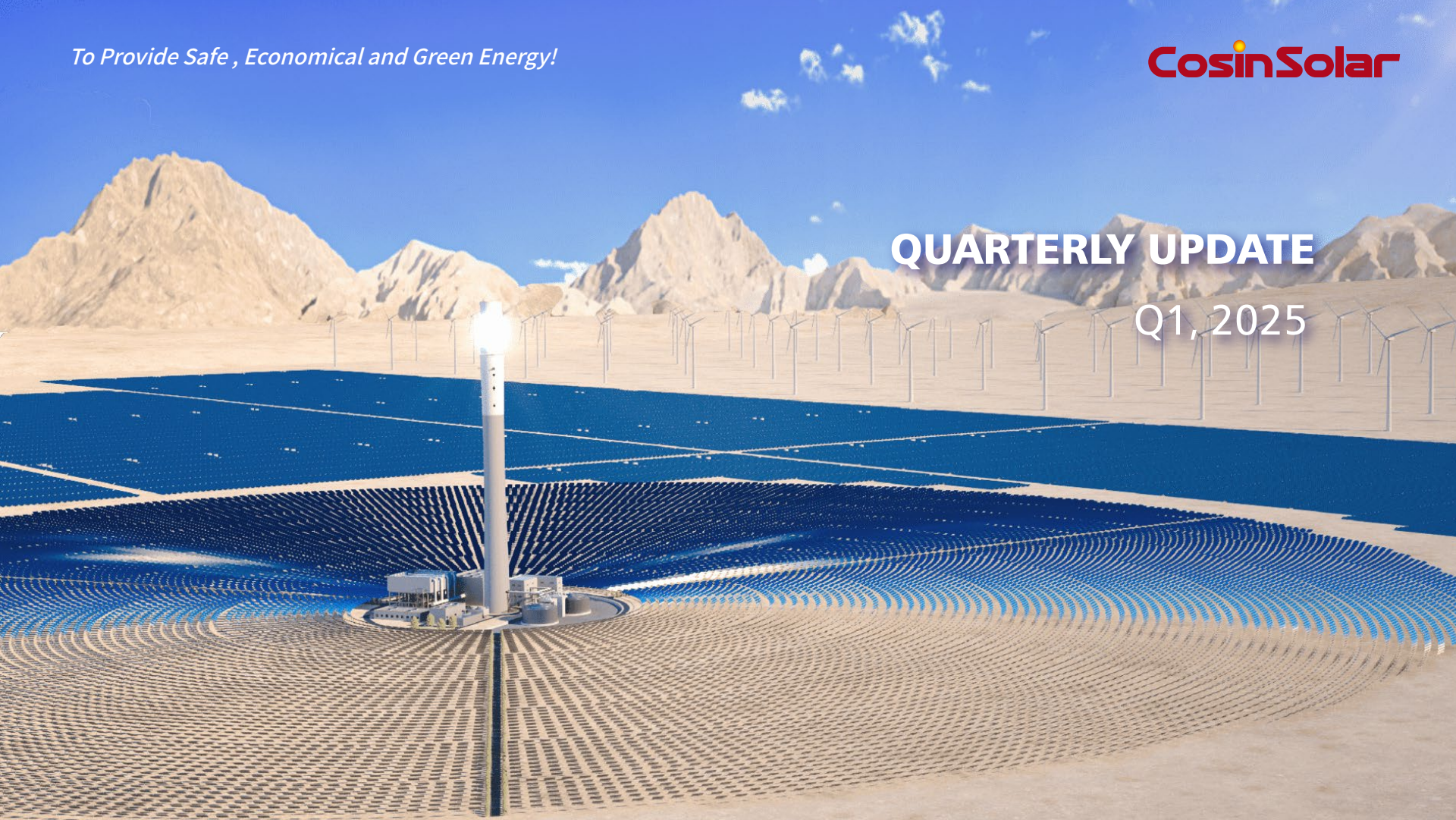
To Provide Safe , Economical and Green Energy!

CosinSolar



QUARTERLY UPDATE

Q1, 2025

WHO WE ARE

Global Leading Provider for Molten Salt Tower CSP

Cosin Solar Technology Co., Ltd. ("Cosin Solar"), was founded in 2010, headquartered in Hangzhou, China. As one of the pioneer and leading enterprises in China devoted in the promotion of research and industrialization of CSP technology, we are now specialized in the application of CSP, CSP+ hybrid solution and molten salt thermal energy storage technologies. We are able to provide our customers with advanced, mature, and cost-competitive CSP and molten salt energy storage products and solutions.

14 Years	117 Million USD	2	53%
Continuous Research	R&D Investment	Business Domain	Market share in China (*CT CSP Businee)

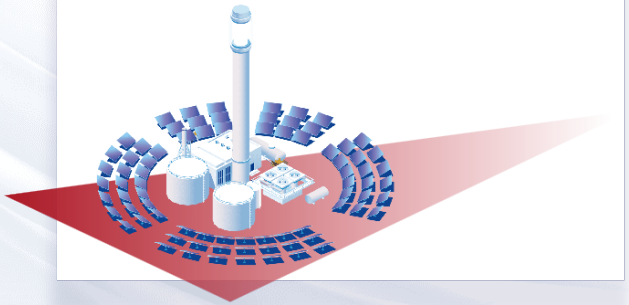
BUSINESS DOMAIN

Cosin Solar is driven by scientific and technological innovation and has established two major business segments.

CSP

Integrated Solution for Tower CSP

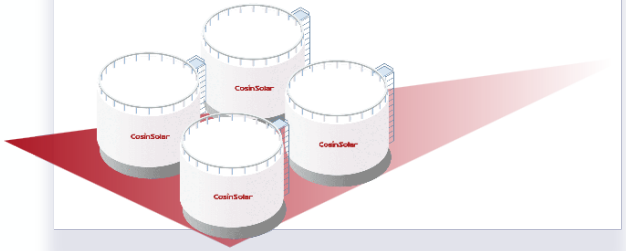
- Tower CSP Power Plant
- Wind/PV/CSP Thermal Storage Hybrid Power Plant
- Solar Thermal MSES Plants



MSES

MSES-Based Integrated Energy Solution

- Industrial Waste Heat Utilization
- Green Heat Supply/CHP Supply in Industrial and Commercial Parks
- Carnot Battery Of Coal-Fired Power Plants
- Energy Storage Services For PV & Wind Power Plants



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Integrated Solution for Tower CSP

Project Development

- Independent Development
- Investment
- Construction
- Operation

Technical Consultation

- Consultation during the preliminary development period
- Project scheme design
- Whole-process construction management

Equipment Supply

- Design of the concentrating solar thermal collection system and equipment supply
- Design of the molten salt energy storage and heat exchange system and equipment supply

Engineering Services

- Consultation during the preliminary development period
- Project scheme design
- Whole-process construction management

Core Technologies and Products

Solar Block

- High-precision Intelligent Heliostat
- Large-Scale Heliostat Field Control System
- Calibrating System
- Flexible Design Technology of Receiver
- Safe Operation Process of Receiver
- Cloud Forecasting System
- Automatic Cleaning Vehicle

Molten Salt TES & SGS

- Safe and Reliable System Process
- Special Equipment Design and Selection
- Design Technology for MS Tanks with High Reliability
- Design Technology for MS Heat Exchangers with Wide - range and Rapid Variable - load Operation
- Design Technology for MS Pumps with Large Flow Rate and High Lift
- Custom - developed Operation Control Strategies
- Original Design of the Low - level Tank Solution

Value-added Service

- CSP Design Software
- Operation Optimization Software
- CSP Simulation Software
- Plant Performance Measurement Software
- Plant Intelligent Fault Diagnosis Platform

CosinSolar

WHAT WE GOT

The world's only

Tower CSP technology provider with a track record of over ***1GW***

Tower CSP Installed Capacity

1360MW

Solar Block
1360MW

MS TES & SGS
260MW

Gansu, China

Jinta ZhongGuang Solar "CSP + PV" Hybrid Pilot Project 100MW CSP Project

Until the end of March 2025, the main works of the project have been completed, striving for the goal of full capacity grid-connected power generation of the project.

Qinhai, China

1 CGN New Energy Delingha 1GW Hybric Project (200MW CT CSP)

Until the end of March 2025, 15294 Sets of heliostats have been installed.

2 CTGR Qingyu DC 100MW CSP Project

Until the end of March 2025, all 23,731 sets of heliostats were assembled.

3 CHN Energy Qinghai Qingyu DC 100MW CSP Project

Until the end of March 2025, all 23,340 sets of heliostats were assembled.

Jilin, China

1. **CGN New Energy Jixilugu DC 490MW Hybrid Project (100MW CT CSP)**

   Until the end of March 2025, 10000 Sets of heliostats have been installed.

2. **SPIC Jixi Base Jixilugu DC 1.4GW Hybrid Project Unit 1 100MW CSP**

   Until the end of March 2025, 5909 sets of heliostats have been installed.

Xinjiang, China

1. **ENERGY CHINA ZTPC Xinjiang Turpan CSP + PV Integrated Project (100MW CT CSP)**

   Until the end of March 2025, all 21,865 sets of heliostats were assembled.

2. **SPIC Xinjiang Turpan Shanshan Qiketai 100MW CSP Project**

   Until the end of March 2025, all 16,667 sets of heliostats were assembled.

3. **ENERGY CHINA Hami 150MW CT CSP**

   Until the end of March 2025, 605 sets of heliostats were assembled.

4. **POWERCHINA Turpan City Tuokexun County CSP + PV Integrated Project (100MW CT CSP)**

   Until the end of March 2025, all 14,680 sets of heliostats were assembled.

5. **Luneng Fukang Hybrid Project 100MW CSP Project**

   Until the end of March 2025, 98 sets of heliostats were assembled, and the tower has reached 60 meters.

Qinhai, China *Under preparation*

Golmud 350MW CT CSP project

- Demonstration (Pilot) CSP Project in Qinghai Province in 2024
- It's will feed-in tariff at 0.55RMB/k-Wh after being put into operation
- The project will adopt the "three-tower-one-machine" design plan
- Development/Investment, EPC Management, O&M, Technology Provider

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MSES-Based Integrated Energy Solution

Process of Large-capacity High-temperature MSES

- Design of large - scale MS tanks
- Parallel connection of multiple pairs of MS tanks
- Series - parallel connection of large - scale electric heaters

Safety Control Strategies for High- temperature MS

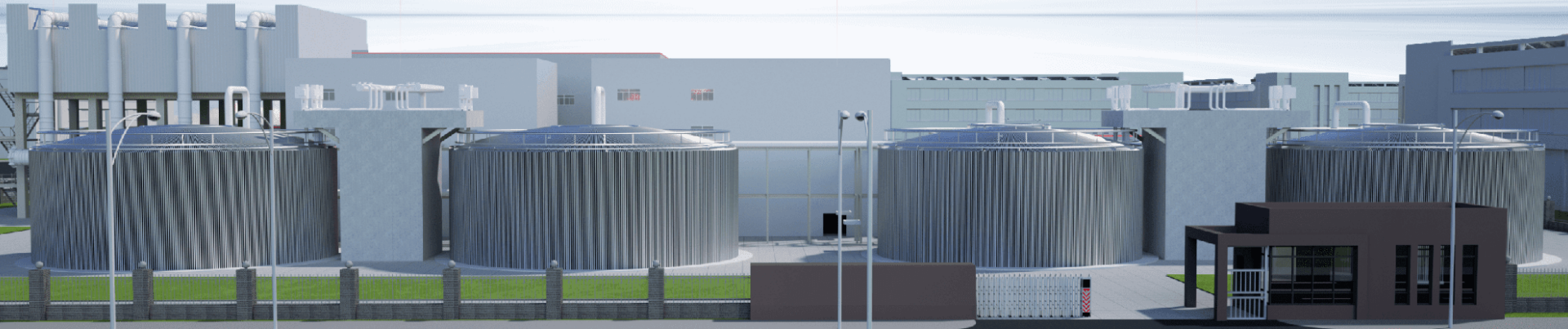
- Customized system start - up and shutdown control strategies
- Interlock and protection strategies for abnormal working conditions such as molten salt freezing blockage, over - temperature, and pipe explosion

System Development and Supply

- Design and selection of key equipment such as MS tanks, MS heat exchangers, MS pumps, MS valves, MS electric tracing, and MS instruments
- Equipment installation management

Implementation, Operation and Maintenance of MSES Project

- Construction quality control
- Commissioning, operation and maintenance technical guidance



Project Cases of MSES

Delingha 10MW CSP Plant

Parameter Introduction

Location	Qinhai
Installed Capacity	10MW
Storage	2 hours
Storage capacity	48MWht
MS	500 tons
Steam Parameter	8.83MPa/510°C
Annual Production	11,480MW
DSG Completion	Jul. 2013
MSR Completion	Aug. 2016

Delingha 50MW CSP Plant

Parameter Introduction

Location	Qinhai
Installed Capacity	50MW
Storage	7 hours
Storage capacity	850MWht
MS	10,093 tons
Steam Parameter	13.2MPa/540°C
Annual Production	146GWh
Start Date	Mar. 2017
Completion	Dec. 2018

Jinta 100MW CSP Plant

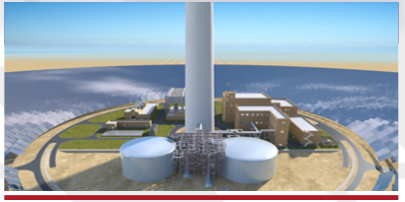
Parameter Introduction

Location	Gansu
Installed Capacity	100MW
Storage	8 hours
Configuration of EH	6.3kV，20MW
Reservation for EH	40MW
Storage capacity	1,983MWht
MS	20,517 tons
Steam Parameter	14MPa/550°C
Annual Productio	209GWh

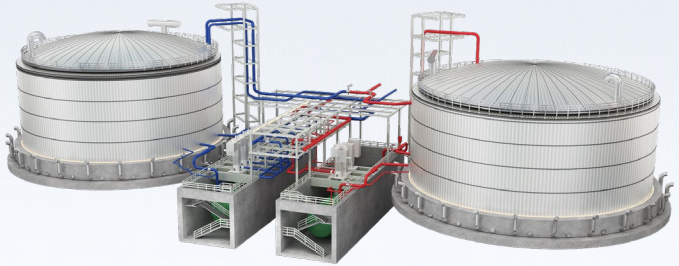
Luneng Fukang 100MW CSP Plant

Parameter Introduction

Location	Xinjiang
Installed Capacity	100MW
Storage	8 hours
Configuration of EH	20MW
Reservation for EH	60MW
Storage capacity	1,861MWht
MS	19,000 tons
Steam Parameter	13.2MPa/540°C
Annual Productio	121GWh



Cosin Solar's Innovative Design of Low-position Tank for Short Shaft Pump



Analysis of Advantages

The short shaft of the molten salt pump ensures high reliability.

The low - position tank short - shaft pump solution significantly cuts down the design, manufacturing, and maintenance challenges of the molten salt pump. For instance, the cold salt pump shaft length can be slashed from 18 - 19m to around 6 - 7m, and the hot salt pump shaft length from 18 - 19m to 5 - 6m, with reduced design and manufacturing complexity.

Less unavailable salt, reducing investment costs.

Lowering the non - usable dead salt level in each storage tank from 1m to about 0.5m (compared to the conventional solution) further cuts initial investment in MS storage tanks and MS.

Convenient operation and maintenance.

The MS pump, installed on the low - position tank with a low (near - ground) platform, is convenient for daily maintenance. This setup also eases the construction of the pump platform and reduces the overall engineering work for both the pump platform and the MS storage tanks.

Economic Analysis

For a project with an installed capacity of 100 MW and 8 - hour thermal energy storage, different storage tank design schemes have an impact on the economy.

Type of Storage Tank Scheme	Diameter of the Cold Tank	Height of the Cold Tank	Diameter of the Hot Tank	Height of the Hot Tank	Total Amount of MS	Submerged Depth of the Cold Salt	Submerged Depth of the Hot Salt
Conventional Scheme	30.4m	14m	31.88m	14m	19,000t	18m	18m
Optimized Scheme	28.49m	15m	28.83m	16m	17,962t	7.5m	6.5m

- After adopting the technical scheme of molten - salt transportation in low - position tanks, the height of the storage tanks is no longer restricted by the shaft length of the molten - salt pump. The storage tanks optimized according to this technical scheme have a smaller specific surface area, higher thermal efficiency, lower steel consumption, and a reduced amount of molten salt.
- Through the application of the molten - salt transportation in low - position tanks technical scheme, compared with the conventional scheme, the comprehensive cost of the thermal energy storage system is reduced by approximately 20 to 30 million yuan, representing a reduction of approximately 6% to 12% in the comprehensive cost of the thermal energy storage system.

UPCOMING EVENTS

The 12th China International Concentrated Solar Power Conference and CSPPLAZA Annual Meeting

May 28—29th, 2025

Hangzhou, China

The meeting is jointly hosted by Cosin Solar.

CONFERENCE INVITATION: We sincerely welcome all the friends from the industry to attend the conference.