Abstract

The excessive use of Energy and the continuous upward trend in greenhouse gasses, leads governments to take immediate decisions and measures for their reduction. The purpose of this master thesis is through the marginal abatement cost curves to provide suggestions, predictions and the most effective solutions to reduce greenhouse gas emissions, so that it becomes possible to achieve the objectives of the Cyprus policy. The determination of the curve, took place for the first time in Cyprus and is based on domestic data. Proposed measures find an application in all sectors of the Cyprus economy, realizing a cost effectiveness for each of them. This study, shows the general overview of the energy situation in Cyprus today, as well as energy policy to be followed for the future. It then analyzes the sectors of the economy and how it affects the emissions of carbon dioxide. The possible measures that can be implemented to achieve the objectives, are followed by economic analysis and sustainability by calculating the Net Present Value (NPV) and the reduction potential for the application. The Marginal Abatement Cost (MAC) Curve Calculation, plays an important role because of the way the construction of the curve shows marginal costs of reducing greenhouse gas emissions. Based on a critical evaluation the results indicate that the proposed measures in the majority and under proper conditions can be cost-effective in terms of cost and reduction, resulting in significant benefits.