GO OPV

BIPV-POE

ORENge The Organic Energy Company

Powered by Nature

ORENgE[™] is the leading organic photovoltaic technology commercially produced for the real estate market using advanced energy technology and photovoltaic organic film. ORENgE[™] delivers an unprecedented mutli-part solution that reduces heat gain, reduces carbon foot print, and delivers zero carbon power fully integrated to Power over the Ethernet (POE) infrastructure.

Simple and Low-Cost Installation

Unlike any other technology, ORENgE[™] power is simple to install, affords new build or retrofit, and brings transparent power generation technology and zero carbon impact to lower operating costs.

gE Smart Building Bluep



POE Switch (60–90 watts each)





Organic and Environmental

ORENgE[™] power is produced from advanced technology built around organic ink and recyclable PET to bring on-site, last inch sustainable power solutions from environmentally safe materials. ORENgE[™] produces energy from the broadest light spectrum delivering power from both indoor and outdoor light sources from any angle.

GO - OPV allows for the Flexible stallation of the ultimate ORENGE[™] iDC^{lab}le well^{ip} solvet ion figuritmite support 802.3bt power, providing direct DC on-site power solutions for low voltage Clatheo Bel Bods. Market bate jthand bent, ORENgE[™] power provide interview of the start of the start

available square footage of								
ORENgE Window Curface Organic, Photovoltaic								
Nominal Power(W) sg/m * 30w								
Bated Voltage, Mith hattery storage, and								
Open Circuit Voltage (VOC) OF THT a Strac 24.9 C,								
* Subject to window configuration and location Ides 24/1								

smart building sustainable www.orengepower.com | Copyright © 2021 All Rights Reserved | GO OPV power solutions.

ORENgE The Organic Energy Company

ORENgE[™] Benefits

Reduce Carbon Footprint Lower operating costs Net Zero carbon energy Improved work environment

ORENgE[™] Power

ORENgE[™] Power is the most suitable light absorption and power generation technology for behind the meter on-site real estate. Organic energy adds the benefit of net zero carbon power, heat gain reduction, carbon foot print reduction, and lower cost per kwh.





When ORENgE[™] is applied to glass, the advanced technology properties of the ORENgE[™] panel reflect light and absorb thermal radiation expanding the performance of the original glass. ORENgE[™] blocks harmful UV, uses visible light to generate power, and absorbs the remaining IR to remove unwanted thermal effects.

Transparent conducting materials are widely used for touch screens and OLED displays. As an organic photovoltaic, ORENgE[™] allows for transparency and the absorption of infrared light waves to lower heat gain and generate power.

Net Zero Carbon Energy - Improved Working Environment - Lower Costs

*All measurements are subject to actual type of glass, location, and form of installation	Light Factor			Energy Factor						Transmission
	Light Transmission (%)	Reflection (%) Internal External		Light Transmission (%)	Energy (%) Internal External		Absorption (%)	Solar Factor	Shading Coefficient	U-Factor
	TL	RLi	RLe	TE	REi	REe	Abs.	FS	CS	U
OPV/Clear	17	13	11	15	14	21	64	0.30	0.34	5.80
Clear	87	8	8	71	7	7	22	0.76	0.88	5.60
OPV/Extra Clear	15	15	10	17	19	24	59	0.30	0.35	5.80
Extra Clear	90	8	8	82	8	8	10	0.84	0.97	5.60

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Real Estate BIPV POE Solution

ORENgE is the most suitable light absorption and power generation technology for behind the meter on-site real estate solutions

ORENgE as Differentiated Power Solution

- **ORENgE is the leading organic photovoltaic technology** commercially produced for the real estate market using advanced energy technology and photovoltaic organic film
 - Delivers an unprecedented multi-part solution that reduces heat gain, reduces carbon footprint, and delivers zero carbon power fully integrated to Power over the Ethernet (PoE) infrastructure
- When ORENgE is applied to glass, the advanced technology properties of the OPV panel reflect light and absorb thermal radiation expanding performance of the original glass
 - Enables heat gain reduction that lowers HVAC uptime by ~30%
- Unlike any other technology, ORENgE power is simple to install and brings transparent power generation technology with zero carbon impact and lower operating costs as well as the elimination of commodity price exposure related to grid dependence



