

Clean Energy Grows Economy Faster Than Traditional Sources

WEDNESDAY, 10 JUNE 2009 00:00

As the state grapples with a multibillion dollar deficit, a new study by researchers at the University of California, Berkeley, to be released today examines the economic impacts of different energy pathways for California and finds that continuing on a business-as-usual energy path risks greater economic insecurity, while aggressive acceleration of clean energy assures faster and more sustained economic growth. Relying on renewable sources for 50 percent of California's electric power, combined with increasing energy efficiency by 1.5 percent a year will generate half a million new jobs with over \$100 billion in cumulative payrolls over the next 40 years, according to the study.

0
tweets



tweet

"Energy Pathways for the California Economy" is authored by UC Berkeley professor David Roland-Holst and his team of researchers from the Department of Agricultural & Resource Economics, and funded by Next 10, a nonpartisan nonprofit organization. This study evaluates the state's energy demand and supply horizons, and models the economic impact of accelerating renewable energy deployment and energy efficiency trends.

"We don't have to choose between protecting the economy or the environment," commented Roland-Holst. "Clean energy is more job intensive than our current energy mix, creates and retains more wealth inside our state, and reduces our vulnerability to volatile fossil fuel markets. Our analysis shows that the faster and farther we pursue energy efficiency and renewables, the more prosperous and secure our economy will be."

The report examines California's projected energy demand and supply horizons and concludes that, if the state continues with business-as-usual, from electricity to transportation projected energy demand growth will create greater reliance on fuel imports and therefore greater vulnerability to price shocks.

Using the Berkeley Energy and Resources (BEAR) model, a state-of-the-art, economy-wide forecasting tool, the study analyzes five new energy scenarios and tracks complex market interactions across key elements of the California economy. The five scenarios include: three degrees of Renewable Portfolio Standards (20 percent, 33 percent, and 50 percent) and new energy (NE) efficiency (with RPS 50) improvements (1.0 and 1.5 percent annually).

Report findings include the following:

- A dollar saved on traditional energy is a dollar earned by 10-100 times as many new workers.
- Renewable fuel generation is more job intensive and less price volatile than traditional carbon fuel supplies.
- Employment creation outweighs employment reduction in every scenario.
- Over the time period considered (2008-2050), the clean energy industry increases in-state employment to about half the size of California's biotech sector, but up to twice as many additional jobs are created in upstream and downstream sectors.
- The most ambitious scenario (50 percent renewable fuels; 1.5 percent efficiency increase) produces the greatest number of net new jobs and largest payroll dividend -- generating half a million additional jobs with over \$100 billion in cumulative payrolls over 40 years.
- Compared to renewable deployment alone (RPS 50), integrating energy efficiency measures increases statewide job benefits almost tenfold. Employment gains are more widespread, particularly in construction and services, with the former responding to new building standards and the latter benefiting from household expenditure diversion.
- Renewable energy generates jobs with relatively high wages and obvious new technology appeal. Even when a significant portion of green tech manufacturing is outsourced (25 percent of value is assumed), California still captures significant employment and payroll benefits from greater renewable deployment.
- Finally, household energy efficiency savings translate, via expenditure shifting, into even greater income growth for consumer sectors,

including more diverse, bedrock, in-state employment in food, services, etc. These are jobs that cannot be outsourced.

"We are facing an unprecedented multibillion dollar budget deficit and many question whether now is the time to embark on an ambitious clean energy program," said Next 10 founder F. Noel Perry. "This study shows that there is no better time. Energy efficiency and renewable energy can provide the lifeline our economy needs."

A previous report by Roland-Holst and funded by Next 10 found that without taking the aggressive steps to increase energy efficiency over three decades ago, California would be more vulnerable to the current economic crisis -- with greater dependence on volatile fuel prices, lower past consumer savings and, as a result, reduced spending and income today. Over the past thirty-five years, forward looking energy efficiency policies created 1.5 million full-time jobs with a total payroll of over \$45 billion, and saved California consumers over \$56 billion on energy costs.

The full report is available at: [www. Next10.org](http://www.Next10.org) or http://are.berkeley.edu/~dwrh/CERES_Web/index.html

Media interviews with the author of the report may be arranged by contacting Cater Communications at (415) 453-0430 or roxanna@catercommunications.com .

Next 10 (www.next10.org) is an independent, nonpartisan organization that educates, engages and empowers Californians to improve the state's future. Next 10 is focused on innovation and the intersection between the economy, the environment, and quality of life issues for all Californians. Next 10 funds research by leading experts on complex state issues and creates a portfolio of nonpartisan educational materials to foster a deeper understanding of the critical issues affecting our state.

SOURCE University of California, Berkeley; Next 10

User Rating

Please [sign in](#) or [register](#) to rate

★★★★★(0)
