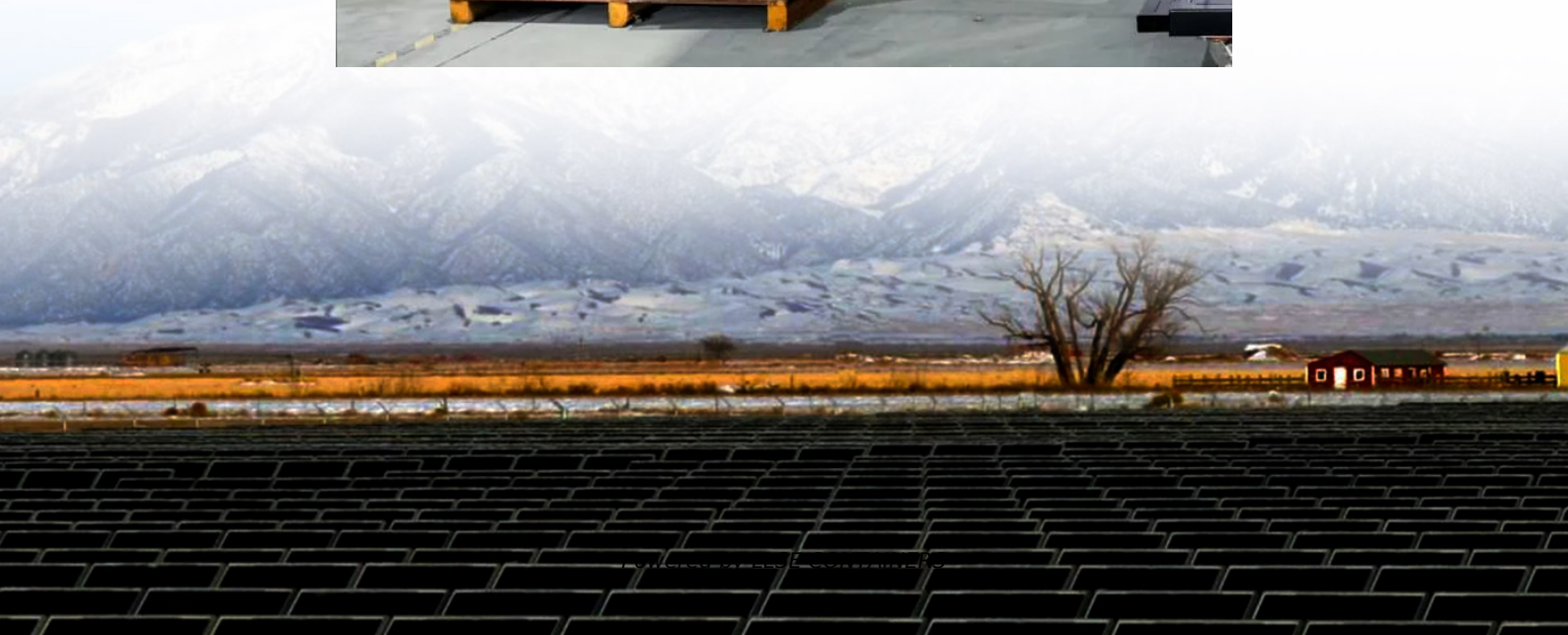


Solar curtain wall of office building in Alexandria Egypt





Overview

What is a photovoltaic curtain wall?

They enhance thermal comfort and help prevent the greenhouse effect. A standard curtain wall offers no return on investment. In contrast, a photovoltaic curtain wall not only insulates the building but also generates power for over 30 years. This reduces monthly electricity bills and ultimately pays for itself over time.

Does Photovoltaic Glass fit in a curtain wall?

No, the BIPV photovoltaic glass structurally does not differ from other types of conventional glazing. Therefore, it is integrated into the building envelope (curtain wall, façade, or skylight) like any construction material. What solar control and comfort advantages does photovoltaic glass offer in a curtain wall?

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Does a PCM double glazing unit reduce electricity consumption in Alexandria?

Figure 12 shows the monthly cooling electric consumption in Alexandria as retrieved from the design builder simulation. It is clear that the office building with the integrated PCM double glazing units is more effective than the one with traditional DGUs in reducing the electric consumption required for cooling the building.

What is a glass curtain wall?

Glass curtain walls (GCW) are a common feature in most modern buildings nowadays. The architectural aesthetics appearance of glass curtain walls helped in spreading its usage especially with office buildings.



Solar curtain wall of office building in Alexandria Egypt

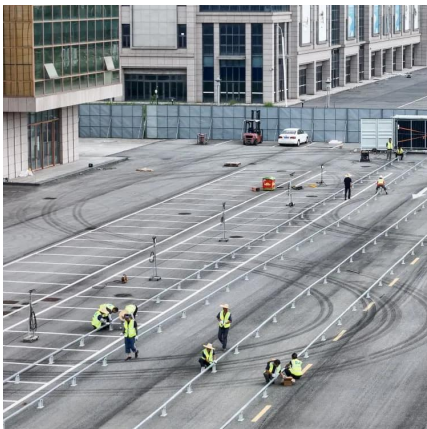


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