



Corporate Presentation FY 2019-20

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- About Us
- Presence
- Products (PV Modules, PV Cells, Encapsulants, Backsheets)
- Facilities — (Hyderabad and Bengaluru)
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# RenewSys

RenewSys is the First Integrated  
Manufacturer of Solar PV Modules  
and Its Key Components -  
Encapsulants (EVA and POE),  
Backsheets and Solar PV Cells





## ENPEE



58 Years

\$350+ MILLION

3000+ EMPLOYEES

[www.enpee.com](http://www.enpee.com)

RenewSys India Pvt. Ltd. is a part of  
the **ENPEE Group**.

An international conglomerate  
with a rich heritage of  
**nearly 60 YEARS** of manufacturing  
excellence in diverse industries.

## ENPEE Group Values



Be

**Courageous**



Be

**Empowered**



Be

**Trustworthy**



Be

**Fair**



Be

**Futuristic**

Our growth story is based on five key values identified for the team, by the team.

# ENPEE Group Companies



- Based in Nigeria
- Manufacturing Metal Packaging



- Based in Nigeria
- Cement/ Fibre Cement Sheets



- Based in Nigeria
- Printing Cylinders and Inks, CPP Films



- Based in India
- Packaging Brand Management



- Based in Nigeria
- Soaps, Personal and Home Care, Beauty and Cosmetics



- Based in Nigeria
- Construction, Chemicals, Adhesives, Power Cables



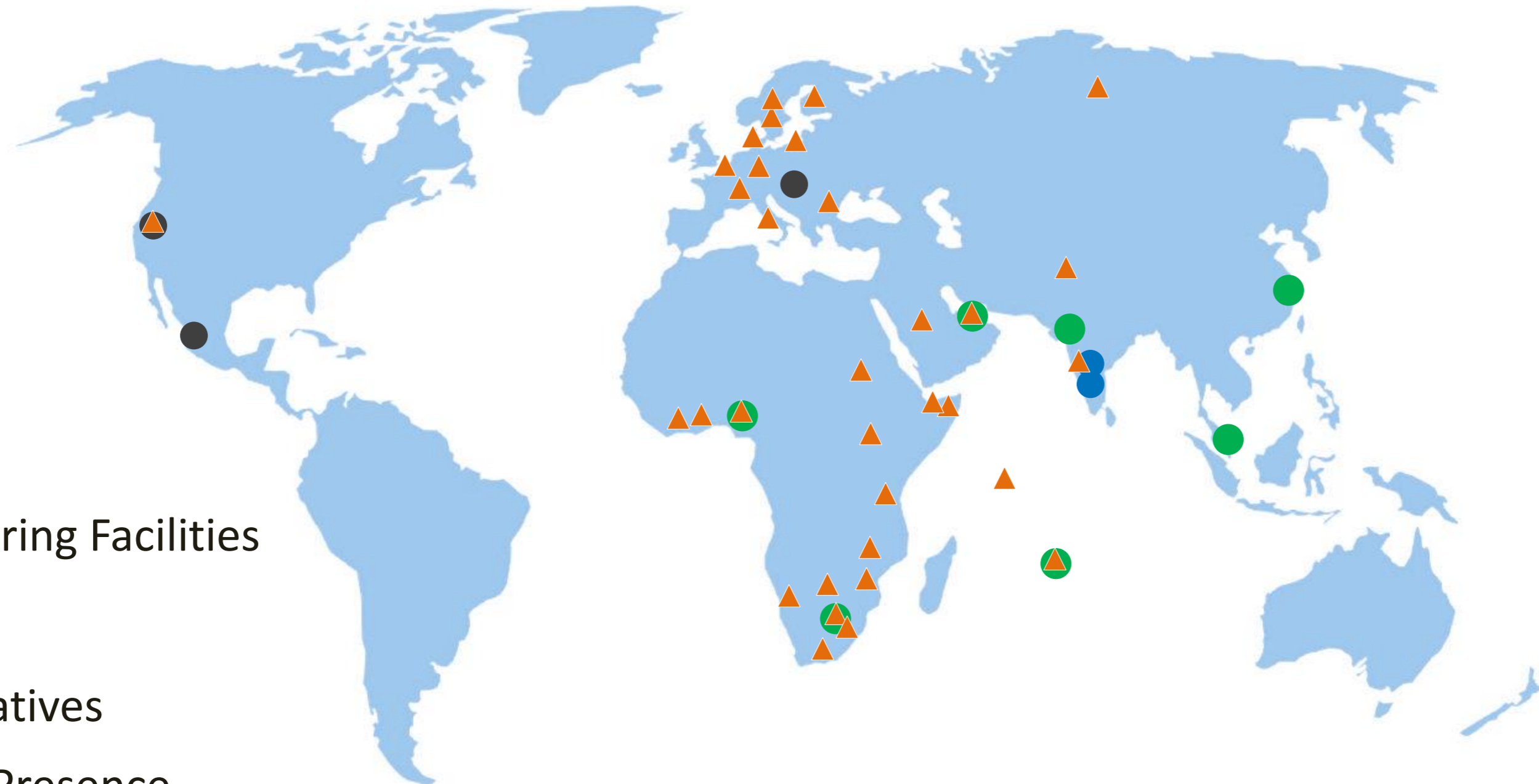
- Based in Nigeria
- Flexible packaging



- Solar PV Modules & Components
- Manufacturing Facilities in Hyderabad & Bengaluru, India



# RenewSys Global Presence



- Manufacturing Facilities
- Offices
- Representatives
- ▲ Customer Presence





# RenewSys PV Module Installations



RenewSys PV Modules are harnessing the sun's power across the globe in projects, ranging from small specialised applications to utility scale projects.



# Manufacturing Facilities



Our **Hyderabad** facility manufactures:

**DESERV** 750 MW Solar PV Modules

**RESERV** 130 MW Solar PV Cells



Our **Bengaluru** facility manufactures:

**CONSERV** 1.4 GW EVA and POE Encapsulants

**PRESERV** 3 GW Backsheets

# The Team



Team RenewSys :

- Diverse set of dedicated professionals
- Knowledgeable with varying skill sets as engineering, finance, human resources
- Energetic and Dynamic
- Innovative and Progressive
- Human Resource strength of approximately 1000



# Careers

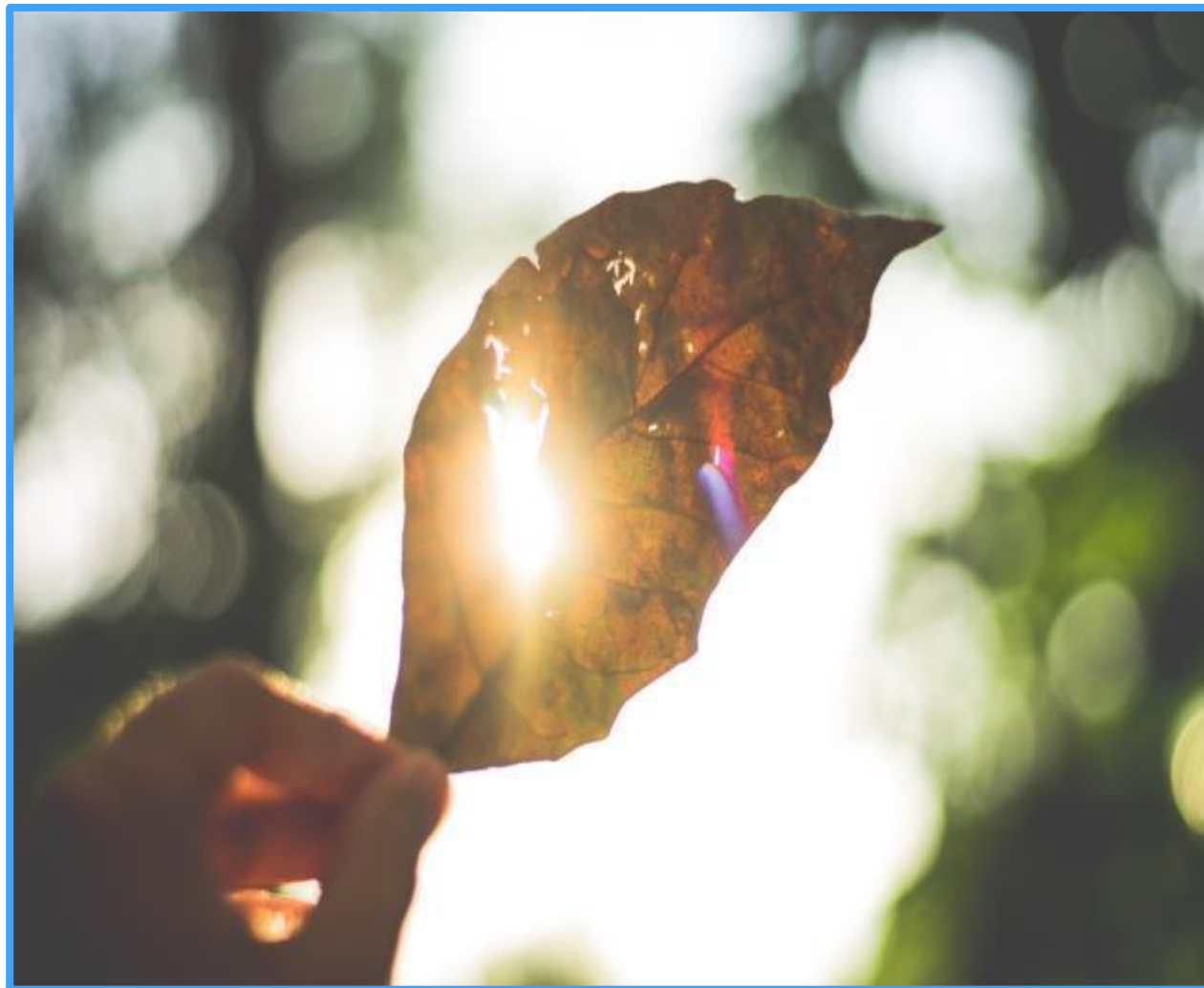


An environment that is conducive for ambition, growth and development:

- **In-house training and development**
- **External** training programmes
- **Safe and healthy** work environment
- **Equal opportunity** organisation



# Community Initiatives



We are committed to giving back:

- **India One Solar Thermal Power Plant** supporter
- **Eye care** and **Diabetes research**
- **Education** for the underprivileged
- **Sponsoring** Cancer patients
- **Sponsoring** Ph.D. Scholarship SERIS, Singapore
- **Vision Centres** across India
- **Special Needs Vision Clinic**, Hyderabad

# Product Excellence Centres



Reliable, Superior Product Quality:

- Facilitate **New Product Development**
- Continuous testing and **Quality Control**
- **Superior Equipment** - Laboratory Extruder, Lab grade Laminator, and Universal Testing Machine, Environmental Chambers for Damp Heat Test, Thermal Cycling, etc.

# RenewSys Hyderabad



# The Hyderabad Factory



- At **FAB City**, Outskirts of **Hyderabad**
- Total area - 50 Acres
- World - class manufacturing facility
- State-of-the-art **European Technology**
- **World - class** Racking System on tracks

## Environment - Friendly Measures



The Hyderabad facility is designed to reduce its overall **carbon footprint by: 249 Tons**

- ✓ **Water Conservation** measures = 5043 KWH saved
- ✓ **Electricity Conservation** measures = 280,895 KWH saved with the power generation of = 1,00,000 units/mth
- ✓ **2000+ Trees** and **1250+ Saplings**
- ✓ **IMS Certified (ISO and OHSAS)**

## Production Capacity: DESERV and RESERV



- DESERV™ 750 MW Solar PV Modules:
- Automated European lines to manufacture Multi and Mono, full cell and cut cell modules
- RESERV® 130 MW Solar PV Cells
- Fully automated European production lines



## DESERV - Product Range

Solar PV Modules to suit applications from small lighting systems to utility scale plants.



- **High Performance PV Modules** (Multi and Mono)
- **High Voltage, High Output PV Modules** for special applications
- **Higher Output PV Modules**
  - Bi-facial Cells (Multi and Mono)
- **Small PV Modules**
- **Specialised PV Modules**
  - BIPV (Building Integrated Photovoltaic)
  - **Semi-rigid and Flexible** (Multi and Mono)

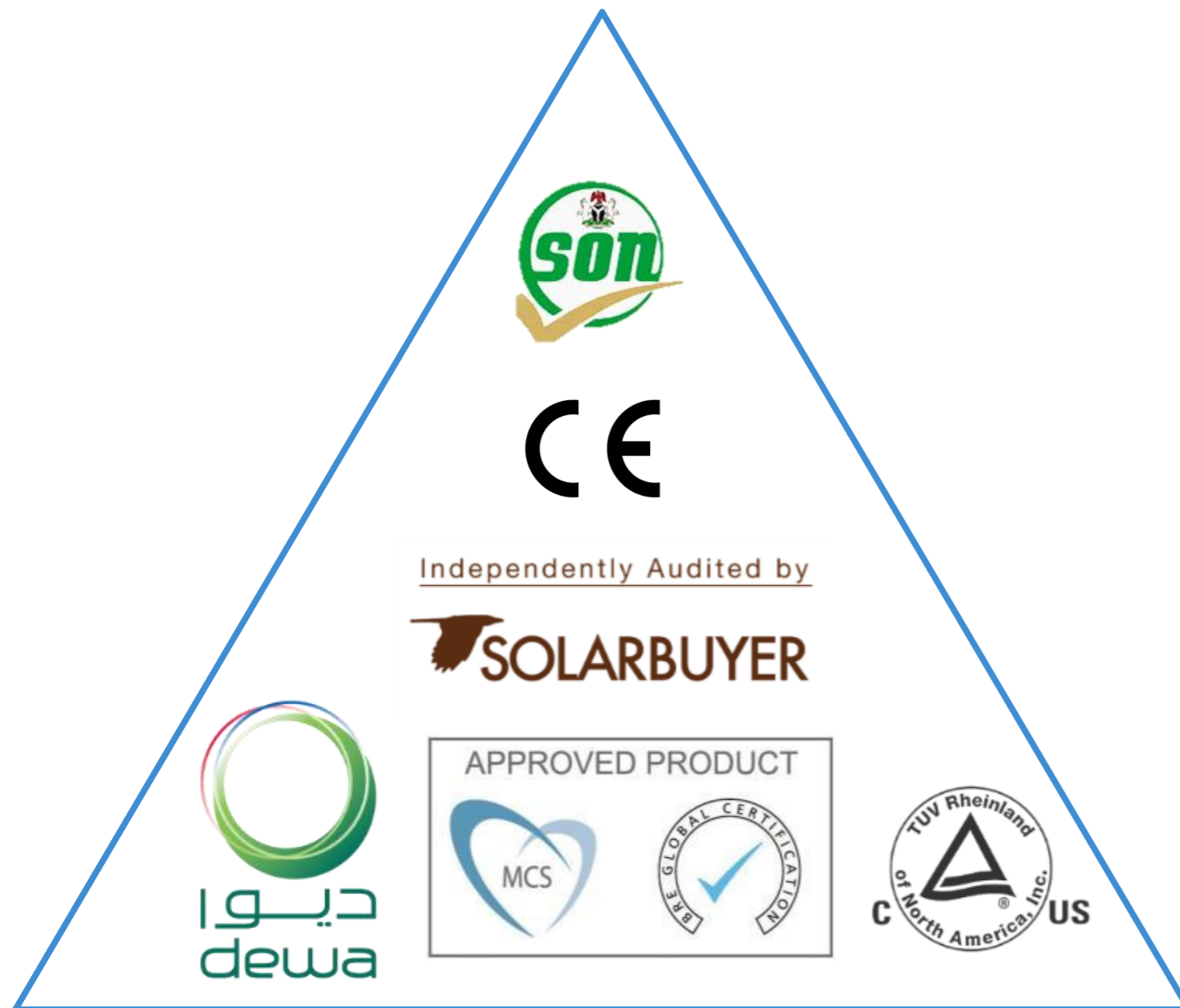
## Assured Performance



Rigorous and controlled manufacturing ensures that **DESERV PV Modules** set benchmarks for performance

- **State-of-the-art** manufacturing technology
- **Fully automated inspection** process
  - **100% EL process** - pre and post lamination
  - **High - rack and 90 degree** Visual Inspection
- **RTV Curing Chamber** to ensure high quality
- **Three Stage Laminator**

# Product Certifications



## Certification Details:

- TUV Certified 61215, 61730, 60068-2-68, 61701, 62716
- IEC TS 62804,61853
- UL Certified: 1703
- SON CAP Certified
- Meets requirements for - SASO, RRECL, GEDA
- CAN/CSA: 61730
- MCS Certified
- DEWA Listed
- Independently audited by Solar Buyer
- BIS NO.: R-63000760



## Champion Products

### **DESERV EXTREME** INDIA'S MOST Efficient Solar PV Module

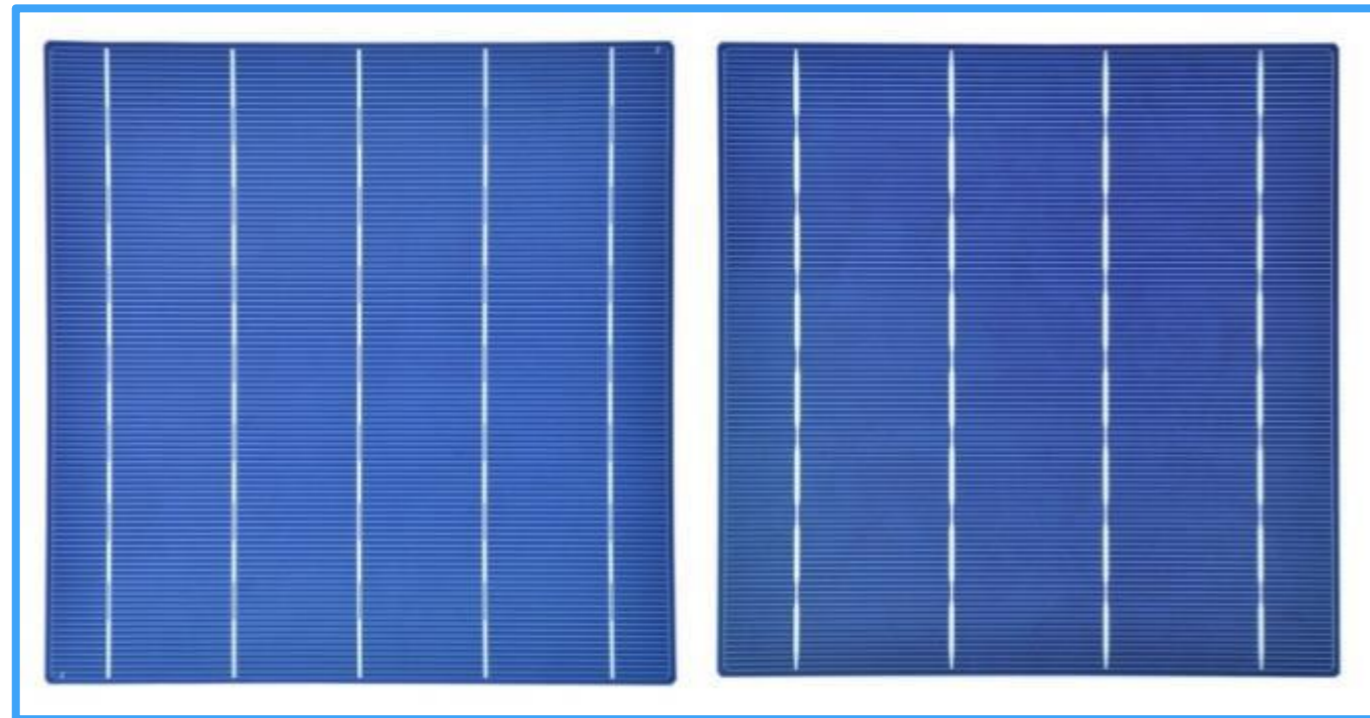
A 390 Wp Solar PV Module  
giving an output as high  
as 663 Wp @70% Albedo



- Bi - Facial
- Cut Mono PERC Cells
- Transparent Fluoro Backsheet

## RESERV - Product Range

RESERV range of PV Cells made from virgin poly-silicon wafers and silver bus-bars



- **Total cell capacity** - 130 MW
- **First Indian company** to launch 5 BB and 6 BB Cells
- **We manufacture** 4 BB Cells and 5 BB Cells
- **Raw materials**, including high purity solar grade silicon wafers and contact pastes with high metal content used
- **Statistical process** control during production

## Assured Performance



A meticulous process ensures that the highest quality of PV Cells are manufactured:

- **Automated Cell Sorting** is conducted with the help of our latest European technology
- **PID Testing** at cell level
- **Statistical Process Control** to check cell measurements
- **High conversion efficiency** due to elimination of cracks




## Packaging and Storage - Hyderabad



Our storage facilities are designed for the secure and safe dispatch of our modules and components:

- **Detailed inspection** system ensuring safe delivery
- **ISO Certified** and **OHSAS compliant** storage facility
- **2,000 modules** dispatched per day
- **Customised packaging**
- **Instore software** for retrieval of goods from storage
- **World - class** Racking System with the facility to move on tracks

# Customers Testimonials



RENEWSYS SOUTH AFRICA (PTY) Ltd  
Bradford House, Block C, No: A9  
12, Bradford Road, Bedfordview 2007  
Johannesburg, South Africa

Friday, 19 February, 2016

TO WHOM IT MAY CONCERN

Dear Sirs,

**RE: RECOGNITION OF PRODUCTS AND SERVICES**


Since the latter part of last year we have been using Renewsys utility sized 60 cell PV modules for many of our domestic installations and for one of our larger commercial installations.

Our decision to use Renewsys modules, in addition to modules from major global suppliers, has been as a result of a number of positive reasons, as follows:

1. We conducted a technical review of the materials, components and processes used in the manufacture of the Renewsys modules. We have concluded that the Renewsys product appears to meet our company's requirements which are that products used in AdSolar installations meet or exceed standard market warranties. We have been using Renewsys panels for the last 6-8 months and so far are happy with their output.
2. AdSolar expects that the manufacturer that supplies a warranty will have the financial means to honour a warranty for the prescribed period. This is particularly important where performance warranties extend to 25 or even 30 years. With respect to Renewsys, we are satisfied, in as much as it is possible, that the warranties from Renewsys will be honoured. Even though AdSolar requested a parental guarantee of support for Renewsys, this was not forth-coming but a letter of intent was received and accepted in good faith.
3. The operational relationship between Renewsys and AdSolar, as forged by Mr Harsh Shah of Renewsys, has grown to be highly supportive and co-operative for AdSolar. Our experience with Renewsys has been positive and has encouraged us to maintain a position of relationship building and mutual support.

We would like to take this opportunity to thank you for the exceptional customer service received so far and to wish your company every success for the future. It is our hope that our businesses will continue to build on the mutually beneficial relationship that we believe has developed and we look forward to installing many more Renewsys PV modules.

Yours faithfully,



Carne Curganven

AdSolar EPC (Pty) Limited  
Postnet Suite 97, Private Bag 26, Kloudf, 3640  
Head Office: 77 Old Main Road, Botha's Hill, Outer West Durban, KZN  
Email: info@adsolar.co.za Phone: +27 31 777 1951  
Directors: D J C Curganven, G Mollerstein, T Lubinski, N M Zondo  
Registration Number: 2013/192060/07



To:

Mr. Prasantha Kuppaswamy  
RenewSys India Pvt. Ltd  
Plot No. 06, Survey # 114P,  
Sinagar Village, Maheshwaram Mandal,  
Rangareddy Dist. - 501258, Telangana, India.

June 8, 2017

Dear Mr. Kuppaswamy:

Sub: Letter of Appreciation

We are procuring solar PV modules from RenewSys, Hyderabad from May 2016 for and we are fully satisfied with the performance of modules. The Renewsys team is highly responsive with quotes and quick to support our tight schedules with on time deliveries.

Best wishes REnewsys!!

Regards,



Dr. Satish M. Nair  
Managing Director

---

Survey No: 223/2A, Union Road, Iransamkattai, Kovur (PD), Chennai 600126, Tel. 944 2900 4851,  
<http://www.nordicindia.com>



P.O. Box 61014  
Marshalltown, 2107, South Africa  
231 Booyens Rd, Cnr Webber Str  
Entrance in Webber Str, Selby  
Tel: +27-11-493-5110  
Fax: +27-11-493-5114  
Email: [microsolve@icon.co.za](mailto:microsolve@icon.co.za)  
Web: [www.microsolve.co.za](http://www.microsolve.co.za)

Micro Computer Based Solutions  
Reg. CK2007/186271/23

**Letter of Recognition**

Att: Harsh Shah  
C/O: Renewsys South Africa (PTY) LTD  
Tel:  
Fax:  
Email: [harsh.shah@renewsysouthafrica.com](mailto:harsh.shah@renewsysouthafrica.com)

22/02/2016

Dear Sir,

Ref: 250W Solar Panels

We have ordered a substantial number of your 250W solar panels from your company, to be used in our projects which range from solar based water pumping, to alternative energy supply, to PV based solar water heating. A number of these projects are being used across the SADEC countries in Southern part of Africa. To date we have not had any issues with the panels, and have received words of praise from our customers, who are pleased with the quality and performance of your panels.

The praise from our customers, accompanied by the fast response and service we have received from your company, makes it our first choice when replenishing our stocks and advising our customers and making sales of the Renewsys solar panels.

Thanking you in advance

Yours faithfully,



Victor Das Neves  
Managing Member

Members: Victor Das Neves (Portuguese)



# RenewSys Bengaluru



# The Bengaluru Factory



- **Located** on Bommasandra Jigani - Link Road, Bengaluru
- **Total area** of facility = 6 Acres, of which **10% area is a green belt**
- **World - class** manufacturing facility
- **Latest** and state-of-the-art European technology

# Environment - Friendly Measures



The Bengaluru facility is designed to reduce its overall carbon footprint by: **830+ MT** per year

- ✓ ISO certified - 9001 : 2015
- ✓ Building Integrated System
- ✓ CNG used instead of electrical heating
- ✓ 145+ Trees planted
- ✓ Safety Calendar

# Production Capacity: CONSERV and PRESERV

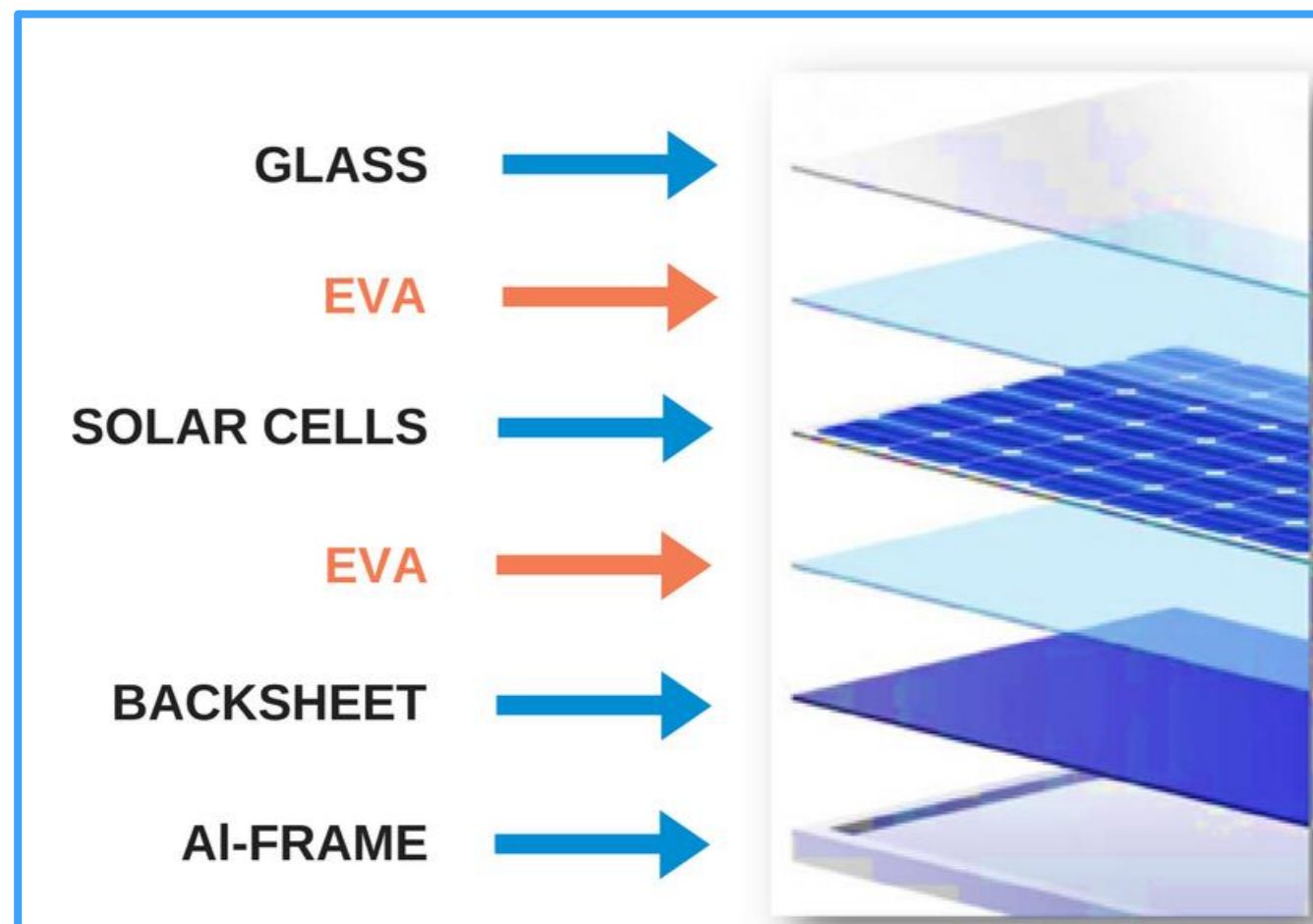


- **CONSERV**® EVA and POE Encapsulants: **1.4 GW**
- **PRESERV**® Backsheets and Bus Bar Insulation Sheet: **3 GW**
- **Fully automated** European lines



# CONSERV - EVA Encapsulant

CONSERV range of Ethylene Vinyl Acetate (EVA) Encapsulants protect PV cells and the integrity of the module



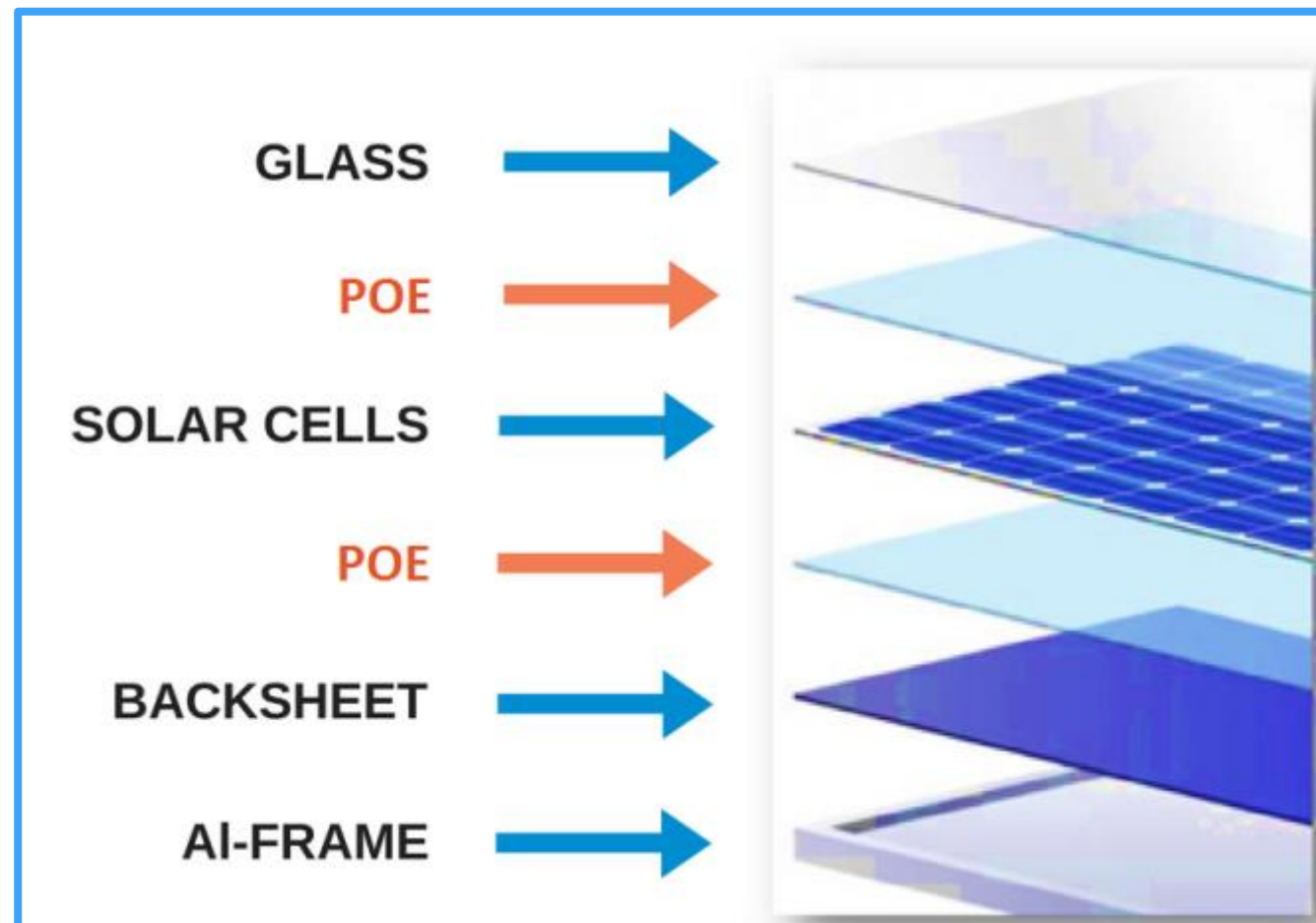
## CONSERV EVA Encapsulant:

Encompasses a range of products in 'Fast Cure' and 'Ultra - fast Cure' versions:

- Potential Induced Degradation (PID) Resistant
- Ultra Violet (UV) Transparent

# CONSERV - POE Encapsulant

CONSERV range of Polyolefin Elastomer (POE) Encapsulants protect PV cells and the integrity of the module



## CONSERV POE Encapsulant :

Ideal for use in Glass-to-Glass PV modules, it is well suited to protect Glass-to-Backsheet PV modules also.

- India's only UL Certified POE
- Delivered advantages of TPO as well
- Resilient in harsh and extreme climatic conditions
- Unique formulation for virtually Zero PID

# Assured Performance

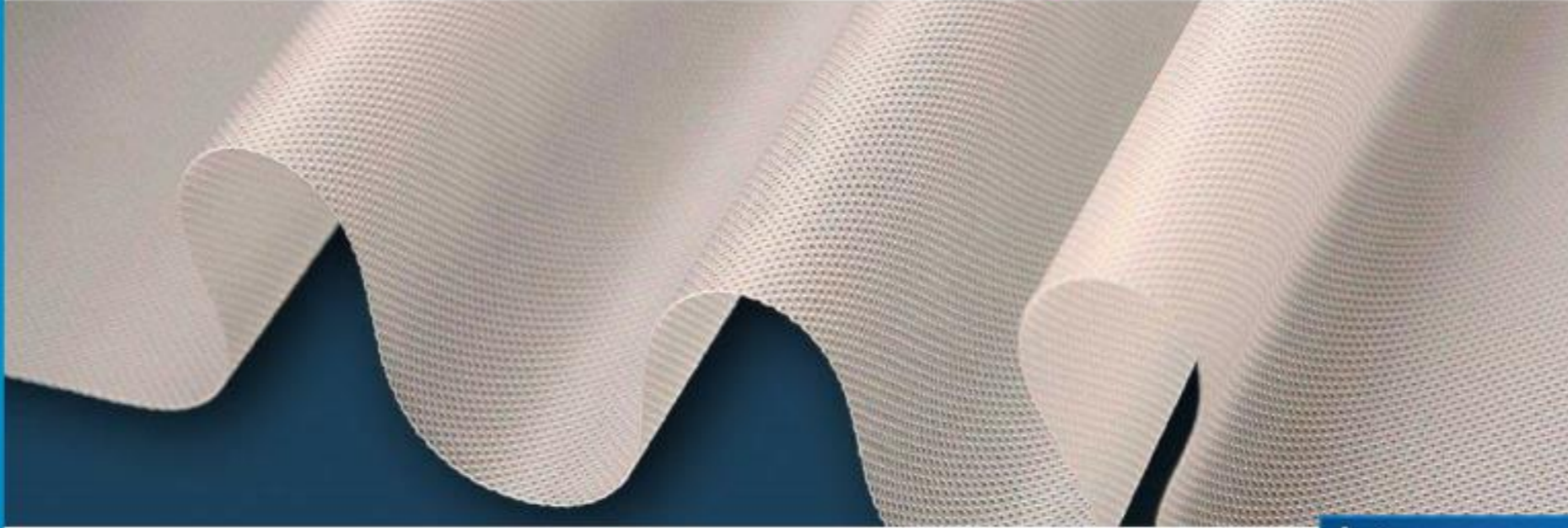


The **CONSERV** product range is designed to ensure better module performance:

- **Superior bonding** to Backsheets and Glass
- **PID Resistance**
- **High** Luminous Transmittance
- Compatible with **Glass-to-Glass** and **Glass-to-Backsheet PV Modules**



# Champion Products



ENPEE GROUP

**POE - CONSERV E 360**

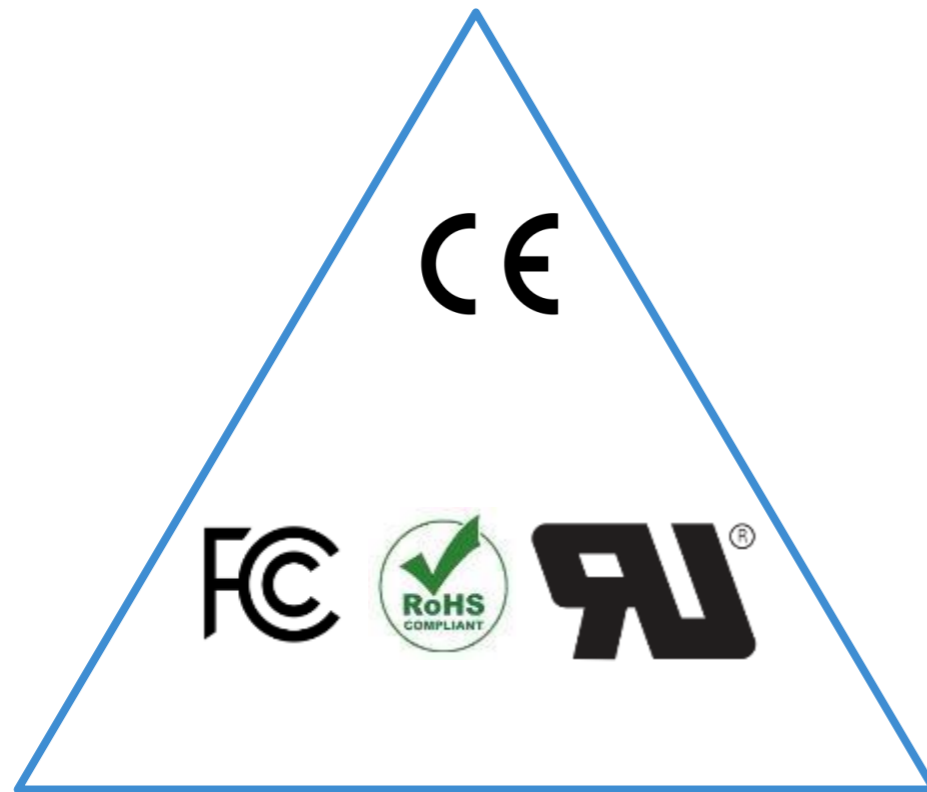
RenewSys®  
*let there be light*

- India's only **UL Certified** POE
- **Resilient** in harsh and **extreme climatic conditions**
- Delivers **advantages of TPO** as well
- Unique formulation for **virtually zero PID**

inter  
**solar  
award**

**2018  
Finalist**

# Product Certifications

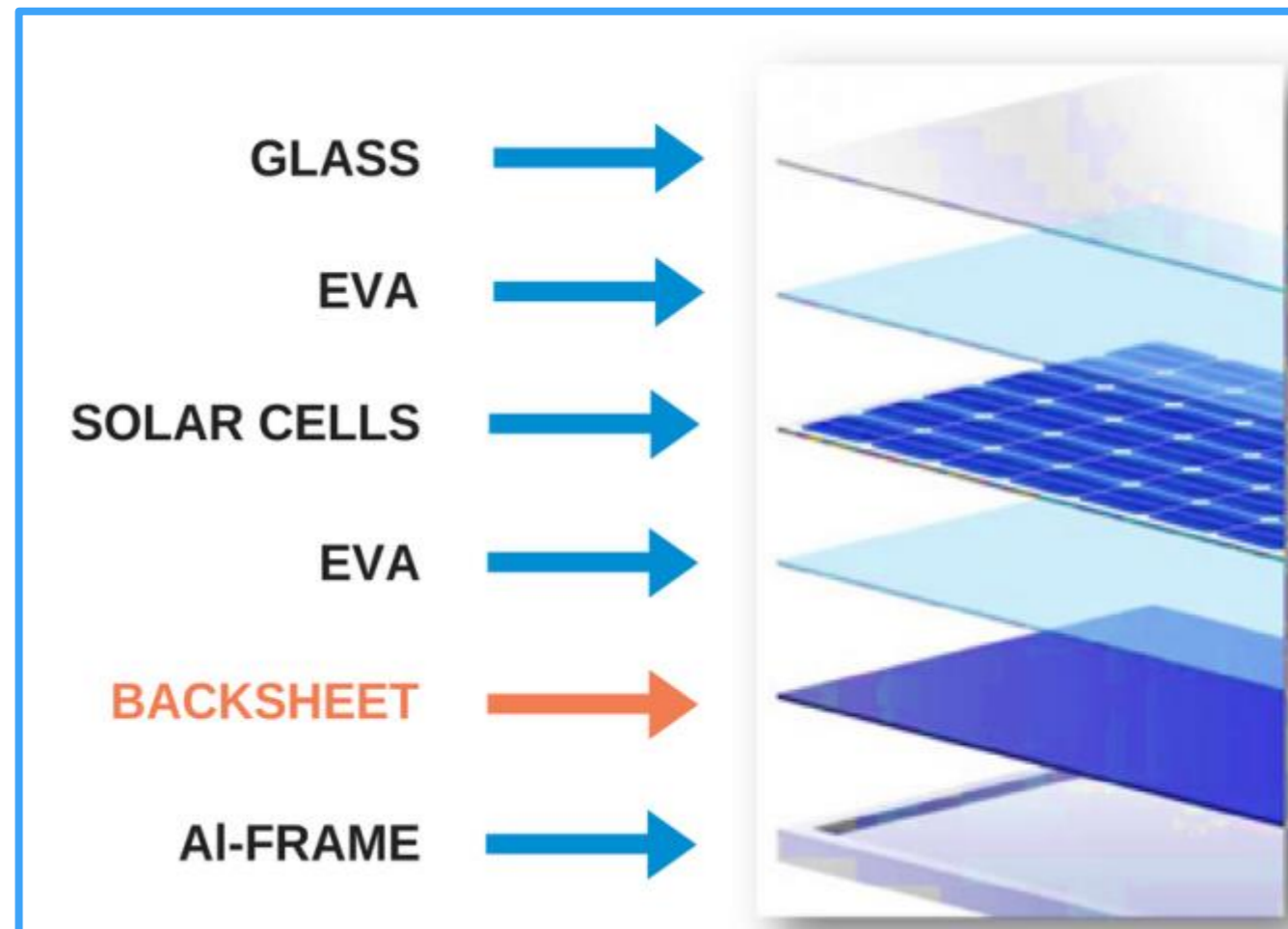


## Certification Details:

- **FC:** UL (UL 94, UL 746A & UL746B)
- **IEC** 61215
- **RoHS**
- **DHT TUV Declaration**

# PRESERV - Product Range

PRESERV Backsheets protect the module from moisture and dust, and are crucial for ensuring performance



## PRESERV Backsheets:

- **PVF** Backsheets (Fluoro)
- **PVDF** Backsheets (Fluoro)
- **Metallic-based** Backsheets
- **PET-based** Backsheets



# PRESERV - Product Range

PRESERV range of Bus - Bar Insulation Sheet ensures prevention of inter- connect breaking



## PRESERV Bus Bar Insulation Sheets:

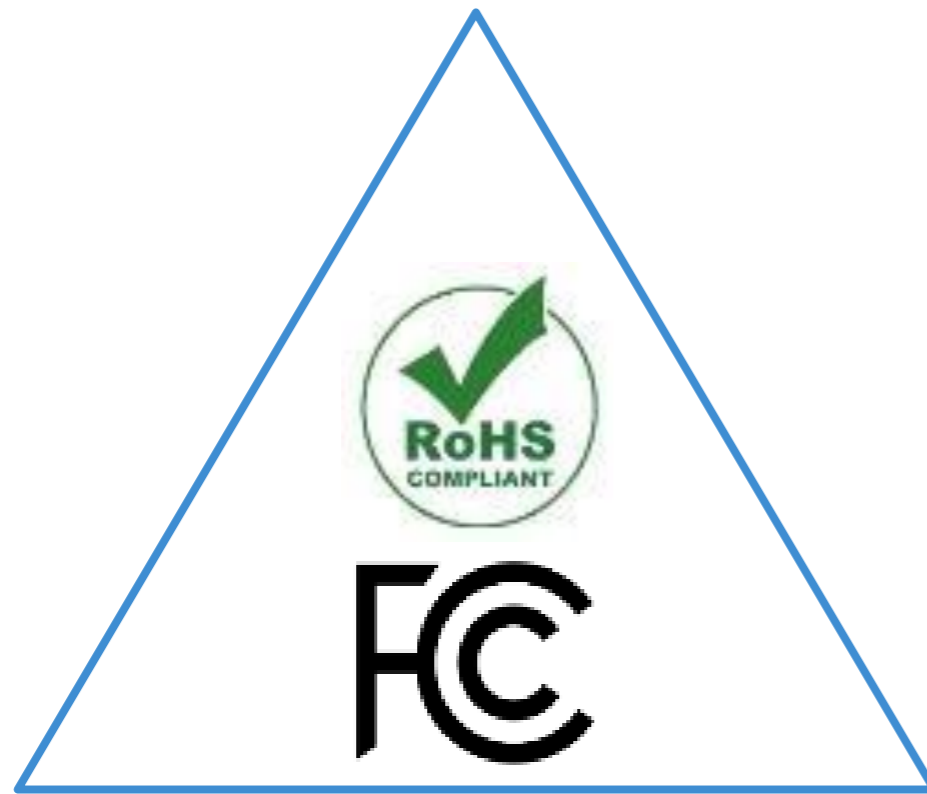
- **PVF** Backsheets (Fluoro)
- **PVDF** Backsheets (Fluoro)
- **Metallic-based** Backsheets
- **PET-based** Backsheets

## Assured Performance



- **Laminated** with high dielectric properties
- **High** moisture barrier
- **High** partial discharge = 1500V DC: **available**
- **High mechanical properties** and Peel Bond retention post - DHT and HAST exposure

# Product Certifications



## Certification Details:

- **FC:** UL (UL 94, UL 764 & UL 764B)
- **CTI** (Comparative Tracking Index)
- **RoHS**
- **Partial Discharge**
- **Flame Spread Index**



# Customers Testimonials

**Topsun**

Date: 30/12/2015

To:  
Mr Shivkumar & Team

I deal with many vendors every day and I have to applaud RenewSys India Pvt. Ltd. for their wonderful Product & Service". We are buying EVA & Backsheet from last three years. We are extremely happy with RenewSys explicit quality product and its efficiency.

There has always been a quick response and a smooth work-flow right from the initial communication, the documentation on Purchase Order till the supplies.

It is my pleasure to work with your team and I am thankful for the support, information, laughs, and everything your team assists me with each time I contact them!

RenewSys Technical & Sales Team does a wonderful job communicating with me and whenever I call your office, Mr. Mohammad Asif Patel & Mr. Raja Iyer are always there to answer any questions.

Keep up the great work and I will continue to refer business acquaintances for RenewSys Products.

Thanking you...!!

For, Topsun Energy Ltd

*(Signature)*  
Authorized Signatory

**Topsun Energy Ltd.**  
Reg. Office: B-101, GIDC, Electronic Zone, Sector-23, Gandhinagar - 382 028, Gujarat, INDIA.  
Phone / Fax: +91 79 23288004, 23288005  
Factory: R.S. No. 880, Nr. 68KV Sub Station, At & Post- Lintah, Dist. Mehsana - 384430, Gujarat, INDIA.  
Phone: +91 2792 252213, 252214  
Email: info@topsunenergy.com • Website: www.topsunenergy.com

ISO 9001  
ISO 14001  
ISO 45001

**ALPEX EXPORTS PVT. LTD.**  
Khatla / Khatoli No. 140 / 142, Khasra No. 802 / 285  
Village - Benoni, Post - Narsipali, Tehsil - Holagardi,  
Distt - Solan, Pin - 174101 (H. P.) INDIA  
Tel. : + 91 1795 265365 / 67, Fax: + 91 1795 265368  
Toll Free : 1800 11 2573  
E-mail : info@alpesonline.com

Date 12-01-2016

To Whom It May Concern

This is to certify that CONSERV P 360-14 FC was used to make Solar PV modules for certification at M/S Alpex Exports Pvt Ltd and Solar PV modules were submitted to M/S TÜV Rheinland lab which were passed the following certification:-

1- IEC 61215 (Resistance to Potential Induced Degradation (PID))

*(Signature)*  
Signature  
Daljeet Kumar (Sr. Manager Operations)

*(Circular Stamp)*  
ALPEX EXPORTS PVT. LTD.

International Trading | Solar PV Module Manufacturers | Solar Products | Solar Electricity (RESCO) | Wind Energy  
Regd. Office: B-79, Shivoli Enclave, Near Mahiya Nagar, New Delhi - 110 017  
Ph. No: + 91 11 2654 7000, CN: US1909 DL 1993 PTC 171352  
New Delhi | Jaipur | Ludhiana | Mumbai | Noida | Patna | Tripur | Teosul | Sydney  
www.alpesonline.com, www.alpesolar.com

**DIVAKAR**  
PV Solar Solutions

• Solar PV Module • Solar Power Plant • Solar Street Light  
• Solar Home Lighting System • Solar Water Pump  
• Solar Lantern

To,  
Mr. Shivkumar & team

I deal with many vendors every day and I have to applaud RenewSys India Pvt. Ltd. for their wonderful Product & Service". We are buying EVA & Backsheet from last one year. We are extremely happy with RenewSys explicit quality product and its efficiency.

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RenewSys Technical & Sales Team does a wonderful job communicating with me and whenever I call your office, the team is always there to answer any questions.

Keep up the great work and I will continue to refer business acquaintances for RenewSys Products.

*(Signature)*  
For, Divakar PV Solar Solutions

Nr. Biliyada Cross Road, N.H.8-B, Survey No.15/2-2, At-Shemla, Tal-Gondal- 360 311, Rajkot, Gujarat - INDIA  
•Office: +91 97277 37121/20 •E-mail: info@divakarpsolar.com •Web: www.divakarpsolar.com

Dear Renewsys Team,

Thank you very much for your hospitality during our visit to your factory. We found your Production Line, QC and R&D very impressive.

Thanks & Best Regards  
Navin Patni  
+91 9819230203

Jyotitech Solar LLP  
R-456, Rabale MIDC,  
TTC Industrial Area,  
Navi-Mumbai-400701  
Maharashtra-INDIA



# Haryana



Location: National Dairy Research Institute  
Capacity: 1 MW



# Maharashtra



Location: Shegoan, Maharashtra  
Capacity: 800 KW



# West Bengal



Location: Canal Top, West Bengal  
Capacity: 10 MW



# Germany



Location: 39615 Zehrental (OT Drösedo), Altmark  
Capacity: 750 KW



# South Africa



Location: Nelson Mandela University  
Capacity: 1.1 MW



# Switzerland



Location: Bachmann AG, 6153 Ufhusen  
Capacity: 931 KW



# Contact Us

## Head Office:

### RenewSys India Pvt. Ltd.

98, Jolly Maker Chambers No. 2,  
225, Nariman Point, Mumbai - 400 021,  
Maharashtra, India.

Tel.: +91 - 22 - 30040500

Email: [renewsys@renewsysindia.com](mailto:renewsys@renewsysindia.com)

GPS Coordinates: 18° 55' 31.6272" N |  
72° 49' 19.5996" E

## Sales Offices:

### RenewSys India Pvt. Ltd.

Regus Wave, Level Ground,  
M-4 South Extension Part-2,  
New Delhi – 110049, India. Tel.: +91-11-66782819

Email: [yugesh.kathuria@renewsysindia.com](mailto:yugesh.kathuria@renewsysindia.com)

GPS Coordinates: 28° 34' 04.2" N | 77° 13' 26.8" E

### RenewSys Industries Nigeria Ltd.

122/132 Oshodi - Apapa Express Way,  
Behind Afprint compound, Isolo, Lagos, Nigeria.

Tel.: +234 802 818 8869

Email: [prasanna.kuppuswamy@renewsysnigeria.com](mailto:prasanna.kuppuswamy@renewsysnigeria.com)

GPS Coordinates: 6° 32' 6.4392" N | 3° 20' 0.6828" E

## Factory Contacts:

### RenewSys India Pvt. Ltd.

Bengaluru Division:

Plot Nos. 21, 22, 23, Bommasandra - Jigani,  
Link road industrial area, Taluk Anekal,  
Bengaluru, Karnataka, India. Tel.: +91 - 80 - 33671400

Email: [renewsys@renewsysindia.com](mailto:renewsys@renewsysindia.com)

GPS Coordinates: 12° 46' 34.7460" N |  
77° 39' 34.0056" E

### RenewSys India Pvt. Ltd.

240, Capital Plaza,  
Pachpedi Naka, Raipur- 492001,  
Chhattisgarh, India. Tel.: +91-9691298829

Email: [renewsys@renewsysindia.com](mailto:renewsys@renewsysindia.com)

GPS Coordinates: 21° 12' 42.48" N | 81° 39' 55.12" E

### RenewSys FZE

AB0907, Jafza One, Jebel Ali Free Zone,  
Dubai, United Arab Emirates

Tel.: +971 - 56 1678678

Email: [vijay.narang@renewsysfze.com](mailto:vijay.narang@renewsysfze.com)

GPS Coordinates: 24.9650° N | 55.0802° E

### RenewSys India Pvt. Ltd.

Hyderabad Division:

Plot No. 06, Survey # 114/P, Srinagar village,  
Maheshwaram Mandal, Rangareddy,  
Dist. - 501359, Telangana, India. Tel.: +91 - 40 - 67303000

Email: [renewsys@renewsysindia.com](mailto:renewsys@renewsysindia.com)

GPS Coordinates : 17° 11' 40.4376" N |  
78° 29' 47.9004" E

### RenewSys South Africa (PTY.) Ltd.

Block C, No. A9, Brandford House, 12  
Brandford Road, Johannesburg, Bedford  
view 2007, South Africa.

Tel.: +27 - 11 6154107, +27 - 60 961 1262

Email: [renewsys@renewsysouthafrica.com](mailto:renewsys@renewsysouthafrica.com)

GPS Coordinates: 26° 11' 3.9732" S | 28° 7' 13.134" E