



Reduce 20% (Andalusia 30%) Greenhouse emissions
 Increase 20% (Andalusia 35%) energy renewables consumption
 Achieve 20% (Andalusia 25%) energy savings

ANDALUSIA ENERGY STRATEGY shares with OBJECTIVES shares with EU2020 STRATEGY

have been extended by

ANDALUSIA ENERGY MODEL presents STATISTICS
 - Andalusia produces 60% of thermoelectric energy in Spain
 - Andalusia has multiplied x42 its solar photovoltaic capacity
 - 30% of the Solar Energy Plants in Spain are in Andalusia
 - Andalusia leads the biomass sector with the 51% of the total national activity
 - Andalusia is 4th region on wind generation



NEW GLOBAL COMMITMENTS

MEDITERRANEAN COUNTRIES

AFFORDABLE AND RELIABLE ELECTRICITY

WATER
 - Scarcity
 - Pollution
 - Desertification
 - Salinization

FOOD SECURITY

FLASH FLOODS

INSTRUMENTS
 ENERGY MANAGEMENT OF PUBLIC ADMINISTRATIONS PROGRAM
 INFRASTRUCTURES & QUALITY OF ENERGY SERVICES PROGRAM

SEAP (Sustainable Energy Action Plans) is also a EU INSTRUMENTS

The SECAP retains the same outline procedure used for SEAPs but differs in:
 - Target: a SECAP is aimed at defining actions that allow cutting down at least 40% of CO2 emissions;
 - Timeframe: a SECAP is expected to achieve the objective of 40% reduction by the year 2030;
 - Development time: a SECAP has to be submitted within two years of joining the Covenant.

ADAPTATION AND MITIGATION CLIMATE CHANGE

DEVELOP A LOW-CARBON ECONOMY

NEW INSTRUMENTS

INTEGRAL POINT OF VIEW
 PUBLIC PARTICIPATION
 TERRITORIAL APPROACH

SECAP (Sustainable Energy & Climate Action Plan)

FUTURE CHALLENGES

TRACK MITIGATION ACTIONS
 CLIMATE RISK
 VULNERABILITY ASSESSMENT

TRANSVERSAL MEASURES

FROM THESE WE LEARN THAT:

ENERGY PLANNING SHOULD MERGE WITH TERRITORIAL/SPATIAL PLANNING

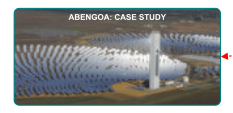
STATISTICS IMPACTS
 - Region with the highest number of municipalities with PAES (533) reaching 69.13% of them
 - Population affected by the SEAPs totals a total of 6,952,130 inhabitants
 - The municipalities with less than 10,000 hab. are those that have fewer planning instruments (65.7%)

QUANTITATIVE IMPACTS
 - Improvement of public lighting reduce 72% energy bills
 - Local promotion of solar energy systems increase the installed surface area by up to 20%
 - There are differences in the consumption of electricity by local authorities between the signatory municipalities of PAES and non-signatories (Signatory municipalities consumption of electricity is 55% lower)

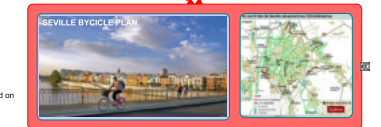
1 ECONOMY
 - Increasing the financial resources available for cities
 - Increasing private funding to environmental objectives
 - Improving the funds to local technology development
 - Supporting green economy

2 LEGAL FRAMEWORK
 - Improving legal framework and instruments
 - Developing new roles in public administration local energy manager

3 SOCIAL ISSUES
 - Increasing social awareness about climate change
 - Improving social knowledge about resilience, adaptation to climate change, etc.
 - Improving access to datasets and knowledge
 - Improving knowledge and training of politicians and public administration



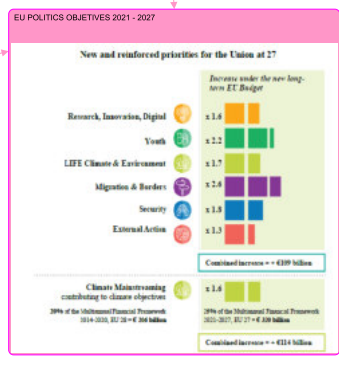
GRANTS IMPROVE EFFICIENCY ENERGY IN PUBLIC AND PRIVATE BUILDINGS
 FINANCIAL TOOLS
 OTHER SECTORIAL URBAN PLANS
 SUMPDS (Sustainable Urban Mobility Plans)
 ROE OPTIMIZATION ENERGY PLANS



URBAN TRANSFORMATIONS
 IMPROVE LOCAL PUBLIC BUILDINGS AND INFRASTRUCTURES
 ENCOURAGE SUSTAINABLE MOBILITY
 SUPPORT LOCAL RENEWABLE ENERGY PRODUCTION
 ENCOURAGE PUBLIC PARTICIPATION



INTEGRATED AND SUSTAINABLE URBAN DEVELOPMENT STRATEGIES
 Budget (Spain): 1.4 M €
 Thematic Objective:
 - TO2: Enhancing access to, and use and quality of information and communication technologies
 - TO4: Supporting the shift towards a low-carbon economy in all sectors
 - TO6: Preserving and protecting the environment and promoting resource efficiency
 - TO9: Promoting social inclusion, combating poverty and any discrimination



SUSTAINABLE DEVELOPMENT ANDALUSIA STRATEGY