

**ECONOMIC EVALUATION OF CO₂ EMISSION ABATEMENT MEASURES
IN THE GREEK ENERGY SECTOR**

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ABSTRACT

This paper outlines a methodological framework for the economic evaluation of CO₂ emissions abatement policies and measures, formulating a basis for the selection of those options of climate change mitigation interventions that minimize the economic cost and maximize the social welfare. To this purpose, a Cost Benefit Analysis has been implemented in order to evaluate a variety of CO₂ emission abatement measures in the Greek energy sector on the basis of their social (i.e. the sum of the private and external) costs and benefits, and it is compared with a Cost Effectiveness Analysis, which takes into account only the net financial costs of the examined interventions. The analysis clearly reveals that a significant decrease in CO₂ emissions is possible without great cost to the economy. Moreover, the monetization of environmental benefits (e.g. restriction of impacts on human health, agriculture, biodiversity, etc.) associated with the above mentioned interventions represents a powerful tool for highlighting priority actions in the context of a climate change mitigation policy and quantifying their overall economic and environmental effectiveness.