

# Reference List: Ground Plants

June, 2016

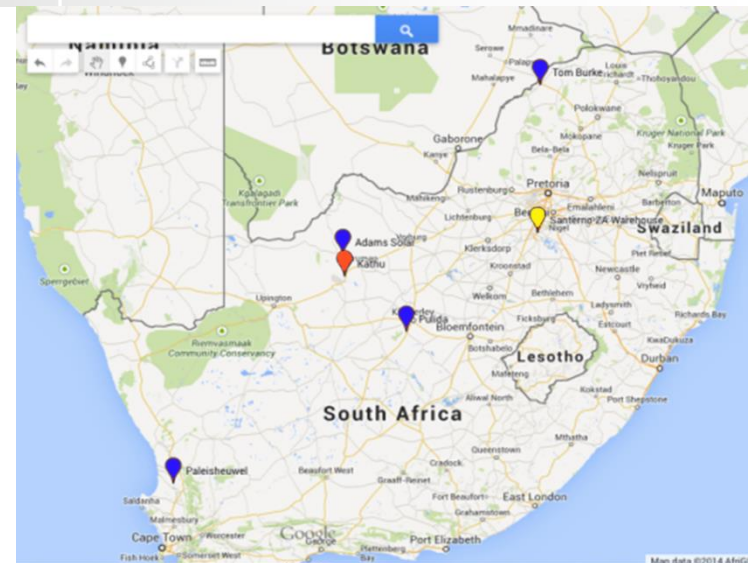


## SA Round III | South Africa

<b>Power:</b>	<b>330 MWp</b>
<b>Under construction</b>	
<b>Inverters:</b>	366 Sunway™ TG 760 1000V
<b>Cabins:</b>	183 Sunway Station LS
<b>Other:</b>	Power Plant Controller

**Key Notes:**

- Four projects: Adams, Pulida, Tom Burke, Paleisheuvel
- Consolidated Supply Chain in SA
- Local Content >54%



## Codford | UK

**Power:** 5 MWp

**Commissioning:** Q1 2016

**Inverters:** 4 Sunway™ TG 760 1000V OD

**Cabins:** 2 Step-up Cabins



## Pampa Norte | Chile



**Power:** 90 MWp

**Commissioning:** Q1 2016

**Inverters:** 88 Sunway™ TG 760 1000V OD and Santerno Power Plant Controller



## Chanares and Lalackama | Chile



**Power:** 110 MWp

**Commisioned:** 2015

**Inverters:** 144 Sunway™ TG 760 1000V OD and Santerno Power Plant Controller



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## Lampang | Thailand



**Power:** 63 MWp

**Commisioned:** 2015

**Inverters:** 90 Sunway™ TG 610 1000V 380 OD and Santerno Power Plant Controller

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## Mildura | Australia

**Location:** Mildura – Australia

**Commisioned:** 2013

**Power:** 1.5 MW

Concentrated Solar Power PV plant



## Northeastern Thailand

<b>Power:</b>	20 MW
<b>PV Plants:</b>	20 x 1 MW each
<b>Inverters:</b>	3 Sunway™ TG 485 800V 270 STD for each PV Plant
<b>Commisioned:</b>	2013
<b>PEA Certified</b>	yes





## Nakhon Sawan | Thailand



**Power:** 126 MW  
**Commisioned:** 2013  
**Inverter:** 182 Sunway™ TG 610 1000V 380 OD  
and Santerno Power Plant Controller

Rainforest, tropical climate



# Kathu Project | Kalahari Desert



**Power:** 81 MW

**Commissioned:** 2013

**Customer:** Building Energy

**Inverters:** 110 Sunway™ TG 750 1000V  
55 Medium Voltage Trafo  
1110 String boxes

**Altitude:** 1197 m above sea level in the Kalahari Desert

## Key Notes:

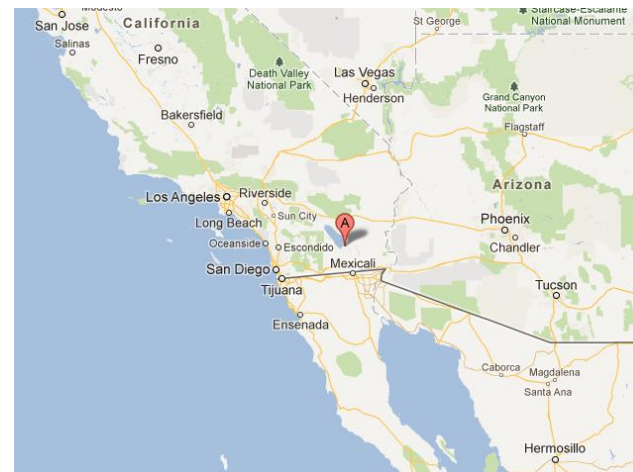
- Inverters delivery started in March 2013
- The delivery ended in August 2013
- Santerno has now one plant project manager and 2 resident technicians in South Africa
- Santerno is now negotiating an O&M contract for 5 /10/15 and 20 years



# Imperial Valley | California – USA



**Power:** 265 MW  
**Commissioned:** 2013  
**Inverters:** n. 138 Skid Stations each with 2 Inverters  
**Total:** 276 Sunway™ TG 760 1000V



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## Podari | Romania

**Power:** 9,5 MW

**Commisioned :** 2012

**Inverter:** 10 Sunway™ TG 750 1000V



## Kalenta | Grecia

**Power:** 5,44 MW  
**Commisioned :** 2012  
**Inverter:** 4 Sunway™ Station 1220 each with 2 Inverters  
Total: 8 Sunway™ TG 730 800V TE – 270 OD



## Amonix Lab | Denver, CO – USA



**Power:** 85 kWP

**Commissioned:** Jan 2012

**EPC:** Amonix / SolarTAC

**Customer:** Amonix

**Modules:** Amonix CPV two-axes tracker

**Inverters:** Santerno TG 100 NA

**Notes:**

- 210 high efficiency multi-junction cells
- ca. 30% module high efficiency
- 7 strings each tracker
- one single inverter (one MPPT) each tracker
- Active/reactive voltage / PF control
- UL 1741 compliant
- Scada monitoring system included



## Linden | New Jersey – USA



**Power:** 200 kWp  
**Commissioned:** 2011  
**Customer:** ARE Sun Solar  
**Modules:** Sunpower  
**Inverters:** Santerno TG 100 NA

**Notes:**

American Renewable Energy (ARE) designs and installs cutting edge, highly efficient photovoltaic (PV) systems with components from leading global manufacturers for residential, commercial, and nonprofit customers.



## Kutch Project | Gujarat – India



**Power:** 1 MW  
**Commissioned :** Feb 2012  
**Customer:** IVRCL Limited  
**Inverters:** 2 Sunway™ TG 610 800V TE

**Notes:**

IVRCL operates in the following core infrastructure sectors:

- Water & Environment
- Transportation
- Buildings
- Power





## Panchkula Project | Chandigarh – India



**Power:** 20 MW

**Commissioned :** Dec 2011

**Customer:** Solar Semiconductor

**Inverters:** 28 Sunway™ TG 750 1000V  
300 String Boxes  
with 4850 monitored strings

**Notes:**

The project location is situated about 7 km from (Ahmedabad-Kandla Port) National highway **Mouje Village Shivilakha** in Kutch district, State of Gujarat.

**Latitude:** 23°19'28' N

**Longitude:** 70°24'1'E

**Altitude:** 24 m above sea level



## Piombino | Livorno – Italy

**Power:** 994.84 kWp  
**Commisioned :** 2011  
**EPC:** Renience Srl  
**Customer:** Enerlive  
**Modules:** LDK 220  
**Inverter:** Sunway™ Station 1020



## Shigatze | Tibet – China



**Power:** 10 MW  
**Commissioned :** 2011  
**Customer:** Linuo Group  
**Inverters:** 12 Sunway™ TG750 900V TE

### Notes:

- The plant is located in the regions of Shigatze, Tibet
- Altitude: 3.895m asl
- Atmospheric conditions of this type (desert area, altitude, strong sunlight) may subject the facility to non-optimal working conditions and require that the inverters are rugged and can withstand and manage these situations.



## Casole d'Elsa | Siena – Italy

**Power:** 993.6 kWp  
**Commisioned :** 2011  
**EPC:** Renience Srl  
**Customer:** Solatos  
**Modules:** LDK 230  
**Inverter:** Sunway™ Station 1020



## Rapolano Terme | Siena – Italy

**Power:** 998.2 kWp  
**Commisioned :** 2011  
**EPC:** Renience Srl  
**Customer:** Primasolar  
**Modules:** LDK 230  
**Inverter:** Sunway™ Station 1020



## Casole d'Elsa | Siena – Italy



**Power:** 643.9 kWp  
**Commisioned :** 2011  
**EPC:** Renience Srl  
**Customer:** Primasolar  
**Modules:** LDK 235  
**Inverter:** Sunway™ Station 620



# Alfonsine and S. Alberto | Ravenna – Italy



**Power:** total cluster of 124 MW

**Commissioned :** 2010 - 2011

**EPC:** Tozzi Sud Spa

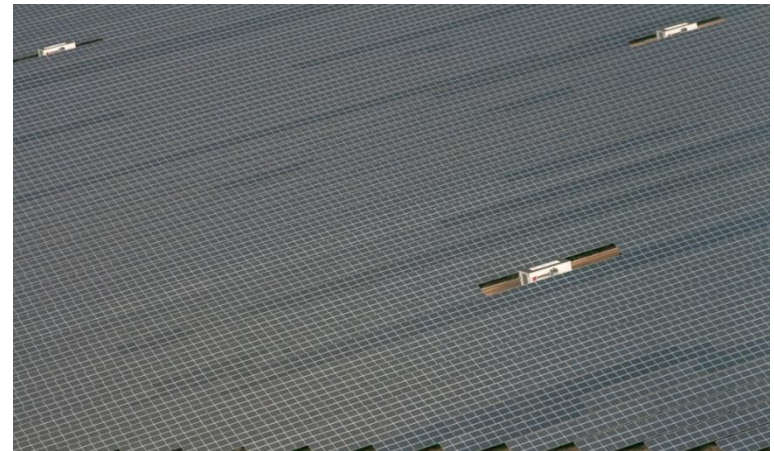
**Customer:** Terna

## Inverters:

- **Project 1 San Alberto:** n. 42 Sunway™ Station 1.350 and 752 Smart String Box 1000V – Modules: Jinko
- **Project 2 Alfonsine:** n. 40 Sunway™ Station 1.350 and 560 Smart String Box 1000V – Modules: Trina

## Key Notes:

- 97% availability and maintenance contract for 20 years warranty
- PV plant completed in five months thanks to SANTERNO plug-and-play solutions
- Bearing structure of the modules: galvanised steel and aluminium with no use of concrete (Supplied and installed by Schletter GmbH)
- Oil MV transformer
- Area size: total of 240 ha (2,4 Km<sup>2</sup>)
- Expected production: total of 148 GWh/year



## Isola di Capo Rizzuto | Crotone – Italy

**Power:** 1.287 MWp  
**Commisioned :** 2010  
**EPC:** Renience Srl  
**Customer:** Soc. Agricola Orrizzontesole  
**Modules:** Suntech 185  
**Inverters:** 1 Sunway™ Station 820  
1 Sunway™ Station 520





## Bagnolo di Po | Rovigo – Italy

**Power:** 100 kWp  
**Commisioned :** 2010  
**EPC:** Elektra Group  
**Customer:** Comune Bagnolo di Po  
**Modules:** VPM Solar  
**Inverter:** 1 Sunway™ TG 110 600V



## Belgorod | Russia



**Power:** 100 kWp  
**Commissioned :** 2010  
**EPC:** LLC "VIECO"  
**Customer:** ALT Energo Invest kft  
**Inverters:** 2 Sunway™ TG 61 600V

### Key Notes:

- The largest running PV plant in Russia
- SANTERNO was chosen as supplier due to the shortest delivery time for high-end inverters
- The project is the first PV station of its kind in in Russia, a good reference for any additional project
- New projects are already in the pipeline, capitalizing on SANTERNO's favourable market position in Russia
- Two Smart String Boxes with 24 inputs and two LED Displays



## Corinaldo | Ancona – Italy

**Power:** 5.5 MW

**Commisioned :** 2010

**EPC:** General Building – IFE  
Eriksen AG

**Modules:** 23.000 Aleo Avim

**Inverters:** 5 Sunway™ TG 750 900V TE  
3 Sunway™ TG 730 800V TE



## Golmud | Qinghai – China

**Power:** 10 MW

**Commissioned :** 2010

**EPC:** Longyuan Group

**Inverters:** 18 Sunway™ TG 730 800V TE  
2 Sunway™ TG 750 900V TE

**Notes:**

- The facility was built by Longyuan, which is part of China Guodian Group (one of 5 major power companies in China).
- Longyan was established in 1993 and becoming a leader internationally.
- Longyan below 70% of businesses related to renewable energy of the parent company.
- The planned installed capacity by 2020 is 2GW



## Soletto | Lecce – Italy



**Power:** 6 MW  
**Commisioned :** 2010  
**Investor:** HFV Novenergia  
**EPC:** Ansaldo Energia  
**Inverters:** 6 steel Sunway™ Station 1020



## South Korea

**Power:** total of 3.1 MW (3 projects)

**Commissioned :** 2010

**Customer & EPC:** SR TECH CO., LTD

**Inverters:**

**Project 1:** Two PV Plants, 1 MWp each

3 SunwayTM TG 485 KR-800V

4 SunwayTM TG 385 KR-800V

**Project 2:** Two PV Plants, 400 kWp each

2 SunwayTM TG 385 KR-800V

1 SunwayTM TG 385 KR-800V

**Project 3:** Three PV Plants, 100 kWp each

1 SunwayTM TG 145 KR-800V

1 SunwayTM TG 145 KR-800V

**Key Notes:**

- Total installed capacity in 2010: 3.4 MW



## Bagnolo di Po | Rovigo – Italy



<b>Power:</b>	<b>5.6 MW</b>
<b>Connection date:</b>	2010
<b>Investor:</b>	HFV Novenergia
<b>EPC:</b>	Ansaldo Energia
<b>Inverters:</b>	5 steel Sunway™ Station 1020

### Key Notes:

- Valued investors and EPC
- Realized in steel container, instead of cabinet (useful for transportation)
- Ansaldo belongs to the important Finmeccanica company and can be seen as key client



## Corinaldo | Ancona – Italy

**Power:** 2.3 MW  
**Commissioned :** 2009  
**EPC:** General Building  
**Modules:** 10.000 Aleo  
**Inverters:** 12 Sunway™ TG 230 600V TE

### Key Notes:

- The solar power plant produce clean energy for about 2.5 to 3 million kWh / year, saving about 1,500 tons of CO<sub>2</sub> to the atmosphere each year.
- Overall, the entire plant life cycle, the solar park will be able to save the atmosphere at least 30,000 tons of CO<sub>2</sub>.





## Cascina | Pisa – Italy

**Power:** 9.9 kWp  
**Commisioned :** 2009  
**EPC:** Sunglobal  
**Modules:** 45 Aleo S18 220 Wp  
**Inverters:** 3 Sunway™ M Plus 3600



## Thermal Power Station | Sardegna – Italy

**Power:** 1.35 MW  
**Commisioned :** 2009  
**Customer:** E-On  
**Modules:** Sunpower



## Zello | Bologna – Italy



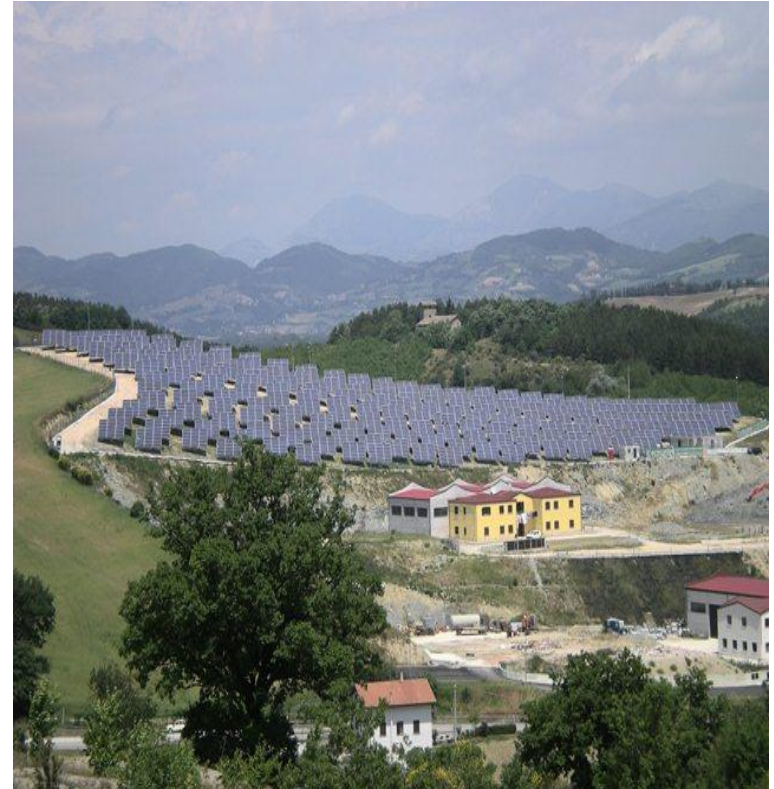
**Power:** 2 MW  
**Commisioned :** 2009  
**Customer:** CEIF  
**Inverters:** 2 Sunway™ Station



## Valfabbrica Plant | Valfabbrica, Perugia – Italy



**Power:** 999 kWp  
**Commisioned :** 2008  
**EPC:** Consorzio ABN  
**Customer:** Ecosuntek SpA  
**Inverters:** 3 Sunway™ TG 385 800V TE



## Altomonte | Calabria – Italy

**Power:** 3.3 MW

**Commissioned :** 2008

**Customer:** Edison



## Los Cabezos | Andalusia – Spain



**Power:** 1.89 MV  
**Commisioned :** 2008  
**Customer:** Ecostream



## El Viso | Bogaris, Andalusia – Spain

**Power:** 1.89 MW  
**Commissioned :** 2008  
**Customer:** Ecostream



## Puebla de Almoradiel | Toledo – Spain

**Power:** 1.6 MV  
**Commisioned :** 2008  
**Customer:** Gestamp – Asetym





## Villanueva de Alcardete | Toledo – Spain



**Power:** 2 MW  
**Commisioned :** 2008  
**Customer:** Gestamp – Asetym



## Fuente Alamo | Murcia – Spain



**Power:** 26 MW  
**Commisioned :** 2008  
**Customer:** Gestamp – Asetym  
**Inverters:** 160 Sunway™ TG 145 800V  
32 Sunway™ TG 385 800V



## Maials | Lleida – Spain



**Power:** 1 MW  
**Commisioned :** 2008  
**Customer:** Comsa  
**Inverters:** 11 Sunway™ TG 135 600V



## Calasparra | Murcia – Spain

**Power:** 20 MV

**Commisioned :** 2008

**EPC:** Gestamp – Asetym, (GA) Solar SA

**Customer:** GA Solar (new Fotowatio)

**Modules:** Trina Mainly and also Jetion, Yingli and Suntech

**Inverters:** 80 Sunway™ TG 145 800V  
40 Sunway™ TG 385 800V



## Tolentino | Macerata – Italy

**Power:** 7.3 MW  
**Commisioned :** 2008  
**EPC:** Sunpower  
**Customer:** Api Nòva  
**Modules:** Sunpower  
**Inverters:** 4 Sunway™ TG 485 800V  
2 Sunway™ TG 610 800V



## Abanilla | Murcia – Spain



**Power:** 3.6 MW  
**Commisioned :** 2007  
**Customer:** Gestamp – Asetym  
**Inverters:** 36 Sunway™ TG 145 800V



## San Fernando | Reggio Calabria – Italy



**Power:** 1 MV  
**Commisioned :** 2007  
**EPC:** Sorgenia



## Enna | Sicilia – Italy

**Power:** 1 MV  
**Commisioned :** 2007  
**EPC:** Sorgenia





## Villacidro I-II | Sardegna – Italy

**Power:** 2 MV  
**Commisioned :** 2007  
**EPC:** Sorgenia



## Benevento – Italy

**Power:** 1 MV  
**Commisioned :** 2007  
**EPC:** Sorgenia



## Sahara | Tunisia

**Power:** 5 kWp  
**Commisioned :** 2007  
**Inverters:** 1 Sunway™ TG



## Special water Company | Napoli – Italy



**Power:** 1 MW  
**Commisioned :** 2005  
**EPC:** Enel.SI



## Serre | Salerno – Italy



**Power:** 3 MV

**Commisioned :** 1994



[santerno.com](http://santerno.com)

NOVEMBER, 2013

