





Mediterranean Del. 4.3.1 Training material for GRASPINNO Living Labs

Module 3 DEVELOPING SMART SEAP



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Module 3 Smart SEAP



1. The case of SIENA Carbon Free

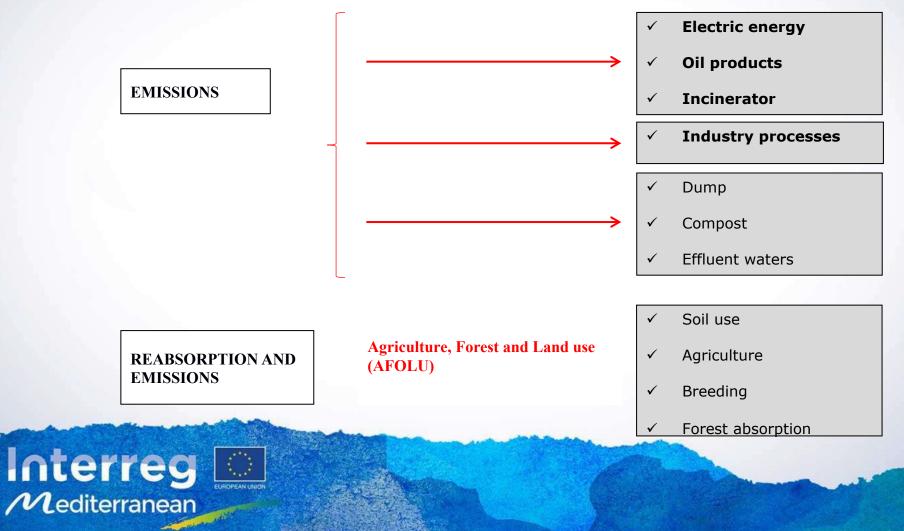
The content of this module is a sort of local (Siena Province) path to describe how a sustainable economy can be implemented and preserved by using a "mosaic" approach where the SEAP is only a tile of a long process.

The Province of Siena has enabled the project "**2015 Siena Carbon Free**" with the goal to be the first wide area with zero emissions by 2015. The project covers the annual calculation and the ISO 14064/1 certification of the CO2 release and resorption balance (made by the University of Siena according to the IPCC approach).





1. The case of SIENA Carbon Free





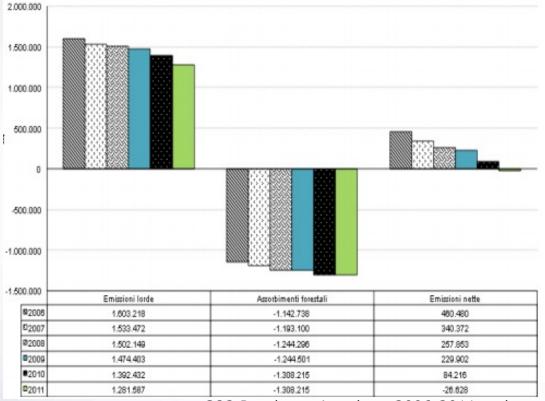
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1. The case of SIENA Carbon Free



This figure was taken on **Terre di Siena Green** website (<u>http://green.terresiena.it</u>) and, despite it's in Italian language, it clearly shows the absorptions and emissions trends. Specifically:

- the first column includes the gross emissions;
- the second column includes the forestry absorptions;
- the third column includes the net emissions.

CO2 Re-absorption share 2006-2011 and over



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1. The case of SIENA Carbon Free

The change in tasks and roles of the Province (recent Italian institutional reform) has constrained to leave a monitoring and control system of GHG emissions and energy consumption focused on a vast area towards a municipal system based on SEAP.

The transfer from the provincial system to the municipal one allowed to transform a big problem (a different territorial level) in a great opportunity by building a smart collection method able to create relevant economies of scale and reduce thee costs for the analysis.



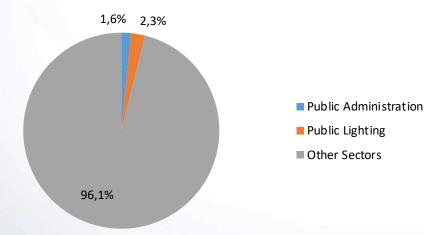




1. The case of SIENA Carbon Free

SEAP should be transformed from a voluntary plan to a **cogent road map** even if the recent legislation on the procurement in some countries can help this change, making GPP compulsory for EE/RES in buildings.

Energy Consumption



SEAP Share of the Public Sector





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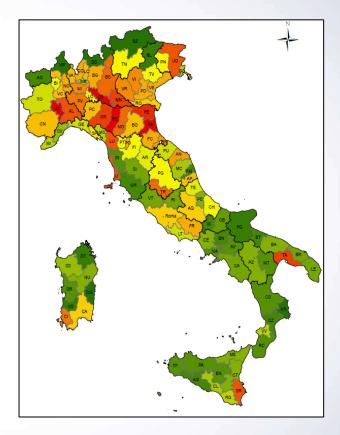
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Terre di Siena

1. The case of SIENA Carbon Free

The Siena Province Carbon Free Certification indicates the political virtuous process that Siena have undertaken; having pursued the goal of equalization between emissions and absorption is still an important achievement but, as we see in the map, Siena is not the province of Italy with the minimum level of energy emissions in the atmosphere.





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1. The case of SIENA Carbon Free

Integrate present SEAP monitoring with

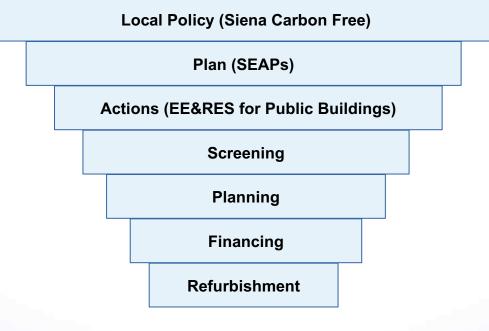
- explanatory analysis of the factors, making up the energy consumption and the emissions themselves
- qualifying test to identify buildings and structures at risk
- discriminating process on the potential interventions to realize
- predicting evaluation on the conditions in front of us during the planning phase

.... means consolidating a path of research and action towards a genuine tool of government, an operational guideline through energy conservation, energy efficiency of buildings and company, real development of renewable without the intervention of incentives, development of sustainable mobility initiatives.





2. Focus on activities: energy efficiency of the public buildings



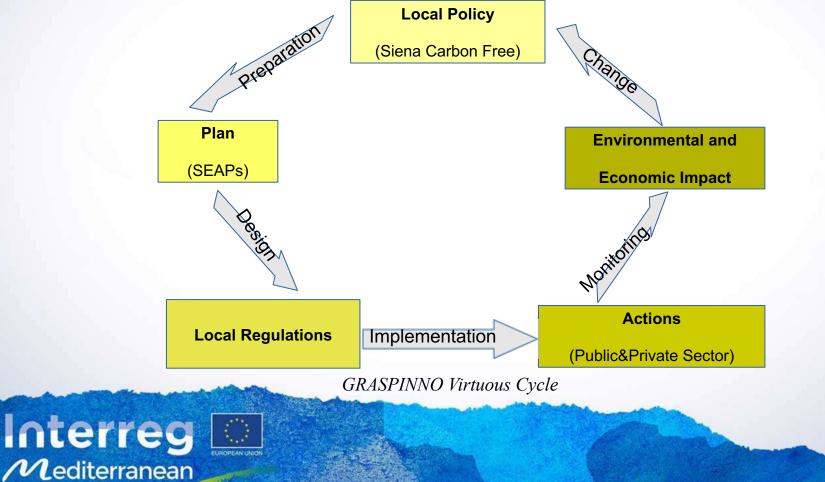
GRASPINNO procedures for the EE of buildings







2. Focus on activities: energy efficiency of the public buildings







2. Focus on activities: energy efficiency of the public buildings

Initial Energy Class (Screening Test)

Target Energy Class (TEC)

Planning (LCC, DB, Audit)

Financing

Refurbishment

Target Energy Class and Planning: approach and tools



Thank you for your attention

