



## Presentation of COBRA T&I

Civil and industrial engineering contractor and concessions developer with annual revenues **over €38 billion**.  
 Present over the five continents with stable **presence in 50 countries**.  
 Long term strategy looks for global leadership and cultural integration towards



2014		38,881
2013		38,373
2012		38,396
2011		28,472
2010		14,329
2009		15,387

*\*Figures in million €*

RANK		FIRM	2013 REVENUE \$ MIL.	
2014	2013		INT'L	TOTAL
<b>1°</b>		<b>GRUPO ACS, Madrid, Spain†</b>	44,053.8	51,029.3
		<b>HOCHTIEF AG, Essen, Germany†</b>	34,845.0	37,012.8
3	3	BECHTEL, San Francisco, Calif., U.S.A.†	23,637.0	30,706.0
4	4	VINCI, Rueil-Malmaison, France†	20,292.6	54,107.0
5	5	FLUOR CORP., Irving, Texas, U.S.A.†	16,784.3	22,144.1
6	6	STRABAG SE, Vienna, Austria†	15,392.0	18,023.0
7	7	BOUYGUES, Paris, France†	14,789.0	35,993.0
8	9	SKANSKA AB, Stockholm, Sweden†	14,141.1	18,446.5
9	10	CHINA COMMUNICATIONS CONSTRUCTION GROUP LTD., Beijing, China†	13,162.5	54,181.7
10	11	TECHNIP, Paris, France†	12,243.0	12,399.0
11	8	SAIPEM, San Donato Milanese, Italy†	12,137.6	12,310.2
12	12	CONSTRUTORA NORBERTO ODEBRECHT, Sao Paulo, SP, Brazil†	9,877.1	15,145.8
13	15	HYUNDAI ENGINEERING & CONSTRUCTION CO. LTD., Seoul, S. Korea†		
14	**	FERROVIAL, Madrid, Spain†		
15	13	SAMSUNG ENGINEERING CO. LTD., Seoul, S. Korea†		

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## World's Largest Transportation Developers

2013 SURVEY OF PUBLIC-PRIVATE PARTNERSHIPS WORLDWIDE

Ranked by Number of Concessions Developed Alone Or in JV Since 1985

Company	Operating		# sold or		No. operating or under construction in:			
ACS Group/Hochtief (Spain)	56	44	55	2	6	19	29	
Macquarie Group (Australia)	44	13	16	4	1	1	38	
Abertis (Spain)	41	14	0	0	0	12	29	
Vinci (Spain)	38	3	17	1	2	11	24	
Hutchison Whampoa (China)	34	5	0	0	0	9	25	
Ferrovial/Cintra (Spain)	32	23	30	6	2	9	15	
NWS Holdings (China)	27	0	1	0	0	27	0	
EGIS Projects (France)	25	1	14	0	1	5	19	
Bouygues (France)	24	3	13	1	1	9	13	



## Networks - Utility Services

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Transmission lines and substations  
Electrical and mechanical installations  
Electricity, gas and water distribution networks  
Maintenance of gas and water  
Industrial maintenance and auxiliary services

## Renewable Energy and Environment

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Photovoltaic, Concentrated Solar Plants, Wind,  
Waste to Energy, Biomass, Offshore Wind  
Environment  
(Desalinations plants, Water treatment plants)  
Soil waste remediation

## Integrated Projects

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Energy Projects (combined cycle, nuclear, coal)  
Mini-hydroelectric Plants  
Industrial Projects  
Offshore Platforms  
High-speed Railway Projects  
Oil & Gas (upstream, midstream, downstream)

## Control Systems

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Control systems for traffic, transport and lighting  
Instrumentation, control and security systems  
Integral maintenance of public infrastructures  
Communication networks  
Consulting and engineering services

CSP



PV



Biomass



Onshore Wind



Offshore Wind



Geothermal





## Background



## Market research & prospection

- Identification, selection and analysis of business opportunities.

## Development of the project

- Permitting (international regulatory know-how).
- Layout, Design and Basic Engineering.
- Synergies with strategic partners.

## Financial Close

- Negotiation of strategic contracts: PPAs, EPC & O&M Contracts.
- Debt & Equity Structuring. Development of financial solutions.
- Technical and financial due diligence management.

## Engineering

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FEED, Basic & Detailed Engineering  
QA/QC Management  
Health, Safety & Environmental Management

## Procurement

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Capital Equipment and Services  
Negotiation with suppliers and subcontractors  
Logistic Management  
Expediting and Tracking

## Construction

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Project Management  
Commissioning and Start up  
EPC Full wrap guarantees

# Operation & Maintenance Capabilities

## Operation & Maintenance

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Scheduled and unscheduled maintenance

Equipment and component warranty management

Qualified Personnel Training

Health, Safety & Environmental management

Operating optimization process

O&M performance and availability guarantees

## THERMOSOLAR PLANTS

Operation	400 MW
Built	519.9 MW
Under construction	110 MW
Development	300 MW

## PHOTOVOLTAIC PLANTS

Built	197.3 MW
Development	314 MW

## WIND FARMS

Operation	1,542 MW
Built	1,799 MW
Under construction	188.7 MW
Development	230 MW

## BIOMASS/GASIFICATION PLANTS

Under construction	28 MW
Development	50 MW





Track Record CSP

## Extensive Track Record

Successfully completed the **construction of 400 MW CSP** plants with storage **for itself** and another **119.9 MW as EPC Contractor for third parties** through a project finance scheme

## Flagship Projects CSP With Storage

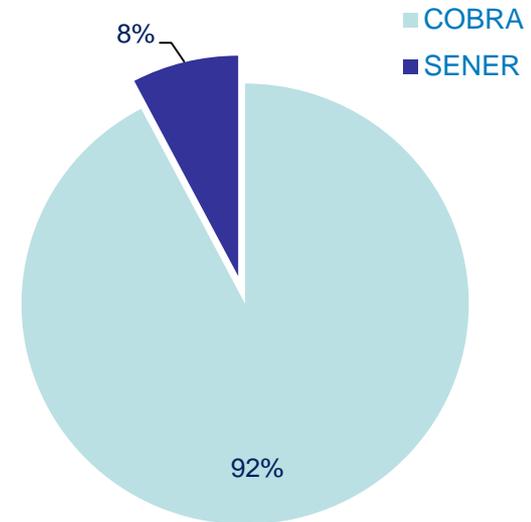
Participation and construction of most of the **flagship projects** in CSP with heat storage system in the world:

**Andasol:** first parabolic trough project with a molten salts storage system (50 MW with 7.5 hours of storage).

**Gemasolar:** first molten salt tower project (19.9 MW with 15 hours of storage).

**Crescent Dunes:** first utility scale molten salt tower project (110 MW with 10 hours of storage).

Market share of constructed or under construction commercial MWs in tower Technology with MS and thermal storage



Source: CSP Today and Protermosolar

**CASABLANCA**  
(50 MWe + 7.5h of storage)

**EXTRESOL COMPLEX**  
(3X50 MWe + 7.5h of storage)

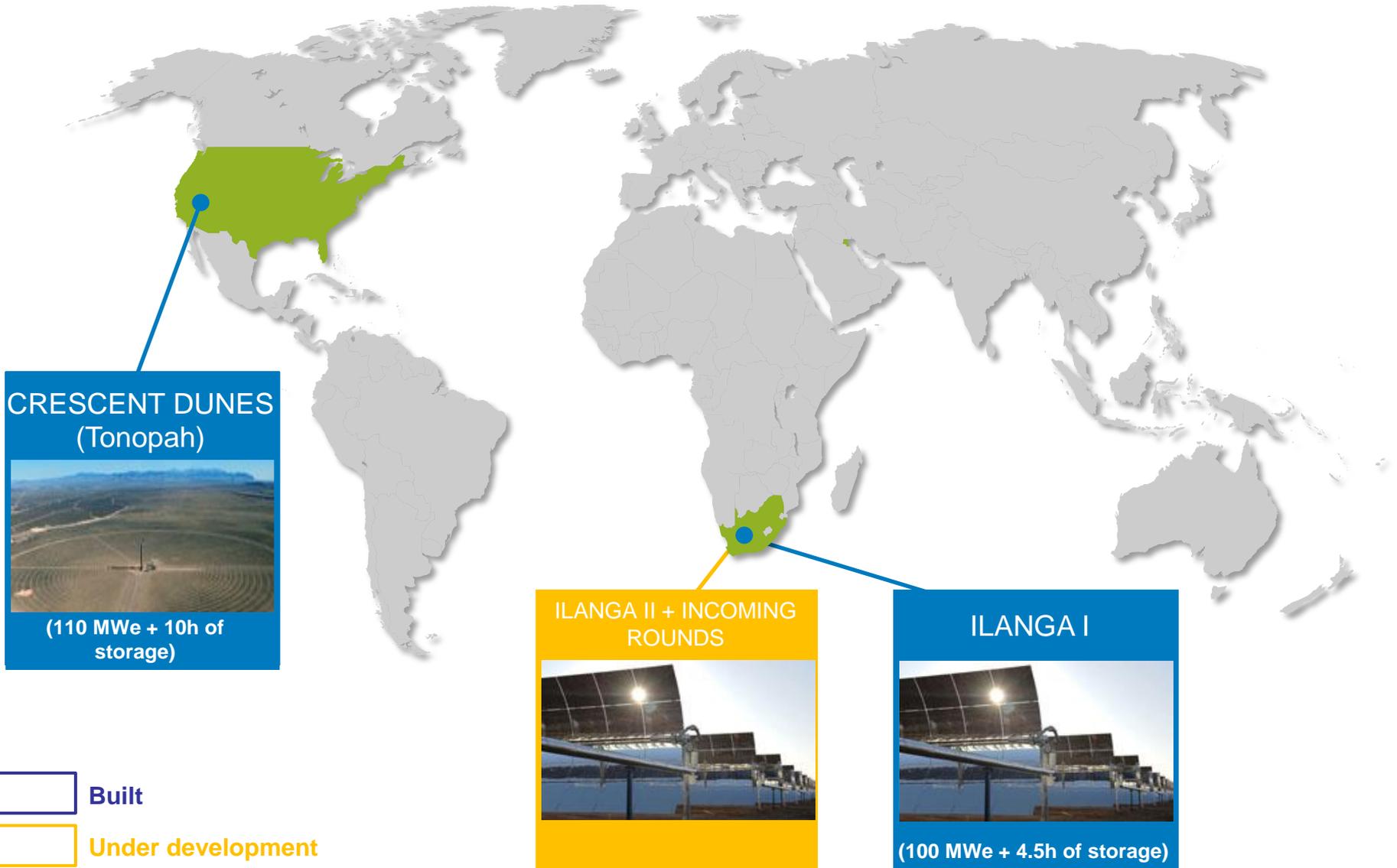
**VALLESOL COMPLEX**  
(2X50 MWe + 7.5h of storage)

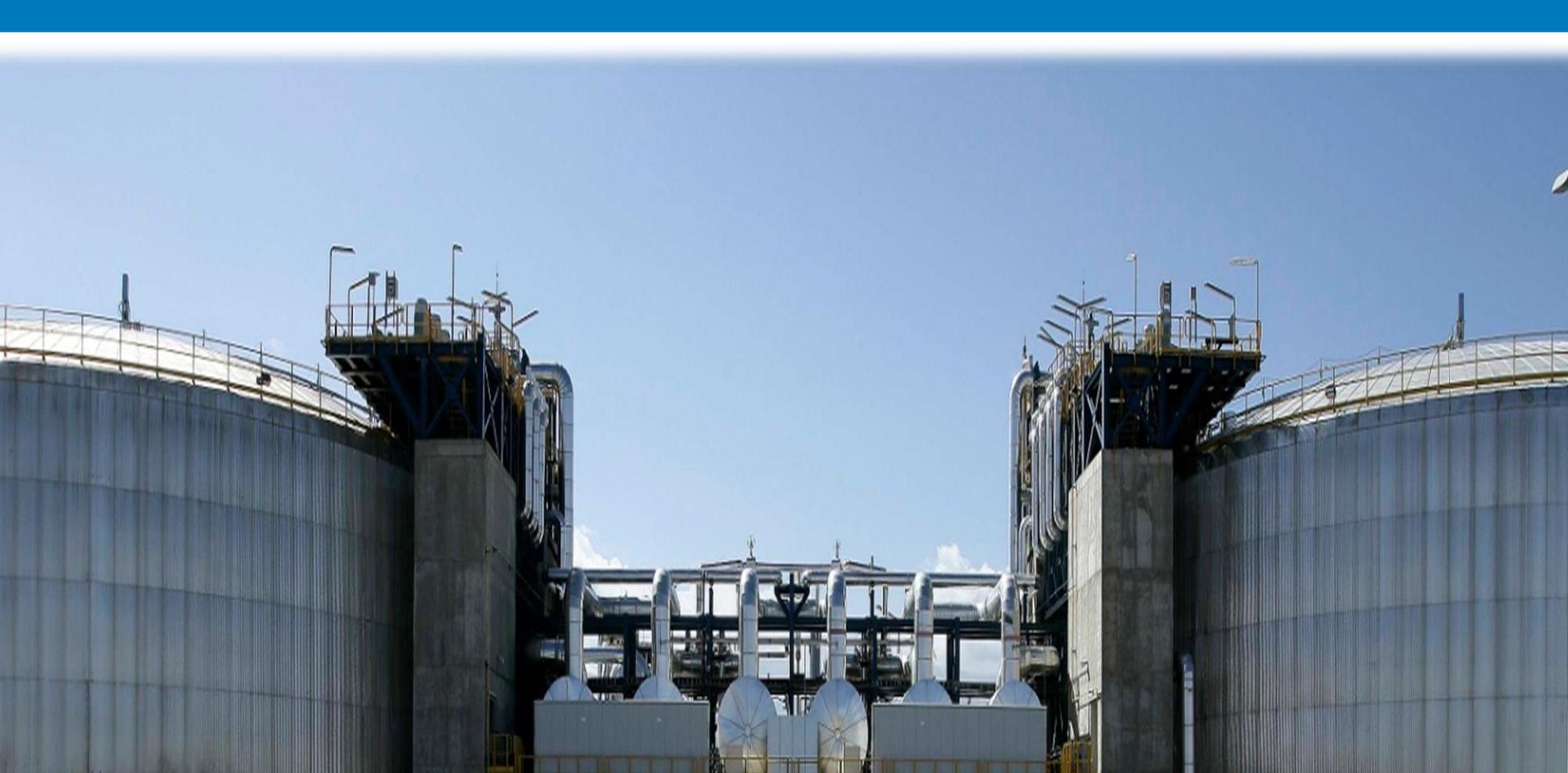


**MANCHASOL COMPLEX**  
(2X50 MWe + 7.5h of storage)

**ANDASOL COMPLEX**  
(2X50 MWe + 7.5h of storage)

**GEMASOLAR**  
(19.9 MWe + 15h of storage)





Our Projects: Realities

**Andasol –I** in operation since **Q4 2008**, **Andasol-II** in operation **since Q2 2009**

**ACS COBRA Role:** EPC contractor (JV with Sener) , O&M and Owner



**Extresol –I** in operation since **Q3 2009**, **Extresol –II** since **Q2 2010**, and **Extresol – III** since **Q3 2012**

**ACS COBRA Role:** Developer, EPC contractor (JV with Sener) , O&M and Owner



**Manchasol –I** in operation since **Q4 2010** and **Manchasol-II** in operation since **Q2 2011**

**ACS COBRA Role:** Developer, EPC contractor (JV with Initec) , O&M and Owner



Both in operation since **Q4 2011**

**ACS COBRA Role:** EPC contractor (JV with Sener) for Torresol Energy



In operation since **Q2 2013**

**ACS COBRA Role:** Developer, EPC contractor (JV with Sener), O&M and Owner



In operation since **Q2 2011**

**ACS COBRA Role:** EPC contractor (JV with Sener) for Torresol Energy



In operation since **Q2 2011**

**ACS COBRA Role:** EPC contractor (JV with Sener) for Torresol Energy



Under Commissioning

**ACS COBRA Role:** EPC contractor for ACS COBRA & Solar Reserve (Owners jointly with SR)



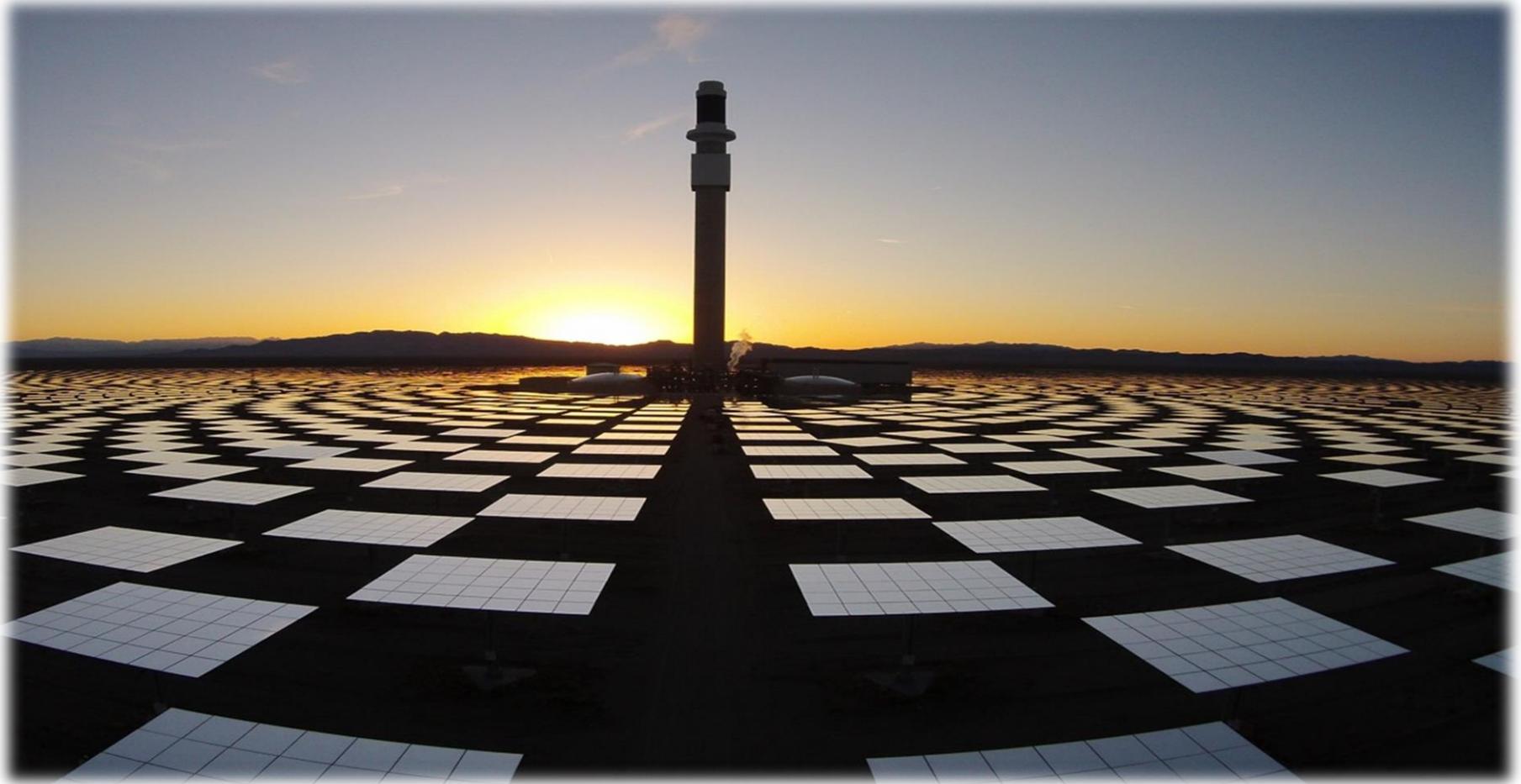
Under Commissioning

**ACS COBRA Role:** EPC contractor for ACS COBRA & Solar Reserve (Owners jointly with SR)



Under Commissioning

**ACS COBRA Role:** EPC contractor for ACS COBRA & Solar Reserve (Owners jointly with SR)



# Thanks for your attention!!!

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