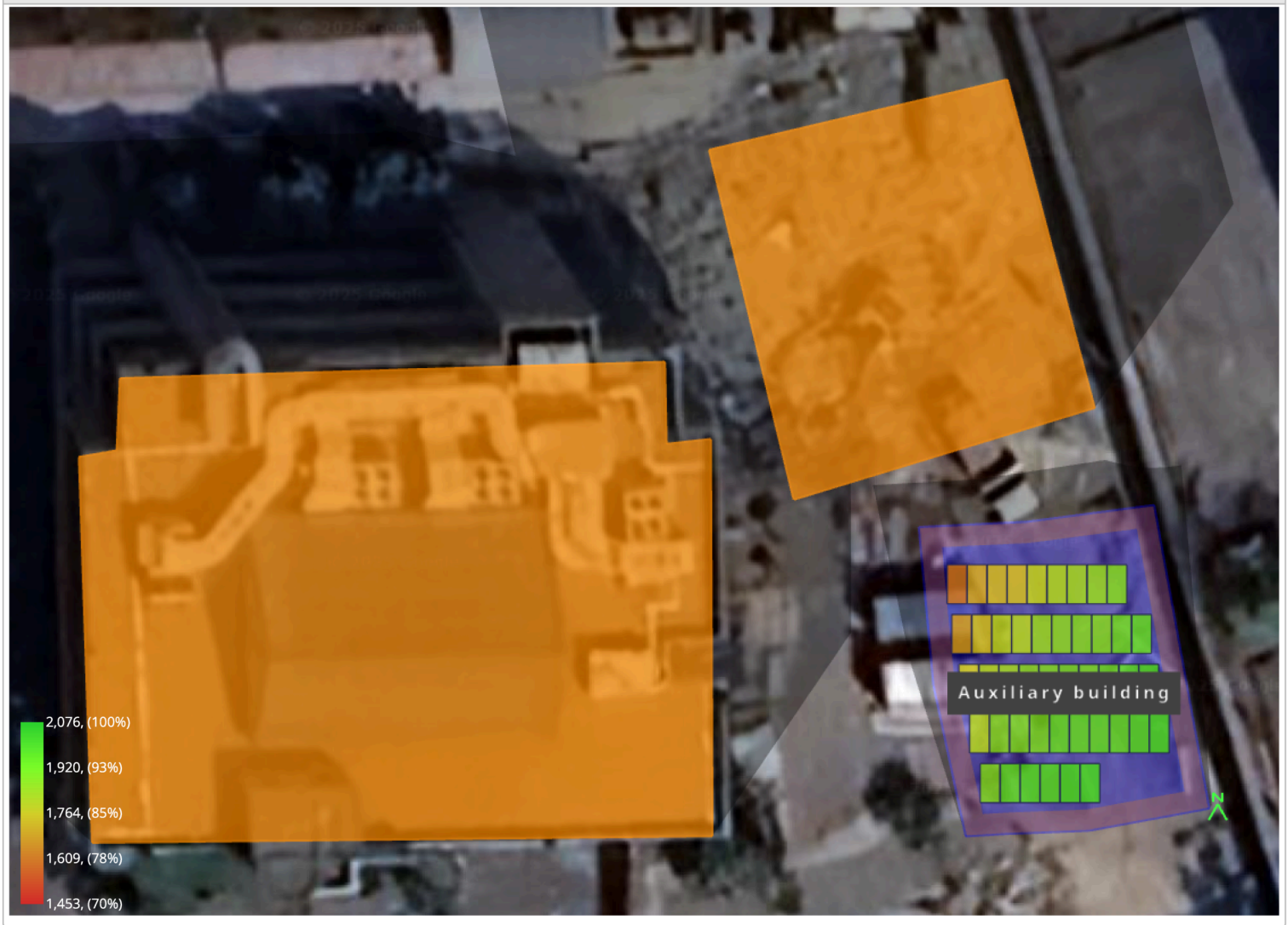
Design 45KVA inverter power backup and solar solution (Auxiliary buiding) world Bank, ECOWAS SECRETETIATE ABUJA

Shading Heatmap



Shading by Field Segment

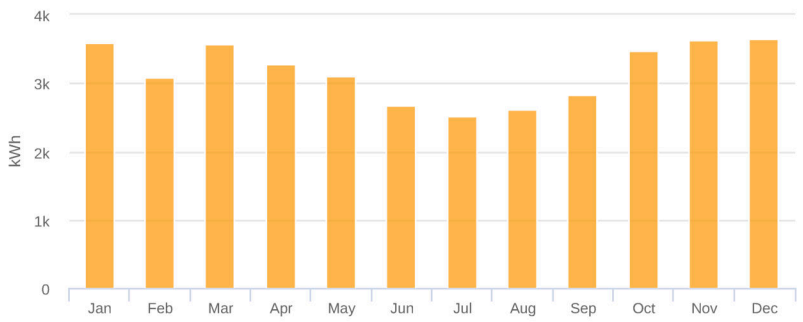
Description	Tilt	Azimuth	Modules	Nameplate	Shaded Irradiance	AC Energy	TOF[2]	Solar Access	Avg TSRF [2]
Auxiliary building	10.0°	180.0°	45	24.8 kWp	1,865.7kWh/m^2	38.0 MWh[1]	99.8%	90.1%	89.9%
Totals, weighted by kWp			**45**	**24.8 kWp**	**1,865.7kWh/m^2**	**38.0 MWh**	**99.8%**	**90.1%**	**89.9%**

[1] approximate, varies based on inverter performance
[2] based on location Optimal POA Irradiance of 2,075.9kWh/m^2 at 17.9° tilt and 175.0° azimuth

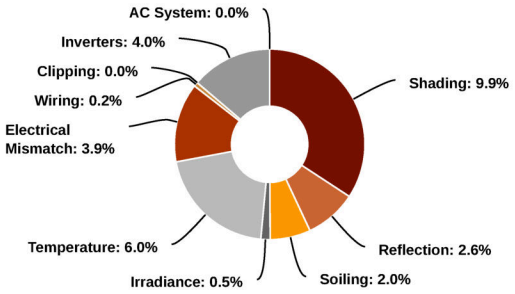
Solar Access by Month

Description	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
Auxiliary building	92%	91%	89%	89%	89%	88%	88%	89%	89%	90%	92%	93%
Solar Access, weighted by kWp	**92.2%**	**91.0%**	**89.5%**	**88.9%**	**89.4%**	**88.2%**	**88.0%**	**88.8%**	**89.0%**	**89.7%**	**91.7%**	**92.8%**
AC Power (kWh)	**3,582.3**	**3,091.9**	**3,570.7**	**3,273.4**	**3,104.3**	**2,670.5**	**2,525.0**	**2,618.3**	**2,823.7**	**3,472.9**	**3,629.6**	**3,639.6**

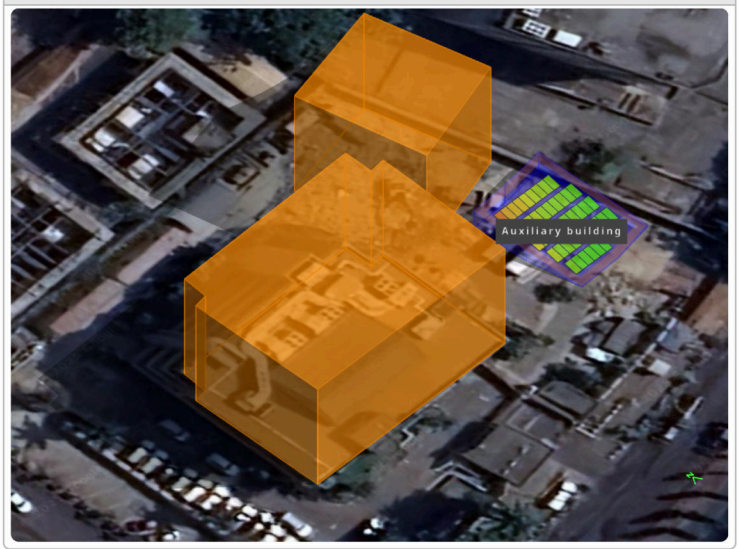
Monthly Production



Sources of System Loss



Southwestern Angle



Southeastern Angle