Recupero energetico delle biomasse in vitivinicoltura: il caso Settesoli

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The recovery of agricultural biomass, such as vine trimming wastes, for energy purposes represents one of the most significant innovations in the agricultural sector: apart from relieving producers of disposal costs, the process has also an economic return resulting from the conversion of biomass into energy and the related commercialization on the national market.

In Sicily, the significant economic potential related to the conversion and energetic exploitation of residual biomass from the wine sector – favoured by recent actions undertaken by the European and national legislators – could play, a strategic role for the immediate future of the Island and for the numerous wineries and wine bottling companies operating within the territory.

In particular, the Agrigento borough, which is the second wine district in Sicily - with about 25,000 hectares (ISTAT 2009) of vineyards, an estimated potential of vine trimming wastes of 2 tons/ha, and about 178,696 and quintals of pomaces produced in the wine year 2008/2009 - is a very suitable area for the establishment of this type of processing plants.

This research project has the objective of analyzing the case of the largest Sicilian winery, namely the Settesoli, which has recently launched a project to implement a 1 MW electric generator that uses the vine branches – prunings and cuttings – in conjunction with pomaces, residues from winemaking process.

After a brief assessment of the legal framework relating to the aforementioned energy industry, the research will focus on the type of processing plant adopted, which will also be the object of a technical-economic analysis (development costs, revenues, estimates of used biomass, financial and management data).

Lastly, the cost for collecting, transporting and storing vine branches from farm to store and the savings related to non-storage of pomace in the distillery will be calculated in order to determine the costs of converting biomass into electricity.

BIBLIOGRAFIA
