

Figure 2: Mapping of sampling zones in the pilot are

rigure 4. a) metal measurement of an quanty, of biomass suppry sources in the runal community of Art

BIOMASS POTENTIAL IN RURAL ISLAND COMMUNITIES ANOGIA – CRETE

Purpose of this pilot action is to measure and analyze the impact of traditional fireplaces for the indoor and outdoor air quality of rural households and offer technical advice on the improvement of heating systems with exploitation of the biomass residues of these areas.

Involved activities:

- TUC has organized visits in the houses with fireplaces, discussing with the owners and measuring the quality of the indoor and outdoor environment under different meteorological typologies (calm days/hard days, windy etc.) during the winter period.
- The results has been discussed with the local authorities and citizens.
- Technical advices and solutions have been provided.
- High efficiency fireplaces have been demonstrated in rural areas, rich in wood residues, in order to increase the use of biomass.
- A feasibility study has assessed the setting up and operation of a local small chips production unit.

End result of the pilot action is a comprehensive report that provides the methodology and lessons learnt during the pilot action and suggestions for replicability.



TECHNICAL UNIVERSITY OF CRETE (TUC) SCHOOL OF ENVIRONMENTAL ENGINEERING RENEWABLE AND SUSTAINABLE ENERGY SYSTEMS LABORATORY



Macro objective:

Increase energy independence with the development of a local small chips production unit and the more efficient exploitation of local biomass residues

Increase indoor and outdoor air quality in rural areas for citizens and visitors

Specific objectives:

Raise awareness on the local population and local authorities regarding the health hazards of traditional fireplaces

Provide local actors with a business opportunity of setting up and operating a local small chips production unit

Reduced cost for heating

RES potential to be exploited:

5.000 m3 from biomass residues

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