



ESPON – TITAN Andalusia Study Case

Oficina de Cambio Climático/ Climate Change
Office Regional Government of Andalusia

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Andalusia

Southeast region of continental Spain

87,500 km²

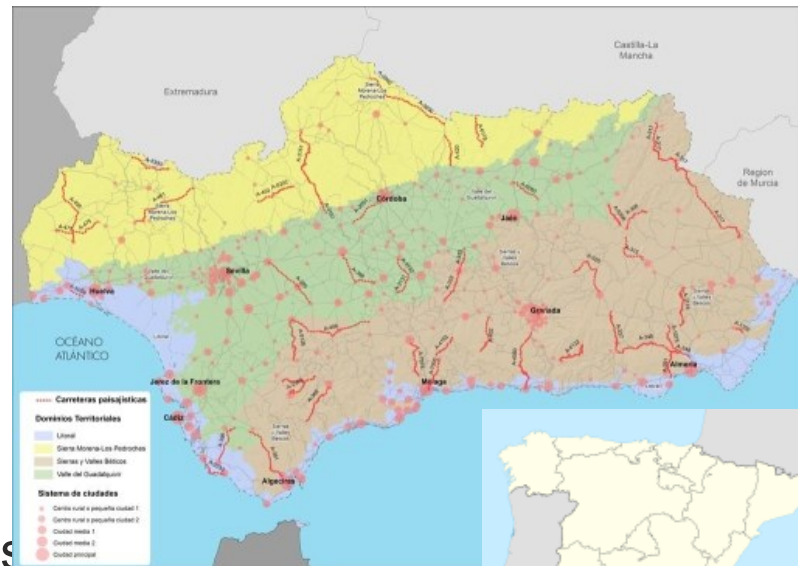
8.5 million inhabitants

Specially vulnerable

2 seas, Mediterranean Climate

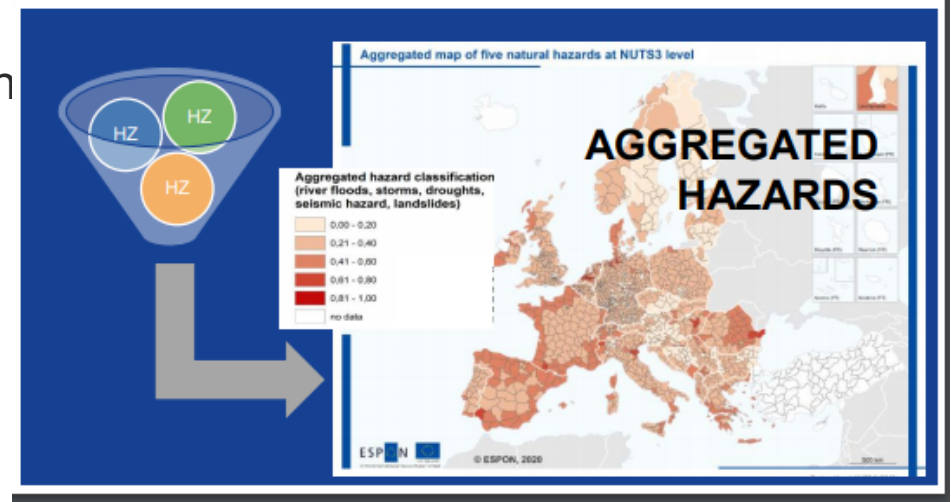
Regional, almost federal government

More than 20% Surface in protected areas



Andalusia risks and hazards profile

- High vulnerability (ESPON - AR5)
- Strong economic impact from tourism and agriculture
- Droughts
- Earthquakes
- Flood
- Cold drop - Katabatic wind



Disaster Risk Management in the Andalusia region. Framework



Territorial Emergency Plan of Andalusia

Drought management

Risk Plan for the Andalusian agricultural sector

National Agricultural Insurance System–
Agroseguro

Flood Risk Management Plans

Civil Protection – PGRI

Commission for Catastrophes, Natural Disasters
and Adverse Meteorological Phenomena

Rural Development Program of Andalusia 2014-
2020

Adaptation in Andalusia

Andalusia Climate Action Plan. Adaptation Program

Law 8/2018 of measures against Climate Change

Irrigation Design and Irrigation Planning

Adaptation strategies for crops

Indicators for agriculture and climate change

Training programs for farmers

Greater prominence to incentive sustainable agricultura

Promotion of energy generation coordinating mitigation and adaptation



Spatial planning

Organisation

Regional government has responsibilities

One main plan: POTA (Andalusia land management plan)

17 subsectorial plans

Coordination among them

Economic impacts:

Loss of forest

Livestock and agricultural production

Tourism Industry

Main impacts

River, pluvial and coast flood, Wildfires, Drought, Landslides o land erosion.

Legal tools:

Floods -> Irrigation management plans

Wildfire plans

Spatial planning: Appropriate use plans, protection Andalucía > 20% Natura 2000

Agriculture

Economic impacts:

Job positions

Production costs agriculture and livestock

Decrease in the value of production

Insurance charge

Need for economic investment

Change in crops for adaptation

Abandonment of activity in extreme cases

Depopulation of rural areas

Technical tools:

REDIAM



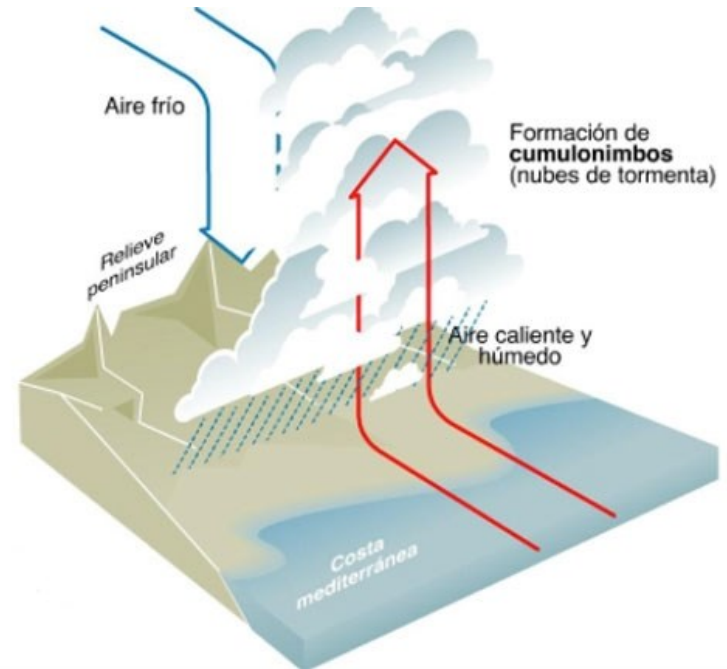
Hydrological management

Preliminary Flood Risk Assessment Preparation of Flood Hazard and Risk Maps

(Hydrological Planning) - River basin districts.
Related to POTA (Civil Protection Plans,
Infrastructure Planning, Agriculture, etc.)
Flood Risk Management Plans

High exposure to river overflows
Erosion
Cold Drop Episodes (DANA)

Infraestructuras, public services,
housing



Common objectives - Governance objectives



Encourage participation
Encourage communication and
cooperation
Increase knowledge



Lessons learned. Strengths

Creation of platforms - share information -
intervention of the different units and organizations

Civil Protection - essential role - inter-
administrative – State and local administration -
technical assistance – data and information
collection

Identification risk areas - continuous inter-
administrative collaboration

Some identification of direct and indirect economic
effects

An exhaustive analysis is made that has not been





Andalucía

Lessons learned. Weakness



Intersectoral coordination can be greatly improved

The system is focused more on correcting than on preventing

Lack of information on economic impact

Subregional plans contains the risk management framework

Climate change must be in policies with socio-economic effects. Inclusion in an integrated and coordinated way

Flood risks assessment methodology is based on the past patterns, but it does not contemplate future projections

ESPON confirms this diagnosis in the same sense as

Andalusia Climate Action Plan

Main strategy in which Andalusia is involved about Climate Change

The Plan is included in Climate Change Law

Approved by Andalusia Government

Just approved

Framework: Transversal

Includes three scopes:

- Mitigation
- Adaptation
- Comunication

Andalusia Climate Action Plan

8 transversal lines

Green taxes

Improve administrative procedures

Green public procurement

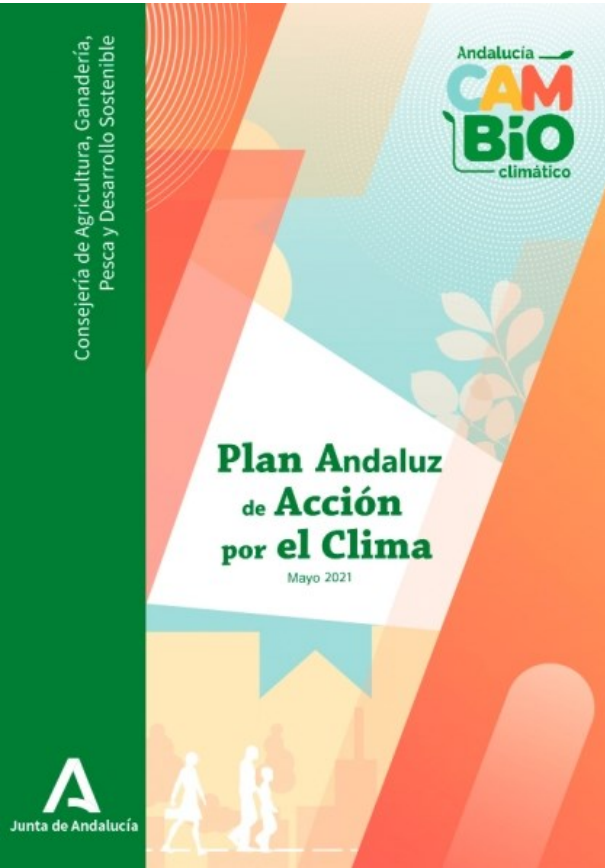
Investment sustainability requirements

Green budget

Generation of knowledge and innovation

Cooperation

Institutional governance



Objective: Innovation and knowledge generation



Foro de Innovación y Conocimiento 'Andalucía, Origen y Destino' de Turismo Inteligente. 26-03-21

Measure Integration of climate action in future Andalusian research and innovation strategies and plans.

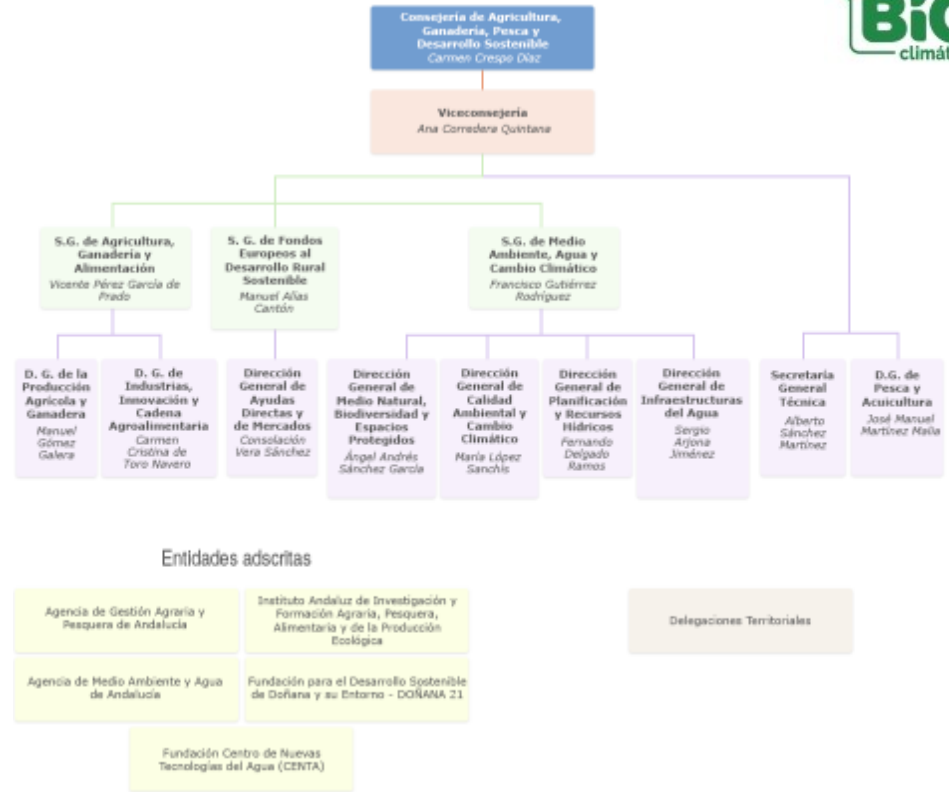
Strategic line Create a prospective line and for financing projects for knowledge management, research, innovation and industrial application for the execution of the PAAC.

Strategic line Identify in a participatory way the specific needs for knowledge, research and innovation on climate change



Objective: Cooperation

Strategic line
 Support from the
 Junta de Andalucía from its
 competence framework to
 projects, initiatives and
 collaborative networks
 in climate action,
 national and international,
 and collaboration
 in the valorization and application of
 the solutions found



Objective: Institutional Governance



Strategic line.

Promote collaboration and participation of the different public administrations in policy development for the fight against climate change and its application in the territorial scope, identifying and taking advantage of the synergies that occur between them

Strategic line.

Drive multi-level collaboration for coordination and development of municipal plans against climate change

Adaptation requirements

Adaptation program contains 44 strategic lines with seven requirements:



- 1.- Knowledge management on adaptation
- 2.- Integration of adaptation to climate change in the Instrumental map of the Regional Government and local Administrations through governance
- 3.- Development of demonstration projects: public-private financing
- 4.- Nature-based solutions
- 5.- Sustainable lifestyles as adaptation tools
- 6.- Adaptation and social perspective

Next steps



Development of a suitable **framework for cooperation** between different functions and at different levels

Location of **cause-effect relationships** between disasters and natural, social and economic impacts

Learn from **good practices**

Greater **focus on prevention** versus repair

Refine the **data collection** framework

Thanks for your attention!

¡Gracias por vuestra atención!

- ✓ **Francisco Solano Cobos Ruiz**
- ✓ **Cambioclimaticoandalucia.cagpds@juntadeandalucia.es**