

FEASIBILITY STUDY NEW YORK **HIDDEN PV IN WHITE COLOR**



CHARACTERISTICS OF THE GLASS

Peak Power (Wp/sqm)	
Visible light transmittance	

ENVIRONMENTAL BENEFITS NEW YORK

Renewable energy 2,997 KWh per sqm LBS. of CO₂ avoided 1,250 LBS. per sqm Miles driven in an electric car 10,712 Mi per sqm Light points fed 6 per sqm/day

110 Wp per sqm

0%

sqm

sam

sqm

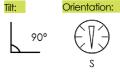
ECONOMIC BENEFITS NEW YORK*

Value of the renewable energy	\$608 per sqm
Return on investment	6 times
Internal rate of return (IRR)	83.96%
Payback time	1 year
Building's value increase**	\$300 per sqm

RESULTS IN OTHER LOCATIONS OF EASTERN UNITED STATES

Renewable energy (Houston)	2,727 KWh per
Payback time (Houston)	1,1 years
Renewable energy (Miami)	2,877 KWh per
Payback time (Miami)	1 year
Renewable energy (Chicago)	2,907 KWh per
Payback time (Chicago)	1 year

DATA CONSIDERED FOR CALCULATIONS









Data Calculated for a 35-year useful life.

-24%

-10%

-15%

-22%

New York

Houston

Chicago

Miami

N

-65%

-57%

-59%

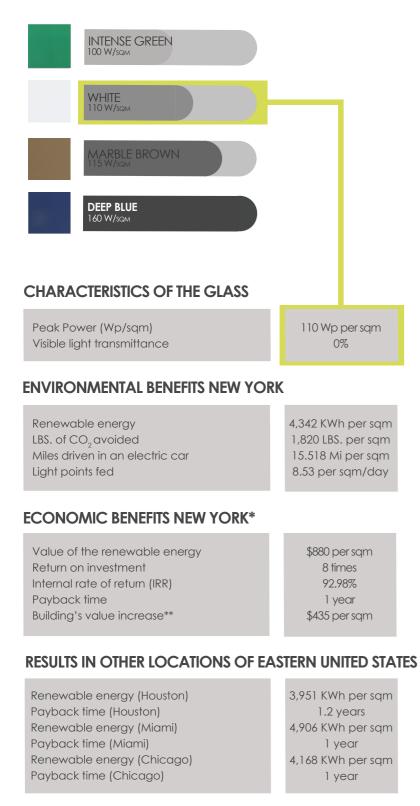
-63%

* The prices considered are merely indicative and may vary depending on the installed glass surface. The data provided in this feasibility study in no case involves a contractual obligation.

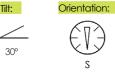
** According to the US Department of Energy & Environment a sustainable building will obtain an increase of value between 10 and 20 USD for every USD generated by renewable energy.

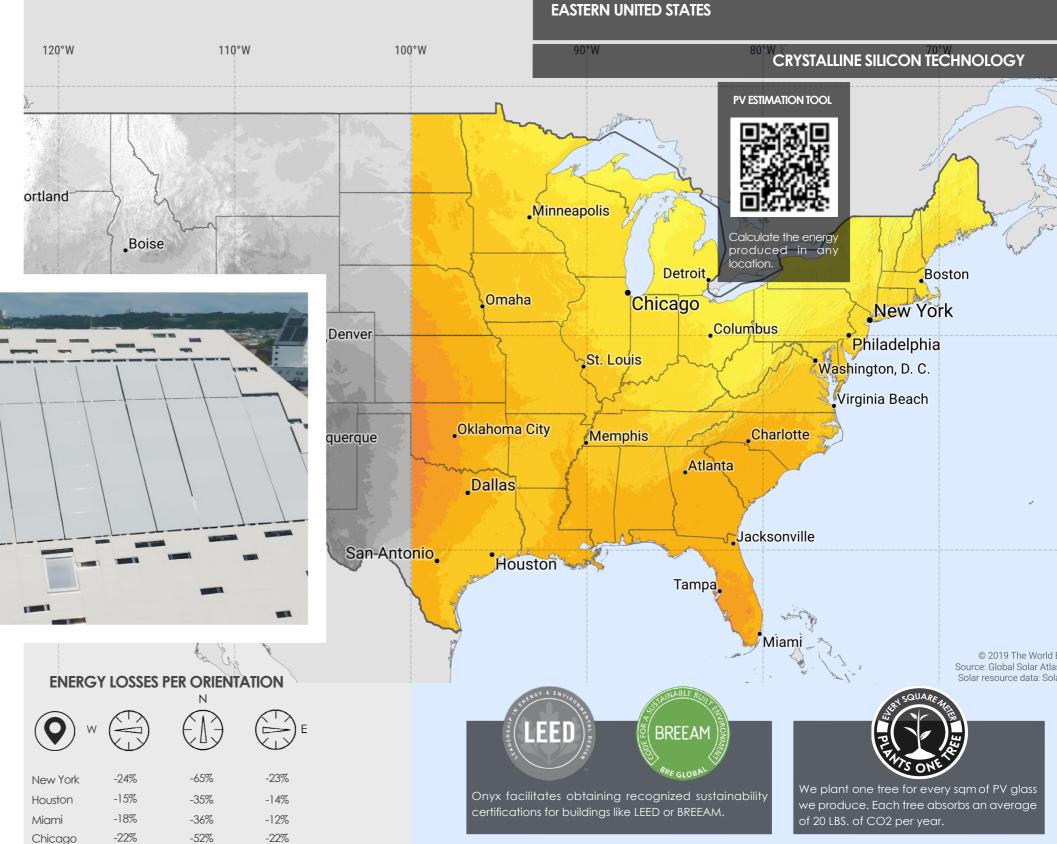
PV FAÇADE / BALCONY EASTERN UNITED STATES

HIDDEN PV IN WHITE COLOR



DATA CONSIDERED FOR CALCULATIONS



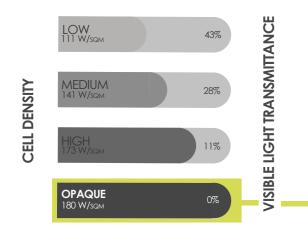


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FEASIBILITY STUDY NEW YORK **OPAQUE PV GLASS**



CHARACTERISTICS OF THE GLASS

Peak Power (Wp/sqm) 180 Wp per sqm Visible light transmittance 0%

ENVIRONMENTAL BENEFITS NEW YORK

Renewable energy 4.905 KWh per sqm LBS. of CO₂ avoided 2.045 LBS. per sgm Miles driven in an electric car 17,529 Mi per sqm 9.64 per sqm/day Light points fed

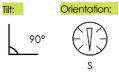
ECONOMIC BENEFITS NEW YORK*

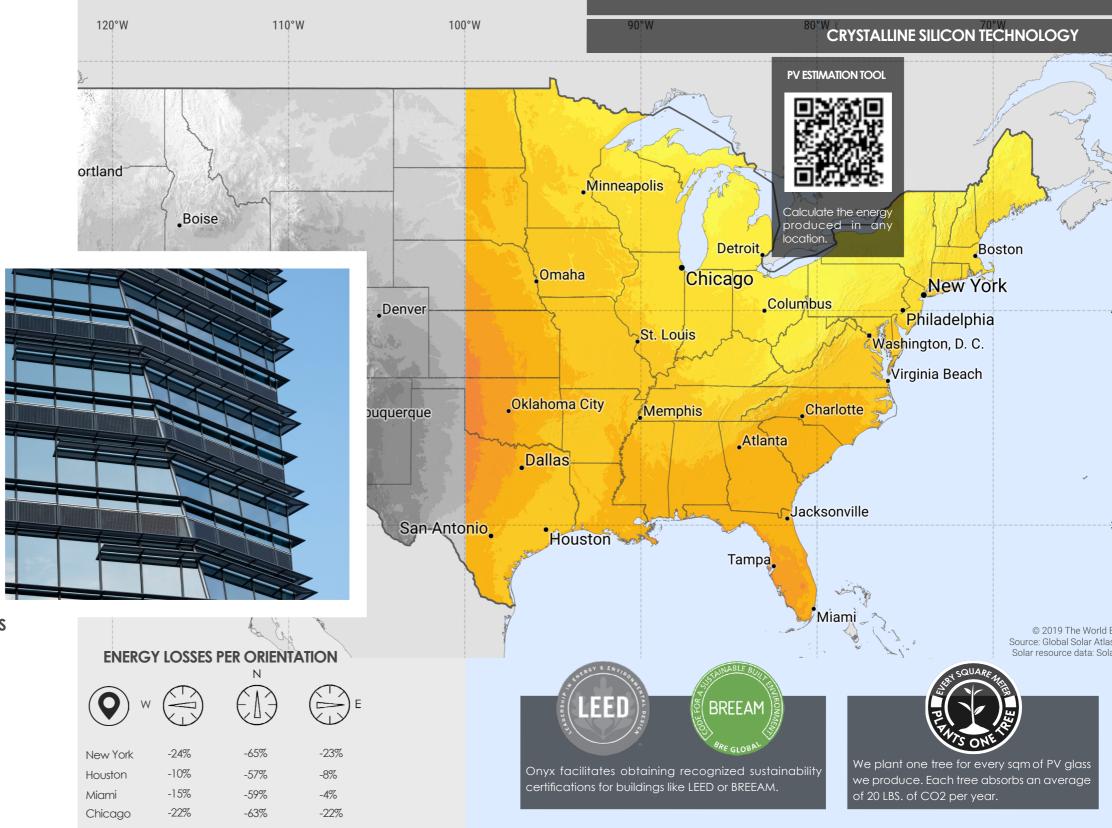
Value of the renewable energy	\$994 per sqm
Return on investment	7 times
Internal rate of return (IRR)	42,88%
Payback time	1 year
Building's value increase**	\$491 per sqm

RESULTS IN OTHER LOCATIONS OF EASTERN UNITED STATES

Renewable energy (Houston)	3,974 KWh per sqm
Payback time (Houston)	1,1 years
Renewable energy (Miami)	4,918 KWh per sqm
Payback time (Miami)	1.1 years
Renewable energy (Chicago)	4,916 KWh per sqm
Payback time (Chicago)	1.1 years

DATA CONSIDERED FOR CALCULATIONS





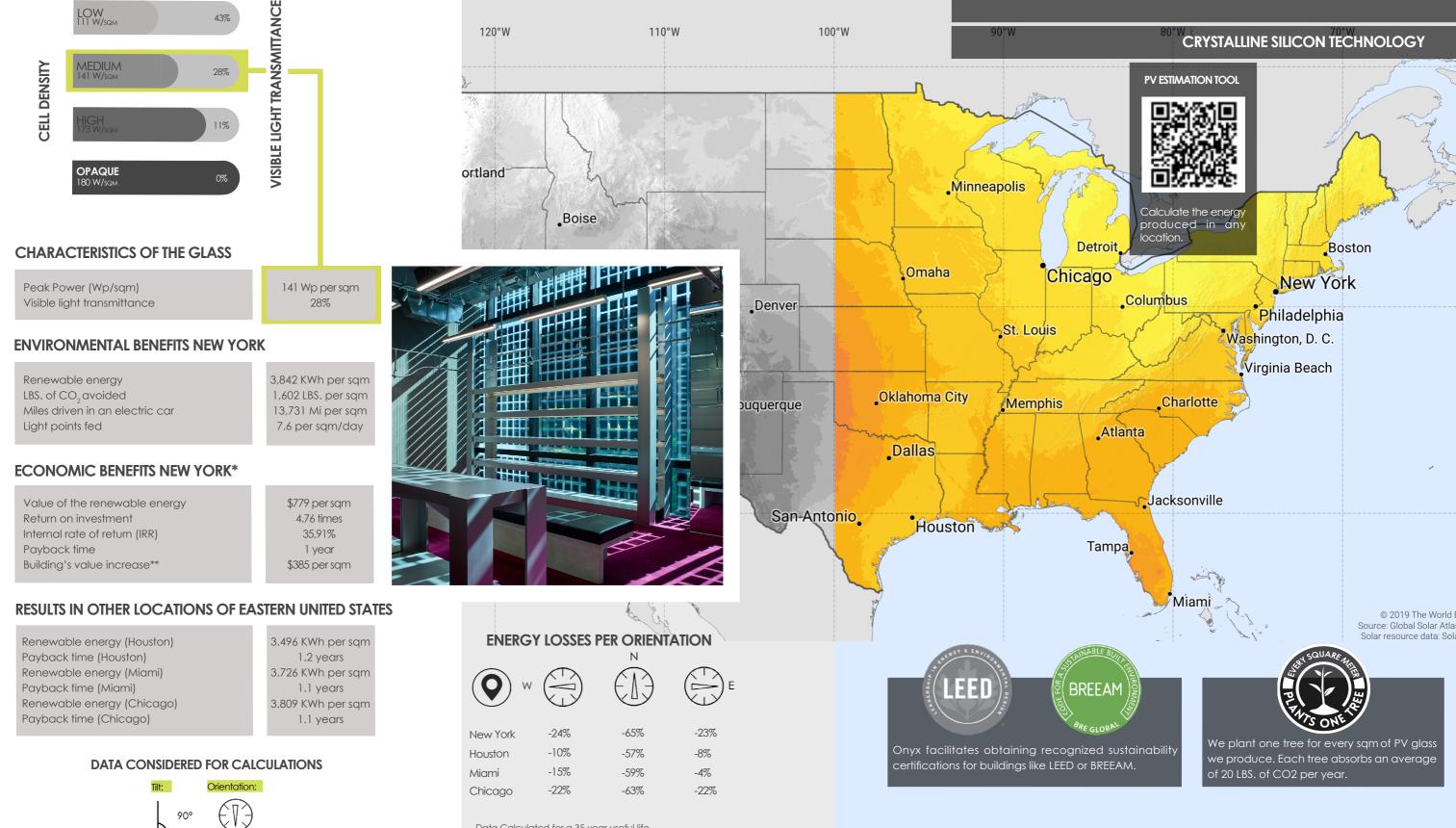
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PV DOUBLE SKIN / SPANDREL EASTERN UNITED STATES

MEDIUM CELL DENSITY PV GLASS



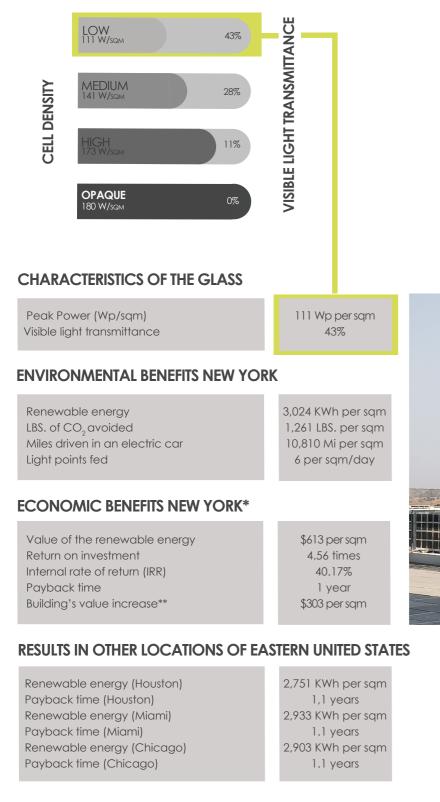
EASTERN UNITED STATES

Data Calculated for a 35-year useful life.

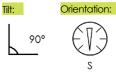
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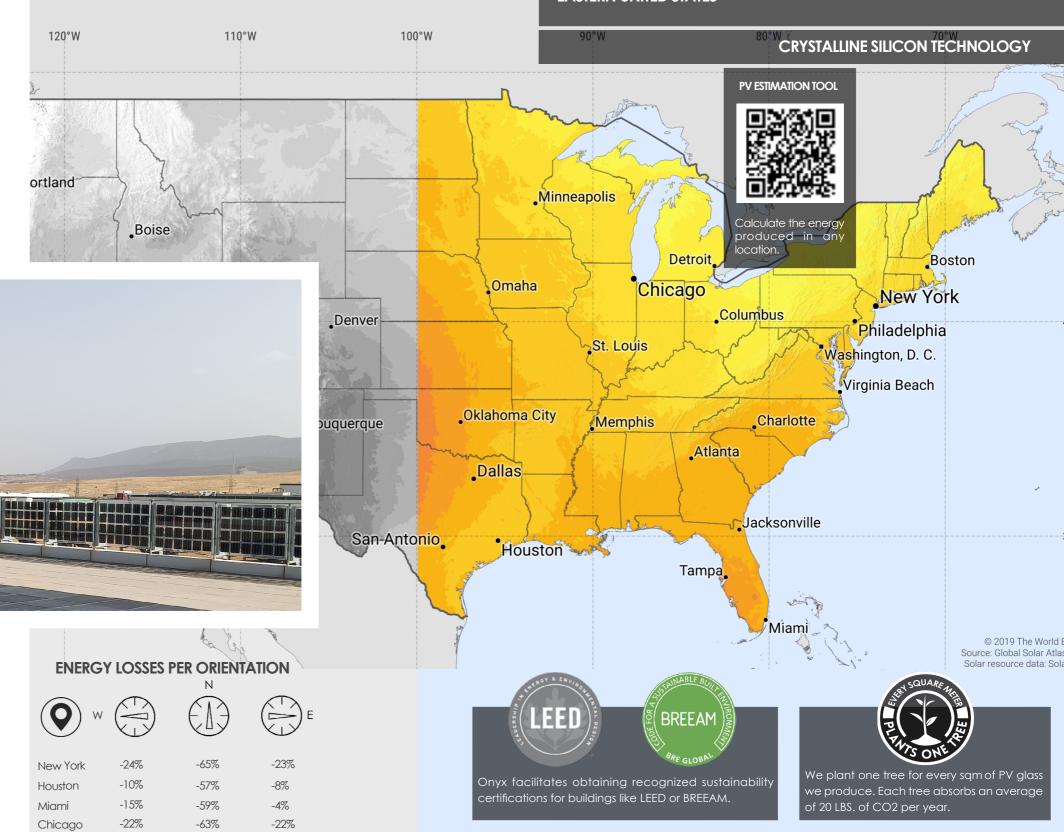
PV CURTAIN WALL

FEASIBILITY STUDY NEW YORK LOW CELL DENSITY PV GLASS



DATA CONSIDERED FOR CALCULATIONS



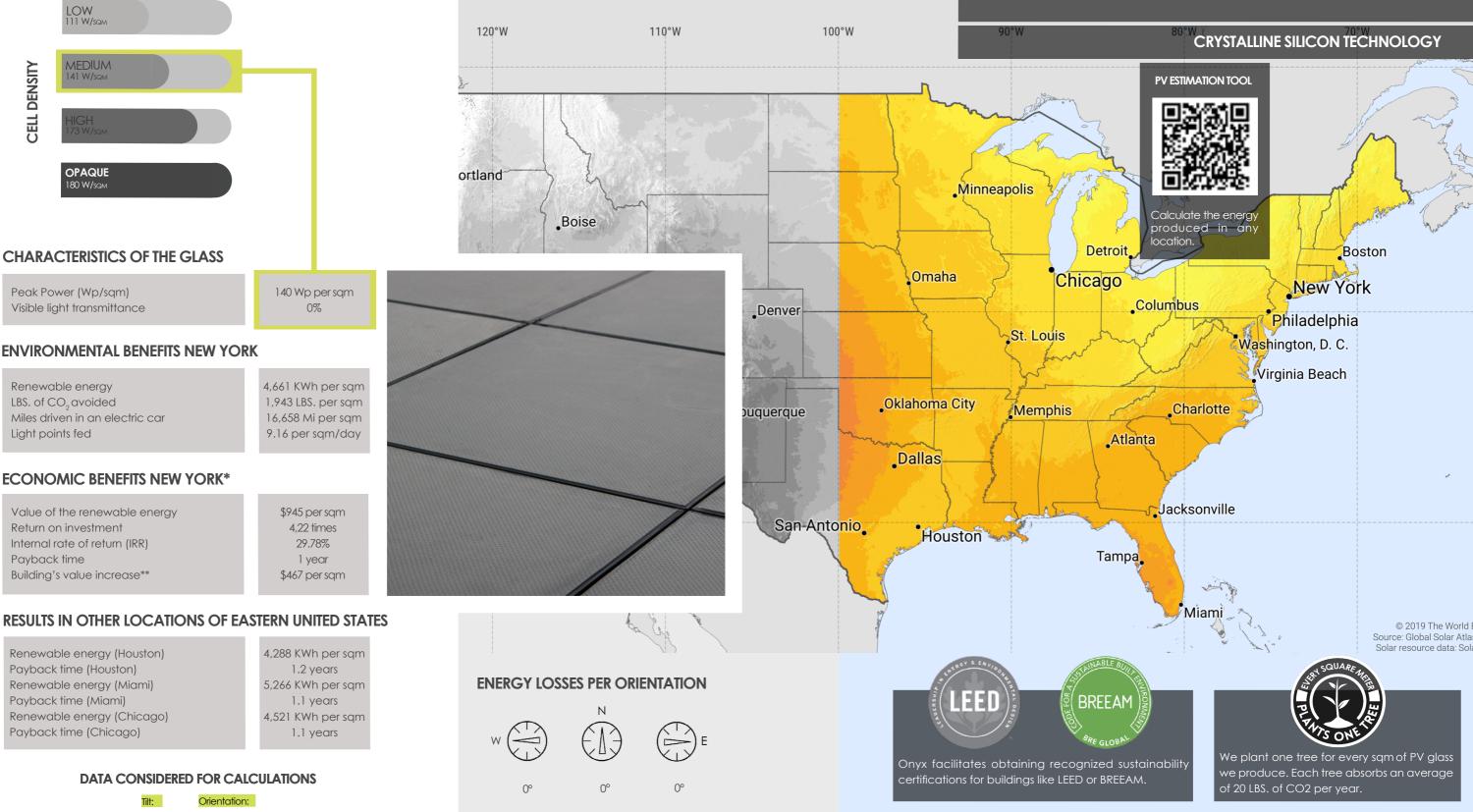


Data Calculated for a 35-year useful life.

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PV BALUSTRADE / BALCONY EASTERN UNITED STATES

FEASIBILITY STUDY NEW YORK **OPAQUE PV GLASS**



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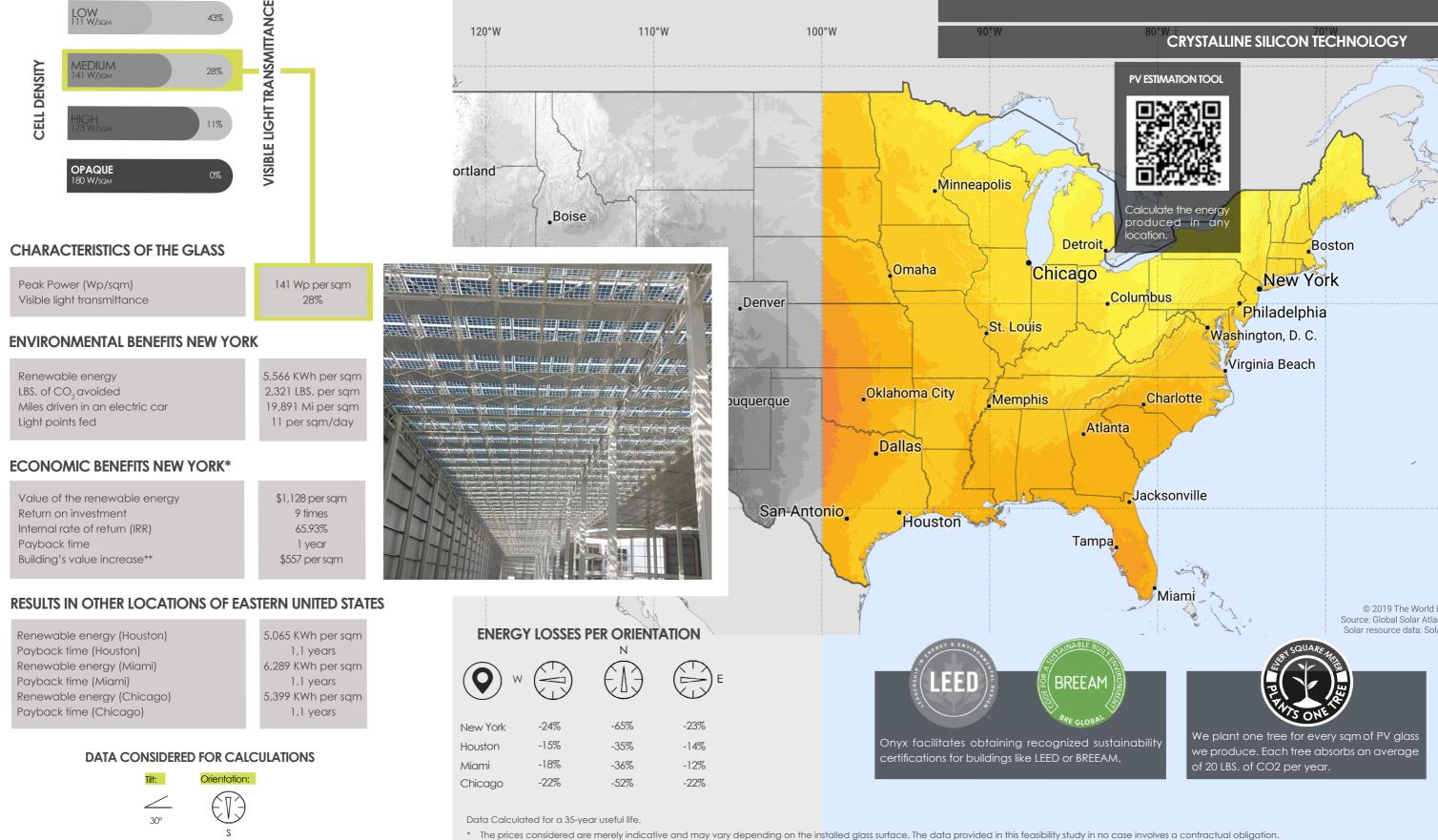
EASTERN UNITED STATES



0°

WALKABLE PV FLOOR

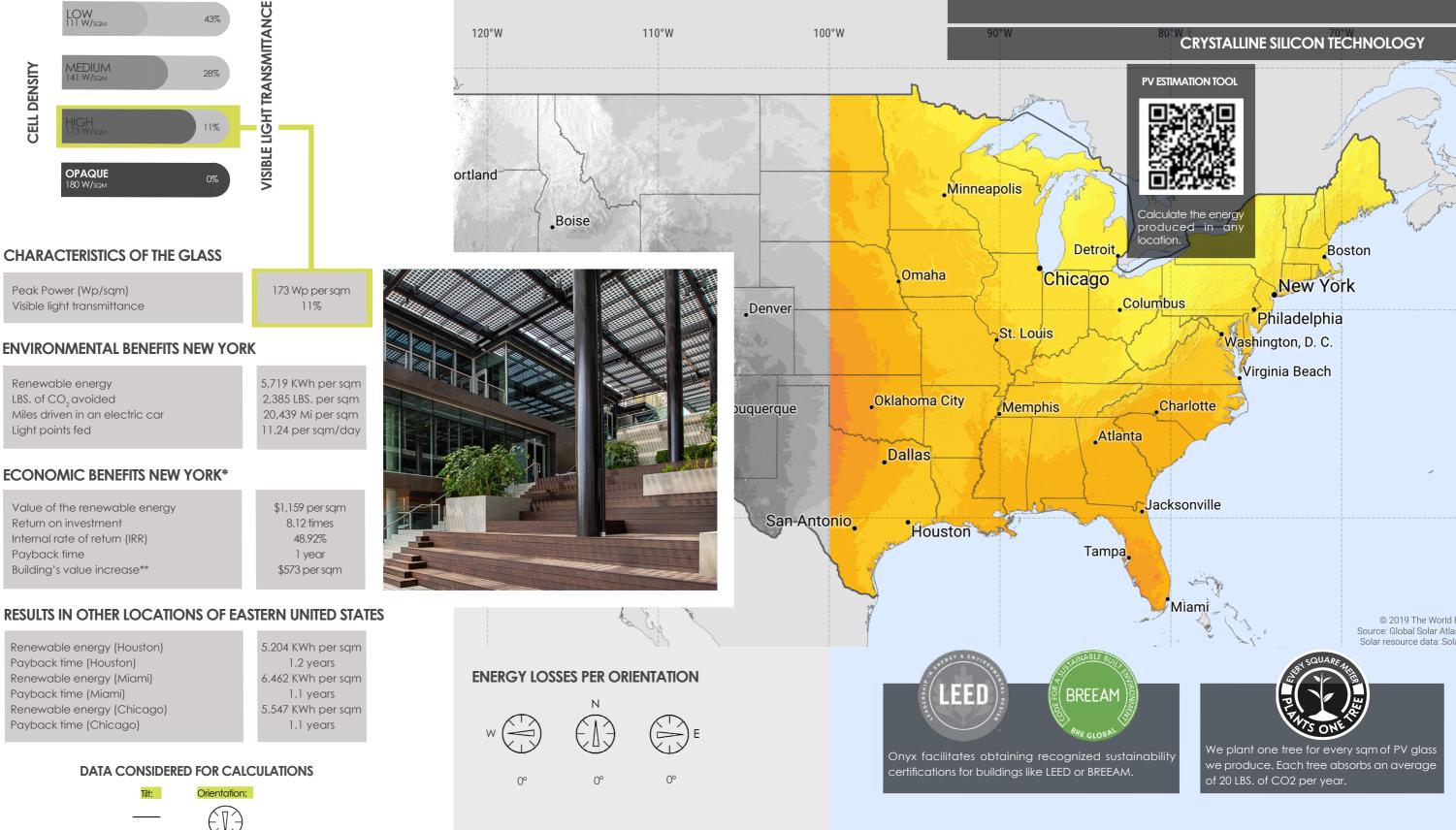
MEDIUM CELL DENSITY PV GLASS



EASTERN UNITED STATES



HIGH CELL DENSITY



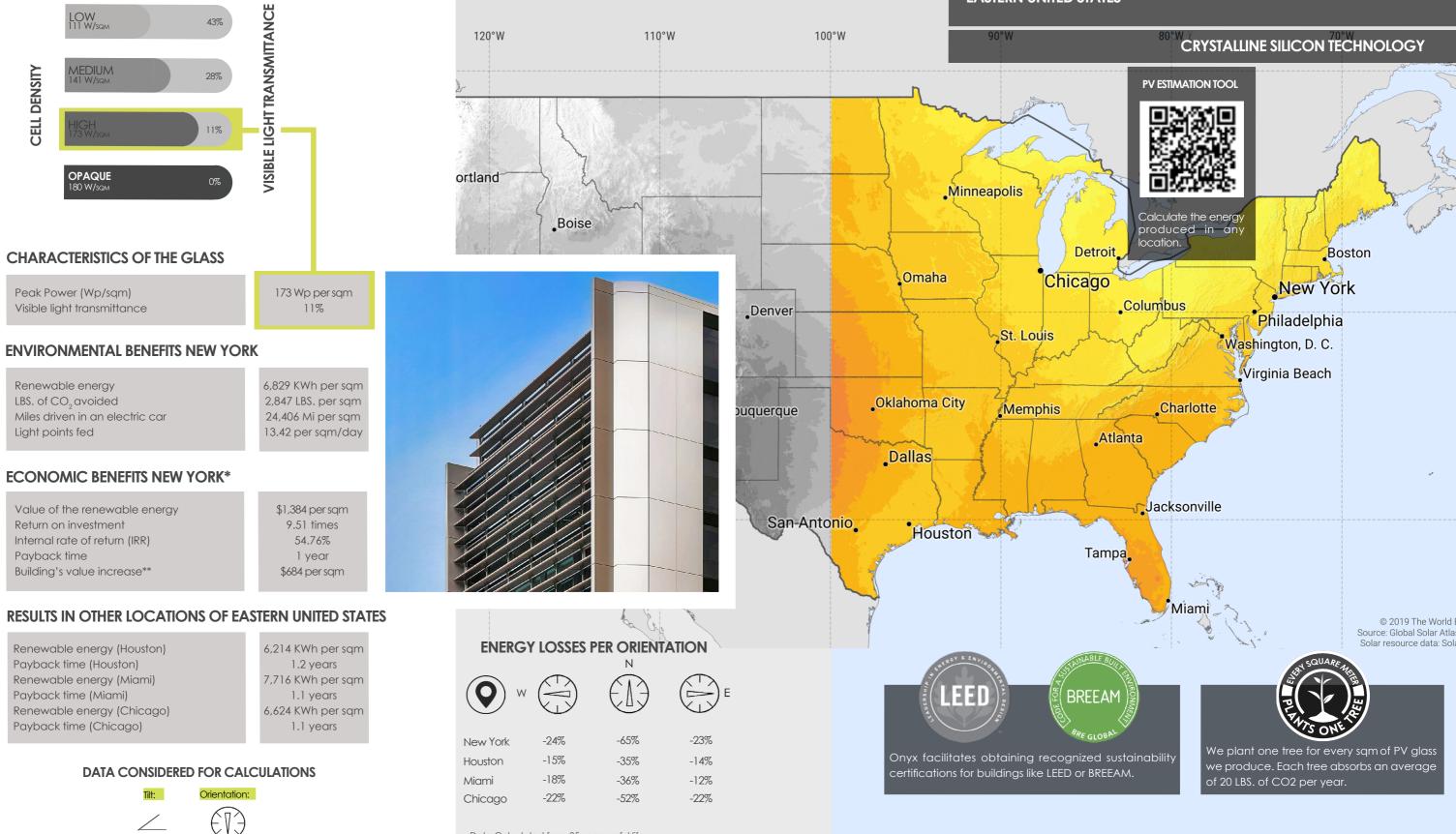
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HIGH CELL DENSITY PV GLASS

⊿∩°

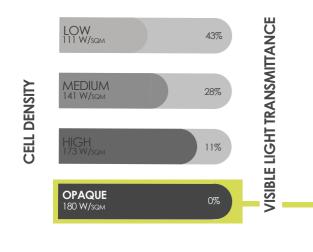


Data Calculated for a 35-year useful life.

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PV BRISE SOLEIL EASTERN UNITED STATES

FEASIBILITY STUDY NEW YORK **OPAQUE PV GLASS**



CHARACTERISTICS OF THE GLASS

Peak Power (Wp/sqm) Visible light transmittance 180 Wp per sqm 0%

4,905 KWh per sqm

2,045 LBS. per sqm

17,529 Mi per sqm 9.64 per sqm/day

ENVIRONMENTAL BENEFITS NEW YORK

Renewable energy LBS. of CO₂ avoided Miles driven in an electric car Light points fed

ECONOMIC BENEFITS NEW YORK*

Value of the renewable energy Return on investment Internal rate of return (IRR) Payback time Building's value increase**

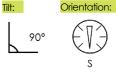
\$994 per sqm 6.38 times 42.17% l year \$491 per sqm

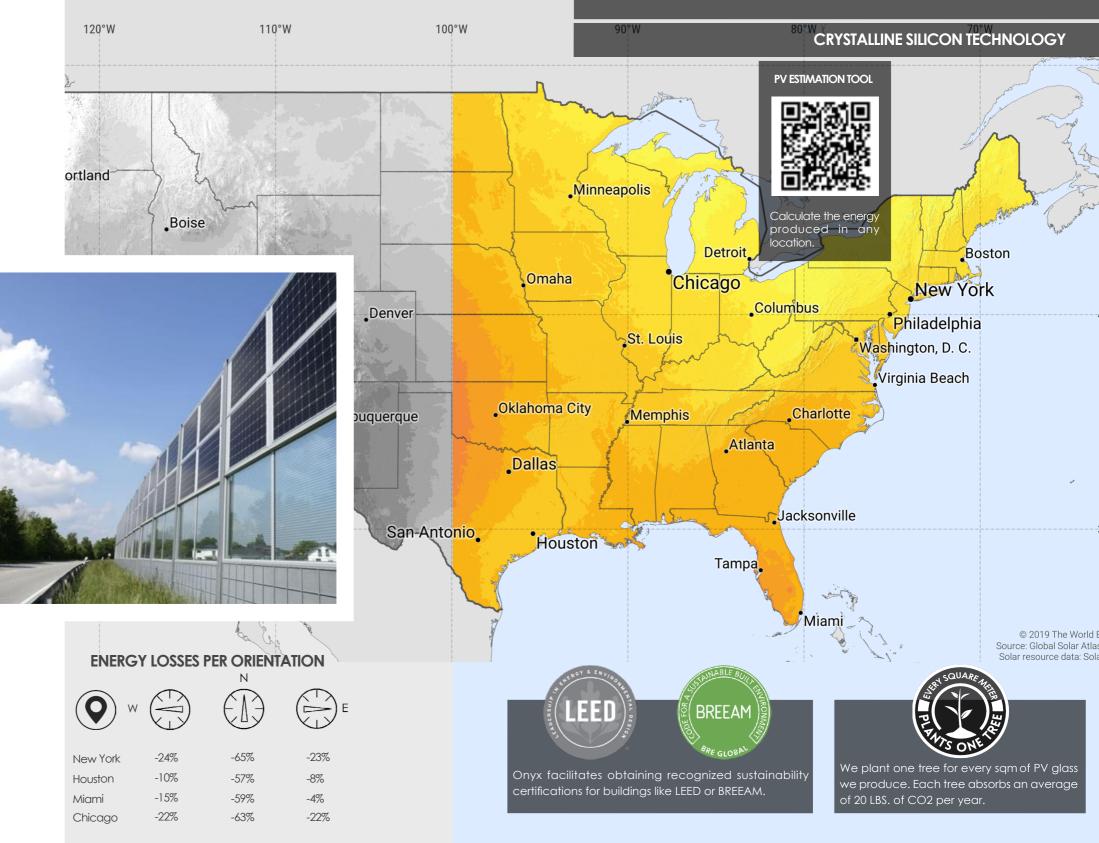
RESULTS IN OTHER LOCATIONS OF EASTERN UNITED STATES

Renewable energy (Houston)
Payback time (Houston)
Renewable energy (Miami)
Payback time (Miami)
Renewable energy (Chicago)
Payback time (Chicago)

4,463 KWh per sqm 1.2 years 4,757 KWh per sam 1.1 years 4,708 KWh per sqm 1.1 years

DATA CONSIDERED FOR CALCULATIONS



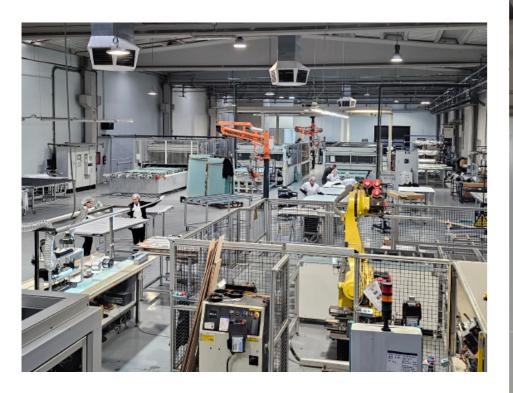


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PV NOISE BARRIER EASTERN UNITED STATES



Global A VERIFIED ENVIRONMENTAL DECLARATION

ECO PLATFORM
EDD
СРВ
VERIFIED

Environmental Product Declaration

EN ISO 14025:2010 EN 15804:2012+A2:2019



CRYSTALLINE PHOTOVOLTAIC SOLAR GLASS

G/GM07244 G/GM07211 G/GM03644 G/GM01688A

Expiry date:

The declared validity is to registration and publication

GlobalEPD Code: GlobalEPD EN15804-063

ECO PLATFORM & AENOR

ECO Platform is a European Association made up of DAP Verification Program Administrators, industrial associations, and life cycle analysis experts, which guarantees the quality and conformity of environmental declarations of construction products in accordance with ISO 14025 and EN 15084 Standards. ECO Platform represents a common pan-European framework for DAPs. The Programs commit to common quality and verification criteria, which are regularly audited.

AENOR is a founding member of ECO Platform and passed audits in 2014 to issue Environmental Declarations with the ECO Platform EPD EN 15804 VERIFIED™ logo, being one of the first four European Administrators along with International EPD System (Sweden), IBU (Germany) and BAU EPD (Austria).



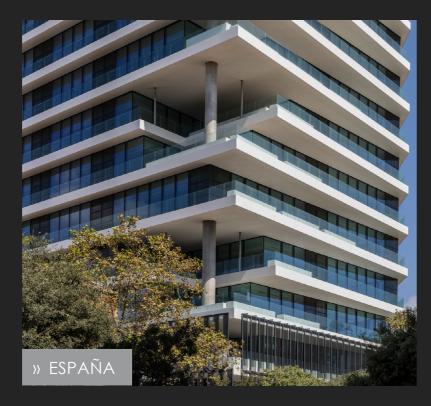
GLOBAL EPD SCAN THE QR TO DOWNLOAD OUR EPD





The Environmental Product Declaration (EPD) is a certified document that provides our clients with reliable, verified, and transparent information regarding the environmental impact throughout the life cycle of a product. This information is based on a Life Cycle Analysis (LCA) study conducted in accordance with the Product Category Rules (PCR) developed by the Eco-labeling Program. In our specific case, the study has been carried out under the **Product Category** Rule for Construction Products UNE EN 15804:2012+A2.

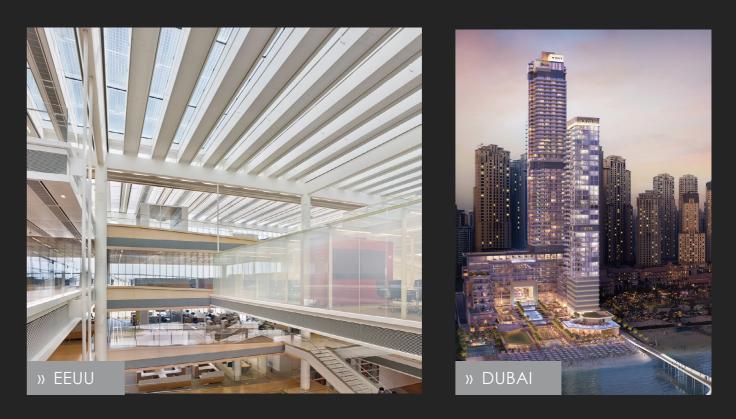
















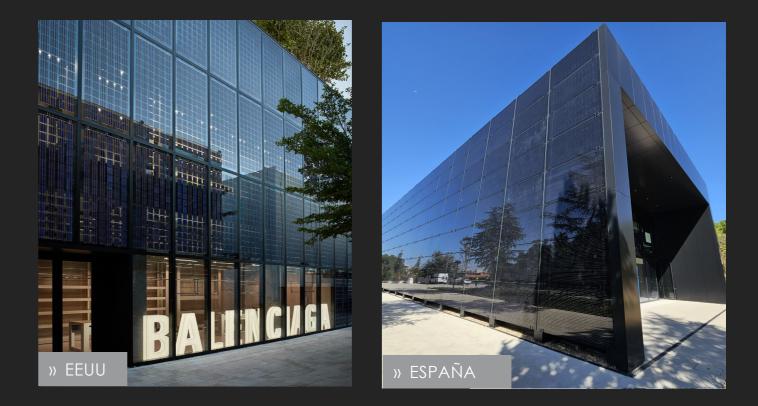




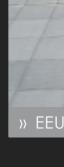




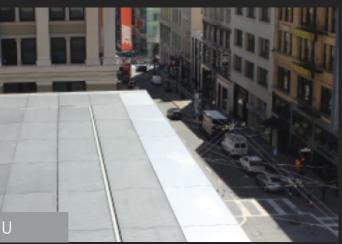


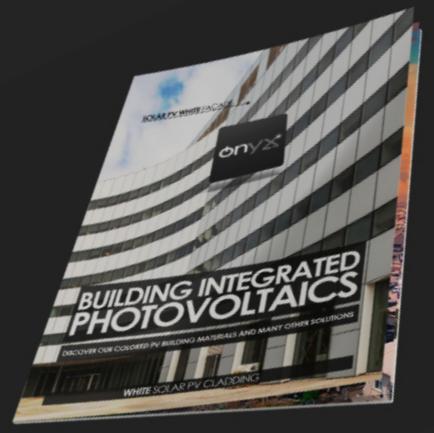














Scan this QR code to acces our catalog.

UNLOCKING THE POWER OF PHOTOVOLTAIC GLASS:

Are you curious about the potential of photovoltaic (PV) glass for your project? Our team at Onyx Solar is here to guide you through the process and help you harness the benefits of this innovative technology.

WHAT DOES PV GLASS BRING TO YOUR PROJECT?

✓ Aesthetic Integration: Say goodbye to bulky solar panels! PV glass blends seamlessly with architectural designs, enhancing the visual appeal of your building.

✓ Environmental Impact: By using PV glass, you contribute to reducing carbon emissions. Imagine the positive impact on our planet!

HOW ONYX SOLAR CAN ASSIST YOU

Our technical team offers free feasibility studies tailored to your project. Here's what we provide:

· Product Datasheets: Detailed information about our PV glass products, including technical specifications.

•Shop Drawings: Visual representations to aid in your design process.

• Energy Estimates: Understand the potential energy output based on your installation.

·CO, Emissions Prevented: Quantify the environmental benefits of using PV glass.

·Cost Analysis: Get a clear picture of the investment required.

• Payback and ROI: Evaluate the financial returns over time.

•Tax Credits and Incentives: Explore available incentives to make an informed decision.

FACTORY C/ Palma de Mallorca, 8 Avila · Spain · 05194 Phone: +34 920 21 00 50

info@onyxsolar.com

The value of the renewable energy generated is just a preliminary estimate and does not imply any kind of guarantee. Factors such as surrounding shadows, self-shades, or other external aspects have not been taken into account. These factors might lead to a reduction in energy production. In addition, other potential losses due to BOS are also excluded from these calculations. The calculation has been done using PVWATTS and PVSYST in pre-design mode. Onyx Solar Energy S.L. makes no representations about the accuracy of these estimates and does not warrant, or guarantee, whether express or implied, that the content in the report is accurate, complete, or up to date.

 \checkmark Energy Generation: PV glass generates clean electricity from sunlight, reducing your reliance on traditional power sources.



OFFICE 79 Madison Avenue, Suite #231 New York · USA · 10016 Phone: +1 917 261 4783 usa@onyxsolar.com

www.onyxsolar.com