International Project's References

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1. About GPTech

GPTech is a pioneer company in the development of power electronic devices which uses the state-of-the-art technology to provide new solutions to the Renewable Energy Sector.

It has specialized as assistant integrator to offer to their clients the added value that gives an expert partner in grid integration systems, providing a wide range of innovative products, completely developed with own resources and adapted to all the technical requirements demanded by each market.

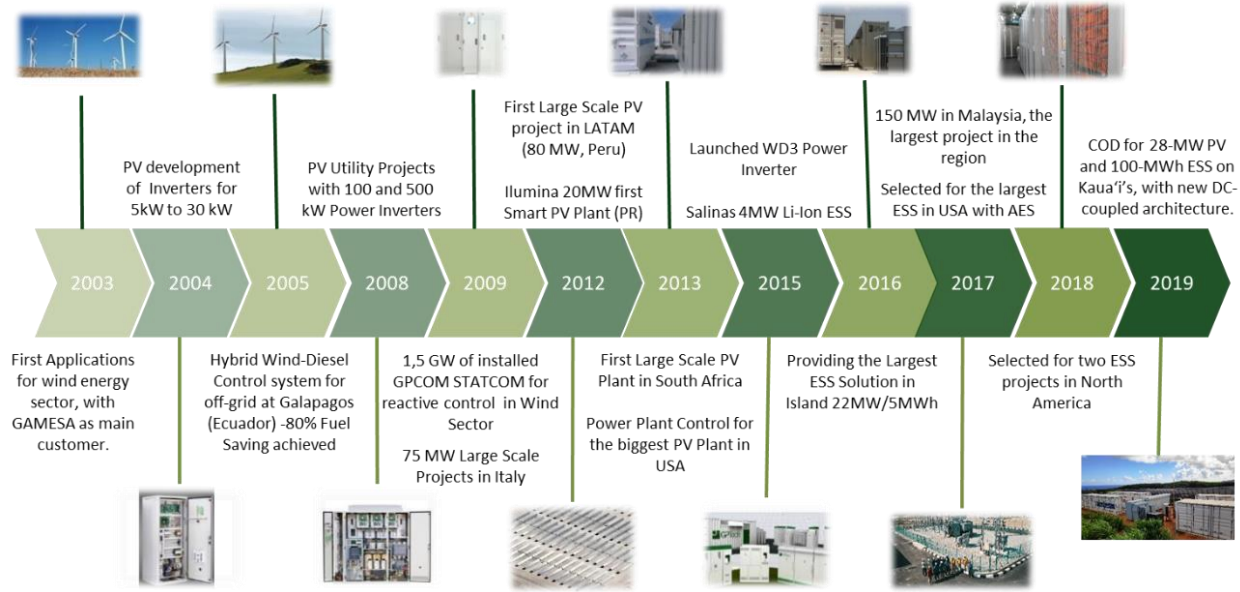
AMPS for 'Lawai", the world's largest battery plant paired with solar generation (customer: AES)

GPTech is well positioned with presence on all five continents. Several leading players of the renewable energy sector have placed their trust on GPTech Solutions for their commercial projects, even for projects developed on new markets with customized and added value solutions.

GPTech's experience in grid integration under the hardest ambient factors and the most restrictive technical requirements has driven the company's growth, becoming one of the most important suppliers of power electronics devices with a wide presence all over the world. As a result, it has become a global player achieving more than 3 GW of installed capacity

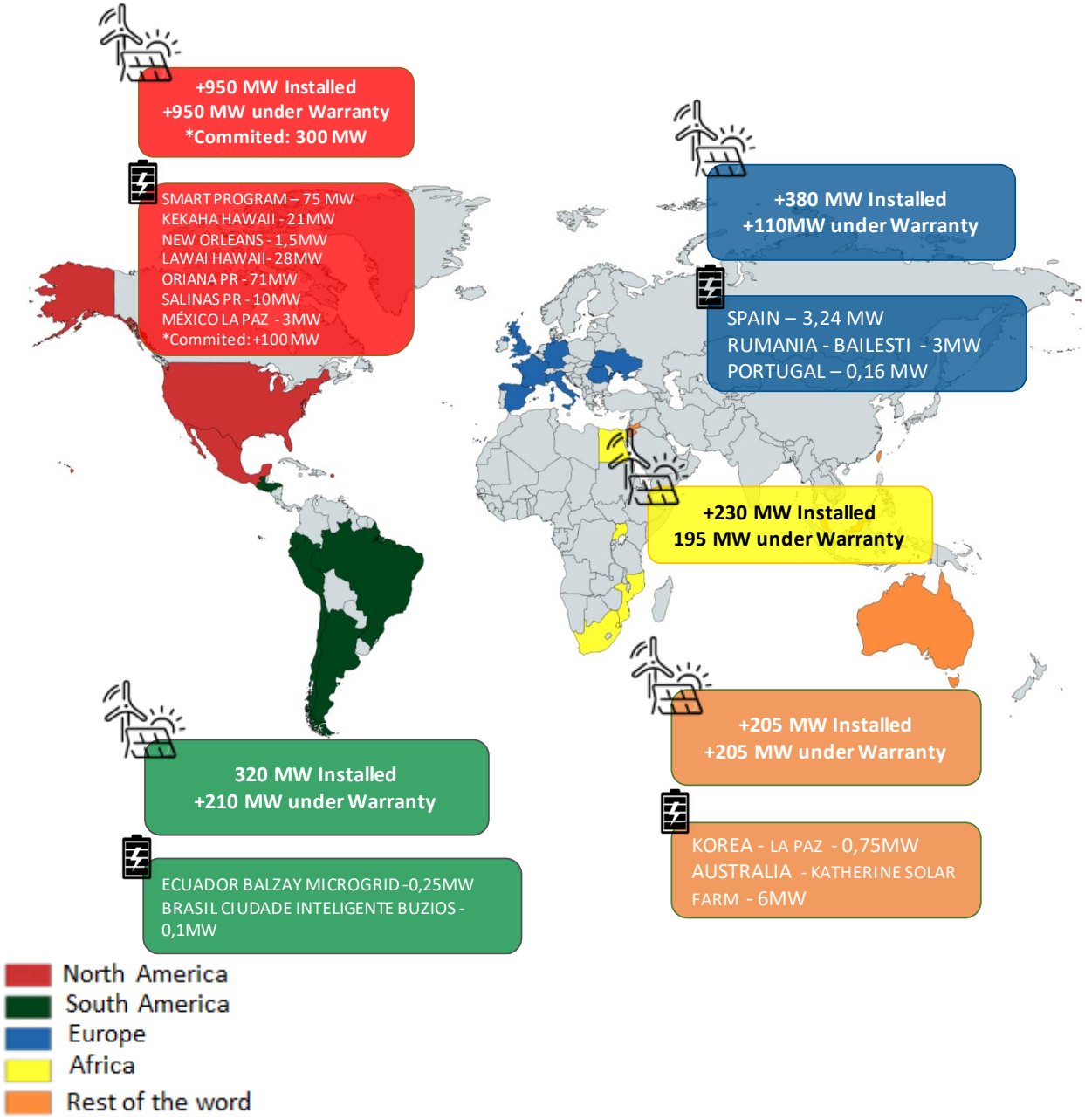
WD3 Platform operating in Benban, Egypt (Customer: Acciona/ TBEA)

GPTech's solutions are focused on the grid integration of solar energy and ESS, as well as on grid stability and energy transport. Using the latest technology for energy management, control and monitoring systems. Five are the top product lines:



Always looking for new challenges

A Robust Track Record
Pioneers entering new markets



SmartPV+: ADVANCED SOLUTIONS FOR PV MANAGEMENT AND CONTROL
Utility-Scale PV Plants with Unconventional Specifications

Complete Inverter Stage Solutions for PV Large-Scale Plants with advanced control and power regulation capacities to meet any technical requirement.

Turnkey outdoor solutions specially designed to offer complete conversion stations with an extended DC input voltage range and **power range up to 4,5MW**.

SmartPV Inverters comply with the most demanding grid codes in the world. They adapt to any market needs due to a flexible power operation range depending on the power factor. With an easy integration to the grid and low power consumption, they are able to work at maximum power at extreme ambient conditions.
These devices offer remote control of active and reactive power, as well as ramp rate response guaranteeing the grid stability.

WD3 Platform solution for "Dymerka" Project in Ukraine (customer: Acciona)

EnergyReserve: STORAGE AND CONTROL SOLUTIONS

Solutions for a new era in the energy industry

GPTech EnergyReserve is the complete fully-functional storage solution for all the today and tomorrow needs, based on our power control technology integrated with selected energy storage systems from the leader brands, carefully studied for every new work.

They are composed by an ESS (energy Storage System) and the WD3 platform for the Power Regulation and control. The complete solution is managed with our GPTech EMSystems technology.

Bidirectional power converters are optimized for the integration of the latest storage devices as batteries into electrical grids. Quick dynamic response, featured to provide advanced active power management under highly demanding environments (Ramp Rate, Frequency Response, Energy Shifting, ...)

Each project is evaluated using the most advanced calculation tools to obtain the exactly EnergyReserve solution needed for the facility, to meet the latest Technical Requirements.

With a DC voltage ready for 1500VDC and power range up to 4,5MW, EnergyReserve solutions are able to work at maximum power at extreme ambient conditions thanks to advanced cooling systems.

Puerto Rico facility for an Energy Storage System with 22MW/4,5 MWh Li-Ion Bttery capacity in Isabela. Largest PV+ESS installation in Caribbe and one of the biggest in North America
(Customer: Sonnedix)

HybridSystems Solutions: ESS AND PV PLANTS ALL IN ONE

Interfacing with and controlling any source

GPTech HybridSystems enables excellent dynamic and steady state performance within a wide voltage range, with optimal renewable energy harvesting, optimum energy management as well as optimal and economical utility grid interactions.

These stations include all necessary components to ensure a good performance and availability of the power generation, including protections and a customized MV Skid with MV transformer and switchgear mounted on one platform, ready for installation

GPTech AMPS solution is the best option for HybridSystems developments operating with the new generation of 1200Vdc and power range up to 4,2MW. It is the best option to solve the challenges of Utility–Scale projects.

AMPS solution for "Lawai" Project in Hawaii (customer: AES)

IN-HOUSE TECHNOLOGIES THAT WORKED FOR EVERY UTILITY-SCALE PROJECTS

GPTech PVI, PCS & AMPS Technologies, the product of 15 years of success

Our company develops technologies and products for power conversion and management, achieving tot al control of the entire energy value chain and the best performance in utility-scale projects.

WD3 joins our experience in PVI applications, ESS integration and the use of the 1500V power electronic devices in STATCOMs (in more than 1.5 GW of wind farms, for LVRT application). While AMPS has come to provide efficient management of Hybrid Power plants, especially those with ESS integration.

GPTech accumulates more than 15 years of experience in solutions for Utility-Scale facilities, reaching more than 3GW of installed equipment that work in Wind and PV Large-Scale facilities around the world.

WD3 Platform: Revolution from Evolution

Our WD3 Platform product line is an evolutionary design, based upon the widely used and proven high performing GPTech previous product series.

GPTech has developed a new inverter but with a vast background in the use of their main components for 1500 V applications ready to the hardest operation conditions of a Large-Scale PV inverter or the latest ESS technologies.

AMPS: working as a single electrical conversion unit

GPTech AMPS is the best option to solve the challenges of Utility-Scale projects, especially for PV plants and ESS developments operating with the new generation of 1200Vdc.

Turnkey outdoor solutions specially designed to offer complete conversion stations with an extended DC input voltage range and power range up to 4,2MW.

STATCOM devices: technology for the grid stability

GPTech STATCOM provides:

- A source of reactive power control with the finest response to meet the grid requirements all time.
- Voltage control is performed by the reactive capacity of installed systems. These are managed by the Power Plant Controller based on the grid operator references.
- Signal quality through its advanced function for generation and control of Reactive Power.

IN-HOUSE TECHNOLOGIES THAT WORKED FOR EVERY UTILITY-SCALE PROJECTS

GPTech Control Technologies, based on our strong experience as energy integrators
Joining specially created control algorithms and the latest technology, GPTech adds a new vision in the scope of energy management systems

Ancillary Services and Large-Scale PV Plants are improved with new control options to obtain the best of each plant source. Combination of renewable energies with conventional sources represents an opportunity of saving money with fuel reduction and plant management, while a cleaner world is developed

EMSystems:
Levelling up plants to the next generation of stability and control potentials

EMSystems are the best answer to the new challenges in hybridization and renewable power control.

- Capacity to control equipment submitted by different manufacturers ("inverter-independent").
- Capacity to integrate different generation/storage technologies: PV, BESS, STATCOM…
- Fast working cycle: The working cycle can be configured up to 50ms. This is the main approach to meet the most exigent grid codes which requires response times less than one second and high accuracy.

SCADA:
Monitoring and interacting with several generation and protection units

GPTech SCADA allows the customer to fully monitor and operate the site remotely.

SCADA technology together with GPTech's hardware equipment (AC and DC-coupled Power Stations) and control devices (EMS, PPC, etc) are the key GPTech to provide a turnkey, reliable and adaptable solution for Power plants.

Thanks to GPTech modular and scalable design, the SCADA is able to interact with several generation, protection, control and monitoring units.

Excellence Up to Client Needs

GPTech proposes our clients the optimum solution based on a wide variety of products and services which match the specific requirements of the project.

Taking full responsibility of our proposals in order to guarantee the proper operation of your plant for up to 25 years.

Our consolidated financial stability and gathered know-how makes feasible the most complete technical assistance as well as building up a global, believable and mature service network all around the world

After Sales and Premium Support

GPTech participate in the whole process of the power plant development and accompany our clients along all the stages.

From the pre-sale to the end of the life of the facility, we guarantee best performance up to 25 years.

Worldwide presence
Higher technical consultancy
Training seminars
Advanced warranty
Evaluation & repair
Spare parts
Maintenance
Up to 99% Availability (ask for O&M Plans

2. Selected references

2.1 Major International ESS Projects using GPTech Technology –WD3 & AMPS–

YEAR	NAME OF PLANT, SITE LOCATION	PLANT (MW)	COUNTRY	SCOPE OF WORK/SUPPLY	ENERGY STORAGE TECHNOLOGY	FACILITY TYPES	STORAGE RATING	FUNCTIONS	BESS MANUFACTURER	CUSTOMER
2019/20	SMART Program	~75	Massachusetts - USA	~30 x AMPS2800WD3-HV690/DC1200 with PPC integrated	Lithium Ion	Grid Generation	~75 MW /105 MWh	VAR support, frequency response, Reactive power control, Power factor control	Samsung	AES
2018/19	BAILESTI	3	ROMANIA	AMPS700WD3-LV300/DC540	Lithium Ion	Grid Generation	1 MW / 950 kWh	Ramp rate, energy shifting, frequency response, Voltage regulation	SAFT	EDPr
2019	KATHERINE SOLAR FARM	6	AUSTRALIA	2 x APCS3160WD3-LV450 + 2 x BESS + 1 x PPC	Lithium Ion	Grid Generation	6 MW / 3500 kWh	Frequency control ancillary services (C-FCAS) and Ramp rate control	Narada	BSR
2018/19	KEKAHA	21	HAWAII - USA	6 x AMPS2800WD3-HV690/DC1200 1 x EMS-MM // 1 x SCADA // 1 x PPC	Lithium Ion	Grid Generation	21MW / 87000kWh	5 hours full Dispatch, frequency response, grid-forming and islanding operation	Samsung	AES
2018/19	AURA	10	LA PAZ - MEXICO	4 X APCS1700 + 2 x APCS1900 2 x BESS -16R + 1 x BESS - 18R 1 x PPC	Lithium Ion	Grid Generation	10MW / 5605kWh	Frequency Response - Voltage regulations System - Ramp Rate Control - Power Factor Control - Reactive Control - Load shifting	LG	GAUSS
2018	HVPS	10	Spain	Modular High Voltage Power system	Supercaps	Lab	1,65 MW 4 s	Voltage and frequency regulation	LSMTRON	REE
2017/18	SENSIBLE	0,11	PORTUGAL	1xBPCS50, 2xBPCS30 independent phases with grid forming capability, Islanding manager	Lithium Ion	Distribution grid	50 kW/ 100 kWh, 2x 30kW/30kWh	Grid-forming, autonomous transition between grid-connected and islanding mode	KOKAM, ELECTROVAYA	EDP
2017/18	LAWAI	28	HAWAII - USA	8 x AMPS2800WD3-HV690/DC1200 Advance Multiport Power Station 1 x EMS-MM // 1 X SCADA // 1 x Advanced PPC	Lithium Ion	Grid Generation	28MW/116000kWh	Hawaii 5hours full Dispatch Requirements	Samsung	AES
2016	ORIANA-PR	71	USA	10 x PPS 2200 // 1 x CAP. BANK 4,2 MVA (2steps) // 1 x EMS Plant controller	Lithium Ion	Grid Generation	21,6MW/4200kWh	PREPA´s MTR Compliance	SAFT	METKA-ENG, SONNEDIX

YEAR	NAME OF PLANT, SITE LOCATION	PLANT (MW)	COUNTRY	SCOPE OF WORK/SUPPLY	ENERGY STORAGE TECHNOLOGY	FACILITY TYPES	STORAGE RATING	FUNCTIONS	BESS MANUFACTURER	CUSTOMER
2016	Balzay Microgrid Tech. Center (Commercial Project)	0,25	Ecuador	2 x GPTech´s BPCS50 // 1 x GPTech´s BPCS30 // 2 x GPTech´s SmartPV 5kW + 1 GPTech´s Smart PV 20kW	Lead Acid, Lithium Ion, Redox Flow, Ultracaps bank	R&D Institute	150kW/250kWh	FRECUENCY REGULATION, VOLTAGE REGULATION, ENERGY SHIFTING	*	Universidad de Cuenca
2016	Paterson Entergy // NEW ORLEANS	1,5	USA	1 x APIS11200SKD-UL // 1 x APCS600SKD-UL // 1 x EMS Plant controller	Lithium Ion	Grid Generation	0,5MW/500kWh	ENERGY SHIFTING, FREQUENCY REGULATION, RAMP RATE CONTROL	LG Chem	BLATNER / ENTERGY NEW ORLEANS
2016	Planta PV20kW + ESS30kW Universidad de Sevilla	0,05	Spain	BPCS-30, Li-Ion Battery, PV20, EMS	Lithium Ion	R&D Institute	30kW/47kWh	ENERGY SHIFTING, RAMP RATE CONTROL	LG-Chem	Universidad de Sevilla
2015	KOREA	0,75	Korea	1 x BPCS750	Lithium Ion	Industry	0,5MW/2000kWh	FRECUENCY REGULATION, VOLTAGE REGULATION	KOKAM	KOKAM
2014/15	Microgrid Li-Ion/SuperCap-CNH2	0,06	Spain	2 x BPCS30 // 1 x EMS PLANT CONTROLLER	Other	R&D Institute	30kW / 0,7 kWh (SuperCap) + 30 kW / 3kWh (lithium)	FRECUENCY REGULATION , VOLTAGE REGULATION, ENERGY SHIFTING	*	CNH2
2014	SALINAS-PR	10	USA	3 x PPS 1700 // 7 x AVCS 1000 // 1 x EMS Plant controller	Lithium Ion	Grid Generation	4,5MW/1260kWh	PREPA´sMTR Compliance	SAFT	BELECTRIC, SONNEDIX
2013	SINTONIA	0,5	Spain	1 x GPTECH BPCS50	Lead Acid	Industry	50KW/10kWh	HIDROGEN PRODUCTION FOR UAVs	*	BOEING
2013	Ciudade Inteligente Búzios	0,1	Brazil	2 x GPTech´s BPCS BATERRY CONVERTER // 1 x GPTECH EMS PLANT CONTROLLER	Other	Smart Grid	50kW/100kWh (NMC) // 50 kW/100kWh (LFP)	LOAD SHEDDING, FRECUENCY REGULATION, VOLTAGE REGULATION, ISLANS (BLACK START), SOC MANAGEMENT, ESS EQUALIZATION	CEGASA	AMPLA (ENEL) // CEGASA
2010/12	Smart City-Málaga	0,015	Spain	1 x GPTECH CONTROLLER // 1 x SMART LIGHTING MICROGRID	Lead Acid	Smart Grid	15kW/5kWh	FREQUENCY REGULATION, VOLTAGE REGULATION	VALENCE	ENDESA
2010/11	ALENRE - MONTEALTO	1,1	Spain	GPTECH EMS PLANT CONTROLLER + BATTERY	Other	Industry	100KW/10kWh	ENERGY SHIFTING	*	ALENRE-MONTEALTO
2010/11	SA2VE PV-FLYWHEEL STORAGE PROJECT	0,1	Spain	GPTECH DC CONVERTER	Flywheel	Industry	Flywheel Technology	ENERGY RECOVERING	*	ADIF
2010	SPOTRAC	*	Spain	GPTECH 2MW Bidireccional Converter	*	*	Flywheel Technology	ENERGY RECOVERING	*	ADIF

2.2 MAJOR INTERNATIONAL PROJECTS USING GPTECH WD3_1500 V TECHNOLOGY

BUSINESS LINE	COUNTRY	REGION	NAME	STATUS	YEAR	POWER	STAKEHOLDER
SmartPV	Chile	Antofagasta	ANDES SOLAR	Under development	2019/20	200	Confidential
SmartPV	Panamá	Panamá	PANAMÁ	Awarded	2019/20	40	Confidential
SmartPV	Dominican Rep.	Dominican Rep.	BAYASOL	Awarded	2019/20	50	Confidential
SmartPV	Malasya	Malasya	REDSOL	Under development	2019/20	36	SCATEC
SmartPV	Spain	Extremadura	EXTREMADURA	Under development	2019/20	50	ALDESA
SmartPV	Ukraine	Ukraine	DYMERKA	In operation	2019	50	ACCIONA
SmartPV	United States	Arizona	KAYENTA	In operation	2016/17	27.3	ISOLUX
SmartPV	Argentina	Mendoza	SAN LUIS	In operation	2017/18	28	DIASER
SmartPV	South Africa	Upington	SIRIUS	In operation	201819	60	SCATEC
SmartPV	ARUBA	Aruba	ARUBA	In Operation	2018	12	ISASTUR
SmartPV	Egypt	Benban	SOLAR PV 1-2-3	In operation	2017/18	150	TBEA
SmartPV	Mexico	Baja California	TUTO II	In operation	2018	90	ACCIONA
SmartPV	Mozambique	Mocuba	MOCUBA	In operation	2017/18	30	SCATEC
SmartPV	Malaysia	Gurun	GURUN	In operation	2017/18	50	SCATEC
SmartPV	Malaysia	Jasin	JASIN	In operation	2017/18	50	SCATEC
SmartPV	Malaysia	Merchand	MERCHAND	In operation	2017/18	50	Confidential
SmartPV	El Salvador	La Independencia	LA INDEPENDENCIA	In operation	2018	100	Confidential
SmartPV	Egypt	Benban	BENBAN	In operation	2017/19	150	Confidential
Wind GridCapabilities	Spain	Carba	CARBA	In operation	2009	46.61	ACCIONA
Wind GridCapabilities	Spain	Carballeira	CARBALLEIRA	In operation	2009	59.04	ACCIONA
Wind GridCapabilities	Spain	Caxado	CAXADO	In operation	2009	57.49	ACCIONA
Wind GridCapabilities	Spain	Fonsagrada	FONSAGRADA	In operation	2009	107.2	ACCIONA
Wind GridCapabilities	Spain	Pena Loba	PENA LOBA	In operation	2009	57.49	ACCIONA
Wind GridCapabilities	Spain	Pena Luisa	PENA LUISA	In operation	2009	102.54	ACCIONA
Wind GridCapabilities	Spain	Punago	PUNAGO	In operation	2009	71.47	ACCIONA
Wind GridCapabilities	Spain	Villalba	VILLALBA	In operation	2009	59.04	ACCIONA
Wind GridCapabilities	Spain	La Unión	LA UNIóN	In operation	2009	12.43	ELECDEY
Wind GridCapabilities	Spain	Altos De Cartagena	ALTOS DE CARTAGENA	In operation	2009	49.72	ENEL GP
Wind GridCapabilities	Spain	Coto Teixido	COTO TEIXIDO	In operation	2009	54.38	ENEL GP
Wind GridCapabilities	Spain	Escucha	ESCUCHA	In operation	2009	66.81	ENEL GP
Wind GridCapabilities	Spain	Faladoira	FALADOIRA	In operation	2009	57.49	ENEL GP
Wind GridCapabilities	Spain	La Muela	LA MUELA	In operation	2009	38.84	ENEL GP
Wind GridCapabilities	Spain	Las Navas del Marqués	LAS NAVAS DEL MARQUÉS	In operation	2009	24.86	ENEL GP
Wind GridCapabilities	Spain	Leboreiro	LEBOREIRO	In operation	2009	49.72	ENEL GP

Wind	GridCapabilities	Spain	Los Lances	LOS LANCES	In operation	2009	12.43	ENEL GP
Wind	GridCapabilities	Spain	Navazuelos	NAVAZUELOS	In operation	2009	40.4	ENEL GP
Wind	GridCapabilities	Spain	Puerto	PUERTO	In operation	2009	59.04	ENEL GP
Wind	GridCapabilities	Spain	Sierra del Cortado	SIERRA DEL CORTADO	In operation	2009	43.5	ENEL GP
Wind	GridCapabilities	Spain	Sierra del Madero	SIERRA DEL MADERO	In operation	2009	32.63	ENEL GP
Wind	GridCapabilities	Spain	Arico	ARICO	In operation	2009	3.11	ENEL GP
Wind	GridCapabilities	Spain	Barbanza	BARBANZA	In operation	2009	1.55	ENEL GP
Wind	GridCapabilities	Spain	Granadilla	MONTOUTO	In operation	2009	12.43	ENEL GP
Wind	GridCapabilities	Spain	Arinaga	MONTOUTO	In operation	2009	10.88	ENEL GP
Wind	GridCapabilities	Spain	Pico Gallo	PICO GALLO	In operation	2009	57.49	EON
Wind	GridCapabilities	Spain	Montouto	MONTOUTO	In operation	2009	48.16	NORVENTO
Wind	GridCapabilities	Spain	Collet de Feixos	COLLET DE FEIXOS	In operation	2009	18.65	ESBRUG
Wind	GridCapabilities	Spain	Mas de la Potra	MAS DE LA POTRA	In operation	2009	6.21	ESBRUG
Wind	GridCapabilities	Spain	Telde	TELDE	In operation	2009	1.55	AENA
Wind	GridCapabilities	Spain	Pena Grande	PENA GRANDE	In operation	2008	71.47	ACCIONA

2.3 MAJOR INTERNATIONAL PROJECTS USING GPTECH 1000V TECHNOLOGY

NORTH & CENTRAL AMERICA

BUSINESS LINE	COUNTRY	REGION	NAME	STATUS	YEAR	PLANT FEATURES			STAKEHOLDER
						Features	Val	unit	
SmartPV	Honduras	Amarateca	INELSA	In operation	2017/18	Plant Capacity	1.2	MWn	CHINT INELSA
SmartPV	United States	California	BAKERSFIELD 1	In operation	2017	Plant Capacity	5.2	MWn	IMMODO SOLAR
SmartPV	El Salvador	La Libertad	LA INDEPENDENCIA	Contracted	2017/18	Plant Capacity	10	MWn	GRUPO ORTIZ
SmartPV	Panama	Veragua	LAS MATAS	Contracted	2017/18	Plant Capacity	10	MWn	RENOVABLES TC
SmartPV EnergyReserve	Puerto Rico	Isabela	ORIANA	In operation	2016	Plant Capacity ESS Power Energy Storage Capacity Installed MVAr Capacity	50 21.8 4 4.2	MWn MWp MWh MVAr	BELECTRIC INC SONNEDIX
SmartPV EnergyReserve	United States	Nueva Orleans	ENO	In operation	2016	Plant Capacity ESS Power Energy Storage Capacity	1.2 0.5 0.5	MWn MWp MWh	GRUPO ONYX BLATTNER ENERGY
SmartPV	Guatemala	Chiquimulilla	HORUS II	In operation	2015	Plant Capacity	30	MWn	GRUPO ORTIZ
SmartPV	United States	Lemoore, California	LEMOORE I	In operation	2015	Plant Capacity	1	MWn	IMMODO SOLAR
SmartPV	United States	Nueva York	MORRISANIA	In operation	2015	Plant Capacity	0.05	MWn	SmartPV
SmartPV	Guatemala	Chiquimulilla	HORUS I	In operation	2014	Plant Capacity	50	MWn	GRUPO ONYX GRUPO ORTIZ
SmartPV	Puerto Rico	Dorado	HERMANOS BALLESTER	In operation	2014	Plant Capacity	0.8	MWn	REC SOLAR
SmartPV	Honduras	Choluteca	MARCOVIA	In operation	2013	Plant Capacity	35	MWn	X-ELIO GRUPO ORTIZ
SmartPV EnergyReserve	Puerto Rico	Salinas	SALINAS	In operation	2013	Plant Capacity ESS Power Energy Storage Capacity installed MVAr Capacity	10 5.4 1.26 7	MWn MWp MWh MVAr	SONNEDIX
SmartPV	Puerto Rico	San Juan	CONVENTION CENTER	In operation	2013	Plant Capacity	4.5	MWn	X-ELIO
SmartPV	United States	El Centro, California	SOL ORCHARD EL CENTRO	In operation	2013	Plant Capacity	25	MWn	ISOLUX
SmartPV	United States	Tulare, California	TULARE	In operation	2013	Plant Capacity	3	MWn	IMMODO SOLAR
GridCapabilities SmartPV	United States	Calexico, California	MOUNT SIGNAL	In operation	2013/14	Plant Capacity	206	MWn	ABENGOA
SmartPV	United States	Fresno, California	LA JOYA DEL SOL	In operation	2012	Plant Capacity	1.5	MWn	GES
SmartPV	Puerto Rico	Guayama	ILUMINA	In operation	2011	Plant Capacity	20	MWn	AES

SOUTH AMERICA

BUSINESS LINE	COUNTRY	REGION	NAME	STATUS	YEAR	PLANT FEATURES Features	Val	unit	STAKEHOLDER
SmartPV	Argentina	La Rioja	CHEPES	Under Development	2017/18	Plant Capacity	2	MWn	ICSA
SmartPV	Brazil	Santa Catarina	ITAJAI	In operation	2016/17	Plant Capacity	1	MWn	Teporti
SmartPV	Chile	Coquimbo	PUNITAQUI	In operation	2016	Plant Capacity	3	MWn	ORION POWER
SmartPV	Chile	Coquimbo	LA SILLA	In operation	2016	Plant Capacity	3	MWn	ENEL GREEN POWER PRODIEL
SmartPV GridCapabilities	Chile	Metropolitana Norte	QUILAPILUN	In operation	2016	Plant Capacity MVAr Capacity	110 56	MWn MVAr	SUNEDISON
SmartPV	Chile	Coquimbo/ Illapel	BELLAVISTA	In operation	2016	Plant Capacity	3	MWn	PRODIEL
SmartPV	Chile	Tarapaca/pozo Almonte	CALAMA I	Under development	2016	Plant Capacity	7.3	MWn	SOLARPACK SOLARPACK
EnergyReserve GridCapabilities	Ecuador	Balzay	BALZAY MICROGRID TECH. CENTER		2016	Plant Capacity ESS Capacity	0.15 0.25	MWn MWh	IRRADIA
SmartPV	Chile	Santiago	CARDONES	In operation	2016	Plant Capacity	0.5	MWn	Inelsa
SmartPV	Chile	Valparaiso	SANTA JULIA	In operation	2015	Plant Capacity	3	MWn	PRODIEL
SmartPV	Chile	Coquimbo/ Combarbala	PSF PAMA Y LOMAS COLORADAS	In operation	2015	Plant Capacity	4	MWn	SOLARPACK
SmartPV	Chile	Tarapaca/pozo Almonte	POZO ALMONTE I	In operation	2015	Plant Capacity	9	MWn	SOLARPACK
SmartPV	Chile	Tarapaca/pozo Almonte	POZO ALMONTE II+ III	In operation	2015	Plant Capacity	24	MWn	SOLARPACK
SmartPV	Chile	Antofagasta, Calama	ATACAMA PV II	Contracted	2015	Plant Capacity	100	MWn	ABENGOA
SmartPV	Chile	Antofagasta/ Calama	CALAMA III	In operation	2012	Plant Capacity	1	MWn	SOLARPACK
SmartPV	Peru	Arequipa	REPARTICION	In operation	2012	Plant Capacity	20	MWn	ISOLUX
SmartPV	Peru	Arequipa	MAJES	In operation	2012	Plant Capacity	20	MWn	ISOLUX
SmartPV	Peru	Tacna	TACNA SOLAR		2012	Plant Capacity	20	MWn	SOLARPACK

SmartPV	Peru	Moquegua	MOQUEGUA / PANAMERICA	In operation	2012	Plant Capacity	20	MWn	SOLARPACK
EnergyReserve GridCapabilities	Brazil	Buzios	CIDADE INTELIGENTE BUZIOS	In operation	2012	Plant Capacity ESS Capacity	0.1 0.2	MWn MWh	ENEL GREEN POWER
SmartPV	Argentina	San Juan	CANADA HONDA I	In operation	2011	Plant Capacity	5	MWn	ELECNOR

BUSINESS LINE	COUNTRY	REGION	NAME	STATUS	YEAR	PLANT FEATURES			STAKEHOLDER
						Features	Val	unit	
SmartPV	Spain	Ciudad Real	CIUDADREAL	Commisioning	2017	Plant Capacity	0.2	MWn	VELA
SmartPV	Spain	Toledo	TOLEDO	Commisioning	2017	Plant Capacity	0.6	MWn	VEOLIA
SmartPV	Spain	Cordoba	LUCENA	Commisioning	2017	Plant Capacity	1	MWn	ENERSONNE
SmartPV	Jordan	Maan	MAAN	In operation	2015	MVAr Capacity Plant Capacity	10 25	MVAr MWn	SUNEDISON
SmartPV	Jordan	Maan	EJRE	In operation	2015	MVAr Capacity Plant Capacity	7.5 20	MVAr MWn	SCATEC
SmartPV	Jordan	Maan	GLAE	In operation	2015	MVAr Capacity Plant Capacity	3.75 10	MVAr MWn	SCATEC
SmartPV GridCapabilities	Romania	Vanju Mare	VANJU MARE	In operation	2014	Plant Capacity MVAr Capacity	9.4 2.6	MWn MVAr	EDP Renováveis
SmartPV	Spain	Puertollano	PUERTO LLANO	In operation	2013	Plant Capacity	0.1	MWn	CNH
SmartPV	Romania	Aricestii	ARICESTII	In operation	2013	Plant Capacity	18.9	MWn	BESTER
SmartPV	Romania	Bailesti	BAILESTI	In operation	2013	Plant Capacity	4.15	MWn	BESTER
SmartPV	Romania	Burila Mica	BURILA MICA	In operation	2013	Plant Capacity	7.5	MWn	BESTER
SmartPV	Romania	Caracal	CARACAL	In operation	2013	Plant Capacity	6.4	MWn	BESTER
SmartPV	Romania	Osica de sus	ARINNA	In operation	2013	Plant Capacity	7.5	MWn	BESTER
SmartPV	Romania	Satu Mare	SOLARIS	In operation	2013	Plant Capacity	44.8	MWn	BESTER
SmartPV	South Africa	Towsrivier	TOUWS RIVIER	In operation	2013	Plant Capacity	37.8	MWn	SOITEC
SmartPV	Swaziland	Swazilandia	SWAZILANDIA	In operation	2013	Plant Capacity	0.1	MWn	WUNDERSIGHT
SmartPV	United Kingdom	SprigssFarm	SPRIGGS	In operation	2013	Plant Capacity	12.8	MWn	BESTER
SmartPV	Spain	Almonte	ALMONTE	In operation	2012	Plant Capacity	1.87	MWn	
SmartPV	Spain	Lorca 1	Lorca 1	In operation	2012	Plant Capacity	2.5	MWn	MARTIFER
SmartPV	Spain	Lorca 2	Lorca 2	In operation	2012	Plant Capacity	3.75	MWn	MARTIFER
SmartPV	Spain	Martorell (Seat)	MARTORELL (SEAT)	In operation	2012	Plant Capacity	2.68	MWn	SEAT
SmartPV	Spain	Puerto Real	PUERTO REAL	In operation	2012	Plant Capacity	1	MWn	
SmartPV	Italy	Ollastra	OLLASTRA	In operation	2012	Plant Capacity	1.8	MWn	
SmartPV	Spain	Guijo de Coria	GUIJO DE CORIA (SOLARPACK)	In operation	2011	Plant Capacity	5.5	MWn	SOLARPACK
SmartPV	Spain	PI Huelva Empresarial	P.I .HUELVA EMPRESARIAL	In operation	2011	Plant Capacity	2	MWn	
SmartPV	Italy		CERDENA	In operation	2011	Plant Capacity	3.5	MWn	
SmartPV	Italy	Matera	MATERA	In operation	2011	Plant Capacity	2.5	MWn	
SmartPV	Italy	Melegnano	MELEGNANO (MILN)	In operation	2011	Plant Capacity	16	MWn	

Ready for the Energy Challenges

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