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The effect of changing ethanol production on the area harvested and CO₂ emissions

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Biofuel production has been increasing dramatically in the last decade. Recently several countries have introduced mandates and targets for ethanol expansion. This paper investigates the recent developments in ethanol production and its impact on the area harvested and CO₂ emissions for the producer countries and the rest of the world. This paper defines three scenarios that examined 50%, 100% and 150% increasing ethanol production respectively in the world which are modeled in GTAP-BIO. The results show that the increasing production of ethanol has different impacts on the area harvested and CO₂ emissions in different areas. In all defined scenarios, the largest change is related to the amount of cereal grains. The findings demonstrate that increasing ethanol production from biofuels resulted in CO₂ emission mitigation in the producers' countries and increasing CO₂ emissions in the rest of the world. This paper shows increasing ethanol production resulted in CO₂ emission mitigation for the United States while observing reduction in the CO₂ emissions for the whole economy.

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Review of policies encouraging renewable energy integration & best practices

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This paper provides policy-makers and renewable energy project developers with background information and analysis into the successful penetration of renewable energy policies. The analysis emphasizes on the different mechanisms to establish an encouraging regulatory framework for renewable energies and examines examples of both successful and failed experiences, through case studies and analysis of various countries. This analytic survey attempts to shed light on the factors which led to successful implementation of renewable energy depending not only on different countries experience, but also on the different sources and technologies for renewable electricity. The main objectives through the provision of this overview are to help policy implementers learn from each other's experiences and contribute to the efforts to meet indicative renewable energy targets. The methodology applied in this document is to collect all applied mechanisms helping deploying renewable energy projects with a reviewing of study cases analysis for some specific experiences. Then the information are classified and discussed from the financial, fiscal, legislative, political, technological and environmental points of view in order to make it a reference and a guideline for other renewable energy policies studies.

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