

The facade stops being a passive structure and becomes an *active energy generator*.

Solar cells integrate directly into the glass, spandrel and cladding a building was already going to buy. The cells sit behind the finish and are not visible from outside, so the exterior looks exactly as drawn. Same installation, same trades, same schedule.

HOW THE UNIT IS BUILT

01

Glass

Any configuration. Float, annealed, tempered, heat strengthened, laminated, low E, reflective, colored.

02

Cavity

Creates shadowbox depth within the unit. The cell pattern is not visible from the exterior.

03

PV layer

Cells against a black backing, generating continuously behind the architect's chosen finish.

MODELED CASE STUDIES

5.7

 GWh / year

Airport terminal

54,000 modules across 600,000 sq ft of facade and roof. White cladding panels at 84 Wp and fully transparent solar windows at 60 Wp, with 1% visible light reflectance.

2.95

 GWh / year

New York skyscraper

21,319 modules on a 1.9M sq ft building, using only 14% of the facade. Light spandrel panels at 120 Wp. The vision glass is left alone.

GENERATION BY ORIENTATION, RELATIVE TO UNSHADED SOUTH

South		100%
Southeast / Southwest		80%
East / West		65%
North		40%

WHAT IT MEANS FOR THE PROJECT

- **Design freedom is preserved.** Any glass type, any tint, metal and opaque finishes included. Each system is engineered to maximize output within the finish the architect has already chosen.
- **No new trades, no exposed wiring.** DC runs inside the aluminum extrusion, panels connect at the mullion with MC4 connectors, and the air barrier is never penetrated.
- **Maintenance does not change.** The same cleaning and maintenance processes already used on glass.
- **Made in America,** without the Section 232 tariff exposure carried by conventional imported facade systems.

AT A GLANCE

Towers under contract	5
First tower	In manufacturing
Material lifespan	35 years
New build and retrofit	Both
Approved vendor	PANYNJ, AECOM

Full architectural presentation, generation modeling and financial analysis available on request. Helios is a registered AIA CES provider and delivers accredited lunch and learn sessions.

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If it can be printed, coated or clad, it can *generate*.

Every unit below produces power. The finish is chosen first and the generation is engineered behind it, which is why the system does not constrain the elevation an architect has already drawn.



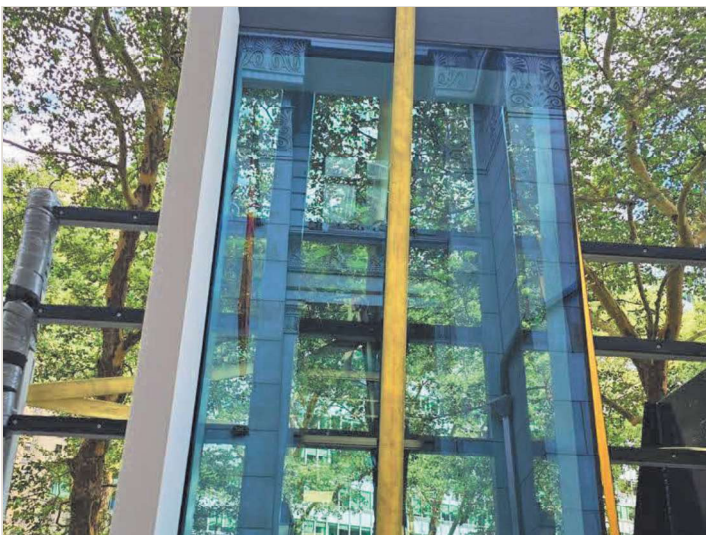
Brick

Full masonry appearance on a generating panel. Wood, stucco, terracotta and metal finishes are produced the same way.



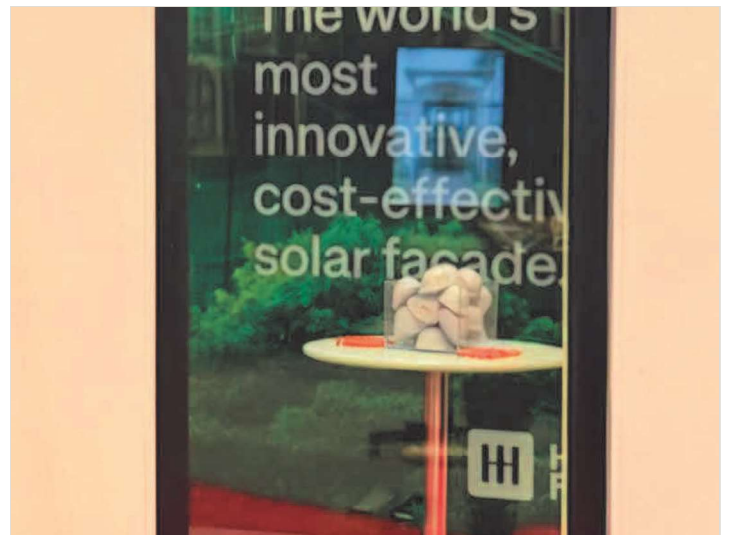
Custom print

Photographic and full color artwork printed to the glass. Signage, branding and artwork become part of the generating surface.



Full size unit

Production scale insulated glass unit. Handled, glazed and installed exactly as a conventional unit of the same dimension.



Punch window

Installed in a standard wall opening. Vision glass reads as vision glass from both sides, with no visible cell pattern.