WP2. SUSTAINABLE IMPLEMENTATION: POLICIES AND PRACTICES

Description

The core objective of this Work Package is to facilitate a better understanding of legal frameworks and daily practice in the implementation of renewable energy landscapes. Thus, it includes research and activities supporting dissemination of the PEARL*S* project. Legal frameworks included in WP 2 are energy policy, land use planning and landscape practice regulations. These will be analysed through an exchange of staff among participating organisations on conjunction with said organisations' cooperation. Secondment periods will enable contact with expert personnel and renewable energy landscape beneficiaries. Exchanges will allow us to go beyond the literature review in which these legal frameworks are usually set and go into territorial, landscape, cultural and natural differences in greater depth.

WP Leaders

USE, UNITN

Participants

USE, UNITN, CLANER, TERRITORIA, ENERCOUTIM, AUTH, GSH, CONSORTIS, BGU, SP INTERFACE

Objectives

1. To examine and compare national energy policy, land use planning and landscape practice schemes.

2. To analyze environmental impact assessment procedures to enable further inclusion of natural and cultural aspects. Set up a return for policy makers.

3. To research and develop tools to increase public participation in energy policy and renewable energy landscape implementation practices.

Framework

In this WP are studied aspects linked to current legislations and how they are sustainable implemented in relation with policies and practices. The WP will investigate whether, and how, the transition to a low carbon economy is taking place in relation to spatial planning in a wide variety of REL (European Commission, 2017-c). Policy and spatial planning analysis will be based on a consolidated framework of international agreements on planning and renewable energies together with national regulations (European Commission, 2017 b); United Nations, 2016; Boelman & Telsnig, 2016; Quoilin et al., 2017) and will be theorised through arguments as to the spatial consequences of renewable energy implementation and landscape management (Walker, 1995; Wüstenhagen et al., 2007; Olwig 2007; Aitken 2010; Prados 2010-a). The range of knowledge will be specifically refers to spatial planning supporting of REL in

Southern and Mediterranean countries because their wider acceptance in comparison with Central and Northern European ones (Torres-Sibille et al., 2009; Espejo, 2010; Nadaï et al., 2010; Frolova & Perez 2011; Tsantopoulus et al., 2014; Briffaud et al., 2015; Delicado et al., 2015). Addressing energy policy, spatial planning and environmental impact assessment will enhance renewable energy implementation to different scales. Environmental Impact Assessment analysis will inform about the balance between the prominence given to companies or public based on inter-territory analysis. Finally, the integration of the social impact assessment concept within spatial planning can serve as a basis for equal balance of actors, costs and benefits, within the decision planning process.

Task 1. Research reports

This task is essential to study national contexts of participating countries related to the construction of comparative energy policy, land use planning and landscape practice schemes. For that purpose, it will produce specific reports about RE legislation and the context of each participant country. WP Leaders will establish a common scheme for the reports (see Annex I). This enables references to legal documents, directives, strategies and programs. Special importance will be given to identifying REL as specific case studies for environmental impact assessment.

Deliverable: D 2.1 Research reports. Month 16 (2019, October).Confidential

Research Questions

RQ1. *What are the policies and strategies for effective, efficient and sustainable REL implementation in partner countries?*

Methods

- Search for and keeping of RE related agreements legislation and recommendations at local, State, European and international level (i.e. United Nations, International Energy Agency).
- Realization of an up-to-date report containing all legal aspects, which are included into previously searched legislation.
- Search for and keeping of administrative spatial and urban planning documents on specific case studies (see Annex II).

Task 2. Interviews

This task is important to obtain direct information about the public participation system in renewable energies implementation. Interviews will be made with national or regional policy makers, technicians and ER promoters. This task will provide information about the assessment and effectiveness of the incentive mechanism for public participation in projects (i.e., favourable, opposing, job creation, conservation of natural and cultural elements, landscape transformation, etc.). And luckily will establish new aspects to consider within the environmental impact assessment procedure such as those aspects related with ER

installations profits. People's REL perception will be also consider through interviews in order to set Best Practices on REL.

Deliverable: D 2.2 Interviews. Month 38 (2021, August).Public

Research Questions

RQ2. *Who are participating in this process? Where are REL located and why?*

RQ3. *How do the public accept REL implementation in light of their energy behaviour and aspirations?*

Methods

- Design a semi-structured interview addressed to policymakers, technicians and promoters.
- Design a semi-structured interview addressed to the population potentially affected by renewable energy installations.
- Search for a panel of interviewees for both interviews in relation to national or regional the case studies.
- Conduct interviews and analyze the results comparatively.

A draft of the interview will be provided after Deliverable 1 due date (2019, November)

Task 3. Research Seminar

The final task will consist of three types of outputs: a) to analyse environmental impact assessment procedures to enable the inclusion of human and territorial aspects; b) to construct a return mechanism for policy makers; c) final fieldwork on EIA/SIA study cases on a return mechanism. All these outputs will be analysed to provide emerging empirical knowledge as part of two co-authored papers on energy policy and REL spatial planning and a Research Seminar that will be held at the University of Seville.

Deliverable: D.2.3 Research Seminar "Renewable Energy Landscapes and Spatial Planning: A Transnational Mediterranean Overview". Month 34 (2021, April).Public

Research Questions

RQ4. *What values shape the implementation of spatial planning tools for renewable energy development e.g., economic, social, cultural?*

Methods

- Search for and keeping environmental impact declarations on specific case studies.
- Innovate with environmental impact assesment to incorporate social, economic, cultural and territorial aspects.
- Test stakeholders "in situ" related to social impact assessment.
- Write papers for high impact scientific journals.

Annex I: RESEARCH REPORTS (RR) COMMON SCHEME

1. Situation of Renewable Energy in each country and/or region
   1.1 Policy/legal framework of RE
   How can we assess ability of countries to comply international agreements?
   Is it possible to review current and future actual implementation of these international agreements?
   What could be the indicators for that?
   1.2. REL planning tools (+ as well as spatial planning)
   1.3. Reflecting different territorial, economic and administrative circumstances (+ national è regional); (+ trends (consumers or companies, further perspectives)

2. Data on Renewable Energy
   2.1. Installed capacity (evolution since/to when?)
   2.2 Energy produced (- id)
   2.3. Occupied area/surface
   2.4. Mapping RE / Mapping REL

3. Focus Areas / Case Sutdies
   3.1. Policy/legal framework
   3.1.1.REL planning tools (+ as well as spatial planns)
   3.1.2. Reflecting different territorial, economic and administrative circumstances (+ regional & local); (+ trends (consumers or companies, further perspectives)
   3.2. Data on Renewable Energy
   3.2.1. Installed capacity (- evolution since/to when?)
   3.2.2. Energy produced (- id)
   3.2.3. Occupied area/surface
   3.2.4. Mapping RE/REL

3. Environmental Impact Assesment and EI Statement Analysis on Case Studies
   3.1. Regulatory framework
   3.2. EIA and SIA tools and procedure (i.e., actors involved)
   3.3. Negotiation (constructing a return mechanism for policy makers)
   3.4. Social Impact Assement

Annex II: **SPECIFIC CASE STUDIES on REL**

Country	Name and place	RE Technology	Installed Capacity (MW)	Total area size (ha.)	Timeline
SPAIN	Cantillana: Sevilla	Photovoltaic	4,86 MW	12 has.	2009
	Cantalejos: Osuna, Sevilla	Wind On-shore	14,00 kW	66 has.	2007
	Gemasolar: Fuentes de Andalucía, Sevilla	Thermosolar	19,90 MW	195 has.	2010
ISRAEL	Ashalim power plant	Thermosolar	121 MW	400 has.	2019 (operation)