



Energy Performance

Sustainability is at the forefront of the world's agenda. And, sustainable design is, more than ever, a key consideration for the building industry. As the greening movement has gained momentum, Solar Photovoltaic Systems have increased in popularity as an effective tool that architects and builders can specify to reduce a building's environmental impact.

The amount of energy produced by a solar energy system depends on a number of factors including solar insolation at the site, angle and orientation of modules, and shading.

The table below shows examples of 3 hypothetical 100m² systems located in London, Tokyo, and Los Angeles. For these examples, assume that each installation has a south facing roof at a 30 degree angle with no shading.

SITE	LONDON	TOKYO	LOS ANGELES
Insolation (kWh/m ² /yr)	1112	1405	2028
SYSTEM			
No of modules	100	100	100
System width (m)	8.08	8.08	8.08
System height(m)	15.8	15.8	15.8
System area (m ²)	127.7	127.7	127.7
System weight (kg)	1550	1550	1550
System rated power (kW)	17	17	17
OUTPUT			
Energy Output (kWh/yr)	14099	17517	25288