Sarah Honeycutt

University of Nevada, Reno

Dr. Thomas R. Harris

Expanding the Solar Energy Generation Industry in Nevada, it's Economic Impacts.

Nevada has a unique role to play in the displace greenhouse gases emitted in the production of energy using fossil fuels. It is one of six states to be included in a Bureau of Land Management cooperative study to determine suitable public lands for available for streamlined development of utility scale solar energy projects. This analysis looks at two types of economic models, unconstrained and constrained. The unconstrained model uses the draft Solar Energy Zones (SEZs), this model assumes that there are no restrictions to the availability of land. The second constrained model uses the final Solar Energy Zones to constrain the land available due to many factors including endangered species habitat. Land available, for the streamlined development of the utility facilities, is reduced from 160,000 acres to 60,000 acres. The effects of these exogenous supply side shocks are estimated using a Social Account Matrix (SAM). The SAM estimations are especially useful; the estimated induced impacts are distributed to nine household income brackets. The distribution of the effects is varied. The smallest two shares are just over half a percent; the largest share is almost 44 percent and is distributed to the second lowest $10,000 - $14,000 income bracket. The lowest and highest income brackets, incomes of less than $10,000 and greater than $150,000, received shares of about 8 and 18 percent, respectively. Total induced impacts to household income vary between $707 billion & $3.4 trillion for the constrained and unconstrained models, respectively.

This material is based upon work supported by the National Science Foundation under Grant No. IIA-1301726. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.