

# European Hub for Applied Solar Research

Smart Specialisation Partnership on Solar Energy Olga García, Extremadura Energy Agency



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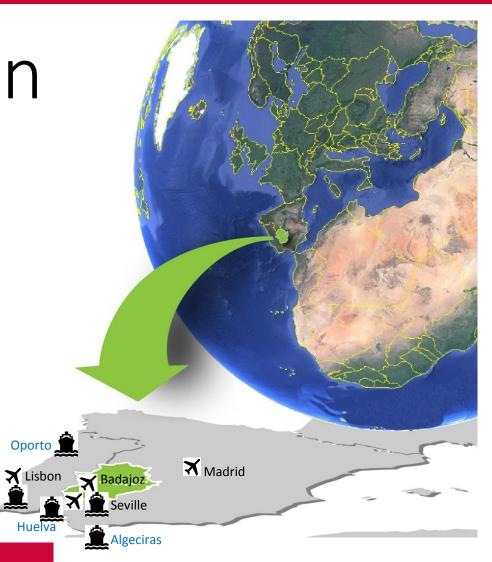


### 1. Introduction

1.1 million inhabitants

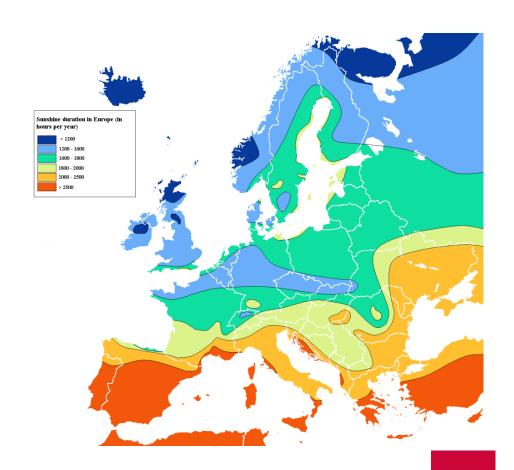
Area 41,634 Km<sup>2</sup>

GDP 17€ billion





### 2. Extremadura's Solar Potential



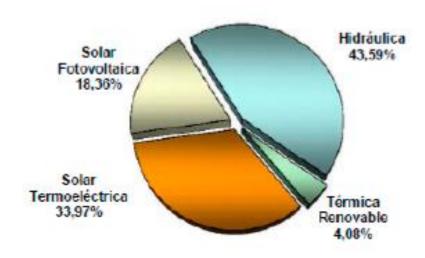
- We hold the first world position in solar coverage of electricity demand (60,99% in the year 2016)
- Extremadura gathers more tan 40% of Spanish installed CSP power and over 30% of installed PV power



#### 2. Extremadura's Solar Potential

	Producción energia eléctrica renovable neta en Extremadura 2016 (GWh)	Aportación en % a la producción renovable neta
Solar Termoeléctrica	1.962	33,97
Solar Fotovoltaica	1.061	18,36
Hidráulica	2.519	43,59
Térmica Renovable	236	4,08
Producción Renovable neta total	5.778	

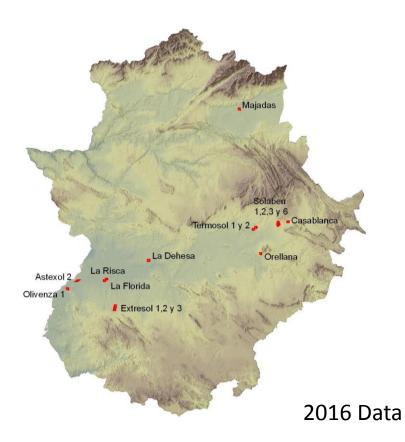




Net electric <u>consumption</u> in Extremadura 2016 = 4.957 GWh Net electric <u>RES production</u> in Extremadura 2016 = 5.778 GWh



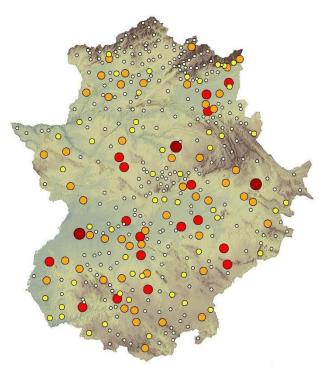
### 2. Extremadura's CSP Potential



- There are 17 CSP plants commercially running in Extremadura
- Total installed power of 850MW
- Electric energy production by this technology reached 1.962 GWh
- 33,97% of net renewable electric energy was obtained from thermosolar facilities



### 2. Extremadura's PV Potential



- Total installed power of 560 MW
- 3 plants of 500, 300 and 250 MW are currently in administrative process
- Electric energy production by this technology reached 1.061 GWh
- 18,36% of net renewable electric energy was obtained from PV facilities

0 < 100 kW 0 100-1,000 kW 1,000-10,000 kW 10,000-20,000 kW > 20,000 kW

2016 Data



# 3. The Importance of Solar Energy in Europe

- ✓ Europe is an industrial leader in the solar energy sector
- ✓ Many EU countries currently develop this technology
- ✓ Manufacturers can be found in more than 10 countries
- ✓ Plants built in Southern Europe could deliver their production to Central and Northern European countries





## 4. Solar Energy Partnership



**Kick off meeting in Brussels** 

17<sup>th</sup> of May, 2017:

- Define main targets
  - Set up a roadmap
- Propose a lead region: Extremadura



### 5. Our Initiatives

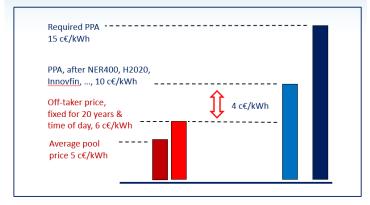
1st Initiative

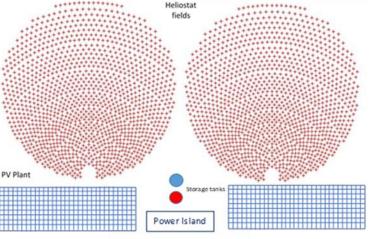


2 Core Projects

- INIESC Alentejo
   Infraestrutura Nacional de Investigação para Energia
   Solar de Concentração
- Extremadura PPP

Build a commercial size innovative STE plant to export its production to a Central European country







#### 5. Our Initiatives

2nd Initiative Generation of Steam by Medium
Temperature Thermoelectric Solar for
Agroindustrial Applications

\*



### 6. Next Steps

Strategic Business Plan -> Novadays Consultant

Innovation Camp -> European Commission & JRC Energy team: 11-12 October, Brussels

2<sup>nd</sup> Partnership Meeting -> In Mérida, Spain November, 2017



# Many thanks for your attention!

JUNTA DE EXTREMADURA