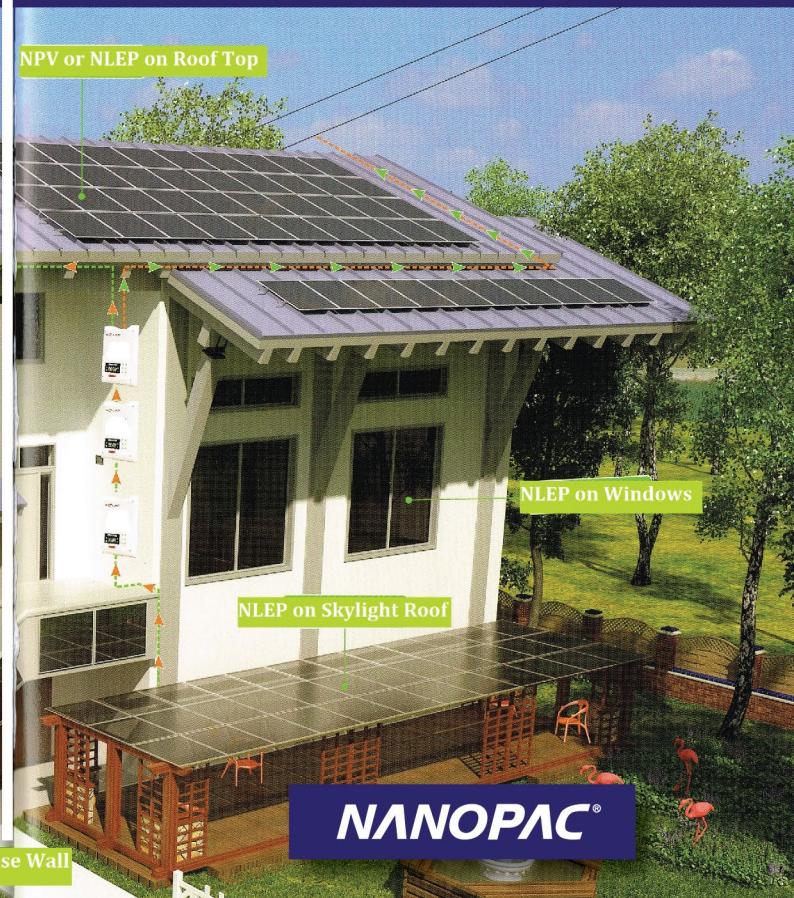
- ACID RAIN
- CHEMICAL
- SOx (volcanic)
- NOx (acid rain)

PREVENT

- SELF-CLEAN WITH
WATER/RAIN
- WATERMARK PROBLEM



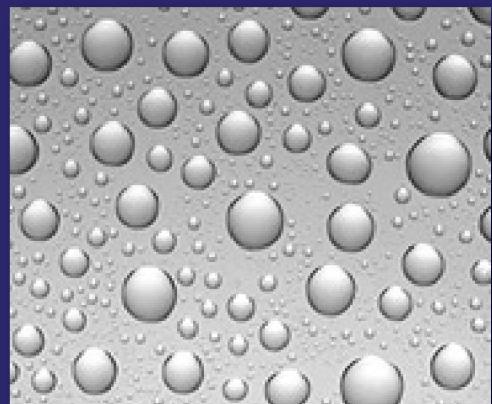
NLEP & NPV—



NPV COATING COMPARISON



Without Nano Coating



With Nano Coating

THE FUTURE IS GREEN ENERGY, SUSTAINABILITY & RENEWABLE ENERGY

ACHIEVEMENT & RECOGNITION

Socrates Award from EBA, Oxford – Best Enterprise in Nanotechnology and Manager of the years 01st July, 2014. Received SME100 Award 2009: Fast Moving Companies in June, 2009. Obtained ISO 9001:2008 “Filter Embedment uses Nanotechnology” in 2011. The only one in the world.



"Best Enterprises"
by The Socrates Committee Oxford,
UK 2014



SME 100
Fast Moving Companies
2009



THE BIZZ AWARDS

The Bizz 2015
World Confederation
of Business, USA



Honesty Enterprise
Keris Award 2014



Honesty Product
Keris Award 2014



Asia Pacific Top
Excellence Brand 2014



CHANGE THE WORLD BY NANOTECHNOLOGY

POWERED BY
NANOPAC®

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