



## Abengoa Solar: an overview

April 2014

**We are a global solar power generation company offering proven proprietary technologies, developing new ones and operating power plants**

- A **twenty year commitment** to the development of both CSP and PV technologies
- **More than 1.300 professionals worldwide**
- **1.223 MW in operation and 430 MW under construction**
- **Proprietary solar technologies** (tower, parabolic trough, thermal storage, high concentration photovoltaics, hybrids)
- A **world class team of solar experts**, with unsurpassed collective experience and skills



### Technology as a competitive advantage for Abengoa

R&D

Pilot Plant or Real Test

Commercial Project

- +150 in-house researchers
- R&D center in Denver, CO
- R&D center in Seville, Spain
- Abengoa Research
- Collaboration with key research institutions and companies worldwide



Abengoa is a technology leader in the 3 key areas within CSP and in HCPV

CSP

Tower

Trough

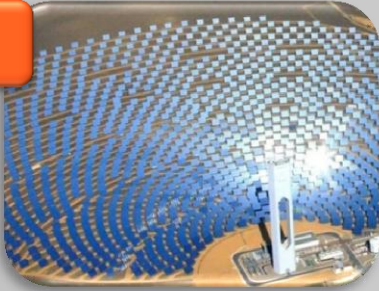
Storage

HCPV



### Clean dispatchable plants

Tower



Trough



Industrial applications



### Hybrid plants

Hybrids



#### Conventional+ solar

- ISCC (gas + solar)
- ISCoal (Carbón + solar)

### Clean intermittent plants

Photovoltaic



High concentration photovoltaic



# ABENGOA SOLAR

## Our projects

Europe

693 MW

- **PS10 & PS20**, the first and the biggest commercial solar power towers in operation worldwide
- **Solnova 1, 3 & 4, Helioenergy 1&2, Solacor 1&2, Helios 1&2, Solaben 1, 2, 3&6**: 13 parabolic trough plants in operation (50 MW each)
- 5 photovoltaic plants in operation

U.S.A.

560 MW

- **Solana** (AZ): the largest solar power plant in the world, a 280 MW parabolic trough plant with 6 hours of storage, in operation
- **Mojave** (CA): 280 MW parabolic trough plant, under construction

MENA,  
Africa y  
Latam.

720 MW

- **Hassi R'mel** (Algeria): 150 MW ISCC hybrid plant in operation
- **Shams-1** (Abu Dhabi): 100 MW parabolic trough in operation
- **Kaxu Solar One & Khi Solar One** (South Africa): 100 MW trough plant and 50 MW solar power tower under construction
- **Xina Solar One (South Africa)**: 100 MW parabolic trough with 5 hours of storage, in pre-construction phase.
- **Ashalim (Israel)**: 110 MW parabolic trough with thermal storage, in pre-construction phase.
- **Cerro Dominador project (Chile)**: 110 MW tower plant of molten salt technology with 17 hours of storage, in pre-construction phase.

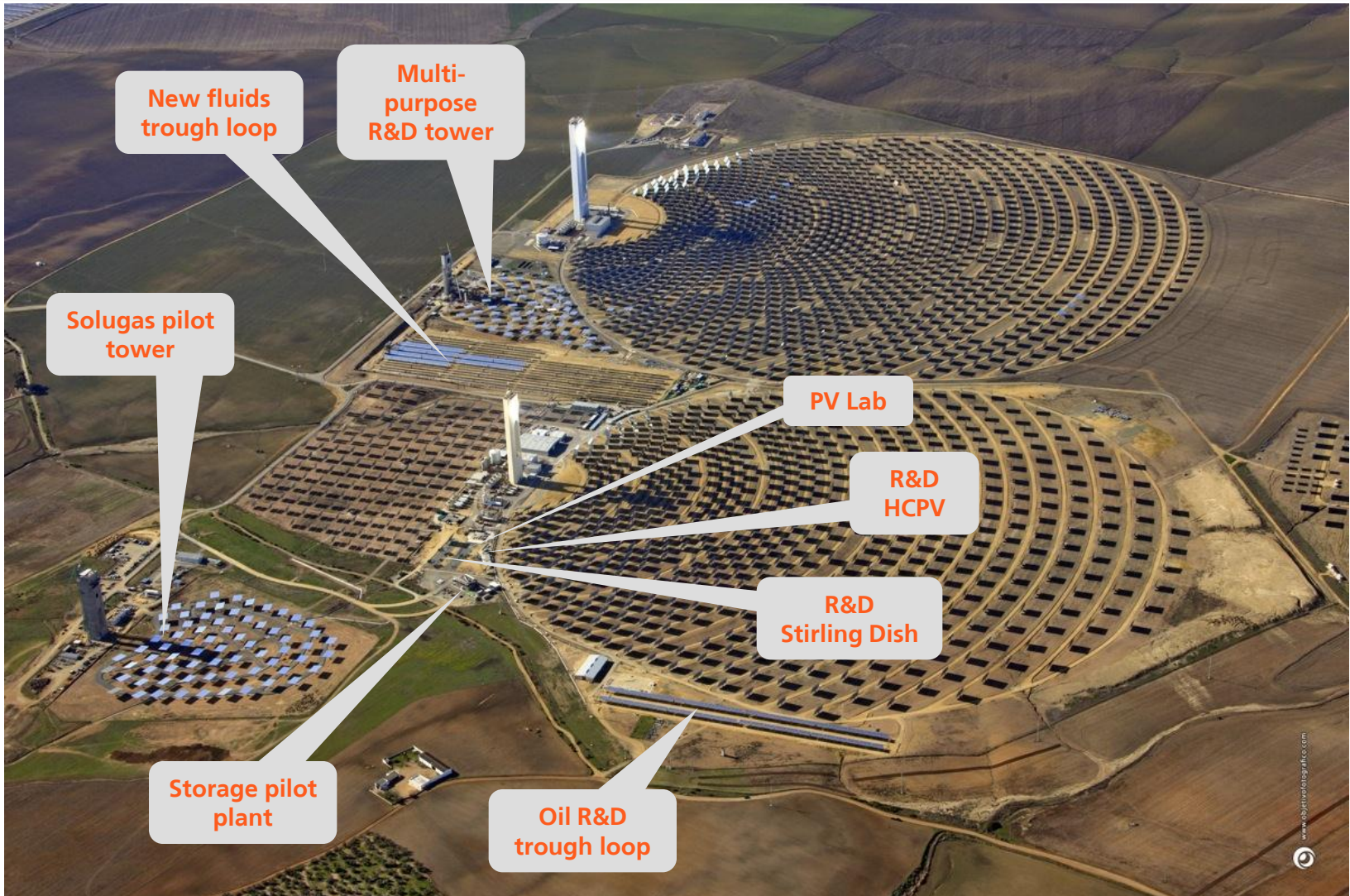


# ABENGOA SOLAR

Some of our plants



Solúcar Complex is a world reference: a unique solar complex that combines operating and pilot plants of several technologies, as well as a R&D center







# Thank you