

**EVOLUTION OF BASELINE ENERGY CONSUMPTION AND ENERGY RELATED CO₂
EMISSIONS IN GREECE ON THE BASIS OF ALTERNATIVE ENERGY PRICES SCENARIOS**

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ABSTRACT

This study seeks to assess the baseline future demand for energy and the trajectory of CO₂ emissions level in Greece, taking into account possible fluctuations in international energy prices as well as potential scenarios for restructuring the taxation system of energy products. The conclusions of the study are based on analysis done with ENPEP, an engineering bottom-up model that employs a market-based simulation approach to project future energy supply/demand balances and the associated air emissions. The study concludes that CO₂ emissions from the Greek energy sector are to increase by 43.5%-44.1% in 2010 compared to 1990 levels. In addition, it is clearly depicted that whereas the examined scenarios of energy prices fluctuation alter significantly the energy consumption pattern in Greece, it does not have considerable impact on the increase rate of CO₂ emissions.