

Sineng Electric Co., Ltd.



Sineng Electric

Stock Code: 300827

Global Leading PV Inverter Solutions Provider



Milestones and Achievements



2012

Wuxi Sineng New Energy Co., Ltd. was established



2015

The company changed its name to Sineng Electric Co., Ltd.



2017

Massive overseas marketing and service network



2020

IPO-going public-Shenzhen exchange
Stock Code: 300827

2014

Acquired fortune 500 listed Emerson's PV business



2016

Inauguration of Sineng Industrial Park in Wuxi



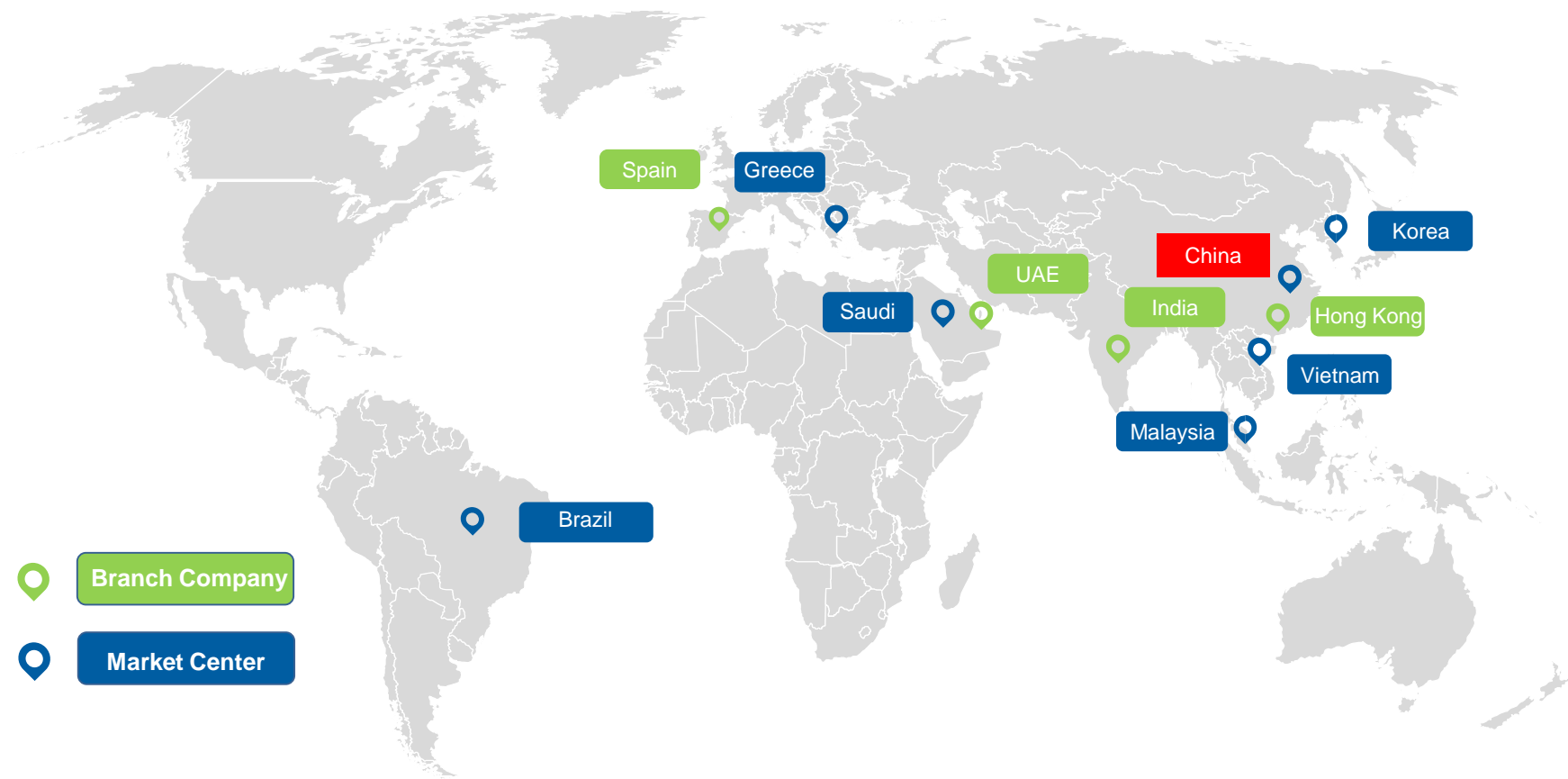
2018

1st overseas manufacturing base in Bangalore, India



Global Business Network

Covering major PV markets such as China, India, Vietnam, Saudi, South Korea, Brazil, Ukraine, etc.



Branch Company,
Bangalore · India

Branch Company, Dubai

Madrid, Spain

Hong Kong, China

Company & Factory, Riyadh
Under evaluation

Global PV Inverter Ranking

The top 10 global PV inverter vendors accounted for 76% of the market, increasing marginally year-over-year

Global PV inverter rankings by MW shipped, 2012-2019

Rank	2012		2013		2014		2015		2016		2017		2018		2019	
	Vendor	YOY Δ	Vendor	YOY Δ	Vendor	YOY Δ	Vendor	YOY Δ	Vendor	YOY Δ	Vendor	YOY Δ	Vendor	YOY Δ	Vendor	YOY Δ
1	SMA	-	SMA	-	SMA	-	Huawei	+2	Huawei	-	Huawei	-	Huawei	-	Huawei	-
2	Power-One	-	Sungrow Power Supply	+1	Sungrow Power Supply	-	Sungrow Power Supply	-	Sungrow Power Supply	-	Sungrow Power Supply	-	Sungrow Power Supply	-	Sungrow Power Supply	-
3	Sungrow Power Supply	+2	ABB (Power-One)	-1	Huawei	+6	SMA	-2	SMA	-	SMA	-	SMA	-	SMA	-
4	Refusol	-	Omron	+14	ABB	-1	ABB	-	ABB	-	ABB*	-	Power Electronics	+3	Power Electronics	-
5	Kaco	-2	TMEIC	+11	TBEA Sunoasis	+1	TMEIC	+1	TMEIC	-	Sineng	+1	ABB*	-1	Fimer (ABB)	+14
6	Advanced Energy	+3	TBEA Sunoasis	+19	TMEIC	-1	Sineng	+5	Sineng	-	TBEA SunOasis*	+1	Sineng	-1	Sineng	-
7	Fronius	-	Advanced Energy (Refusol)	-1	Omron	-3	TBEA Sunoasis*	-2	TBEA Sunoasis*	-	Power Electronics	+1	GoodWe	+3	SolarEdge Technologies	+1
8	Schneider Electric	+3	Emerson	+8	Schneider Electric	+2	Schneider Electric	-	Power Electronics	+1	TMEIC	-3	SolarEdge Technologies	+4	Growatt	+9
9	Samil Power	+19	Huawei	+22	Tabuchi Electric	+3	Power Electronics	+3	KStar	+6	Schneider Electric	+1	Ingeteam	+9	TMEIC*	+3
10	SolarMax	-	Schneider Electric	-2	Advanced Energy	-3	SolarEdge Technologies	+10	Schneider Electric	-2	GoodWe*	+10	TBEA Sunoasis*	-4	Ginlong Solis	+1

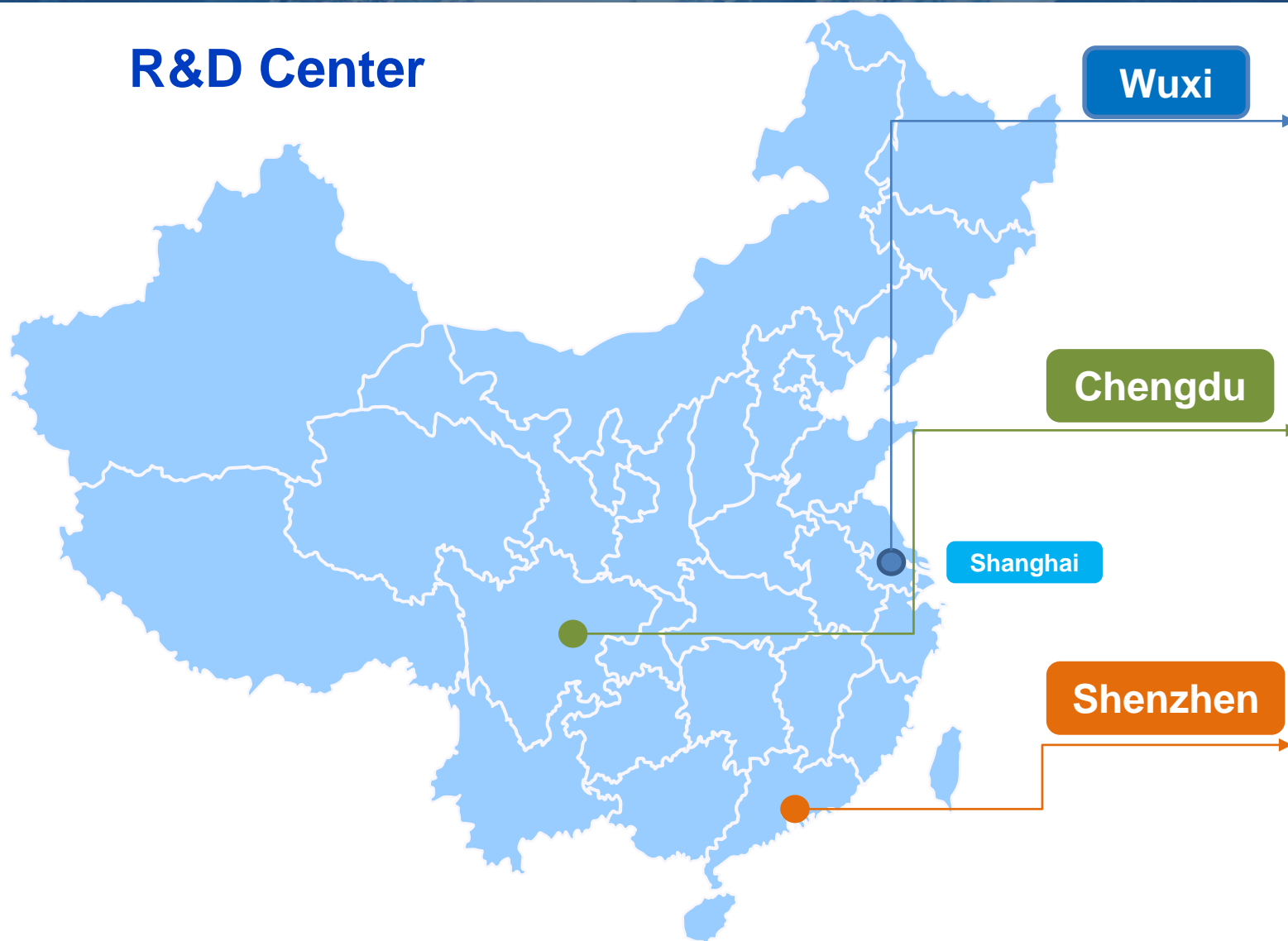
Percentage of global shipments by top 10 suppliers

Source: Wood Mackenzie Power & Renewables

2012	2013	2014	2015	2016	2017	2018	2019
66%	55%	66%	72%	78%	77%	75%	76%

R&D Center

R&D Center



Wuxi



Wuxi C&I inverter R&D Center

Chengdu



Chengdu monitor system R&D center

Shanghai

Shenzhen



Shenzhen Utility inverter R&D
origins from Emerson

Global Manufacturing Base



Wuxi - China

Annual Capacity, 10GW

Ningxia - China

Annual Capacity, 10GW

Bangalore - India

**Increased to Annual Capacity,
10GW Before August 2021**

Global supply chain partners

- ✓ Long term strategic cooperation relationships with Top multinational and Chinese-Multi electronics manufacturer
- ✓ Intelligent sourcing-Performance are continuously re-evaluated to improve for the greatest efficiency



Major Customers and Partners (China)



国家电投
SPIC



中国华能
CHINA HUANENG



中国华电
CHD



国家能源集团
CHN ENERGY



中国大唐集团公司
China Datang Corporation



中国电建
POWERCHINA



中国能建



上海电气
SHANGHAI ELECTRIC



中核集团
CNNC



CMEC

LONGi

Solar
Jinko
Building Your Trust in Solar

Trinasolar

CATL
宁德时代

 **Envision**
Net-Zero Tech Partner

Major Customers and Partners (International)



Main Business Scope



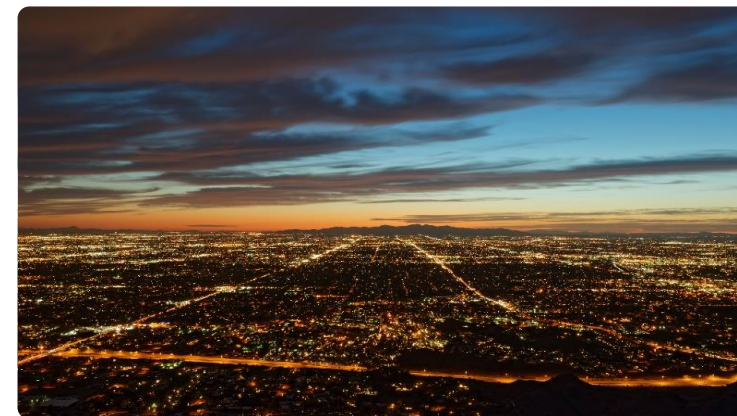
PV inverter

- Central inverter
- String inverter
- Multi-MPPT Central inverter



Energy storage

- DC coupled ESS
- AC coupled ESS
- Integrated ESS



Power quality

- Active filter
- LV reactive power compensator
- 3-phase unbalanced compensator

Full Series Inverter Solution



Central

- Single inverter 2.5MW -3.4MW, integrated solution, the lowest price /Wp
- High load ratio and over load capacity- lower electricity price
- Suitable for designing large block- optimum LCOE



String

- 3kW-20kW residential
- 40kW-120kW C&I roof
- 136kW~320kW, large block design
- Multi-channel MPPT to increase power generation
- Maximizing generation in complex terrain scenarios



Multi-MPPT Central

- Single machine 3150kW+, integrated design
- Multi-channel MPPT, less equipment, high power generation
- High load ratio - reduce the cost of electricity

Energy Storage PCS Solution Overview

Full range of EC / EH / ES Energy Storage Bidirectional Converters



ES Series

125/250kW
DC/DC Modular



EC Series

125/250kW
Medium Power Modular



EH Series

500/630kW
High Power Cabinet



EH Series

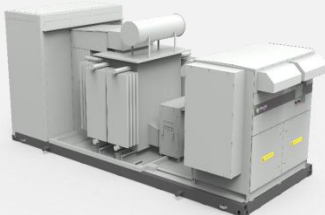
2.5/2.75/3/3.15/3.45MW
1500V Outdoor PCS



1/1.25MW



2/2.5MW



2.5~3.45MW



5~6.9MW

Integrated Solution

Application Scenarios



New Energy
Power Station



Frequency
Modulation



Peak Shaving



Microgrid



Peak Load
Shifting



Load Smooth
Control

Energy Storage PCS Solution Overview

Full range of EH / ES Energy Storage Bidirectional Converters

1500V DC

ES String

**200kW
DC/DC Modular**



1500V DC

EH String

**200kW
Medium PCS Modular**



Application Scenarios



**New Energy
Power Station**



**Frequency
Modulation**



Peak Shaving



Microgrid



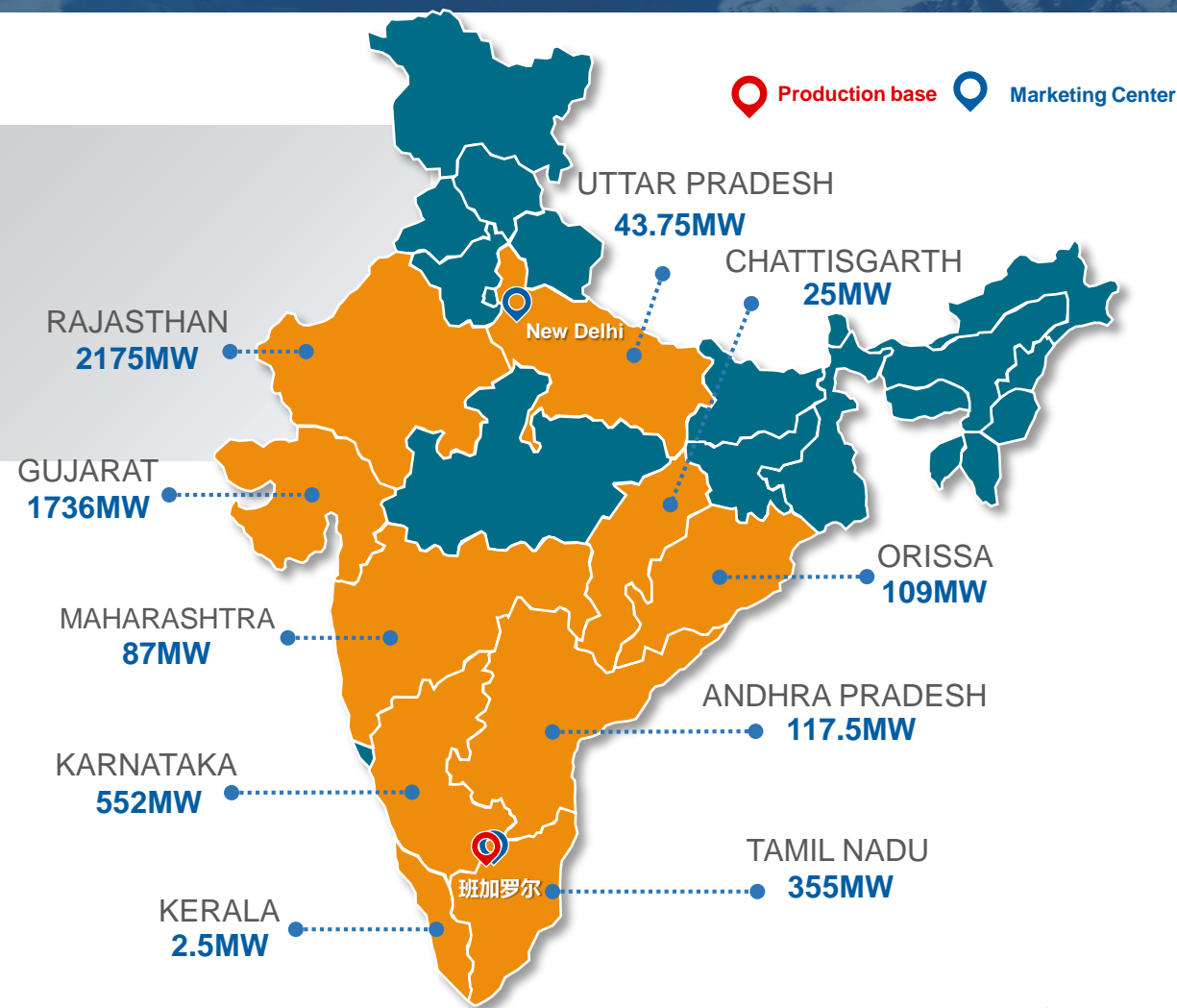
**Peak Load
Shifting**



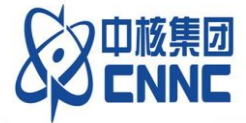
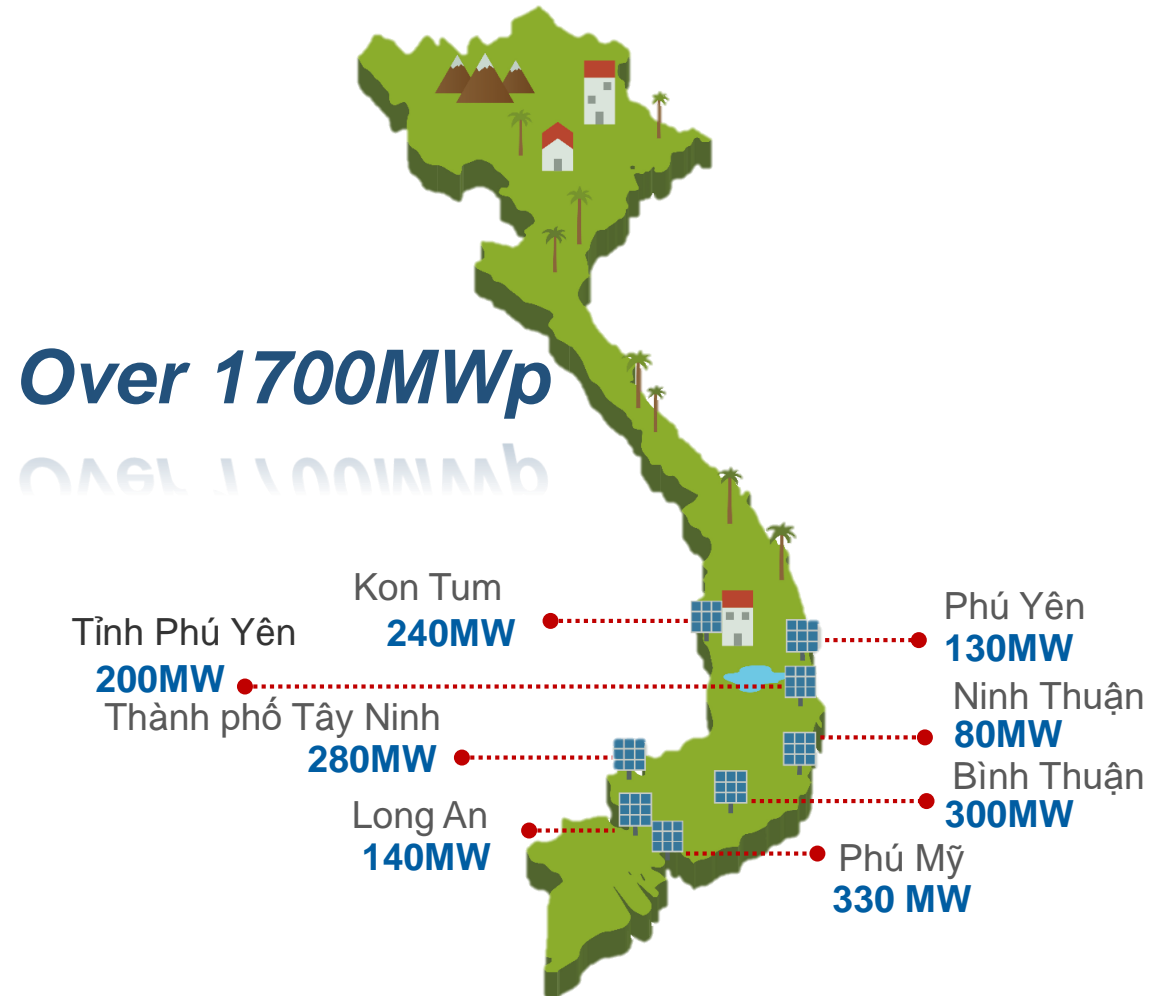
**Load Smooth
Control**

Rapid Growth and High Demand in India

*Shipments exceeded
5GW till June 2021*



Vietnam's Installed Capacity Exceeded 1700MWp



Utility PV Plant-Flat



257MW Flat PV Power Station, B.Grimm, Vietnam

Utility PV Plant-Hilly



100MW Complex Mountain PV Power Station, CHD, China

Utility PV Plant-Various Application: High temperature, Humidity



330MW PV Power Station, BCG, Vietnam

Utility PV Plant- High Humidity



100MW Floating PV Power Station, Datang China

Utility PV Plant-High Temperature



Utility PV Plant-Sandy



100MW Sandy PV Power Station, China

C&I Applications



C&I PV project, Zhejiang, China



C&I PV project, Korea



C&I PV project, Greece



C&I PV project, Malaysia

ESS Applications



30MW PV+10MW / 10MWh ESS project for **2022 Beijing Winter Olympics**, China



Industrial Park **60MW / 240MWh** ESS project, China



18MW / 9MWh ESS for **frequency regulation** project, China



100MW Wind farm + **20 MW / 20 MWh** ESS project, China

Endless Energy for Limitless Green

| Thanks

Sineng Electric Co., Ltd.

🏠 No. 6 Hehui Road, Huishan District, 214174, China.

☎ +86 510 83583123

🌐 www.si-neng.com

Sineng Electric (India) Pvt Ltd.

🏠 Plot No. 56 & 57, Bommasandra-Jigani Link Road, Industrial Area,
Bangalore, Karnataka, 560099, India.

✉ Sales.India@si-neng.com