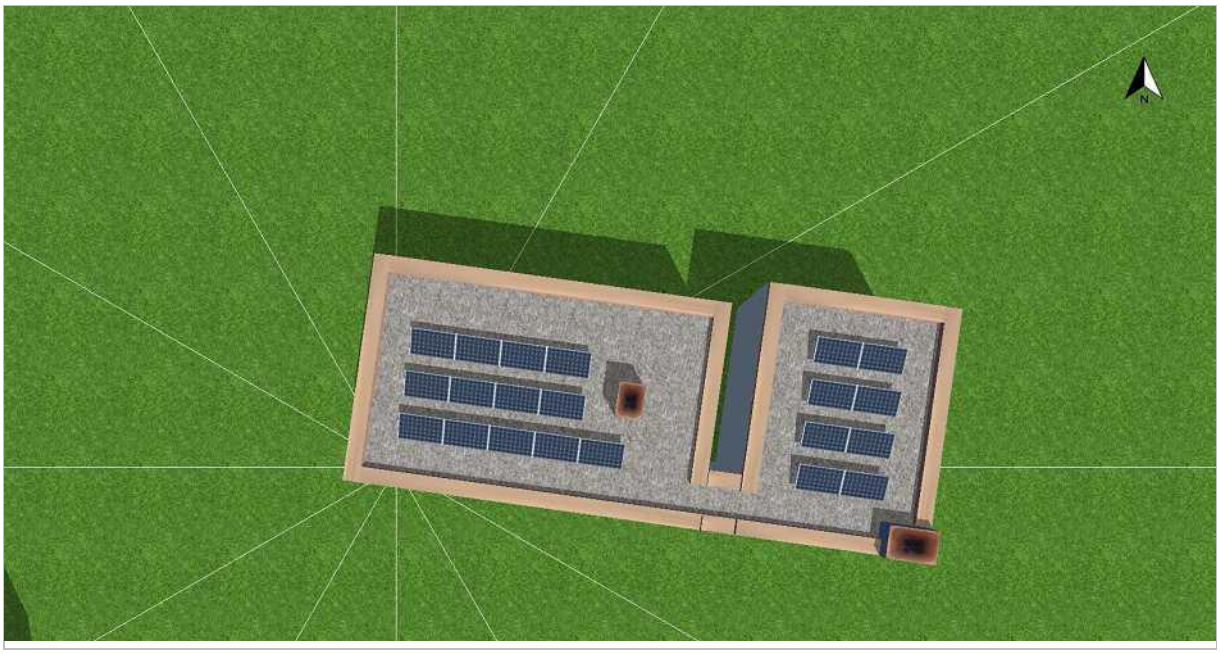
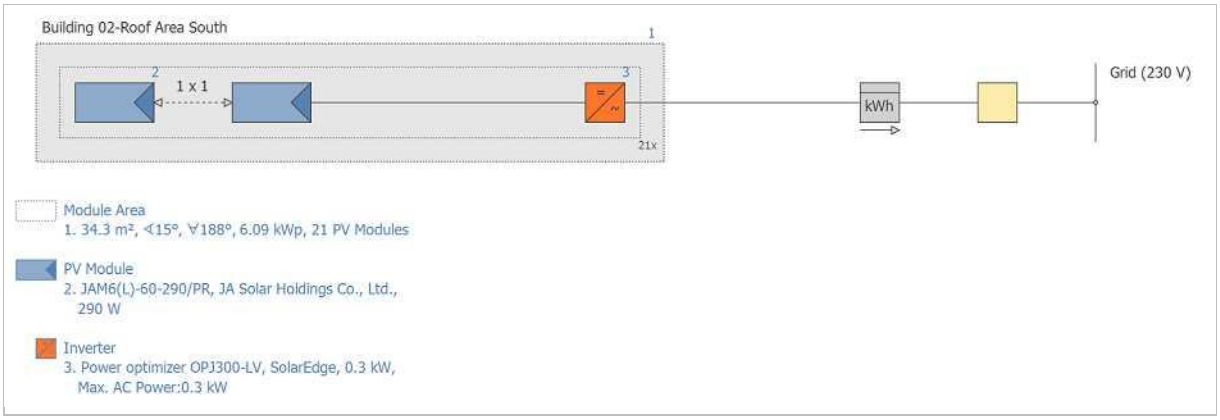
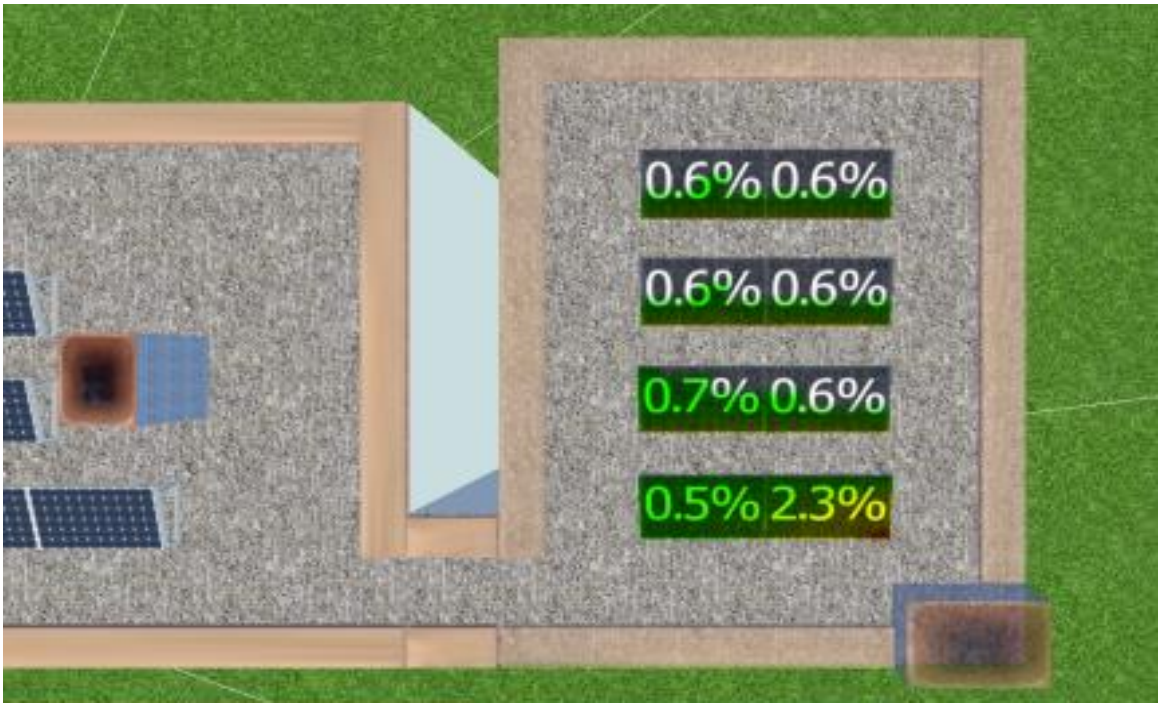
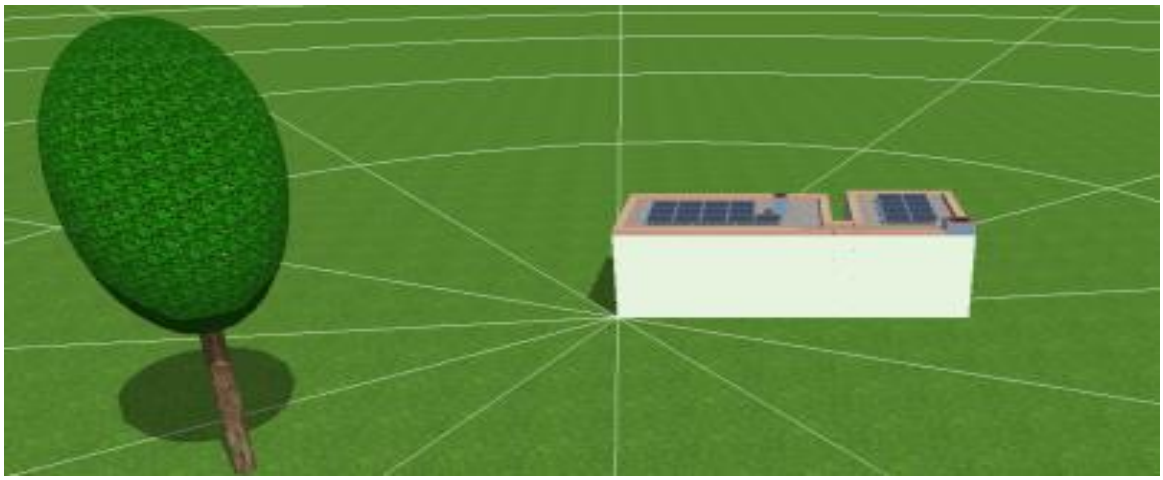


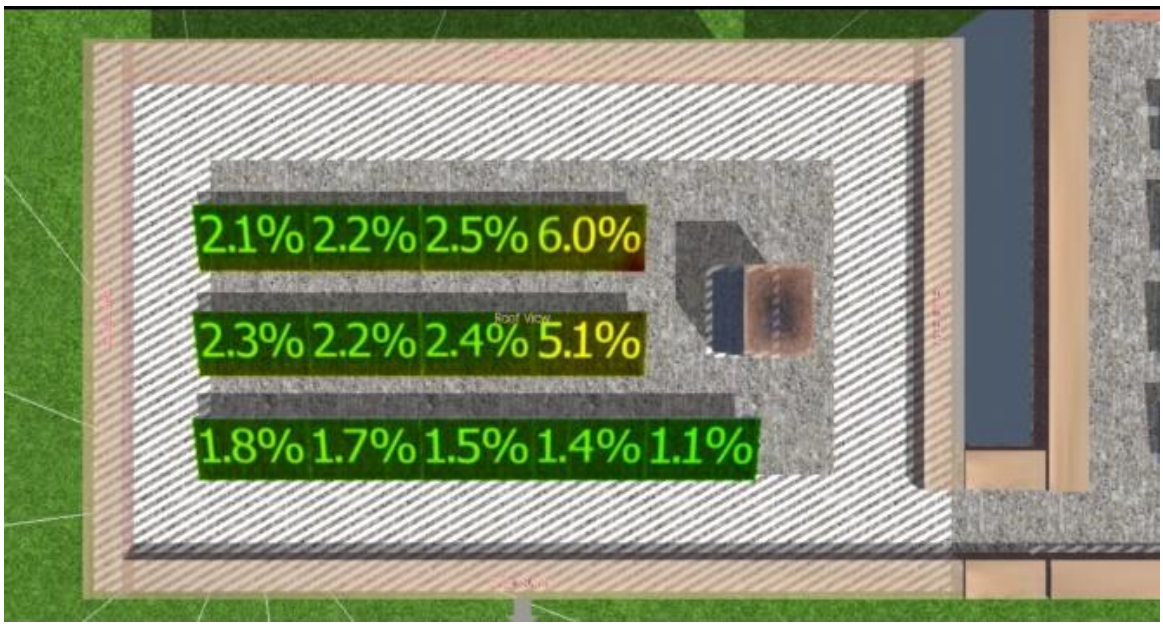
3D, Grid Connected PV System		
Climate Data	Hampstead (1991 - 2010)	
PV Generator Output	5.99	kWp
PV Generator Surface	34.3	m²
Number of PV Modules	21	
Number of Inverters	1	



The yield		
PV Generator Energy (AC grid)	5,555	kWh
Spec. Annual Yield	912.15	kWh/kWp
Performance Ratio (PR)	86.5	%
Calculation of Shading Losses	5.9	%/year
CO_2 Emissions avoided	3,333	kg / year


0.6% 0.6%
0.6% 0.6%
0.7% 0.6%
0.5% 2.3%




2.1% 2.2% 2.5% 6.0%
2.3% 2.2% 2.4% 5.1%
1.8% 1.7% 1.5% 1.4% 1.1%

Set-up of the system

Climate Data	Hampstead
Type of System	3D, Grid Connected PV System

PV Generator Module Area

Name	Building 02-Roof Area South
PV Modules*	21 x JAM6(L)-60-290/PR
Manufacturer	JA Solar Holdings Co., Ltd.
Inclination	15 °
Orientation	South 188 °
Installation Type	Mounted - Roof
PV Generator Surface	34.3 m²

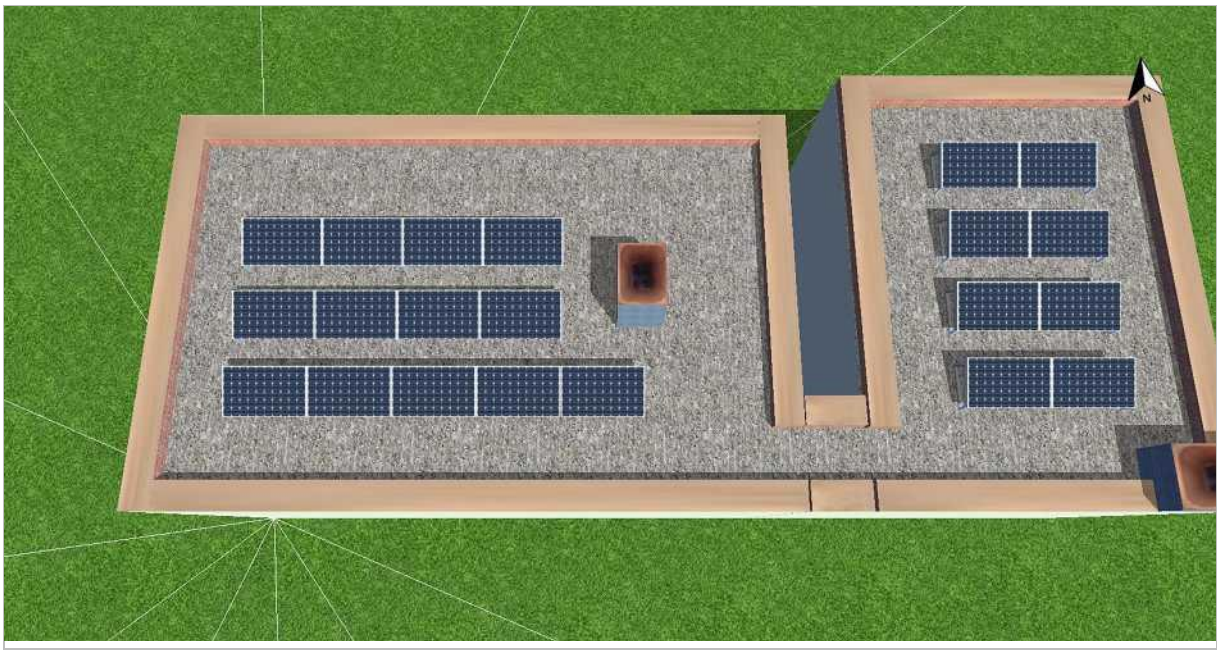


Figure: 3D Design for Building 02-Roof Area South

Inverter

Module Area	**Building 02-Roof Area South**
Inverter 1*	21 x Power optimizer OPJ300-LV
Manufacturer	SolarEdge
Configuration	MPP 1: 1 x 1

AC Mains

Number of Phases	1
Mains Voltage (1-phase)	230 V
Displacement Power Factor (cos phi)	+/- 1

* The guarantee provisions of the respective manufacturer apply

Simulation Results

PV System

PV Generator Output	5.99	kWp
Spec. Annual Yield	912.15	kWh/kWp
Performance Ratio (PR)	86.5	%
Yield Reduction due to Shading	5.9	%/year
CO_2 Emissions avoided	3,333	kg / year

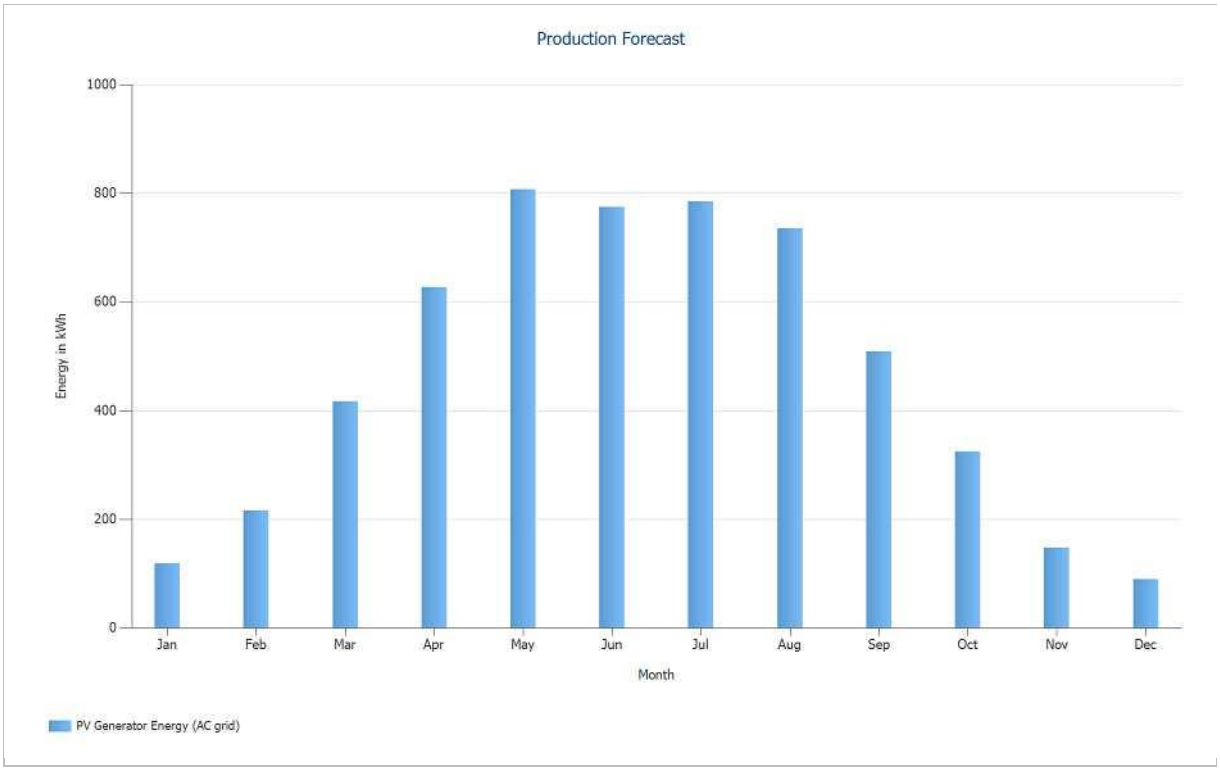


Figure: Production Forecast