



Spanish References



Note:

All used data within this analysis (raw data, pictures, graphs, etc.) is the property of:

DEGERenergie GmbH
Solar Tracking Systems
Industriestraße 70
72160 Horb am Neckar
www.degerenergie.com
info@DEGERenergie.com

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Lleida
 Location: Lleida
 Country/Region: Spain/Lleida
 Longitude: 0° 38' E
 Latitude: 41° 37' N

System configuration:

Rated Installation output: 110,7 kW
 Number of trackers: N/A
 Number of modules: Sanyo 210W
 Number of inverters: SMA SMC 6000

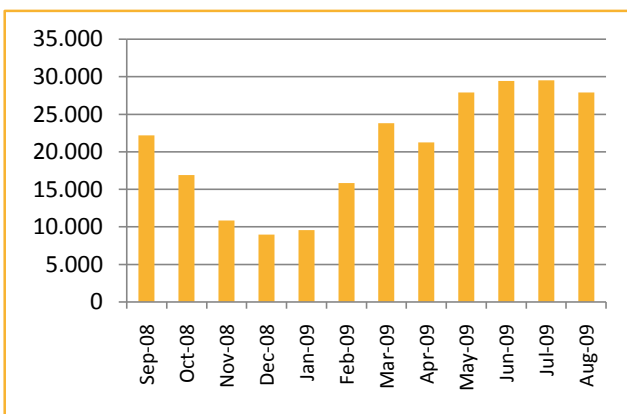
Production period

September 2008 - August 2009

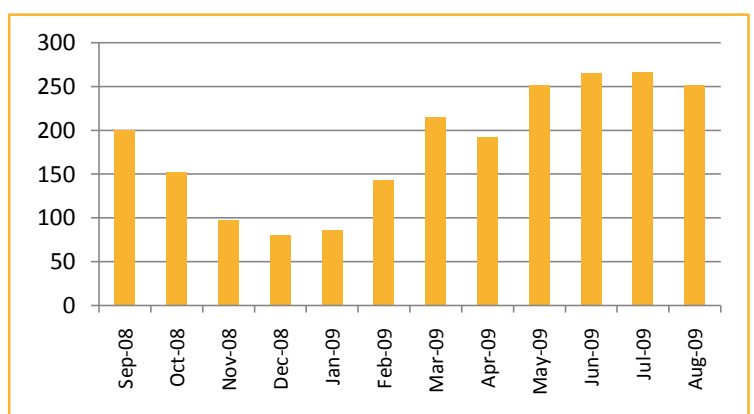
Month	kWh total	kWh/kWp	Fixed System kWh/kWp	Additional Yield
Sep-08	22.162,50	200,20	138,67	44%
Oct-08	16.864,43	152,34	103,09	48%
Nov-08	10.828,56	97,82	70,87	38%
Dec-08	8.938,58	80,75	45,71	77%
Jan-09	9.557,70	86,34	52,07	66%
Feb-09	15.832,90	143,03	103,21	39%
Mar-09	23.767,65	214,70	145,28	48%
Apr-09	21.249,65	191,96	145,46	32%
May-09	27.888,81	251,93	167,89	50%
Jun-09	29.396,05	265,55	172,96	54%
Jul-09	29.484,07	266,34	177,60	50%
Aug-09	27.882,88	251,88	169,55	49%
TOTAL	243.854	2.203	1.492	48%



Lleida: 110,7 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Picanda Solar
 Location: Bell-Iloch d'Urgell
 Country/Region: Spain/Lleida
 Longitude: 0°44'24" E
 Latitude: 41°39'28" N

System configuration:

Rated installation output: 110,7 kWp
 Number of trackers: 18ut DEGERtraker 5000NT
 Number of modules: 540ut SANYO HIP-205NKHE1
 Number of inverters: 18ut Mini Central 6000TL/55

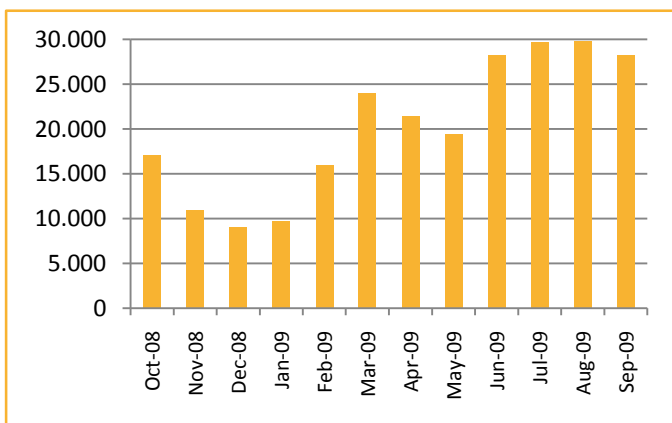
Production period

October 2008 - September 2009

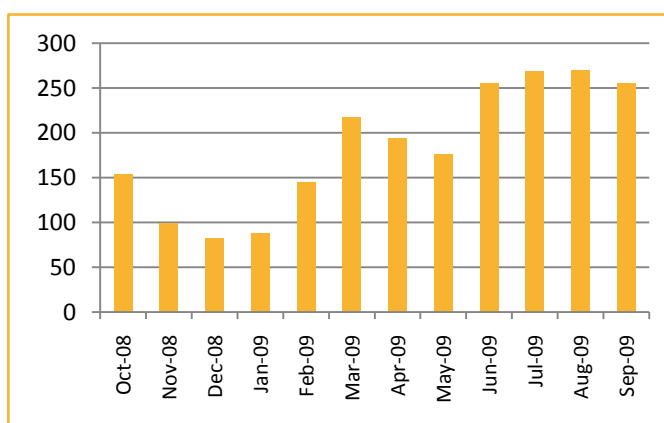
Month	kWh total	kWh/kWp
Oct-08	17.052	154,04
Nov-08	10.949	98,91
Dec-08	9.038	81,64
Jan-09	9.664	87,30
Feb-09	16.009	144,62
Mar-09	24.032	217,09
Apr-09	21.486	194,09
May-09	19.447	175,67
Jun-09	28.199	254,73
Jul-09	29.723	268,50
Aug-09	29.812	269,30
Sep-09	28.193	254,68
TOTAL	243.604	2.201



Picanda Solar: 110,7 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Picanda Solar
 Location: Bell-Iloch d'Urgell
 Country/Region: Spain/Lleida
 Longitude: 0°44'24" E
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System configuration:

Rated installation output: 110,7 KWp
 Number of trackers: 18ut DEGERtraker 5000NT
 Number of modules: 540ut SANYO HIP-205NKHE1
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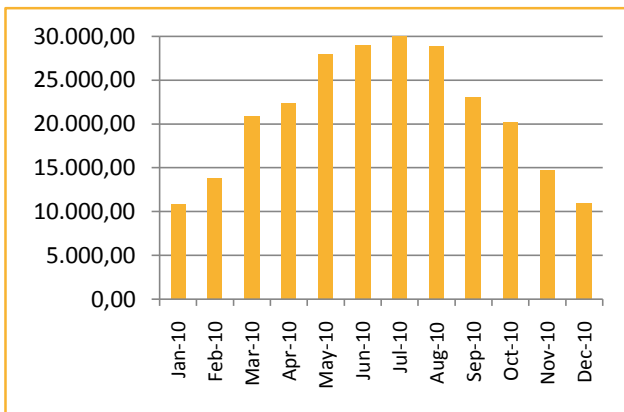
Production period

January 2010 - December 2010

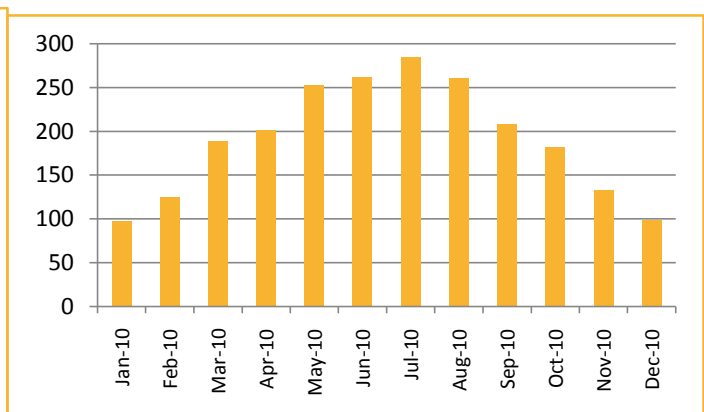
Month	kWh total	kWh/kWp	Fixed System kWh/kWp	Additional Yield
Jan-10	10.805,00	97,61	69,75	40%
Feb-10	13.786,00	124,53	100,71	24%
Mar-10	20.856,00	188,40	143,47	31%
Apr-10	22.306,00	201,50	144,62	39%
May-10	27.941,00	252,40	169,22	49%
Jun-10	28.970,00	261,70	167,2	57%
Jul-10	31.505,00	284,60	184,92	54%
Aug-10	28.830,00	260,43	177,34	47%
Sep-10	23.074,00	208,44	148,77	40%
Oct-10	20.149,00	182,01	127,87	42%
Nov-10	14.641,00	132,26	90,56	46%
Dec-10	10.846,00	97,98	70,9	38%
TOTAL	253.709	2.292	1.595	44%



Picanda Solar: 110,7 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Valdespino Park 3
 Location: Herencia
 Country/Region: Spain/Ciudad Real
 Longitude: 3°21'17" W
 Latitude: 39°21'58" N

System configuration:

Rated installation output: 106,92 kW
 Number of trackers: 22ut DEGERtraker 5000NT
 Number of modules: 396ut ET Solar 270 Wp
 Number of inverters: N/A

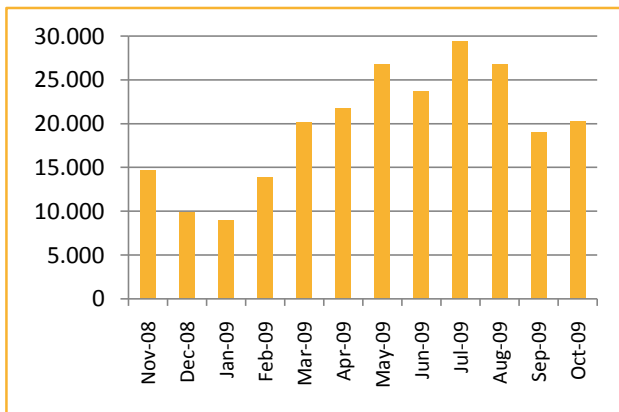
Production period

November 2008 - October 2009

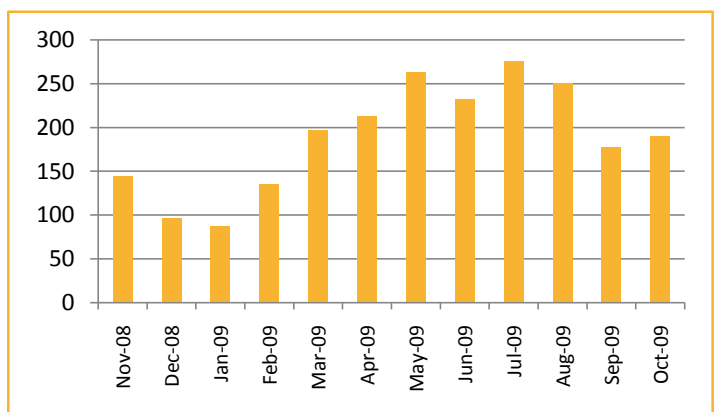
Month	kWh total	kWh/kWp	Fixed System kWh/kWp	Additional Yield
November-08	14.687	143,91	108,51	33%
December-08	9.897	96,97	69,98	39%
January-09	8.901	87,21	65,91	32%
February-09	13.835	135,56	103,01	32%
March-09	20.082	196,77	142,11	38%
April-09	21.753	213,14	153,83	39%
May-09	26.808	262,67	175,31	50%
June-09	23.678	232,00	178,06	30%
July-09	29.417	275,13	196,61	40%
August-09	26.806	250,71	193,66	29%
September-09	18.949	177,23	144,43	23%
October-09	20.304	189,90	75,25	152%
TOTAL	235.117	2.261	1.607	41%



Valdespino Park 3: 106,92 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Valdespino Park 4
 Location: Herencia
 Country/Region: Spain/Ciudad Real
 Longitude: 3°21'17" W
 Latitude: 39°21'58" N

System configuration:

Rated installation output: 106,92 kW
 Number of trackers: 22ut DEGERtraker 5000NT
 Number of modules: 396ut ET Solar 270 Wp
 Number of Inverters: N/A

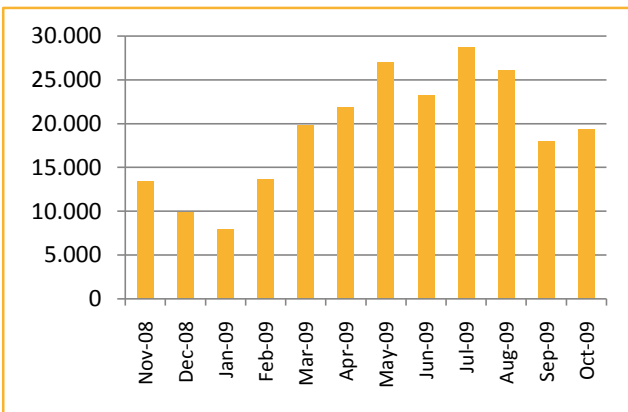
Production period

November 2008 - October 2009

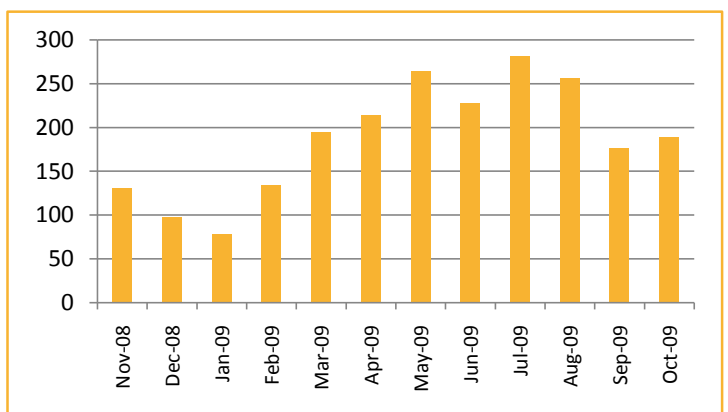
Month	kWh total	kWh/kWp	Fixed System kWh/kWp	Additional Yield
November-08	13.395	131,25	69,98	88%
December-08	9.926	97,26	65,91	48%
January-09	7.929	77,69	103,01	-25%
February-09	13.667	133,91	142,11	-6%
March-09	19.850	194,49	153,83	26%
April-09	21.857	214,16	175,31	22%
May-09	26.995	264,50	178,06	49%
June-09	23.202	227,34	196,61	16%
July-09	28.717	281,37	193,66	45%
August-09	26.149	256,21	144,43	77%
September-09	18.000	176,37	75,25	134%
October-09	19.328	189,38	97,08	95%
TOTAL	229.015	2.244	1.595	41%



Valdespino Park 4: 106,92 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Valdespino Park 5
 Location: Herencia
 Country/Region: Spain/Ciudad Real
 Longitude: 3°21'17" W
 Latitude: 39°21'58" N

System configuration:

Rated installation output: 106,92 kW
 Number of trackers: 22ut DEGERtraker 5000NT
 Number of modules: 396ut ET Solar 270 Wp
 Number of inverters: N/A

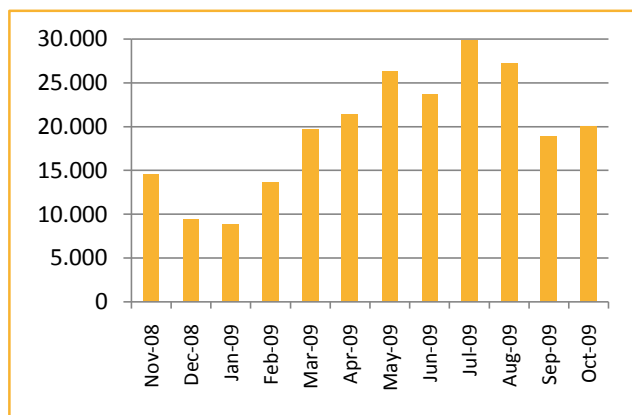
Production period

November 2008 - October 2009

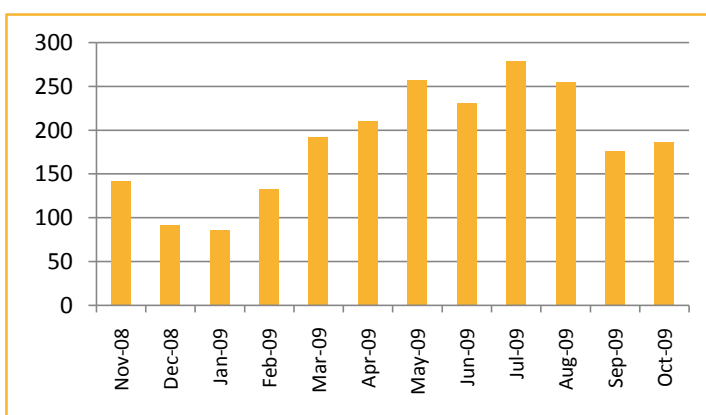
Month	kWh total	kWh/kWp	Fixed System kWh/kWp	Additional Yield
November-08	14.549	142,55	69,98	104%
December-08	9.409	92,19	65,91	40%
January-09	8.839	86,61	103,01	-16%
February-09	13.596	133,22	142,11	-6%
March-09	19.648	192,51	153,83	25%
April-09	21.424	209,92	175,31	20%
May-09	26.263	257,33	178,06	45%
June-09	23.640	231,63	196,61	18%
July-09	29.829	278,98	193,66	44%
August-09	27.223	254,61	144,43	76%
September-09	18.862	176,41	75,25	134%
October-09	19.987	186,93	97,08	93%
TOTAL	233.269	2.243	1.595	41%



Valdespino Park 5: 106,92 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Huerto Solar La Vega
 Location: Mazarrón
 Country/Region: Spain/Murcia
 Longitude: 1°18'47" W
 Latitude: 37°35'88" N

System configuration:

Rated installation output: 346,5 kW
 Number of trackers: 66ut DEGERtraker 5000NT
 Number of modules: 1980ut Kyocera 175 Wp
 Number of inverters: 66ut SMA 5000A

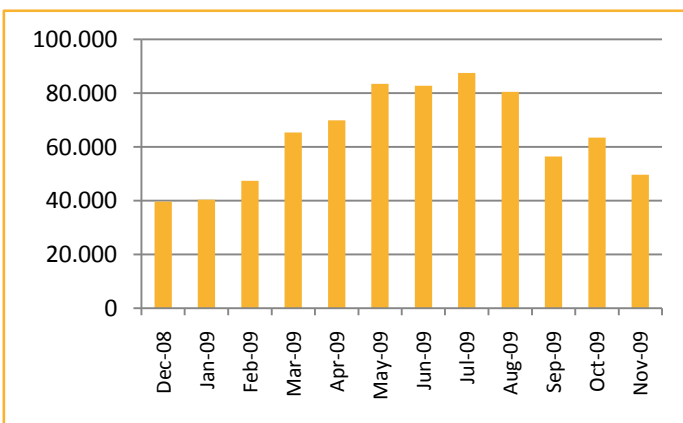
Production period

December 2008 - November 2009

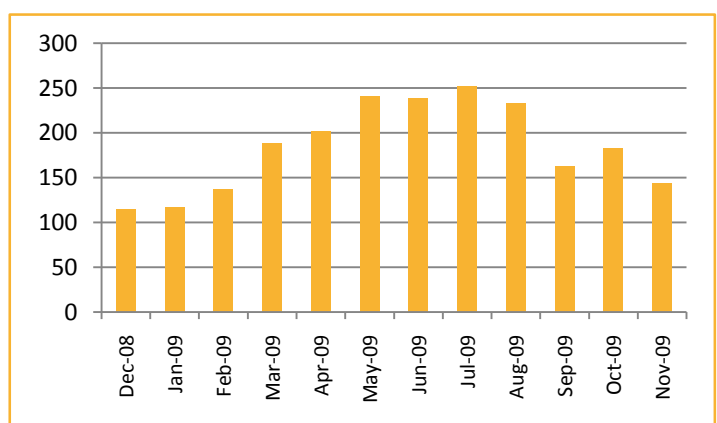
Month	kWh total	kWh/kWp
Dec-08	39.672,72	114,50
Jan-09	40.351,51	116,45
Feb-09	47.345,66	136,64
Mar-09	65.362,67	188,64
Apr-09	69.856,01	201,60
May-09	83.456,64	240,86
Jun-09	82.725,95	238,75
Jul-09	87.443,84	252,36
Aug-09	80.519,34	232,38
Sep-09	56.458,60	162,94
Oct-09	63.401,36	182,98
Nov-09	49.648,10	143,28
TOTAL	766.242	2.211



Huerto Solar La Vega: 346,5 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Huerto Solar La Vega
 Location: Mazarrón
 Country/Region: Spain/Murcia
 Longitude: 1°18'47" W
 Latitude: 37°35'88" N

System configuration:

Rated installation output: 346,5 KWp
 Number of trackers 66ut DEGERtraker 5000NT
 Number of modules 1980ut Kyocera 175 Wp
 Number of inverters 66ut SMA 5000A

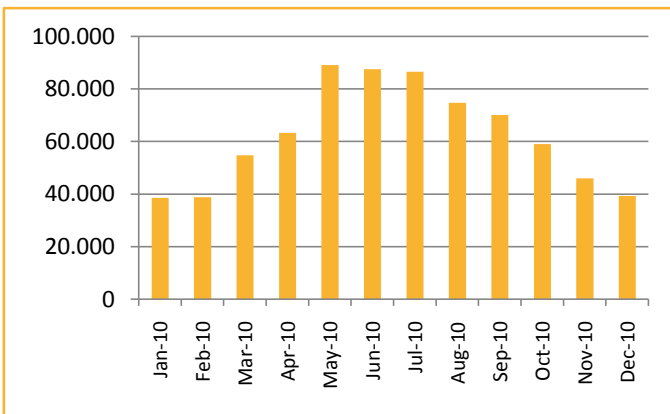
Production period

January 2010 - December 2010

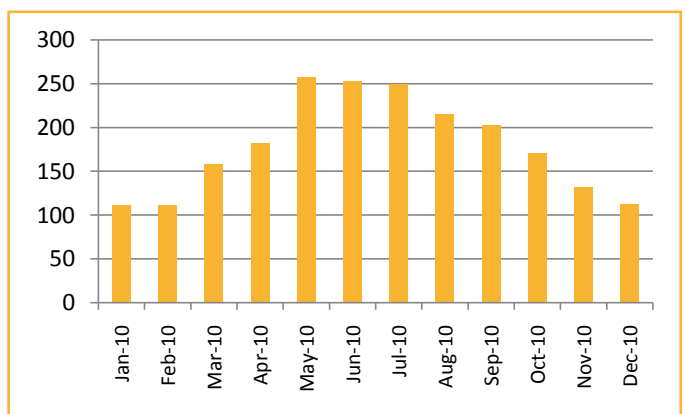
Month	kWh total	kWh/kWp	Fixed System kWh/kWp	Additional Yield
Jan-10	38.473,85	111,04	53,01	109%
Feb-10	38.689,34	111,66	67,05	67%
Mar-10	54.702,95	157,87	113,65	39%
Apr-10	63.194,00	182,38	132,41	38%
May-10	88.983,29	256,81	161,45	59%
Jun-10	87.492,94	252,50	158,71	59%
Jul-10	86.439,04	249,46	168,92	48%
Aug-10	74.711,78	215,62	157,51	37%
Sep-10	69.993,25	202,00	135,19	49%
Oct-10	58.935,06	170,09	66,86	154%
Nov-10	45.865,11	132,37	115,87	14%
Dec-10	39.161,33	113,02	56,41	100%
TOTAL	746.642	2.155	1.387	55%



Huerto Solar La Vega: 346,5 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Cabaña la Mota
 Location: El Pego
 Country/Region: Zamora / Spain
 Longitude: 1°18'47" W
 Latitude: 37°35'88" N

System configuration:

Rated installation output: 11,448 kW
 Number of trackers: 3ut DEGERtraker 4000EL
 Number of modules: 54ut Siliken 60P6L 212 Wp
 Number of inverters: 3ut Sunways NT4000

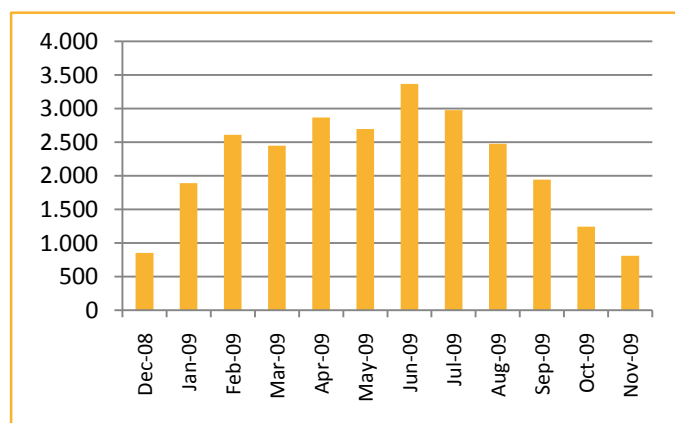
Production period

January 2009 - December 2009

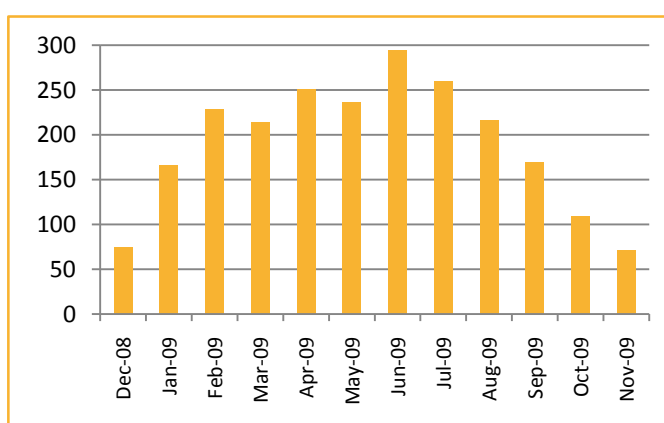
Month	kWh total	kWh/kWp
Dec-08	851,40	74,37
Jan-09	1.892,75	165,33
Feb-09	2.611,89	228,15
Mar-09	2.448,02	213,84
Apr-09	2.868,56	250,57
May-09	2.697,26	235,61
Jun-09	3.364,76	293,92
Jul-09	2.977,17	260,06
Aug-09	2.475,29	216,22
Sep-09	1.943,18	169,74
Oct-09	1.243,81	108,65
Nov-09	810,94	70,84
TOTAL	26.185	2.287



Cabaña la Mota: 11,448 kWp



Total production: kWh



Production performance figure: kWh/kWp

Reference projects and a production overview from DEGERenergie



Basic installation data:

Solar plant identification: Cabaña la Mota
 Location: El Pego
 Country/Region: Zamora / Spain
 Longitude: 1°18'47" W
 Latitude: 37°35'88" N

System configuration:

Rated installation output: 11,448 kWp
 Number of trackers: 3ut DEGERtraker 4000EL
 Number of modules: 54ut Siliken 60P6L 212 Wp
 Number of inverters: 3ut Sunways NT4000

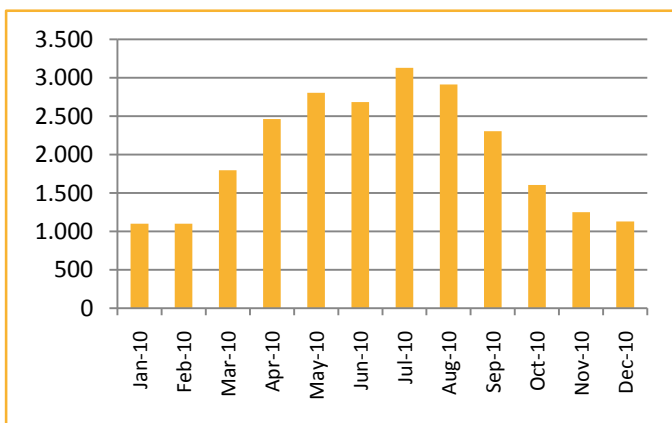
Production period

December 2008 - November 2009

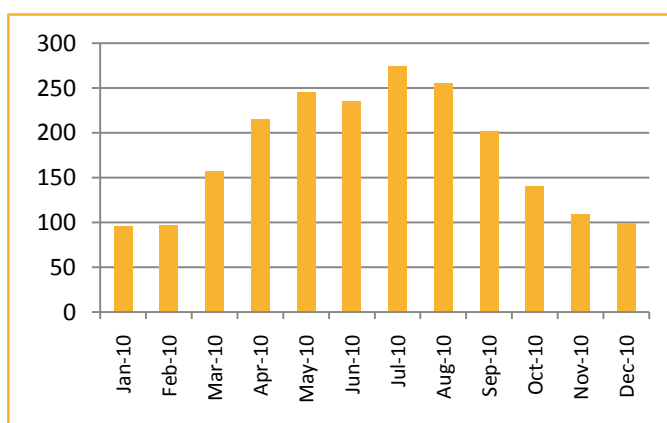
Month	kWh total	kWh/kWp
Jan-10	1.099,00	96,00
Feb-10	1.102,00	96,26
Mar-10	1.796,00	156,88
Apr-10	2.463,00	215,15
May-10	2.803,00	244,85
Jun-10	2.685,00	234,54
Jul-10	3.131,00	273,50
Aug-10	2.914,00	254,54
Sep-10	2.306,00	201,43
Oct-10	1.606,00	140,29
Nov-10	1.250,00	109,19
Dec-10	1.130,00	98,71
TOTAL	24.285	2.121



Cabaña la Mota: 11,448 kWp



Total production: kWh



Production performance figure: kWh/kWp