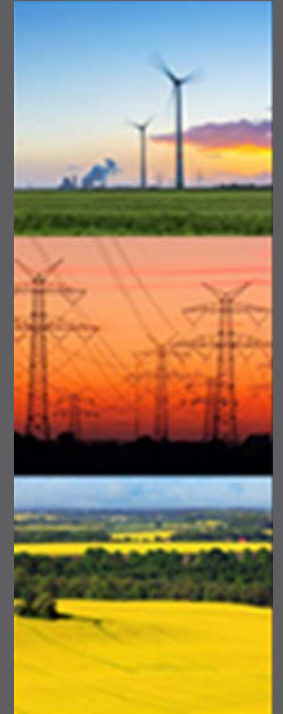




# Unlocking the Potential of Spatial Planning for the Development of Renewable Energy Landscapes

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European Conference of the Landscape Research Group  
Energy Landscapes: Perception, Planning, Participation and Power  
2015 DRESDEN, Germany



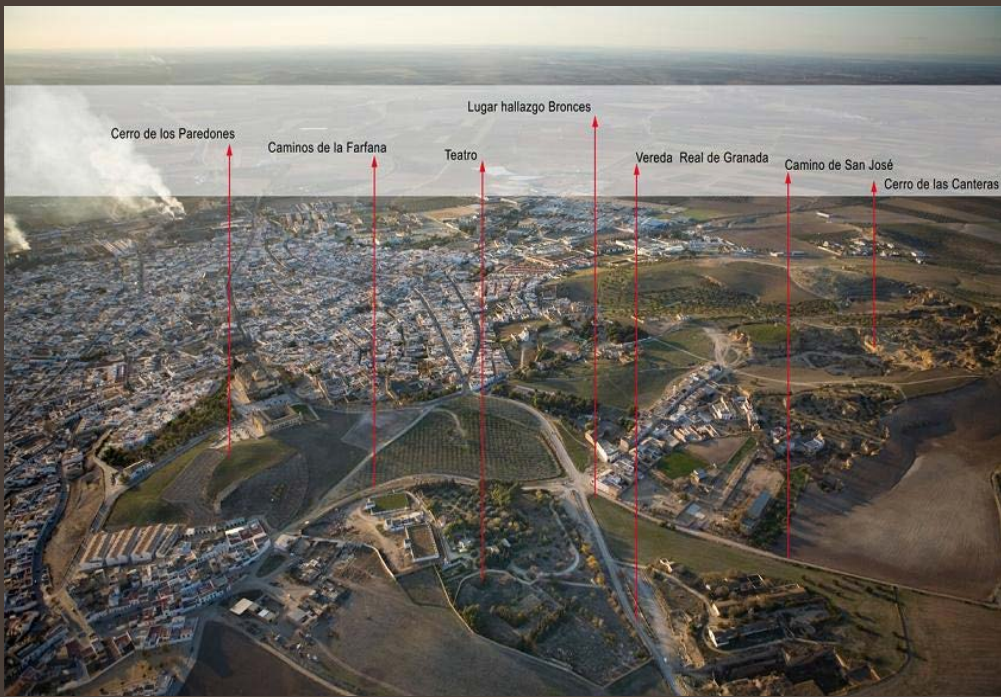
# GAME OF THRONES™



SEASON V







*The "Campaña" Cultural Landscape*





What are the factors that explain the different value of urban and rural landscapes by the Spanish society?

How does the mushrooming renewable energy landscapes affect spatial planning implementation?

What makes cultural landscapes resilient to radical transformation through the installation of wind turbines or heliostats?



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# The Siting of Renewable Energy Plants

Real Estate Bubble + Renewable Energy Bubble =  
Cultural Landscapes Degradation



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Provincia de Sevilla

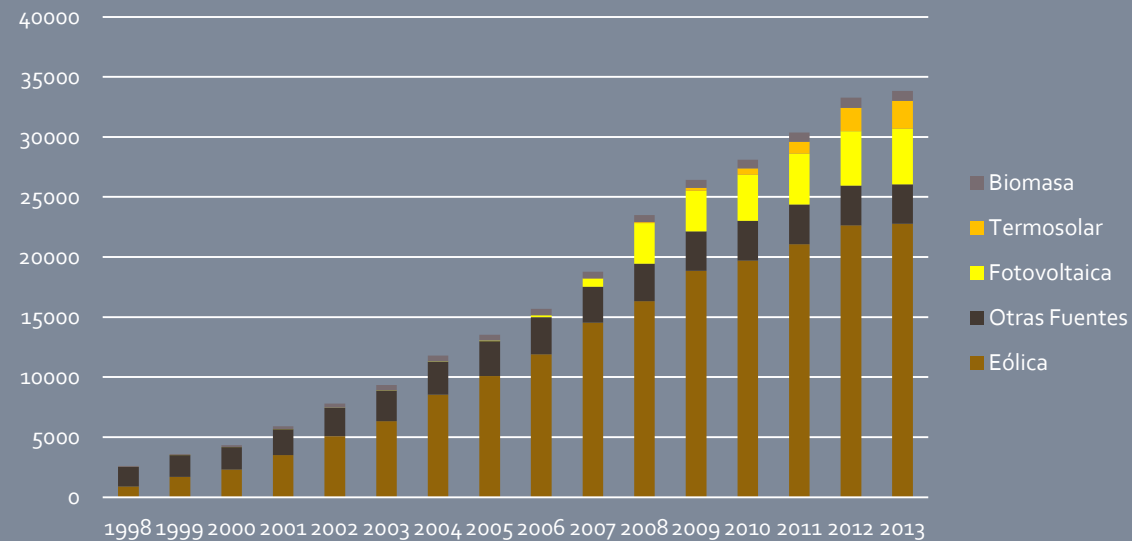
14.000 Km<sup>2</sup>

Regierungsbezirk Dresden 7.930 km<sup>2</sup>





# The Success of the Implementation of Renewable Power in Spain



Energy Resources  
Legal Instruments  
Technical Instruments



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*Law 54/1997*

Incentives system over 50 MW

*RD 436/2004*

Supplying general tariffs facilities per KW/h

*RD-L 6/2009*

Cutbacks and control mechanisms for new plants

*RD 413/2014*

Retroactive cutbacks

THE CUTBACKS HAVE THE RENEWABLE IMPLEMENTATION GO IN A NEW DIRECTION



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Central  
Administration

Regional  
Administration

Local  
Administration

Energy,  
Environmental  
& Land Use  
Policy

Energy Policy &  
Planning

Environmental  
Policy

Land Use Policy  
& Planning

Urban  
Planning



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Andalusian Autonomous Administration Promotes Renewable Energies



## Andalusian Autonomous Administration

Regional Energy Plans had promoted photovoltaic energy

Environmental Authorizations had been less restrictive to small plant's power rating

Development of Spatial Planning instruments

Non strong concerns about Cultural Landscapes



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# ADMINISTRATIVE AUTHORIZATION REQUIREMENTS

## ENERGY

- Special Regime Authorisation
- Draft System
- Draft System Aprovevement
- Operating Permit
- Official Registration

## ENVIRONMENT

- From Environmental Impact Assesment to Environmental Qualification
- Operating Permit

## URBAN PLANNING

- Building License
- Draft system License
- Partial Plant

Time period  
from three to  
eight months



## Local Administration

Authorizations for the siting of renewable plants

Changes on land classifications and plot boundaries

Building Licenses

New structures and constructions  
Acceleration of Urban Permits processing

Tax Breaks

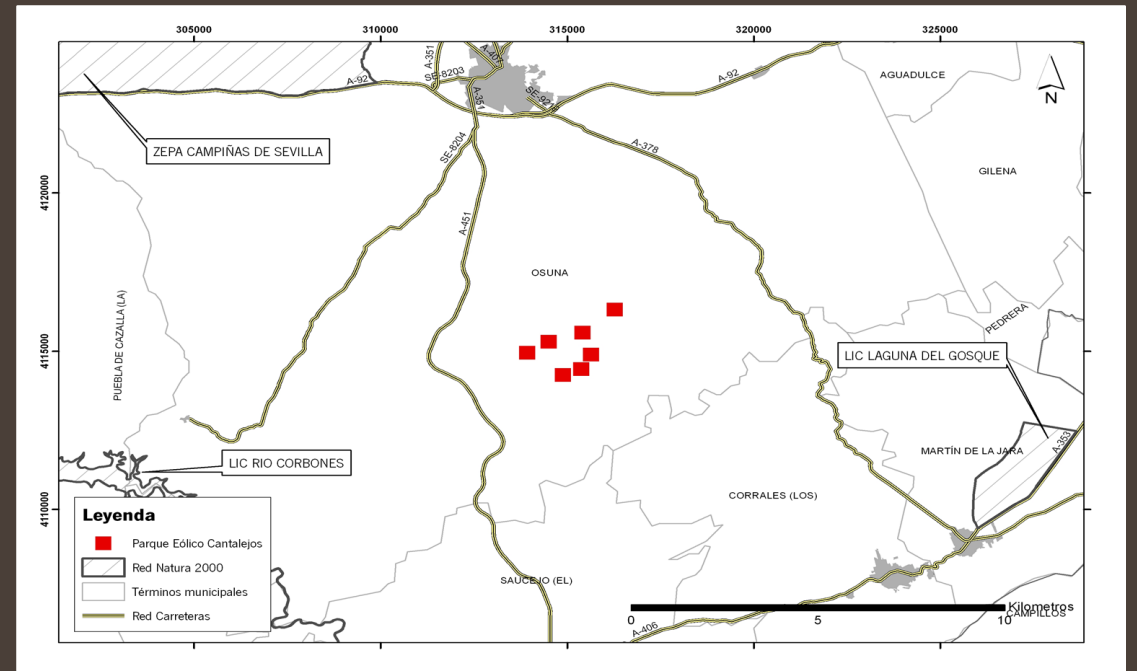
Councils push energy plants installations in return for economic benefits



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## MAIN *ACTORS* on *SPATIAL PLANNING and SITING*

- 7 wind turbines of 14.4 Mw
- Supported by the *local council & land owners*
- Opposition of *environmental groups* and *neighbors*



MEDIATION OF LOCAL COUNCIL



*Company*

Project Modification + Compensatory Measures



CANTALEJOS WIND FARM  
OSUNA MUNICIPALITY



## MAIN *ACTORS* on *SPATIAL PLANNING* and *SITING* →

- 50 Mw
- Supported by the *local council & company* (as *land owner*)
- Opposition of *regional administration (Culture Department)* and *environmental groups*



### MEDIATION OF COMPANY

Increases Plot Size  
Project Modification  
Compensatory Measures

SOLNOVA THERMOSOLAR  
SANLUCAR MUNICIPALITY





## Campus Focus-Abengoa

*De la Tierra al Sol.  
Historia de los Paisajes del Guadamar*



Focus-Abengoa Foundation Social Development Artistic Heritage Baroque School Education Prizes and Grants Abengoa Employees

## Campus Focus-Abengoa

Campus Focus-Abengoa  
Focus-Abengoa Foundation



### Campus Focus-Abengoa

The Campus Focus-Abengoa has been created as a space to research and promote the historical-landscape aspects of the Guadamar valley. It is an educational environment in which experiences related to the scientific reconstruction of the landscapes from the distant, ancient and recent past, and the present, can be discovered and conveyed. The content of the Campus is designed for environmental education in its broadest sense, bringing together the historical and natural heritage.

The "From the Earth to the Sun" exhibition, which includes historical-landscape, archaeological and technological subjects, includes a documentary, a gallery of panels, display cabinets and a cartographic panorama about the introduction of the Solúcar Platform in the area. It also includes screens connected in real-time to the control centre of the energy platform.



The headquarters:  
The Casa Quemada estate



Educational Program



"From the Earth to the Sun. History of the  
Guadamar's landscapes" project



1st Open Days

<< September 2015 >>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			



Campus  
Focus-Abengoa  
Located in Sanlúcar la Mayor, Sevilla.



Music Program  
This is always based around the great  
Baroque organ of the Los Venerables  
church.

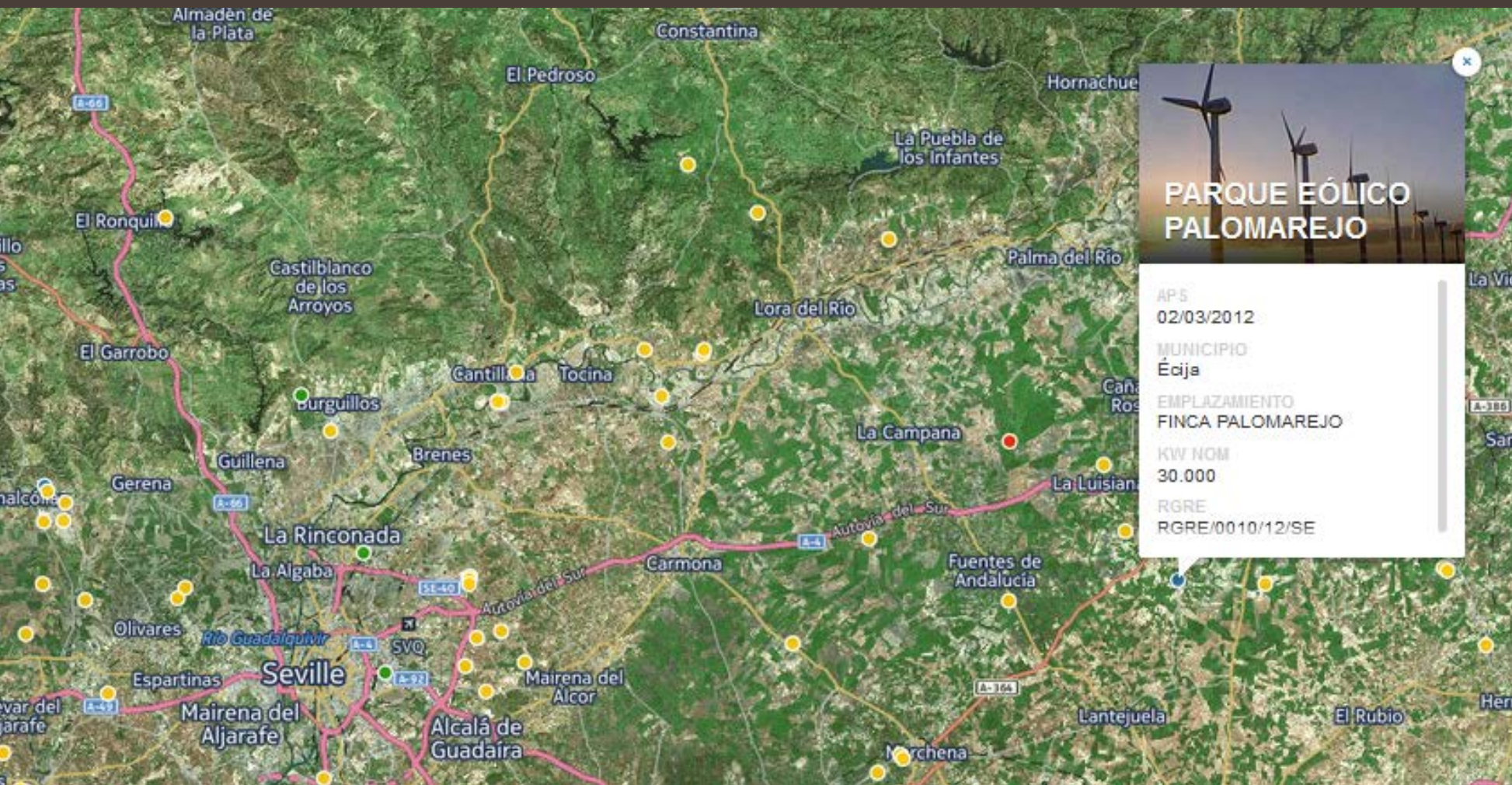


Reserve your visit Velázquez Centre  
and the Hospital de los Venerables  
From Monday to Friday, from 10 am to  
2 pm and from 4 pm to 8 pm.  
Tel. +34 902 091 137



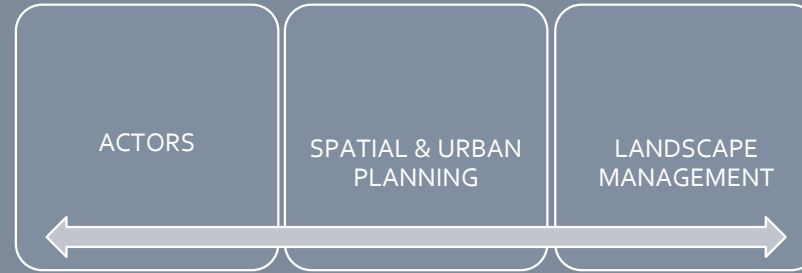






<http://renovables.tk>

# THE SITING OF RENEWABLE ENERGY PLANTS



INTEGRATING SECTORIAL POLICIES  
INTO A TRANSVERSAL PROCEEDING

PUBLIC PRESENTATION PHASE

DECISSION MAKING PROCESSES

JOINT BUREAU & WORK AGENDA  
MONITORING & CONTROL

VIRTUAL GEOLATION TOOLS & PROJECT  
RECREATION  
VIRTUAL CHANNELS FOR DISSEMINATING  
INFORMATION

ALLEGATION PERIOD AS ETHICAL GARANTY  
OF PROJECTS



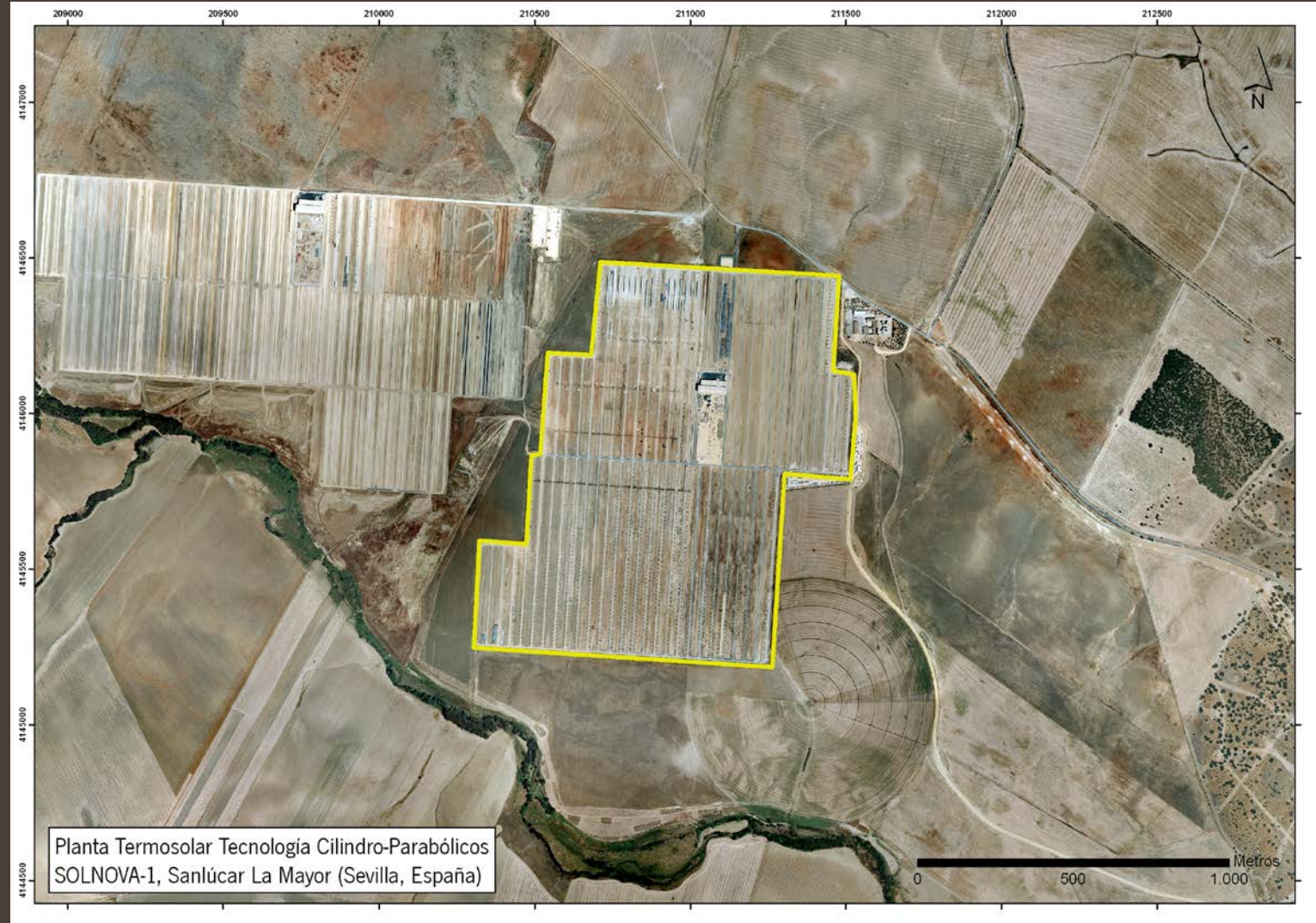
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PLATFORM FOR A NEW  
GOVERNANCE RÉGIME  
ON  
RENEWABLE ENERGY SITING  
INTO THE SPATIAL PLANNING







Thanks for your attention

And also thanks to my students Juan González for the photos, and Alejandro Barrios for the geolocation tool