

PRISMI 1st PUBLISHABLE REPORT

Context	
Call for projects	1 st call for proposals INTERREG MED ☒ Modular ☐ Horizontal
Project Typology	☒ Studying ☐ Testing ☐ Capitalising
Programme priority axis	Priority Axis 2: Fostering low-carbon strategies and energy efficiency in specific MED territories: cities, islands and remote areas
Programme priority specific objective	2.2: To increase the share of renewable local energy sources in energy mix strategies and plans in specific MED territories

Project description	
Project number (ID)	1099
Acronym	PRISMI
Project title	Promoting RES Integration for Small Mediterranean Islands
Partnership	PRISMI project is coordinated by Sapienza University of Rome and it has 6 partners: Centre for Renewable Energy Sources and Saving, University of Zagreb, Cyprus Energy Agency, Piraeus University of Applied Sciences, Malta Intelligent Energy Management Agency and Municipality of Favignana.

Project vision	EU islands are facing common challenges in terms of high energy costs and local CO2 emissions, security of supply and system stability. In the EU many islands have become a site of energy innovation, where betting on renewable energy sources (RES) exploitation is a winning choice to meet their energy needs. In Mediterranean area, despite the high potential of renewable energy, this green transition goes slowly, and Mediterranean islands (Misl) still maintain a great dependency on fossil fuel. PRISMI aims at tackling these key challenges by supporting the transition of Misl to an autonomous, clean, secure, low-carbon energy system – in line with the overall EU Energy Union package and EU 2020-30 Strategies – through the development of an integrated trans-national approach to assess and exploit local RES potential. The setting up of this new model for local renewable energy production will be based on the integration of three pillars: • the scientific knowledge; • the local authorities work; • the citizens involvement. Merging these three different basis, the new approach will be able to assess, map and finally promote the use of new hybrid systems that combine RES and last generation's storage devices, in order to increase the share of RES, contributing to sustainable development and inclusive growth in the MED Programme area. This approach aspires to change the current energy model characterized by the use of fossil fuels and strongly centralized, towards a new energy pattern based on distributed generation from RES and focused on territorial resources and local community's needs.
Specific Objectives	1. Develop an integrated toolkit able to assess and map local renewable energy sources for the targeted elaboration of energy scenarios and related techno-economic feasibility analysis in MED islands; 2. Support effective design and implementation of Sustainable Energy Action Plans (SEAPs); 3. Establish a Network of specialized agencies, public authorities and scientific institutions able to increase and exchange knowledge, skills and acceptability of RES in MED islands.

Study Areas	PRISMI methodology is applied to 5 Mediterranean islands taken as case study: • Akamas Peninsula - CYPRUS • Korčula & Vis Islands - CROATIA • Tilos Island - GREECE • Favignana Island - ITALY • Gozo Region – MALTA
Project Start Date	01/11/2016
Project End Date	30/04/2018

Project contacts

Website	https://prismi.interreg-med.eu
Facebook page	https://www.facebook.com/Prismi-project-249321535489626
Twitter page	https://twitter.com/prismiproject
ResearchGate page	https://www.researchgate.net/project/PRISMI-Promoting-RES-Integration-for-Smart-Mediterranean-Islands
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Most scientific achievements

Methodological guidelines for RES assessment	A deep analysis of already existing RES assessment methodologies has been developed and commonly used databases and software have been identified in order to develop a fully comprehensive methodological guidelines tailored to MED islands. The developed guidelines consider the possibility to have primary data (including measurement data and data from meteorological stations) and secondary data (atlases, national sources of data) and data interpolated by the use of some tools (e.g. METEONORM) considering the chance of subcontracting experts as last viable option. Data is mostly available for wind and solar sources, also at least secondary sources of data can be used for tidal and wave energy, while
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	other sources, such as geothermal, are not available, but also in general MED islands lack the potential from such sources. Data processing methods have been identified for each kind of data.
Thematic data collection	The thematic data collection consists of: • Environmental constrains; • Wind (yearly and hourly); • Solar (yearly and hourly); • Wave and tidal (yearly and hourly); • Electric load (hourly and monthly data). From the collected data, it emerges that all case study areas have good solar and wind potential and they are characterised by several environmental constraints due to their unique ecosystems.
RES state of the art and SWOT analysis	The SWOT analysis carried out in all PRISMI case study areas has shown that there is a very promising RES potential in all of them. Certainly, very good conditions in the whole MED area and each country separately provide excellent opportunities for RES investments; however, there are various internal and external difficulties that need to be overcome for their successful implementation. Between these, the muddled regulatory and legislation conditions are the main obstacles that need very serious effort to be overcome; possibly in EU framework also and not only in each country separately.