

**P-FE-4****TECHNICAL AND ECONOMIC ANALYSIS OF CARBON CREDITS OF FOREST OF THE BASILICATA REGION AND POSSIBLE EVOLUTIONARY SCENARIOS**

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Economic expectations generated by sink function of forests in the Kyoto Protocol context have been disappointed by the decision of the national government to consider for free the entire amount of credits generated from LULUCF sector (Land Use Land Use Change and Forestry) as national accountability, without making any investment to improve environmental quality.

The Kyoto 2 program follows the precedent framework adding new goals, including a 18% reduction in greenhouse gases compared with 1990 levels and the confirm of the three flexible mechanisms waiting for a global agreement to be adopted in 2015. From the forestry sector point of view, the national question related to the two markets, regulated and voluntary, and the current inability for forest owners to access to both markets and to related carbon finance seems still unclear.

The main focus of this paper is to estimate carbon credits that the Basilicata regional forests are able to produce in order to highlight the economic benefits potentially obtainable by the development of a local voluntary market for carbon credits called Carbomark.

The carbon credits quantification was conducted by applying the For-est model, in line with the IPCC Guidelines, which allows estimating absorption of carbon in the three pools identified by Guidance Good Practice for LULUCF: living biomass, dead organic matter and soils. The results showed an average annual absorption by the regional forests of about 12 thousand tons of carbon. The economic results show that the implementation of a voluntary market would produce significant economic benefits which, considering the minimum prices recorded on other voluntary platforms, are between 175 and 570 thousand €/year as well as countless social benefits such as employment, territorial coverage, sustainable forest management, etc.

The implementation of a voluntary market in Basilicata region would be easy to apply for the potential presence of both actors of the market: oil companies (demand) on one side and public and private forest owners (supply) the other side. The oil companies could benefit from participation to the market especially in terms of perceived image and acceptance by the local population, while the benefits for the supply side could be both economic that environmental.