

**SOLAR CV/EU SOLARIS CST INFODAY**  
**CST AND RENEWABLE ENERGY SITUATION IN EXTREMADURA**

**ede**  
 agencia extremeña de la energía

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## Overview of the region of Extremadura

- 1.104.000 inhabitants.
- 41.617 km<sup>2</sup>.
- Largest town: Badajoz (152.402 inhabitants).
- Dispersed population 26.52 inhab/km<sup>2</sup>.
- Energy production from RES to cover the needs of 1.5 Million inhabitants.



## Overview of the region of Extremadura

**EXTREMADURA: Pioneer in energy generation and use of Renewable Sources (RES)**

Since the '50s Extremadura has played an important role in the Spanish Energy generation context:

- Hydroelectrics ('50s)
- Nuclear power stations in Almaraz and Valdecaballeros ('80s)

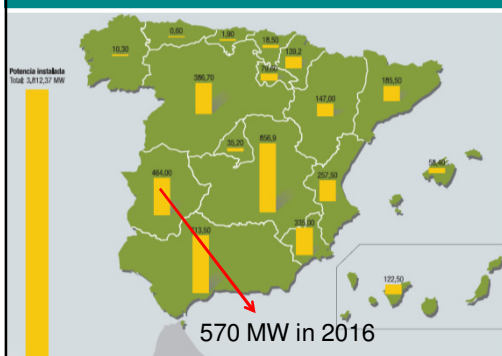
In 2011, 7.8% of National Energy Production was generated in Extremadura.

- RES since 2007
- The region exported in 2011 78% of the Energy generated in the region (16.151GWh)



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## PHOTOVOLTAIC ENERGY IN EXTREMADURA



Spain has photovoltaic power installed of 4.700 MW.

Extremadura is in the **third** position in Photovoltaic installations in Spain (570 MW).

Is the **first by inhabitant** (relation Power/inhabitant).



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## BIOMASS ENERGY IN EXTREMADURA

There are two biomass power plants for electricity generation

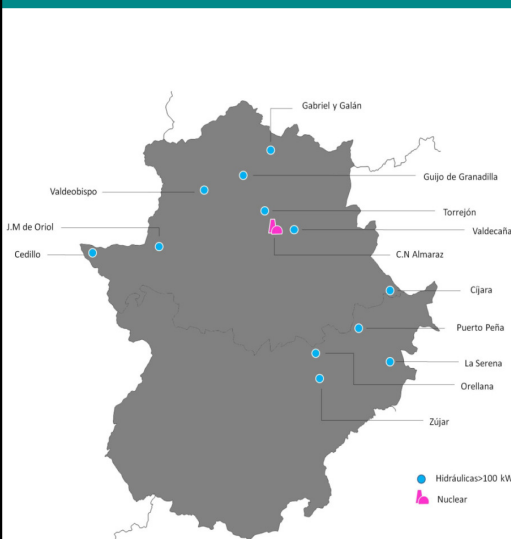
- Biomass Electrical Generation **Miajadas 16 MW**
- Biomass Electrical Generation **Mérida 20MW**

Biomass from agriculture and forest and energy crops



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## HYDRAULIC and NUCLEAR ENERGY IN EXTREMADURA



NUCLEAR PLANTS	POWER (MW)
ALMARAZ 1	1.035
ALMARAZ 2	983
<b>TOTAL</b>	<b>2.018</b>

HYDRO PLANTS	POWER (MW)
CH TORREJÓN	130,36
CH JOSE MARÍA ORIOL	953,32
CH CEDILLO	495,18
CH GABRIEL Y GALÁN	110,40
CH GUJO DE GRANADILLA	52,21
CH VALDECAÑAS	247,17
CH VALDEOBISPO	39,40
CIJARA M.D.	50,40
CIJARA M.I.	51,70
ORELLANA	22,20
PUERTO PEÑA	55,59
ZUJAR	28,36
LA SERENA	21,10
<b>TOTAL</b>	<b>2.257,39</b>



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## CONCENTRATING SOLAR THERMAL PLANTS IN EXTREMADURA

LOCALIZACIÓN DE CENTRALES SOLARES TERMOÉLECTRICAS EN ESPAÑA

50 INSTALLATIONS

Power installed in Spain  
2303,9 MW

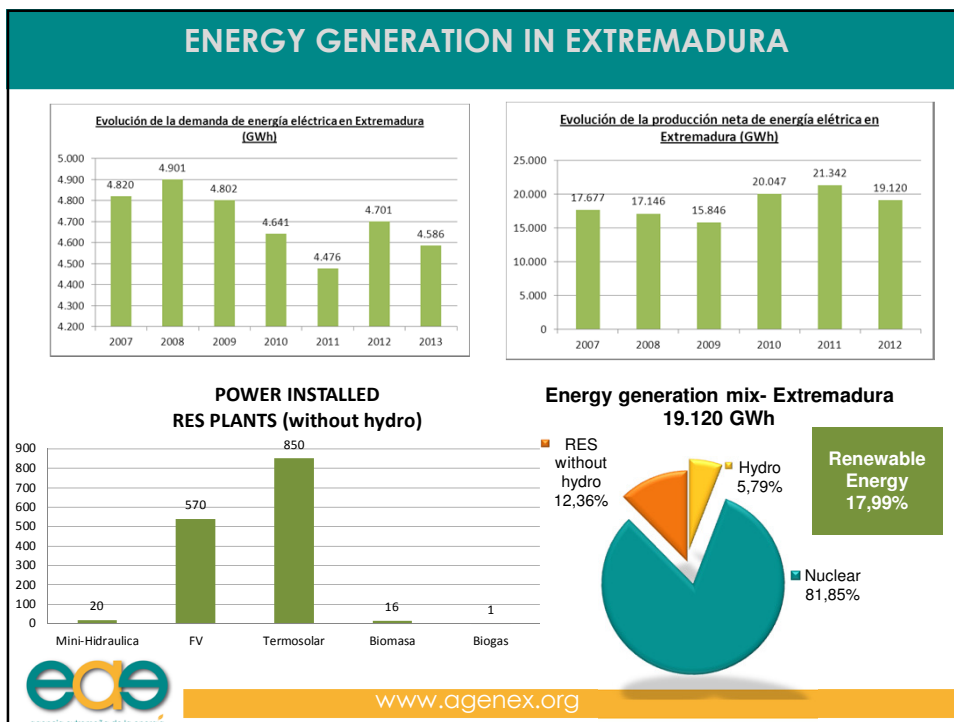
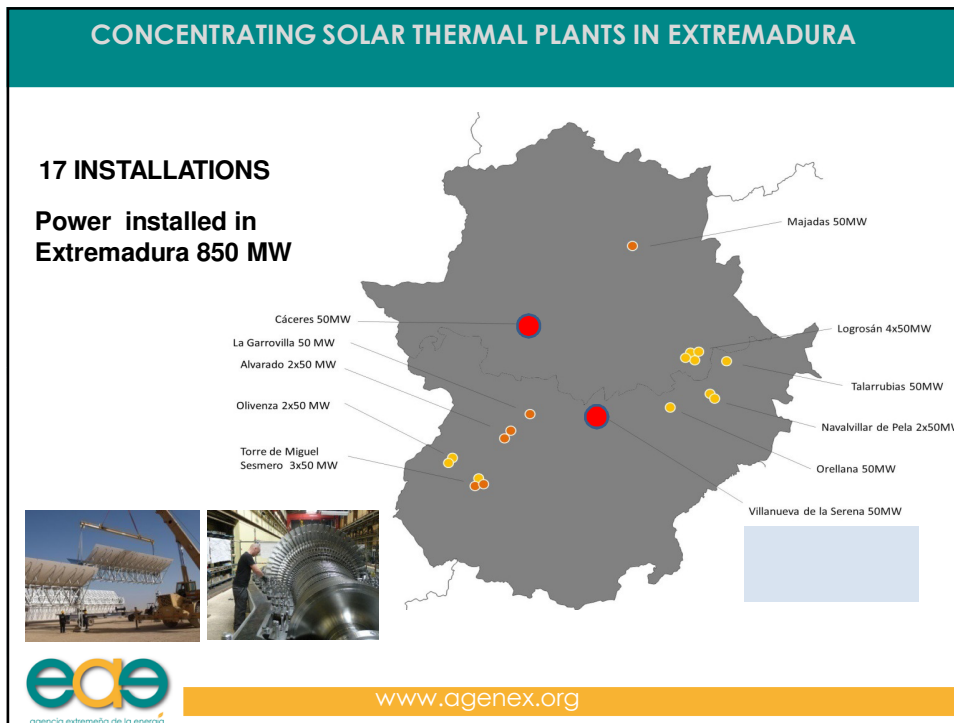
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## CONCENTRATING SOLAR THERMAL PLANTS IN EXTREMADURA

Approved 50 in Spain:

- 17 built in Extremadura. All of them are parabolic cylinder technology (CCP).
- 10 with molten salts energy storage and 7 without storage.
- Each one of them with 50 MW of installed power.

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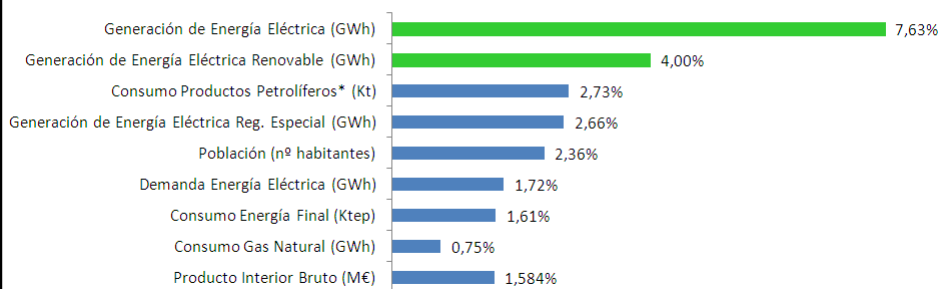
## ENERGY GENERATION IN EXTREMADURA

In 2010 Extremadura has covered 100% of its electrical consumption with Renewables Energies (because that year was very high in hidraulic energy generation)

Today Extremadura cover more than 20% of its total consumption primary energy with Renewables Energies

Directive 2009/28/CE

### %EXTR/ESP



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## THANKS FOR YOU ATTENTION



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