Employment effects of electricity generation from renewable energy technologies in the UK

Topic: CGE and Econometric Input-Output Modeling

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In response to the need of reducing CO2 emissions, the European Union has set itself ambitious targets to increase the share of electricity generated from renewable energy sources (RES-E). Therefore, the promotion of the deployment of renewable energy technologies has come to form a crucial part of governments' strategies to prevent climate change.

Although it is difficult to refute the claim that increasing the use of RES-E will help to prevent global warming, along with adding to Europe's energy security, policy-makers and 'green growth' advocates further argue that it will lead to the creation of a large number of jobs. However, the exact number of jobs quoted by current studies varies enormously with a tendency for member states to base policy decisions on employment estimates that are arguably too optimistic.

Taking the UK as a case study, this paper provides an assessment of the impact that renewable energy targets for electricity generation will have on employment. The job creating potential of each RES-E will be made available through the use of Input-Output employment multipliers with projections for the year 2020.

The analysis indicates that the number of jobs associated with RES-E is expected to be less than anticipated by the UK government. Thus with employment benefits smaller than anticipated, and as a consequence less able to offset any negative employment effects that are likely to transpire from the move to a low carbon economy, it is argued that current policy measures do not adequately protect or prepare the workers for this transition.