



## 1.5mw Solar park installed in Spain, September 2008 – Performance data

**Performance is Approximately 10% higher than predicted**

Month	Days	HOURS INSOLATION DAILY (see note 1)	HOURS INSOLATION ANNUAL (see note 1)	Global radiation per day (optimum angle) (Kwh/m <sup>2</sup> day)	Global radiation per month (optimum angle) (Kwh/m <sup>2</sup> month)	HSP (kWh/kWp)	PR	REAL ENERGY (kWh/kWp)	ESTIMATED PRODUCTION (kWh)	REAL PRODUCTION (kWh)	DIFFERENCE (kWh)
January	31	9.80	303.80	3.79	117.49	117.49	0.796	93.50	140,243.42	154,702.00	-14,458.58
February	28	10.80	302.40	5.27	147.56	147.56	0.795	117.30	175,951.75	169,488.00	6,463.75
March	31	12.10	375.10	5.56	172.267	172.267	0.780	134.44	201,660.56	226,419.00	-24,758.44
April	30	13.40	402.00	5.97	179.1	179.1	0.778	139.36	209,039.43	212,406.00	-3,366.57
May	31	14.50	449.50	6.35	196.757	196.757	0.767	150.87	226,312.32		
June	30	15.10	453.00	6.69	200.7	200.7	0.744	149.31	223,970.09		
July	31	14.80	458.80	7.08	219.573	219.573	0.738	162.14	243,216.32		
August	31	13.80	427.80	6.52	202.089	202.089	0.739	149.38	224,068.29		
September	30	12.50	375.00	5.58	167.28	167.28	0.753	125.89	188,828.49		
October	31	11.20	347.20	5.18	160.642	160.642	0.775	124.54	186,802.55	19,702.00	167,100.55
November	30	10.10	303.00	4.41	132.3	132.3	0.796	105.28	157,921.57	192,183.00	-34,261.43
December	31	9.50	294.50	3.69	114.266	114.266	0.796	90.93	136,395.06	132,390.00	4,005.06
<b>Total days</b>	<b>365</b>	<b>12.30</b>	<b>4,492.10</b>	<b>5.51</b>	<b>2,010.02</b>	<b>2,010.02</b>	<b>0.771</b>	<b>1,542.94</b>	<b>2,314,409.86</b>	<b>1,107,290.00</b>	<b>100,724.35</b>

**Note 1 - Insolation** is a measure of solar radiation energy received on a given surface area in a given time. It is commonly expressed as average irradiance in watts per square meter (W/m<sup>2</sup>) or kilowatt-hours per square meter per day (kW·h/(m<sup>2</sup>·day)) (or hours/day). In the case of photovoltaics it is commonly measured as kWh/(kW<sub>p</sub>·y) (kilowatt hours per year per kilowatt peak rating).

