

Los Angeles' renewable energy plan won't tank the economy, study finds

January 16 2024, by Christian Hetrick



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The City of Los Angeles' plan to rely entirely on renewable electricity

sources by 2035 won't have a significant effect on the local economy, according to new research from the USC Sol Price School of Public Policy.

USC Price School Research Professor Adam Rose and former Research Associate Professor Dan Wei co-authored a study estimating the [economic impacts](#) of nine scenarios in which L.A would convert its [electricity](#) portfolio to 100% [renewable sources](#). The findings, [published](#) in *Climate Policy*, showed that some scenarios may result in slight job gains or losses, but any potential changes would be minuscule in relation to the city's 3.9 million jobs and \$700 billion in GDP.

"The important takeaway is that the 100% fossil-free electricity provision can be attained with, at most, some very minimal job losses throughout the economy," Rose said. "But it's important to remember: You don't want to have the tail wagging the dog. This is a co-benefit. The main reason to do this is to reduce [greenhouse gas emissions](#)."

The City of Los Angeles owns and operates the nation's largest municipal utility and plans to modernize its electricity system infrastructure with the goal of achieving a 100% renewable energy supply by 2035. Such an endeavor would require major investments and changes in operations and maintenance spending, and result in changes to electricity rates paid by customers.

To examine the direct and indirect (supply-chain) [economic impact](#), researchers considered nine possible pathways, which differed in how quickly L.A. achieved the goal, the portfolio of renewable energies used, and the demand for electricity, among other factors. The study found:

- The net economic impacts within L.A. from possible 2026 to 2045 timelines range from losing 3,600 job-years (in terms of one year of work per person) annually to adding 4,700 additional

job-years annually. Both amount to just 0.1% of L.A.'s average annual employment.

- Job impacts across all scenarios can be improved by attracting renewable equipment manufacturing and support industries to the city and by helping with the appropriate training of the expanded workforce.
- Policies such as subsidies for home energy efficiency improvement, modifications to electricity rate structures or rebates could improve the minimal negative income impacts, especially for low-income groups.

Rose said the scenarios that have the most positive impact generally have a higher level of investment in renewables within the L.A. area—such as a heavy emphasis on rooftop solar—as opposed to building generation outside the area, such as centralized solar stations.

Scenarios that have the most negative employment impacts tend to call for relatively large proportions of investment outside of L.A., accelerate the timing of the goals to 2035, and/or exclude some energy options, such as biofuels, Rose said. All of these would generally result in higher electricity rate increases, which would affect lower-income households the most if not counteracted by subsidies or other policies to help.

However, it should be noted that the two scenarios with the 2035 target date would yield by far the largest reductions in greenhouse gas emissions, Rose noted.

For decades, the debate over shifting to renewable energy has produced polarizing opinions. Critics have labeled renewable energy policies as job killers, while proponents have claimed that ditching fossil fuels will be a panacea for economic development. Yet this study, as well as Rose's previous research across the U.S., suggests that neither extreme is true, though most studies show the results to come out on the slightly positive

side.

"Our studies have found that the truth is somewhere in the middle, and that the job impacts are usually somewhere between a one-half of 1% to 2% change in the baseline projection," Rose said.

Rose also noted that many are skeptical that the 100% renewables target can be met by 2035. However, he emphasized that even if the advances reach only 90%—or even moderately lower—of their target, this policy initiative should be deemed a success.

More information: Harvey Cutler et al, Regional economic impacts of the Los Angeles 100% renewable energy transition, *Climate Policy* (2023). [DOI: 10.1080/14693062.2023.2287076](https://doi.org/10.1080/14693062.2023.2287076)

Provided by University of Southern California

Citation: Los Angeles' renewable energy plan won't tank the economy, study finds (2024, January 16) retrieved 8 May 2024 from <https://techxplore.com/news/2024-01-los-angeles-renewable-energy-wont.html>

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