Regional Net-Impacts and Distributive Effects of Promoting Renewable Energies in Germany

Topic: 711F Inequality and Environment
Author: Johannes TÖBBEN

This paper concerns the net-effects of promotion the promotion of renewable energies on value added and disposable income in Germany, as well as their distribution among regions and income-brackets. Since its entry into force the German Renewable Energies Act (EEG) stimulated tremendous investment into renewable energy capacities through guaranteeing investors a fixed price per kWh as well as preferred feed into the grid over electricity from conventional sources. The policy measures are financed by surcharge on electricity prices. In recent years a controversial debate arose about potentially negative regional and social distribution effects. In this paper, multiregional price and quantity Input-Output models with endogenous heterogeneous households are used to trace the indirect impacts of the EEG on output and income levels (quantity-side) and the formation of prices and wages through a complex network of regionally dispersed value chains. Our findings suggest, that generation of electricity from renewable sources itself leads to small positive impacts on industries, but leads to a massive drain of household’s income and has regressive distributive effects. However, investment into new capacities is found to turn negative impacts into a positive direction for the majority of households.