

Energy Policy, Technological Innovation and Uncertainties in Global Climate Change: A Cost-Benefit Assessment Using Monte Carlo Analysis

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A model of the type often used to project long-term emissions of CO₂ from energy production and use is subjected to Monte Carlo Analysis. Key econometric uncertainties on: Energy Demand, Marginal Costs of Emissions and the rate of development and use of non-carbon technologies are examined, and a sensitivity analysis of the discount rate applied is performed. Benefits and Costs -thus derived in probabilistic terms- imply that energy policies supporting steadily increasing ratios of renewable-to-fossil technologies in the energy mix, provide a sensible economic approach to Climate Change.