

2024

# ***COVEME PHOTOVOLTAIC***

***TRANSPARENT BACKSHEETS AND  
FRONTSHEETS FOR BIFACIAL AND  
FLEXIBLE PV MODULES***

**coveme**

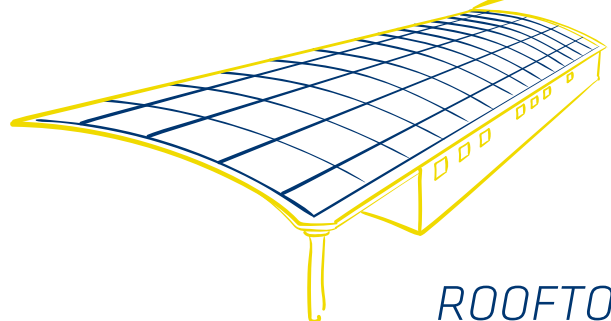
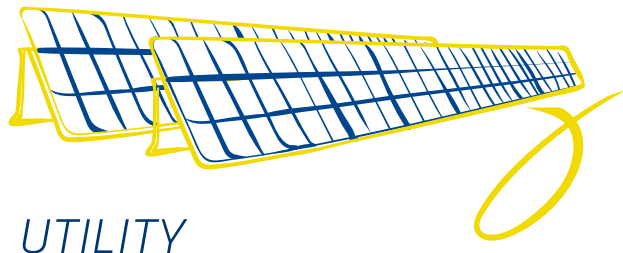
THE VALUE OF INNOVATION

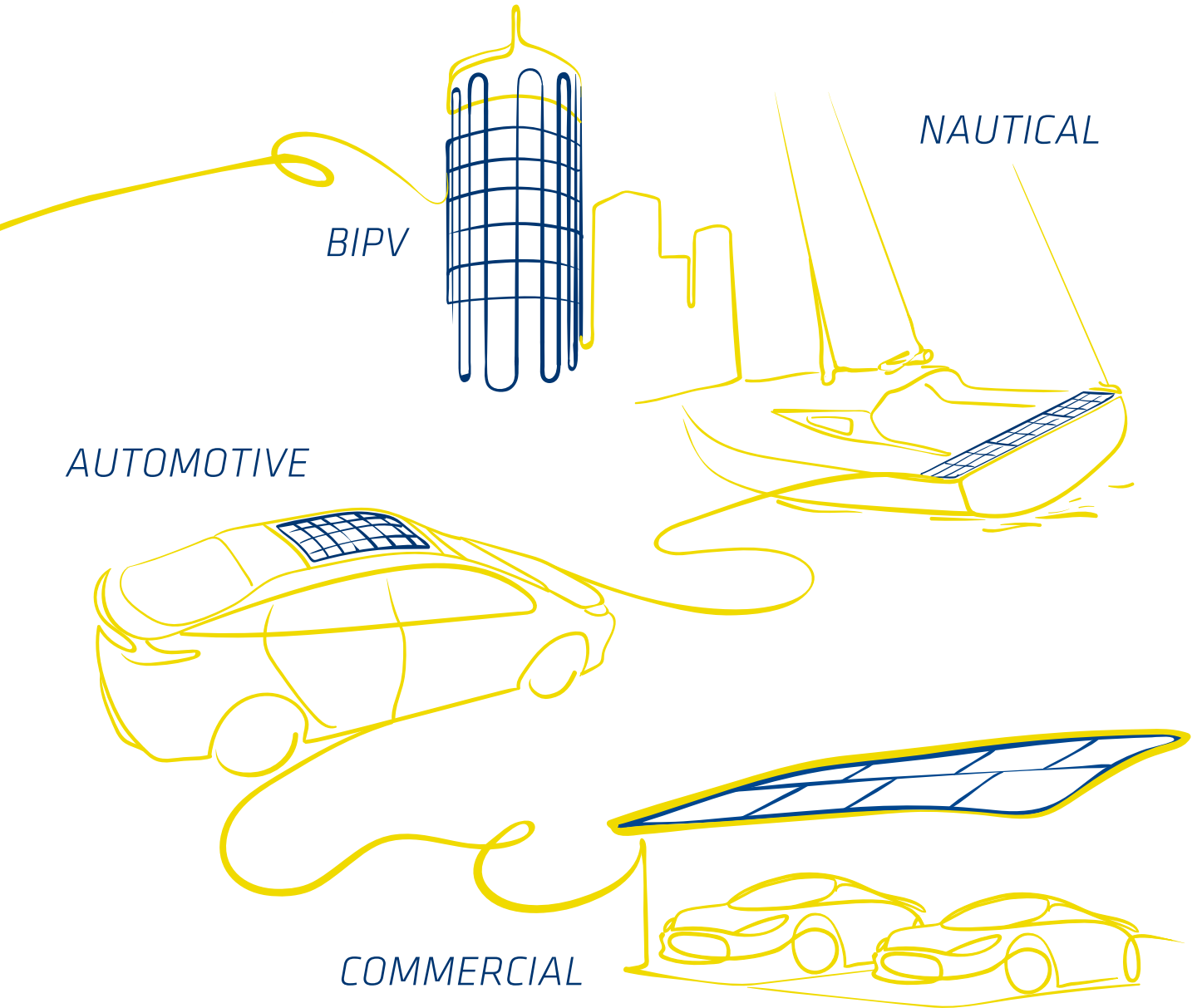
# CLEAR BACKSHEETS AND FRONTSHEETS FOR BIFACIAL AND FLEXIBLE PV

Coveme, headquartered in Italy, is a leading manufacturer of polymer laminates with 25 years supplying the PV industry. Today over 65 GW of solar panels installed worldwide are protected by Coveme's dyMat® backsheets and frontsheets. The privately owned company has two production sites in Italy and China and three fully equipped research centres in Italy, Germany and China. Coveme's 14 production lines are equipped with the latest technologies for coating, laminating, heat stabilizing, treating and customized cutting of polymeric films.

Coveme's is certified: ISO 9001: 2015 for quality management standards, ISO 14001: 2015 for environmental management, ISO 45001:2018 for occupational health and safety.

- **2 PRODUCTION PLANTS** IN EUROPE AND ASIA
- **3 R&D HUBS** IN ITALY, GERMANY AND CHINA
- **BONDED WAREHOUSES** IN EUROPE, CHINA, TURKEY AND USA
- **OVER 50 YEARS OF KNOW-HOW** IN CONVERTING PET FILM
- **25 YEARS OF SUPPLYING** THE PV INDUSTRY
- **20 GW OF PRODUCTION CAPACITY**
- **65 GW OF SOLAR PANELS** INSTALLED WORLDWIDE
- **CERTIFIED QUALITY, SAFETY AND ENVIRONMENTAL STANDARDS**
- **PFAS FREE AND LOW CARBON FOOTPRINT PRODUCT**





# dyMat® Clear OVERVIEW

## TRANSPARENT BACKSHEETS AND FRONTSHEETS

Coveme offers high grade PET based transparent backsheets specifically developed to provide a lightweight alternative to glass on the backside of bifacial or transparent modules. The Pet based frontsheets with an innovative UV Coating are a highly performing solution for semi-flexible and flexible pv modules.

### Product features

dyMat® Clear Backsheets and Frontsheets for highly performing modules



**WEIGHT REDUCTION**



**IMPACT RESISTANCE**



**IMPROVED PRODUCTIVITY**



**INCREASED DAILY YIELD PER WATT**



**POWER ENHANCEMENT OPTIONS**



**UV AND HYDROLISYS RESISTANT**



**CORROSION AND ABRASION RESISTANCE**



**REDUCED MAINTENANCE**



**HEAT DISSIPATION PROPERTIES**



**DHT** >3000H DHT WITH <1% POWER DROP\*

\*tested by Fraunhofer ISE

### Green solutions

Ecological product proposals for a sustainable industry



**PFAS FREE AND LOW CARBON FOOTPRINT BACKSHEETS**



**BACKSHEETS MADE OF rPET COMPONENT**



**LCA AND CARBON FOOTPRINT ANALYSIS OF A BACKSHEET**



**PROMOTION OF A CIRCULAR ECONOMY PROJECT**

### Quality

dyMat® products are certified by the world's major certification bodies



**TÜV RHEINLAND CERTIFIED**



**TÜV SUD CERTIFIED**



**UL REGISTERED**



# CLEAR PET BASED BACKSHEET FOR BIFACIAL PV

Coveme's dyMat® transparent high grade PET backsheets are employed as an alternative to glass in Bifacial modules or where transparency is required (eg. greenhouses). The polymers, primer and adhesives specifically developed for these products provide an extra high resistance to UV and humidity. dyMat® Clear PET Backsheets are suitable for 1000 and 1500 VDC and have a proven track record being employed in the world's first bifacial 1500V installation.

 **PFAS free, low carbon footprint, recyclable, rPET version**

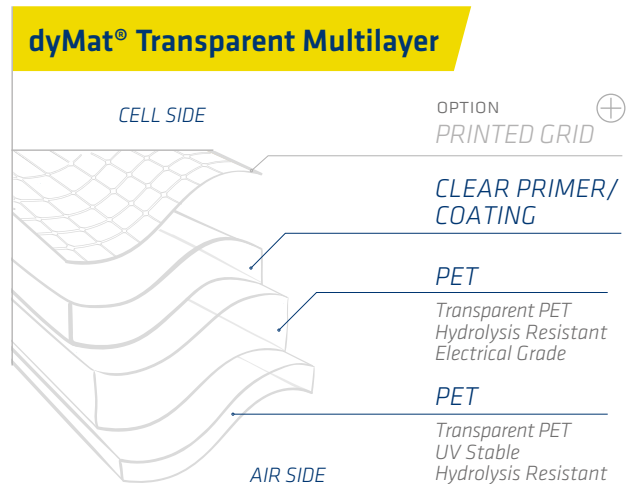
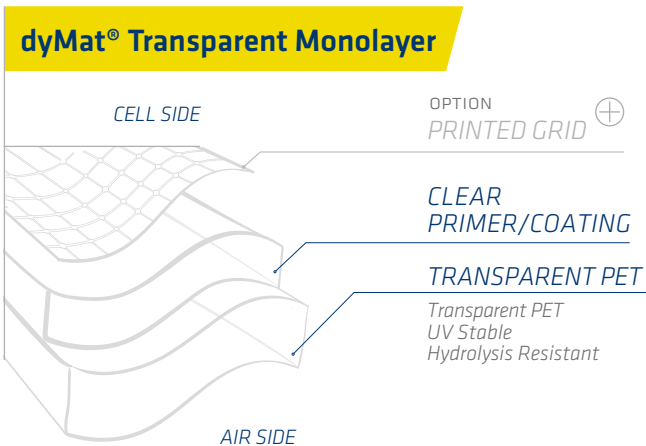
 **Designed for TOPCon , HJT and PERC**

**1500  
VDC**

 **Black or white mesh selective grid**

 **>3000H DHT WITH <1% POWER DROP\***

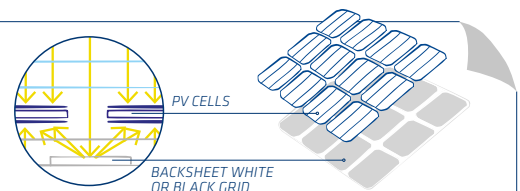
*\*tested by Fraunhofer ISE*



**OUTPUT INCREASING OPTIONS:**

## dyMat® Selective

Optional white or black grid incorporated in the backsheet that turns the space in between the cells and the borders into a highly reflective area for significant output improvement. The grid layout is defined according to customer's cell shape and size.



# CLEAR PET HIGH BARRIER BACKSHEETS AND FRONTSHEETS

dyMat® Clear Barrier is a frontsheet or backsheet employed when very sensitive cells technology (HIT,CIGS, HJT,CIS) requires near zero moisture penetration.

dyMat® barrier film backsheets and frontsheets are manufactured with an innovative integrated PET barrier layer which results in a low WVTR value. These laminates have been specifically designed to be used in pv modules with heterojunction cells and floating systems with all types of cells. Furthermore, these laminates, not having an aluminum layer, facilitate the production process of assembling the module.

 **PFAS free, low carbon footprint, recyclable, rPET version**

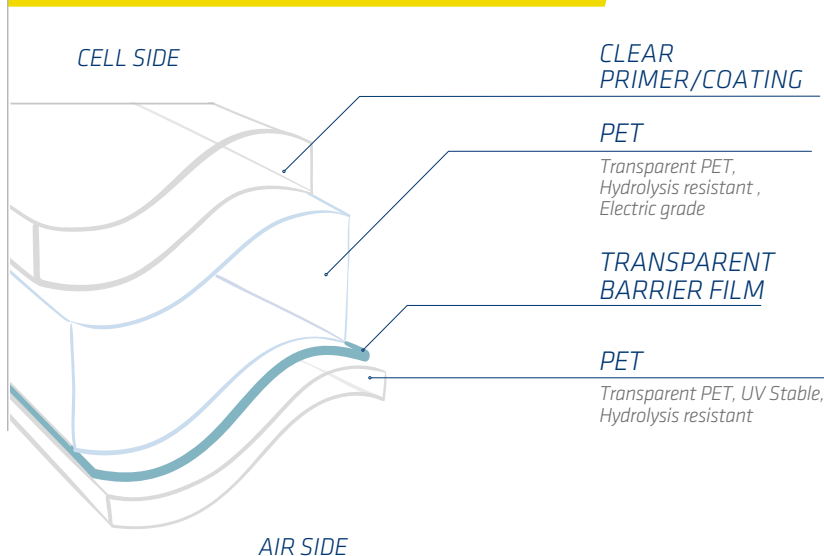
 **Extra low WVTR value**

 **Transparent PET barrier**

 **Anti-scratch & anti-abrasion**

**1500  
VDC**

## dyMat® Clear Barrier Backsheet Multilayer



# CLEAR PET BASED FRONTSHEETS

dyMat® transparent frontsheets are the ideal solution to be employed instead of glass in lightweight flexible photovoltaics. They combine the properties of a high grade UV stable polyester film with those of a special UV coating applied in a high-tech EB curing production process. dyMat® frontsheets have been specifically developed to guarantee an extra high UV and hydrolysis resistance together with outstanding anti-scratch and anti-abrasion properties. dyMat® Clear PET Frontsheets are suitable for 1000 and 1500 VDC and they can be supplied with the UV coating in a matt anti-glare finish for output enhancement and traffic safety.

 **PFAS free, low carbon footprint, recyclable, rPET version**

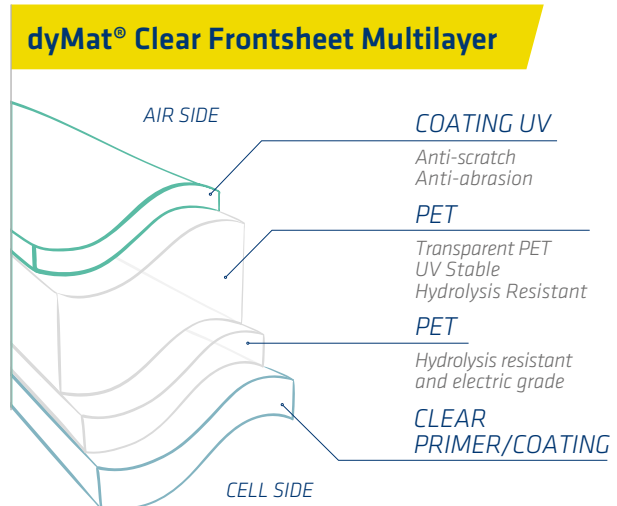
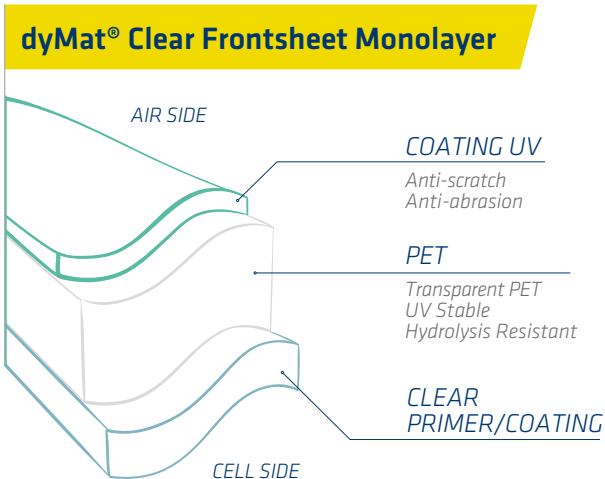
 **Matt, anti-glare for traffic safety**

 **Anti-scratch & anti-abrasion**

 **High transparency**

1000  
VDC

1500  
VDC





Coveme is IATF (International Automotive Task Force) certified as suppliers to the automotive industry



Coveme has received the Bronze Medal Ecovadis certification as the result of a corporate sustainability performance evaluation.



Coveme complies with the Ecomate rating which evaluates the environmental, social and governance (ESG) performance of the company

**COVEME PHOTOVOLTAIC PRODUCTS ARE UL REGISTERED AND TUV RHEINLAND AND TUV SUD CERTIFIED:**



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

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