

Abstract:

The thesis evaluates three revenue neutral mixes of political measures aimed at the support of utilization of biofuels in the Czech Republic. The dynamic computable general equilibrium model with three aggregated sectors and two types of households is applied for evaluation of relevant environmental and economic impacts. The hypothetical price subsidy of utilization of energy biomass in production of the first generation biofuels fulfilling sustainability criteria is chosen as the basic supportive tool. The revenue neutrality is satisfied via adequate increase in tax rates in three different alternative scenarios (via labor tax, motor fuel tax, and standard value added tax). The results indicate that at the current price level of crude oil even relatively high level of price subsidy is not sufficient in fulfilling the emission and biofuel share targets presumed by European Commission. Therefore, for attaining the biofuel share target high percentage first generation biofuels and second and third generation biofuels have to be utilized. Furthermore, for the fulfilling of emission targets other alternative fuels have to be utilized as well. The results finally reveal that environmentally most efficient mix is the price subsidy compensated via an increase in the motor fuel tax, economically most advantageous is the compensation via standard value added tax rate.