

Corporate Presentation FY 2020-21





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- 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

\$300+ MILLION

3000+ EMPLOYEES

www.enpee.com

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

An international conglomerate

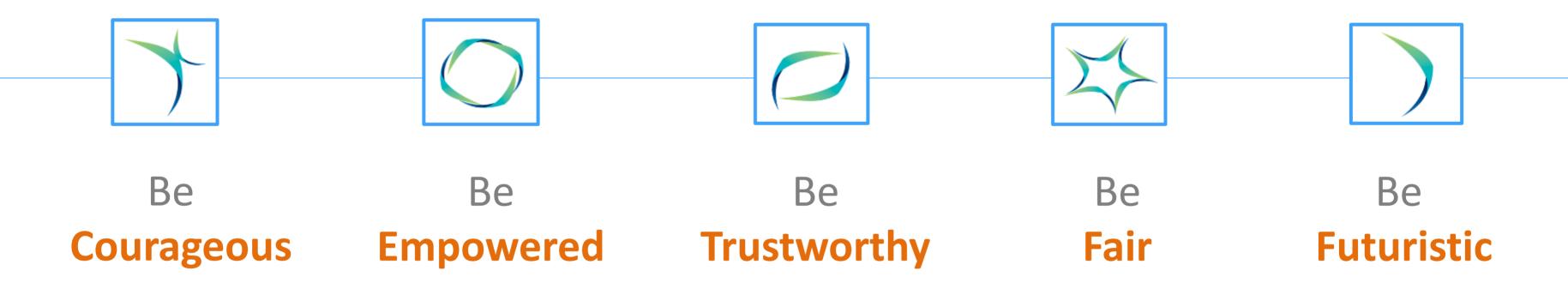
with a rich heritage of

nearly 60 YEARS of manufacturing excellence in diverse industries.





ENPEE Group Values



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
- Printing Cylinders and Inks,
 CPP Films



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



- Based in Nigeria
- Flexible packaging



- Based in Nigeria
- Cement/ Fibre Cement Sheets



- Based in India
- Packaging Brand Management



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



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

www.enpee.com





RenewSys Global 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



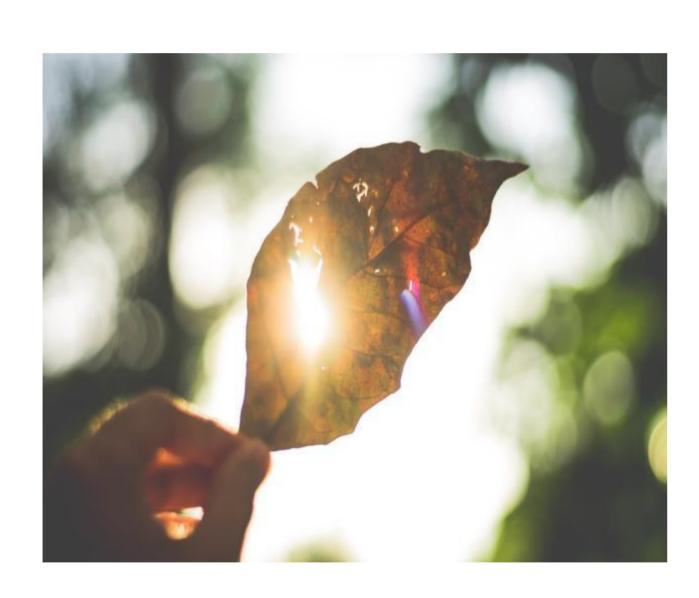
An environment that is conducive for ambition, growth and development:

- 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
- Supporting with PPE kits during Covid-19





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 - The 1st



And only integrated manufacturer of Solar PV Modules and its key components

- To launch India's only Glass-Backsheet Bi-facial Solar PV Module 'DESERV Extreme'
- And only in India to receive UL approval and Commercialise the production of POE Encapsulant - CONSERV E 360
- And only Indian manufacturer to have a dedicated 'Product Excellence Centre'
- And only in India with NABL Accredited PV Lab specifically for Encapsulants,
 Backsheets & their raw materials Bengaluru Facility
- And only in India to have Intertek Certified Satellite[®] Lab Hyderabad Facility
- In India to launch Dr. PV, a free module wellness programme
- In India to launch 5 BB and 6 BB solar PV Cells, Made in India
- Indian company to receive a PV Backsheet Patent







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 has made significant reduction in its overall carbon footprint by: **1,333 Tons**

- ✓ Water Conservation through recycling measures = 19,451 KL saved
- ✓ Electricity Conservation measures = 1,532,251 KWH / year saved
- ✓ 2800+ Trees and 1850+ Saplings
- ✓ IMS Certified (QMS, EMS and OHSAS) compliant storage facility
- ✓ Avoided use of plastic water bottles = 2880 kgs by replacing it with in-house RO water purification system since Dec 2019





Production Capacity: DESERV and RESERV



- <u>DESERV ™ 750 MW</u> 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
- PV Cells are made from undiffused silicon wafer (black wafer), as per MNRE requirements





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)
 - Half cut
- Small PV Modules
- Specialised PV Modules
 - BIPV (Building Integrated Photovoltaic)
 - Semi-rigid and Flexible (Multi and Mono)





Assured Performance



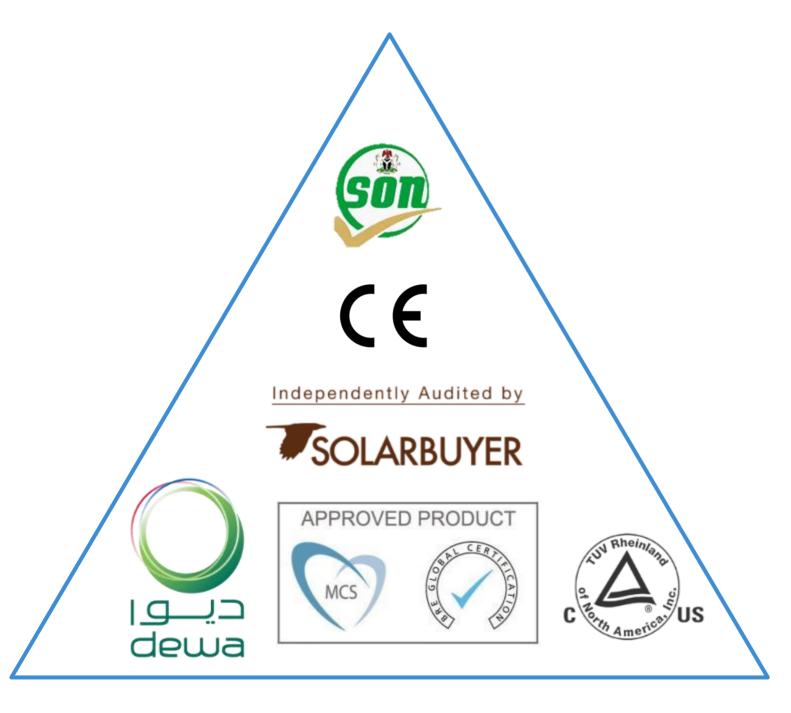
Rigorous and controlled manufacturing ensures that DESERV PV Modules set benchmarks for performance

- State-of-the-art manufacturing technology
- Three Stage Laminator
- Fully automated inspection process
 - 100% EL process pre and post lamination
 - Automated Optical Inspection
- RTV Curing Chamber to assure quality





Product Certifications



Certification Details:

TUV Certified 61215,
 CAN/CSA: 61730

61730, 60068-2-68,

61701, 62716

• IEC TS 62804,61853

UL Certified: 1703

SON CAP Certified

MCS Certified

DEWA Listed

Independently audited by Solar Buyer

• BIS NO.: R-63000760

Meets requirements for - SASO, RRECL, GEDA





Munich RE & DNVGL

- Setting industry benchmarks for transparent, reliable business
- RenewSys modules now accepted by major Developers, EPC companies and Financiers, who otherwise only accept 'Tier 1'

Bankability

Transparency enhanced with audit by DNV GL - empowers customers with insights



Insurance

Product and performance insurance globally
Re-insurance offered by Munich RE*

Warranty partner



Large-scale PV projects bought during the Policy Period of 19 July, 2019-18 July, 2020 can obtain optional warranty back stop by **Munich Re**, with insurance capacity exclusively allocated for each project.





Champion Products

DESERV EXTREME INDIA'S MOST Efficient Solar PV Module

A 390 Wp Solar PV Module giving an output as high as 500 Wp @30% Albedo



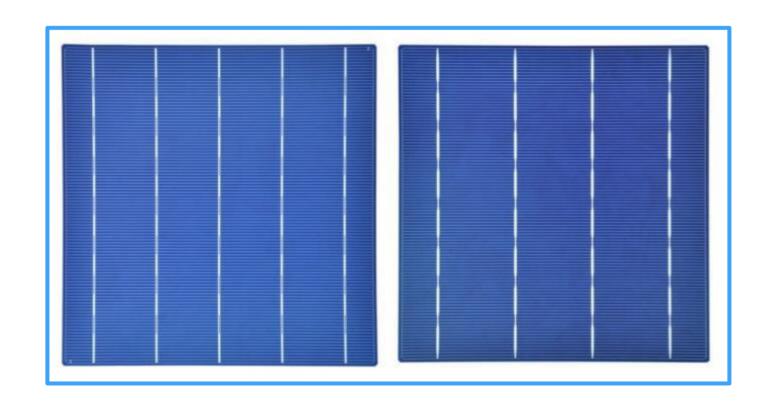
- Bi Facial
- Cut Mono PERC Cells
- Transparent Fluoro Backsheet





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
- PV Cells are made from undiffused silicon wafer (black wafer), as per MNRE requirements





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 SAP system ensuring safe delivery
- Over 3,680 modules dispatched per day
- Customised packaging 14.835 tons in last 6 months
- Instore software for retrieval of goods from storage
- World class Racking System with the facility to move on tracks





Intertek Lab



India's 1st Intertek Certified Satellite®

Lab - Hyderabad Facility

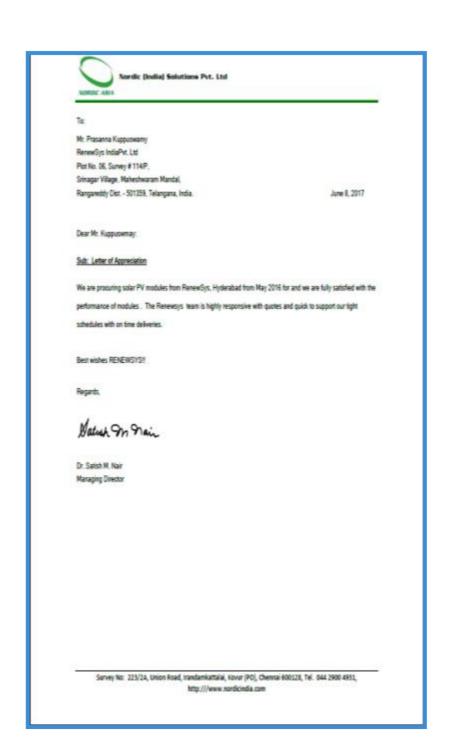
Know more...





Customers Testimonials

| | AdSolar |
|---|--|
| | EPC |
| | |
| RENEWSYS SOUTH Bradford House, Blo 2, Bradford Road, Johannesburg, South | Bedfordview 2007 |
| riday, 19 February, | 2016 |
| O WHOM IT MAY | CONCERN |
| lear Sirs, | |
| E: RECOGNITION | OF PRODUCTS AND SERVICES |
| | of last year we have been using Renewsys utility sized 60 cell PV modules for many of ations and for one of our larger commercial installations. |
| | Renewsys modules, in addition to modules from major global suppliers, has been as a f positive reasons, as follows: |
| manufacturi meet our co exceed star and so far a 2. AdSolar exp honour a wi warranties e it is possible a parental g received an 3. The operating Renewsys, I Renewsys, I Renewsys, I Renewsys and mutual | e this opportunity to thank you for the exceptional customer service received so far and ny every success for the future. It is our hope that our businesses will continue to build efficial relationship that we believe has developed and we look forward to installing many |
| Came Curgenven | |
| • 10000 | AdSolar EPC (Phyl Limited Fosterel Suite 97, Private Bag 34, Kloof, 3640 Head Officer 77 Old Main Road, Borba's HB, Outer West Durban, KZN Ernal: Firld Sander oz.co. a Proner - 73 11 77 1951 Directors: D.J. C. Curgerews, Old Mellentar, T. Lufwest, N. M. Zondo Registration Number: 2013 1190096007 |









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: 1640+ 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



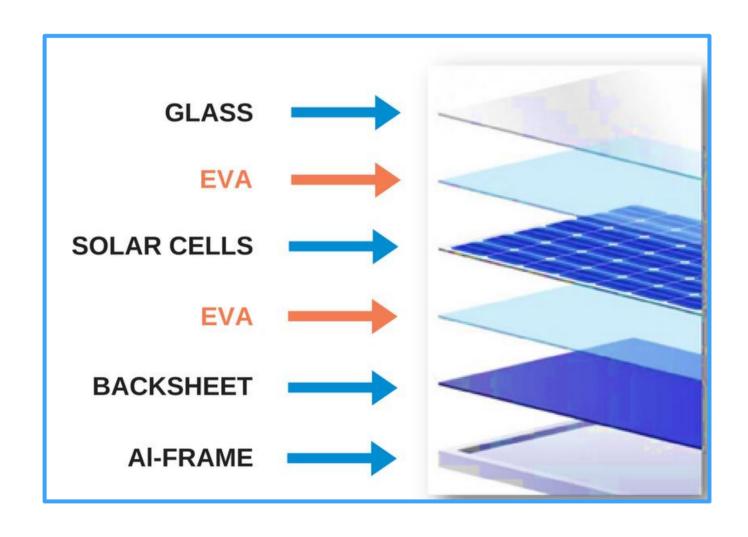
- CONSERV ® EVA and POE Encapsulants:
 1.4 GW
- PRESERV® Backsheets and Bus Bar Insulation Sheet: 3 GW
- Fully automated European lines





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:

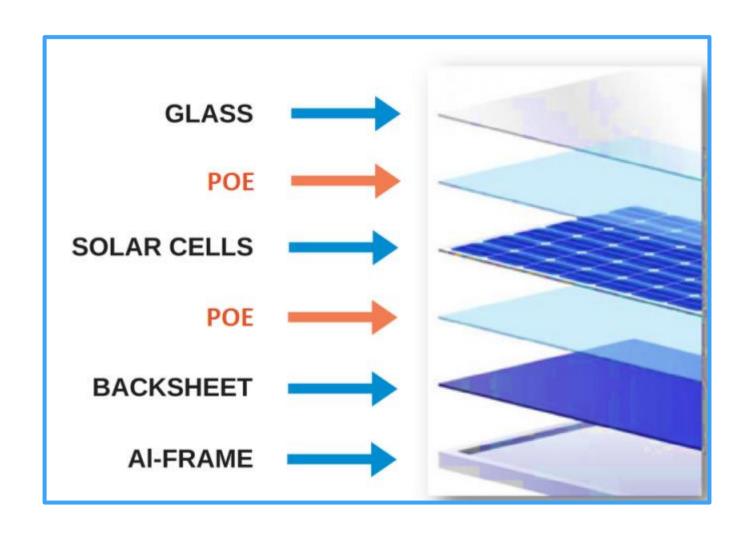
- Potential Induced Degradation (PID) Resistant
- Ultra Violet (UV) Transparent





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





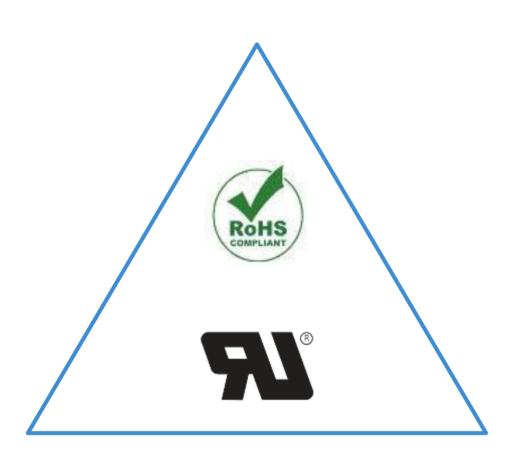
Champion Products







Product Certifications



Certification Details:

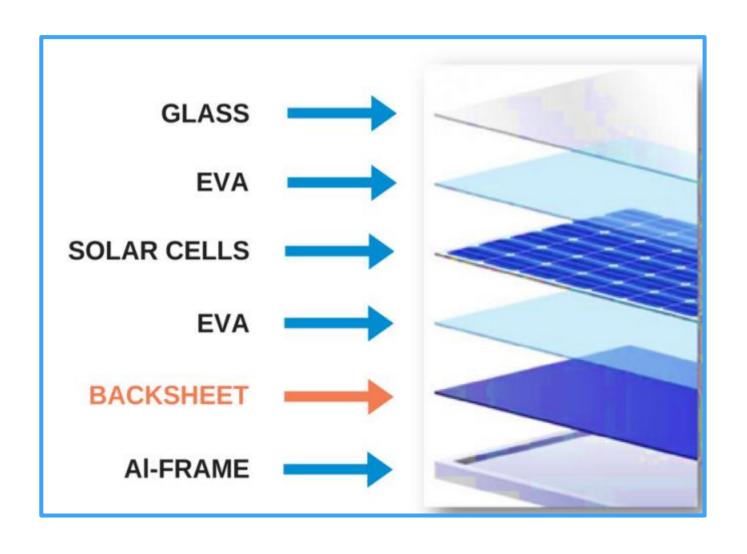
- UL: UL 746A & UL746B
- IEC 61215
- RoHS
- DHT TUV Declaration





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:

- UL: UL 764A & UL 764B
- CTI (Comparative Tracking Index)
- RoHS
- Partial Discharge
- Flame Spread Index





Photovoltaic Lab

C-MRA



National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



NAE

CERTIFICATE OF ACCREDITATION

PHOTO VOLTAIC LABORATORY - RENEWSYS INDIA PVT. LTD.

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

PLOT NO. 21,22 & 23. BOMMASANDRA JIGANI LINK ROAD, INDUSTRIAL AREA, BENGALURU, KARNATAKA, INDIA

in the field of

TESTING

Certificate Number: Issue Date: TC-8436

12/04/2019

Valid Until:

11/04/2021

In view of the transition deadline for ISO/IEC 17025:2017, the validity of this accreditation certificate will cease on 30.11.2020.

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL



berlitism

N. Venkateswaran Chief Executive Officer India's 1st NABL accredited Solar PV Laboratory specifically

for Encapsulants, Backsheets & their raw materials

Who should avail of this facility:



Solar
PV Module
Manufacturers



Solar Project Financiers,
Project Developers, EPC,
& System Integrators



Encapsulant & Backsheet Manufacturers

Know more...



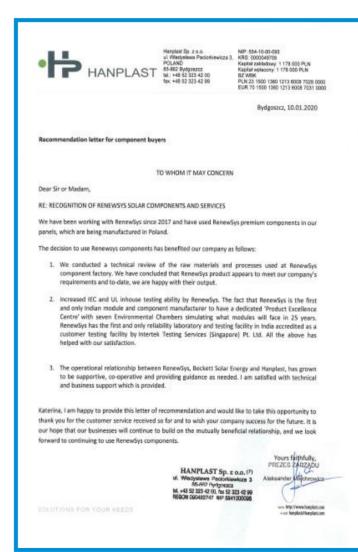


Customers Testimonials









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





Tamil Nadu



Location: Tuticorin, Tamil Nadu

Capacity: 45 MW





West Bengal



Location: Canal Top, West Bengal

Capacity: 10 MW





Germany



Location: 39615 Zehrental (OT Drösede), Altmark

Capacity: 750 KW







South Africa



South Africa's largest ground mounted private sector project

Location: Port Elizabeth, Eastern Cape, South Africa

Project: Nelson Mandela University

Funded by: Standard Bank of South Africa

Capacity: 1.1 MW







Switzerland



Location: Bachmann AG, 6153 Ufhusen

Capacity: 931 KW











Head Office:

RenewSys India Pvt. Ltd.

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

Tel.: +91-22-6810 0500

Email: renewsys@renewsysindia.com GPS Coordinates: 180 55' 31.6272" N

720 49' 19.5996" E

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RenewSys India Pvt. Ltd.

Regus Wave, Level Ground, M-4 South Extension Part-2, New Delhi – 110049, India. Tel.: +91-11-6678 2819 Email: yugesh.kathuria@renewsysindia.com

RenewSys Industries Nigeria Ltd.

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

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

Tel.: +234-805-459 5612

Email: prasanna.kuppuswamy@renewsysnigeria.com Email: vijay.narang@renewsysfze.com GPS Coordinates: 60 32'6.4392 N | 30 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.: +91-80-3367 1400

Email: renewsys@renewsysindia.com GPS Coordinates: 120 46' 34.7460" N

770 39' 34.0056" E

RenewSys India Pvt. Ltd.

240, Capital Plaza, Pachpedi Naka, Raipur- 492001, Chhattisgarh, India. Tel.: +91-9691298829 Email: 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.: +971-56-167 8678

GPS Coordinates: 24.9650° N | 55.0802° E

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Hyderabad Division:

Plot No. 06, Survey # 114/P, Srinagar village,

Maheshwaram Mandal, Rangareddy,

Dist. - 501359, Telangana, India. Tel.: +91-40-6730 3000

Email: renewsys@renewsysindia.com GPS Coordinates: 170 11' 40.4376" N

780 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.: + 27-11-615 4107

Email: renewsys@renewsysouthafrica.com

GPS Coordinates: 260 11' 3.9732" S | 280 7' 13.134" E