If California is the Model, it Doesn't Work

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California a model for U.S. under Obama global-warming plan

San Francisco Chronicle / Carolyn Lochhead and David R. Baker / Monday, June 2, 2014

Washington -- - California and other states that have acted to cut greenhouse gas pollution will be models for the rest of the country when it comes to adopting the first-ever caps on power-plant emissions that fuel global warming, state officials and environmentalists said Monday.
(…)
By pioneering a carbon pollution trading system in 2012, California "has created a gigantic and important proof case that reducing greenhouse gas emissions and having an economy grow can be done simultaneously," said Cathy Zoi, former White House chief of staff on environmental policy in the Clinton administration, now a consulting professor at Stanford University.

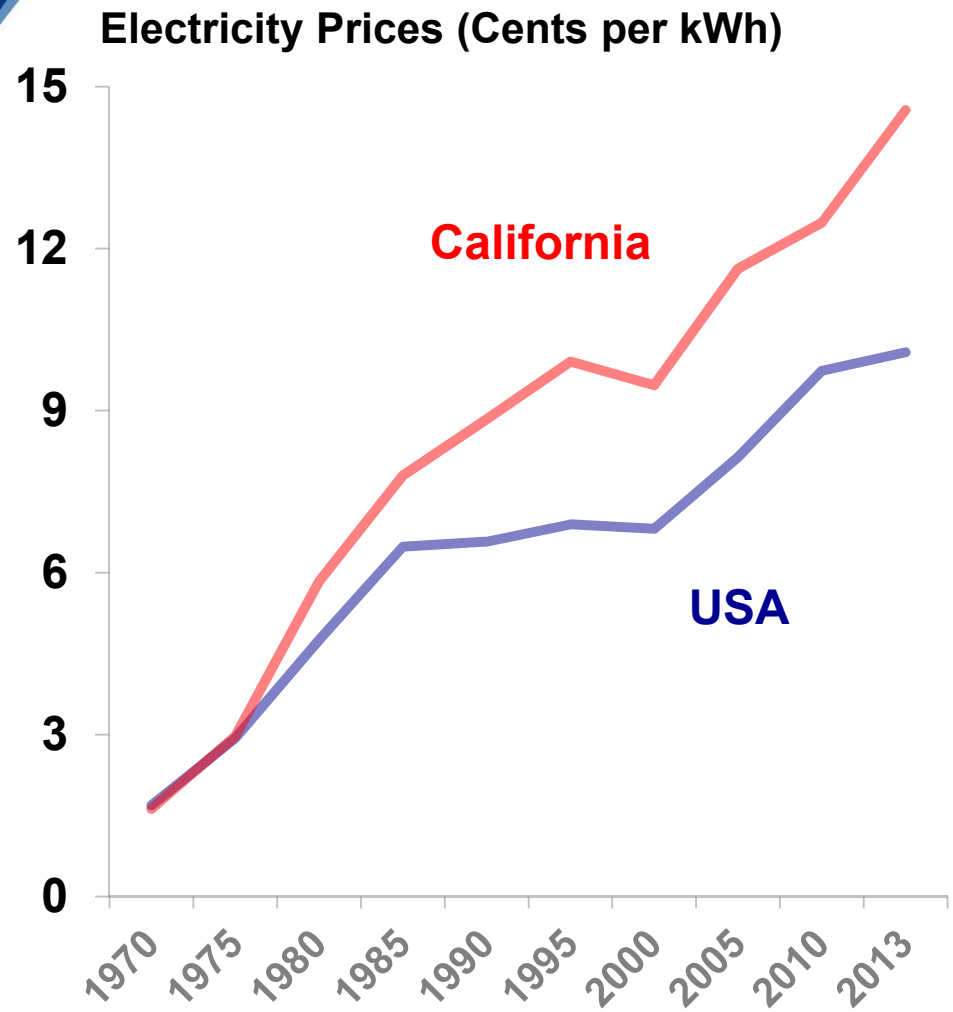
"We've already figured out to access renewables," such as solar and wind power, Zoi said. "We use lots of natural gas. Our energy-efficiency programs here in California are world-best practice. So the program that we have here is setting the national standard for what can be done."
(…)
No state has taken more aggressive action to fight climate change than California.
The state has set limits on greenhouse gas emissions and forces companies to buy permits to emit carbon dioxide into the air. California requires oil companies to cut the "carbon intensity" of the fuels they sell in the state.
Regulations adopted in 2007 effectively block utility companies in the state from buying electricity from coal-fired power plants. Under state law, utilities must get 33 percent of their electricity from renewable sources by the end of 2020.
(…)

Prodding other states

Derek Walker of the Environmental Defense Fund said the new rules could push other states into joining California's cap-and-trade system.

"The verdict has come in pretty quickly that these are worthwhile programs," Walker said. "California has already been a hot spot of visits from other states and countries who want to learn as much as they can about what we're doing here."

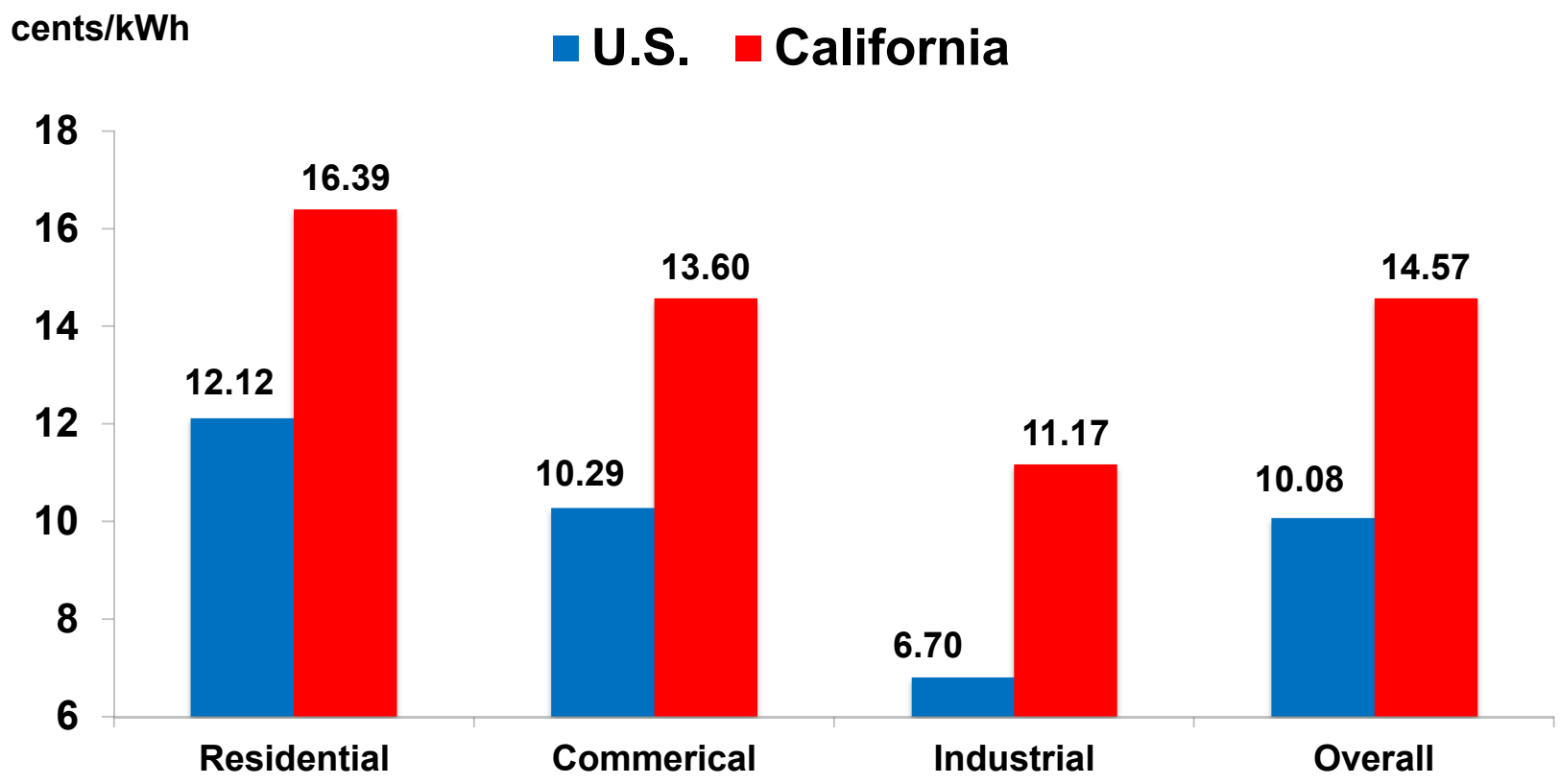
Making Electricity Expensive:
California is not a model the U.S. should follow



"What these [EPA] rules do…is build off what we've been doing since the 1970s, moving away from coal, pushing on efficiency and renewables. This is going to push forward the programs California is known for and make them more national in scope," Robert Weisenmiller, Chairman, California Energy Commission

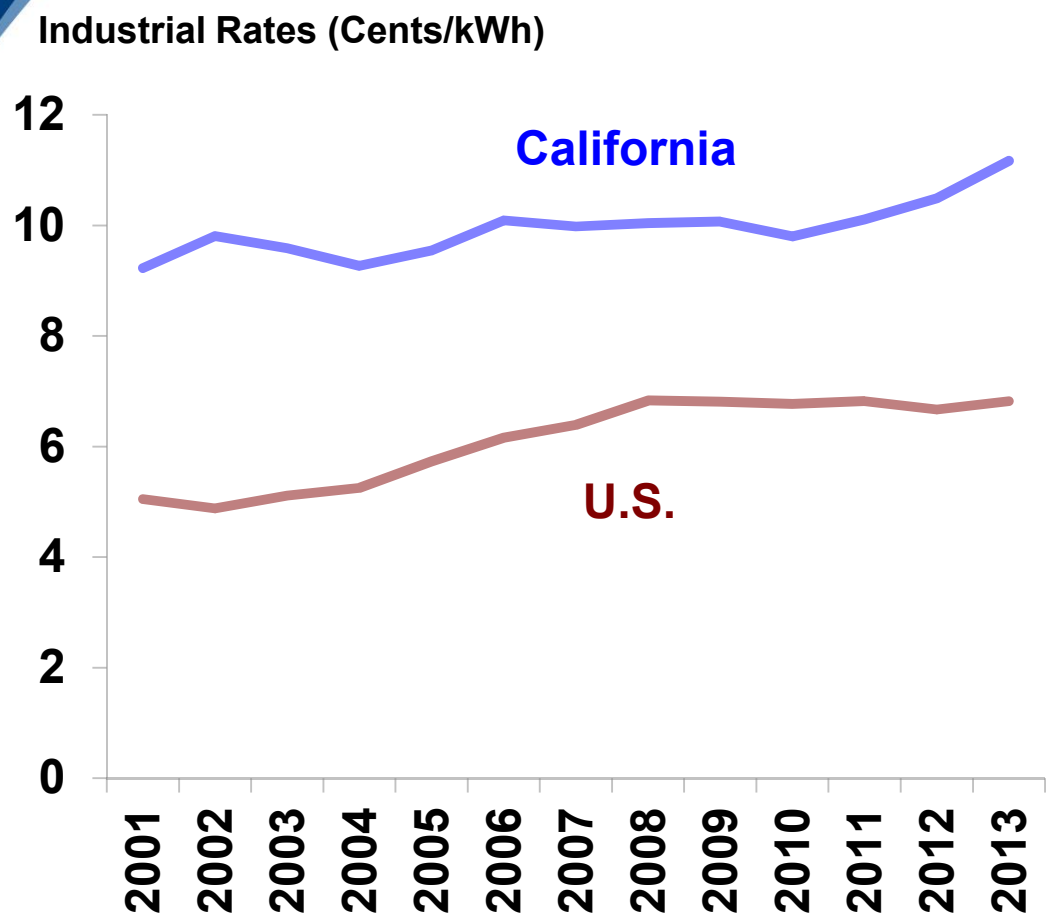
Source: EIA; San Francisco Gate, June 2, 2014; Anant Sudarshan, Deconstructing the Rosenfeld Curve, Stanford University, March 2011

California Electricity Rates: Higher for Every Sector of the Economy



Source: EIA, 2013 data

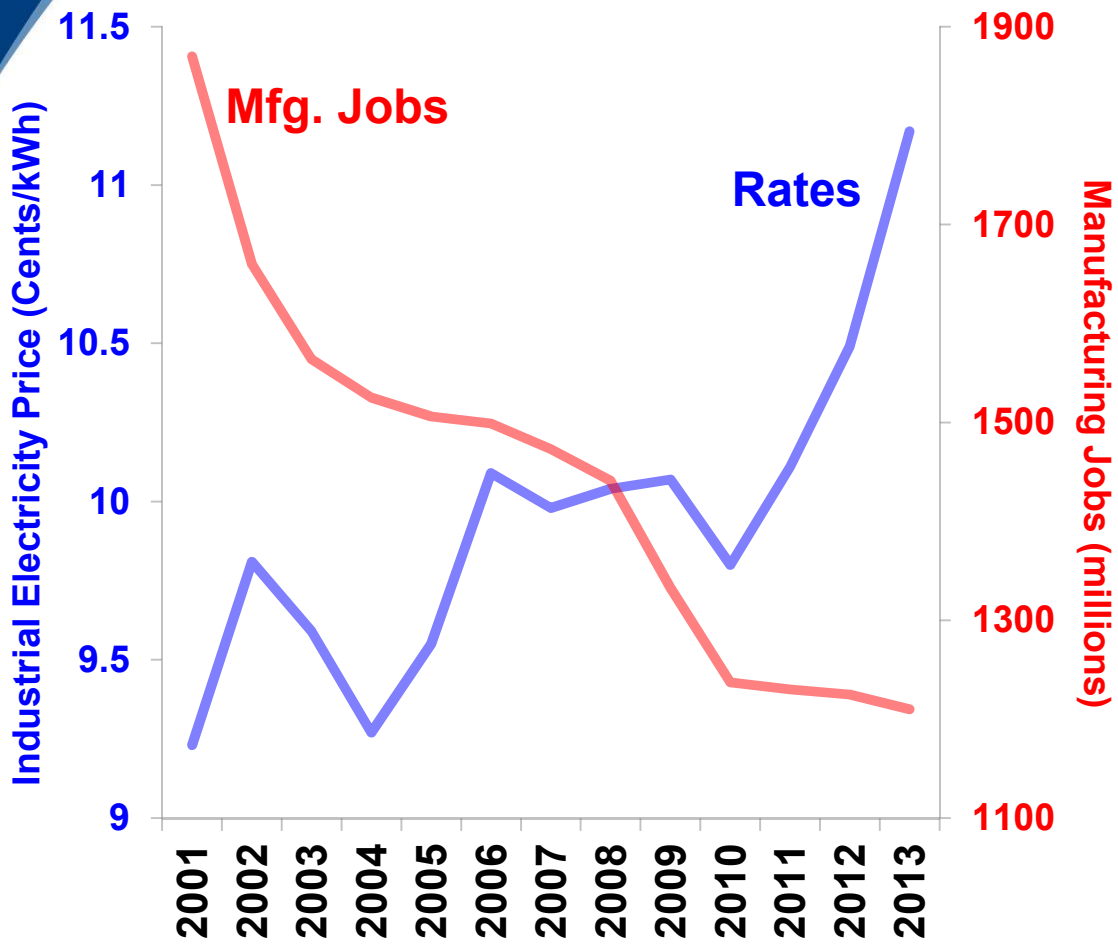
Higher Power Rates Means Less Manufacturing



From 2001-2013, California's industrial electricity prices were 65% above the U.S. average, and the state lost 650,000 manufacturing jobs.

Sources: EIA; Orange County Register, February 21, 2014; Pacific Research Institute, 2013

Higher Electricity Prices Have Eroded California's Manufacturing Base



"Most of the low-hanging fruit of reduced energy intensity has already been harvested – California can only shut down its aerospace industry once," Dr. Stephen Hayward," 2013

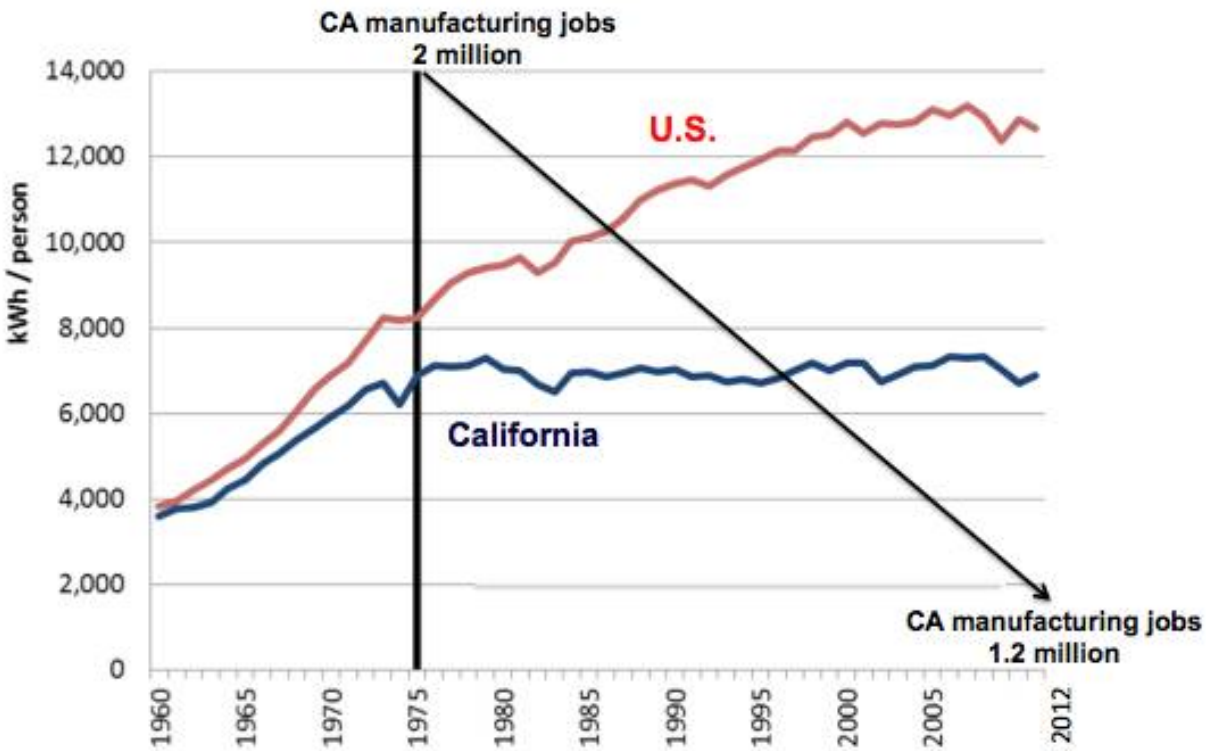
Source: EIA

Notable Companies that Have Left California or Announced Plans to Leave

- Toyota
- Chevron
- Occidental Petroleum
- Waste Management
- Waste Connections
- SAIC
- Pratt & Whitney
- eBay
- Hyundai Capital America
- Claim Jumper
- Bubba Gump Shrimp
- Comcast
- Campbell Soup
- American Racing
- Hewlett-Packard
- JC Penney
- Nissan North America
- Paragon Relocation Resources
- Rockwell Collins
- Tickets.com
- Wells Fargo
- Dunn-Edwards Paints
- EDM Laboratories
- Kairak
- Oracle
- Twitter
- Adobe
- EA Games
- Intel
- Charles Schwab
- US Airways
- US Press
- Tapmatic
- Stata Corp
- Solar World
- Special Devices
- Maxwell America
- Lennox Health Products
- LCF Enterprises
- Helix Wind
- Gregg Industries
- Fluor Corp
- EDMO Distribuors
- Denny's
- BPI Labs
- Apria Health
- American AVK
- Beckman Coulter
- Audix Corp
- Precor
- Plastic Model Engineering
- Pixel Magic
- Northrop Grumman
- Simple Tech
- Scale Computing
- Starkist
- Smiley Industries

California's Huge Manufacturing Losses Mean Lower Demand for Electricity

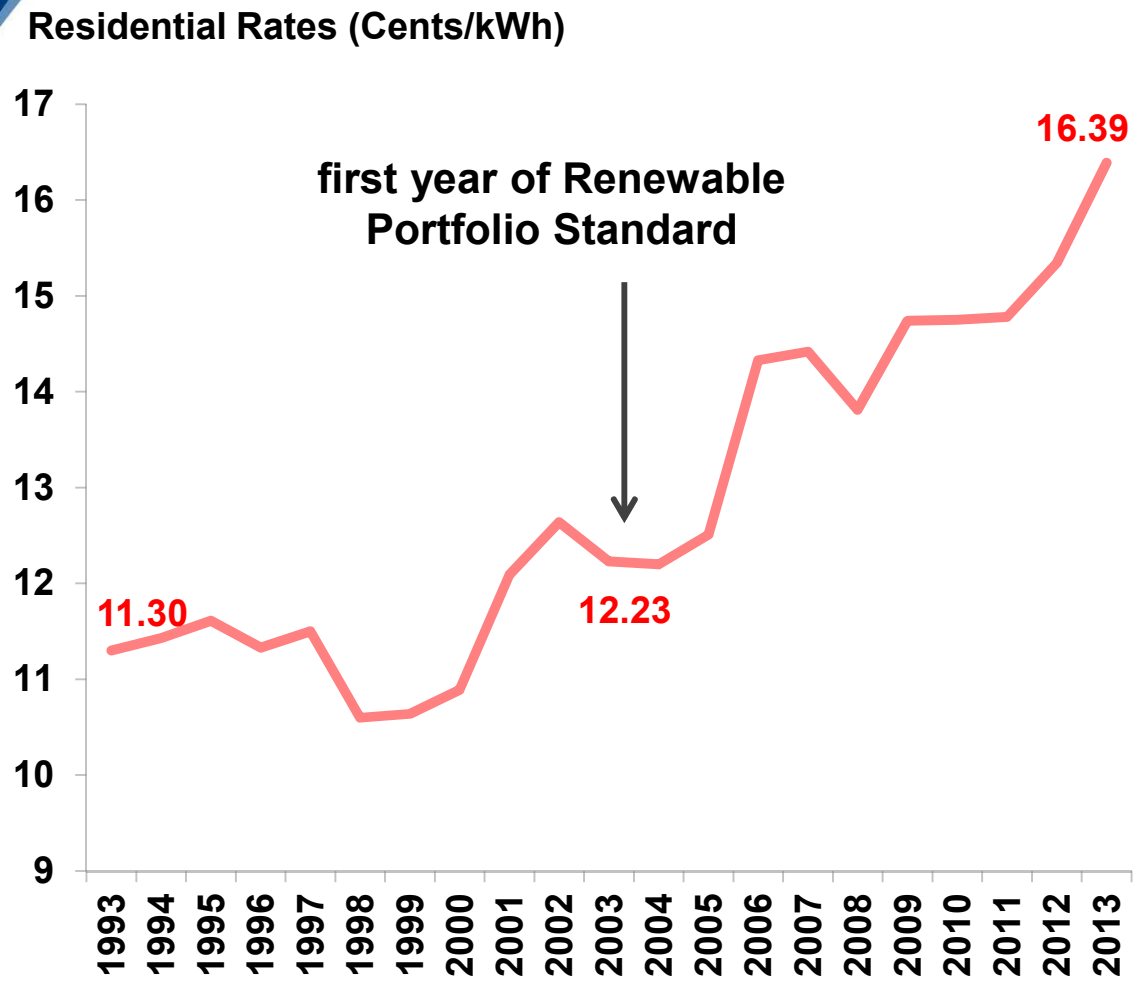
Per Capita Electricity Use



"in California, energy-intensive manufacturing industries have shown greater reductions in employment…This helps explain the divergence between California and the rest of the country in terms of overall energy consumption per capita," Energy Economics

Sources: EIA; San Gabriel Valley Tribune, February 22, 2014; Mitchell, et al., "Stabilizing California's Demand," March 2009, Energy Economics

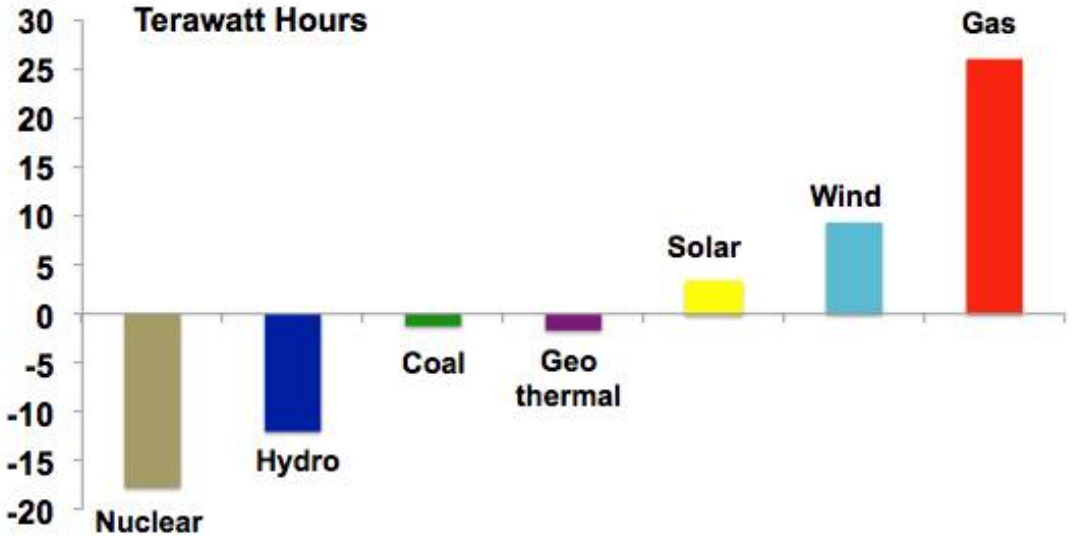
California's Power Rates Have Surged Under the Renewable Portfolio Standard



Source: EIA

Since California's first Renewable Portfolio Standard was installed in 2003, household rates have increased 34%, compared to just 8% from 1993-2003.

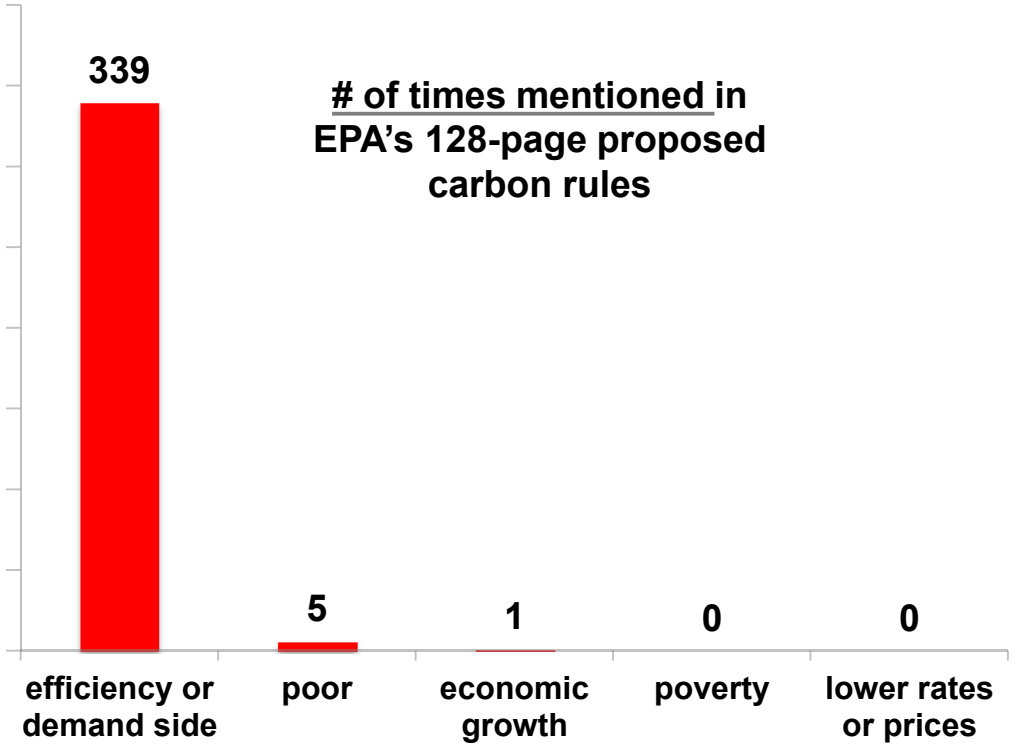
Dependence on natural gas: California's Incremental Power Generation, 2003-2013



Over the past decade, gas prices to produce electricity have averaged almost three times more than coal prices

Source: EIA; Los Angeles Times, December 9, 2012

EPA's Focus on Reducing Demand Ignores Other Dimensions of U.S. Society

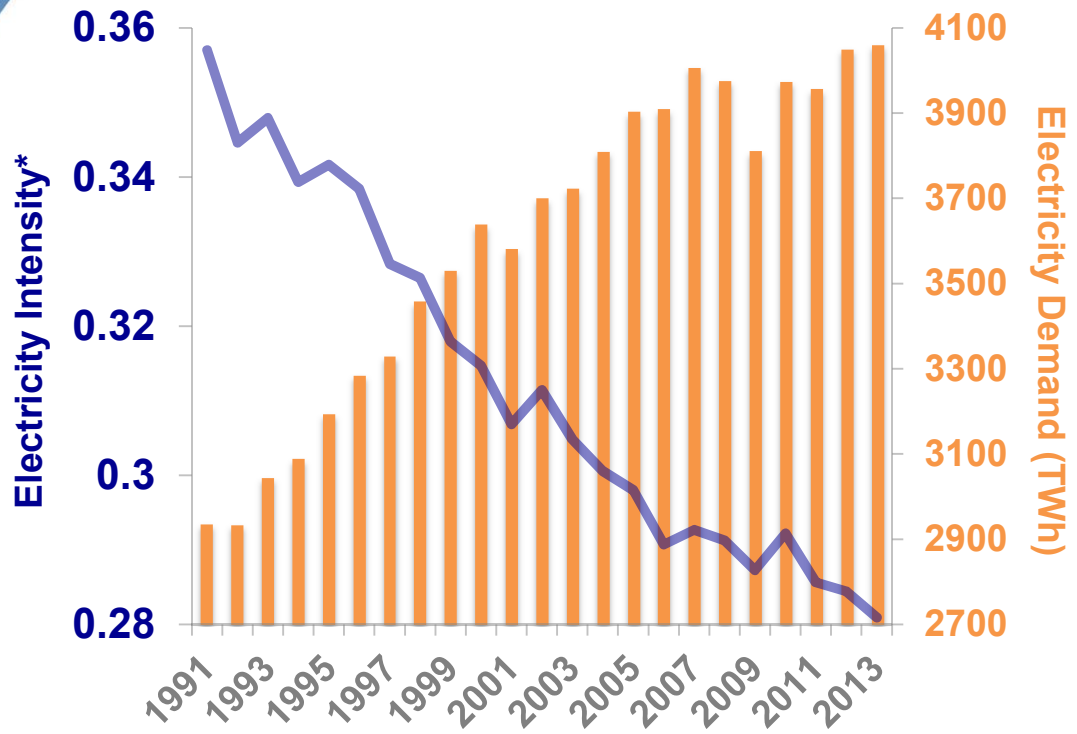


# of times mentioned in EPA's 128-page proposed carbon rules

"In downplaying the costs, EPA and the environmental community have made highly unrealistic assumptions regarding energy efficiency programs," Electric Reliability Coordinating Council

Source: EPA, Federal Register, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule, June 18, 2014

More Electricity Efficiency Does Not Decrease Demand in the U.S.

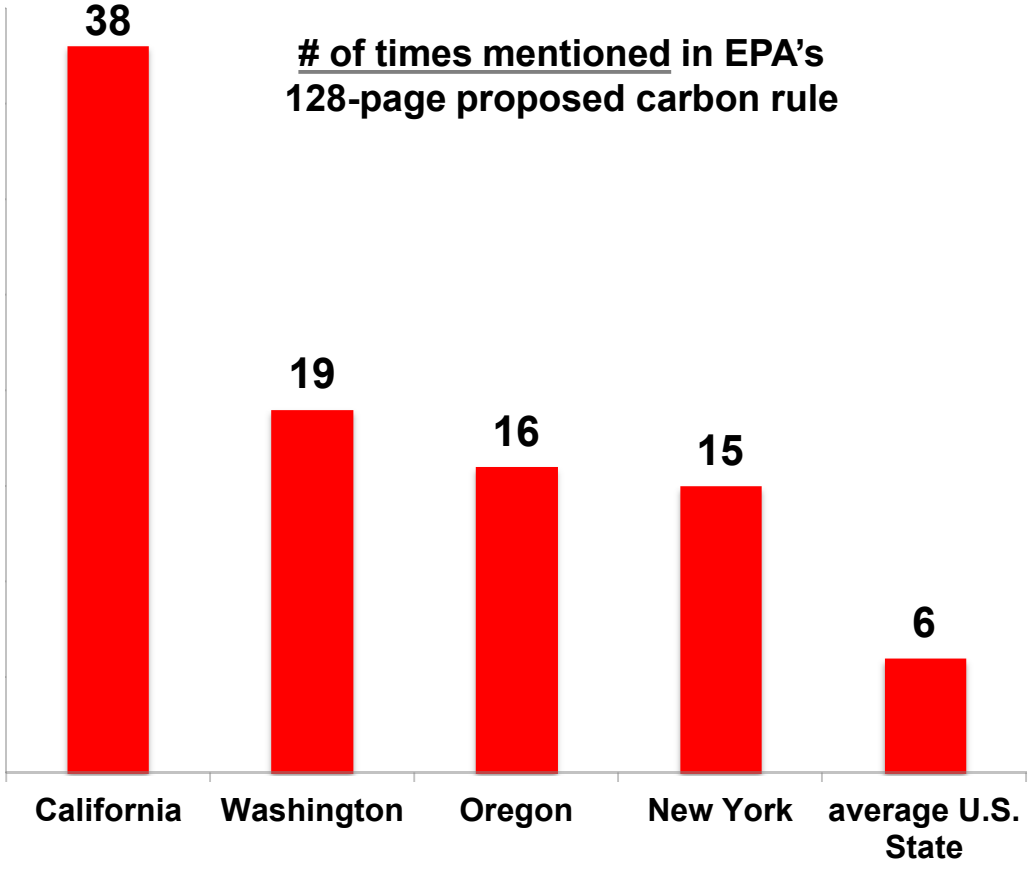


From 1991-2013, total U.S. electricity efficiency improved 22%, yet total power demand increased 38%, and per capita use increased 10%.

*Electricity Intensity = TWh needed to generate $1 billion in real GDP

Sources: EIA, "Electricity, Generation and Thermal Output;" USDA, Historical Real GDP

Why does EPA use these states as exemplary models?

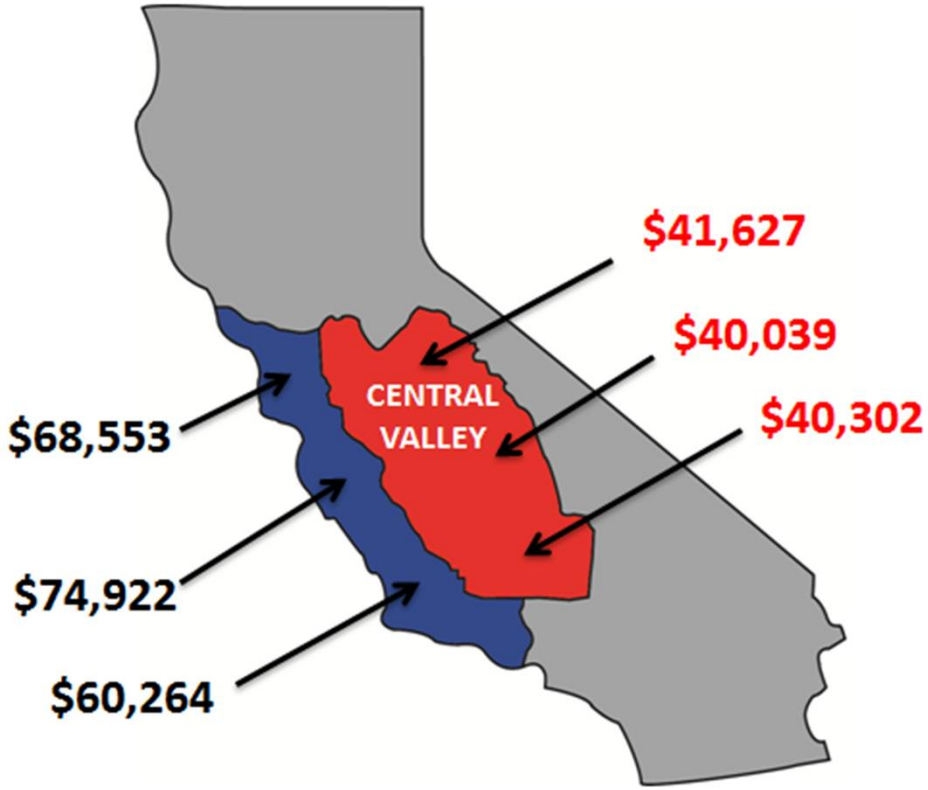


California has the highest electricity rates west of the Mississippi, New York's residential rates are 56% above U.S. average. Washington and Oregon are hydro-based, thus not relevant to the rest of the country.

Source: EPA, Federal Register, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Proposed Rule, June 18, 2014: Note: Contiguous U.S.

Widening Inequality in California

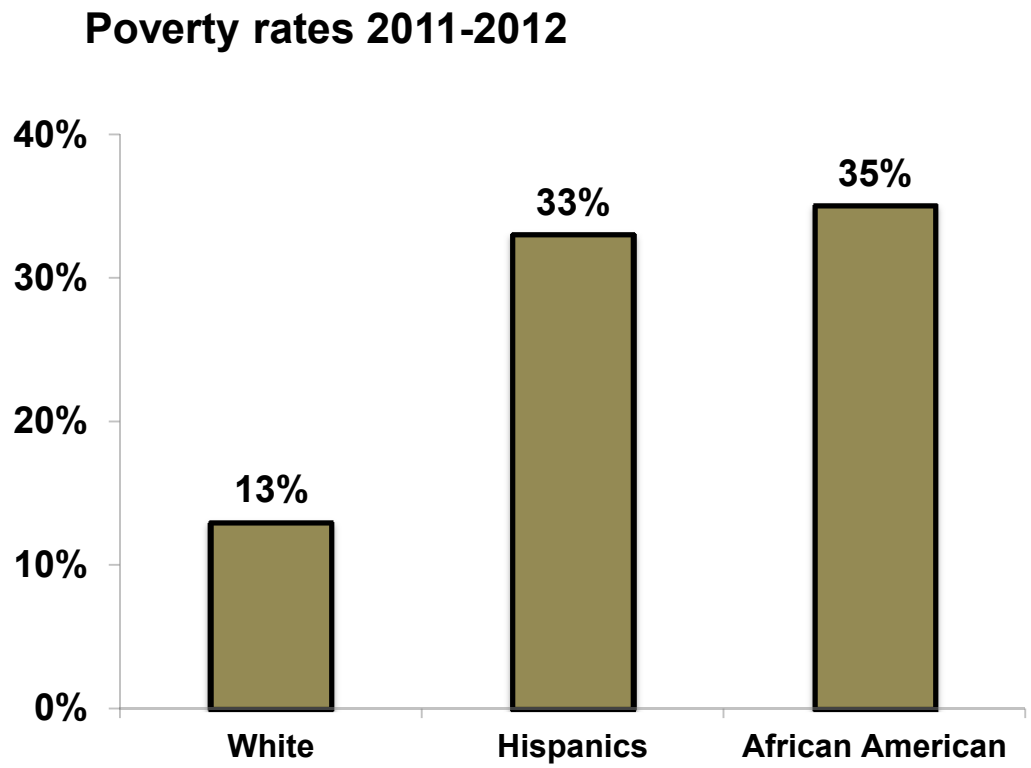
Median Family Income



"The well-heeled, largely white and Asian coastal denizens live in an economically inaccessible bubble insulated from the largely poor, working-class, heavily Latino communities in the eastern interior of the state… The vast expanse of economic decline in the midst of unprecedented, but very narrow urban luxury has been characterized as 'liberal apartheid," Joel Kotkin, *Forbes* Magazine, March

Source: Forbes Magazine, March 20, 2014

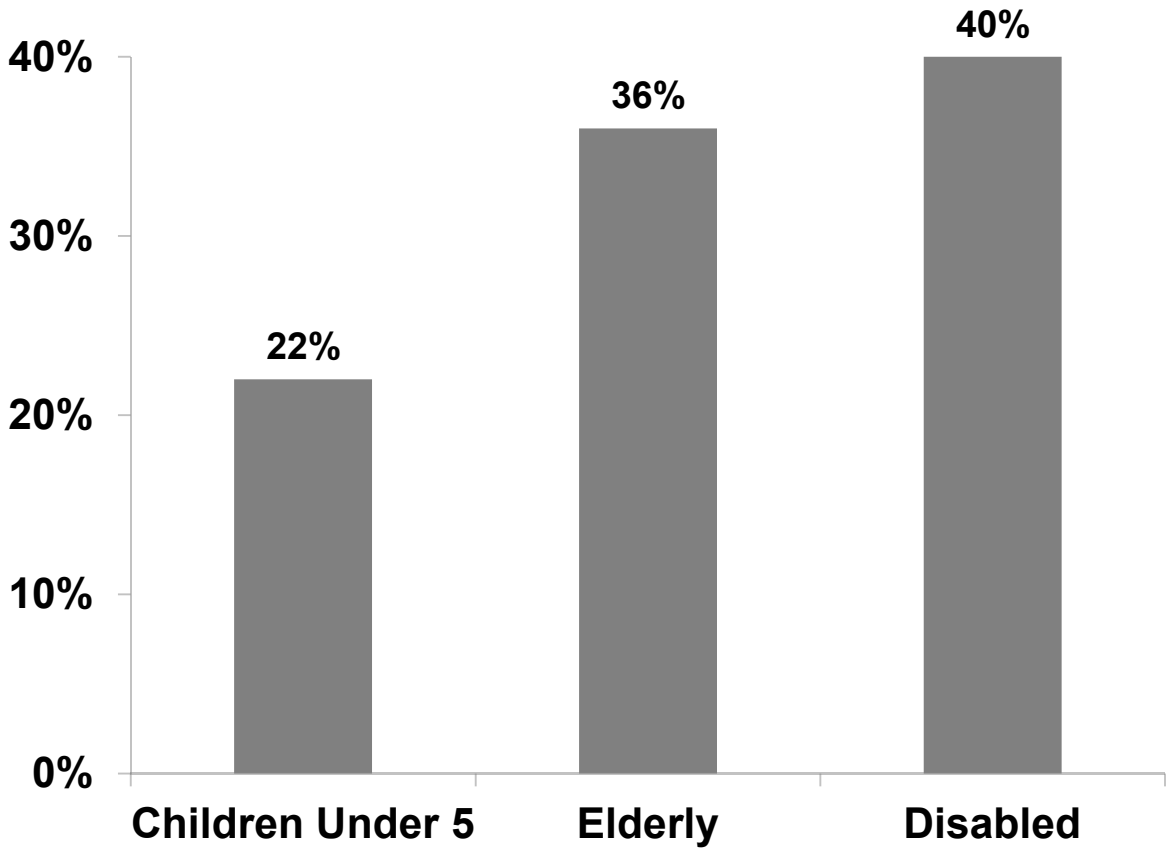
Minority Poverty in California



"With …industrial growth stifled largely by regulation, many rural Californians particularly Latinos, are downwardly mobile, and doing worse than their parents; native-born Latinos actually have shorter lifespans than their parents," Joel Kotkin, "Where Inequality is Worst" *Forbes*, March 20, 2014

Sources: The Henry Kaiser Family Foundation, 2013, Poverty Rate by Race/Ethnicity; Forbes, March 20, 2014

The Poor Pay More: California's Families on Energy Assistance are Most Vulnerable



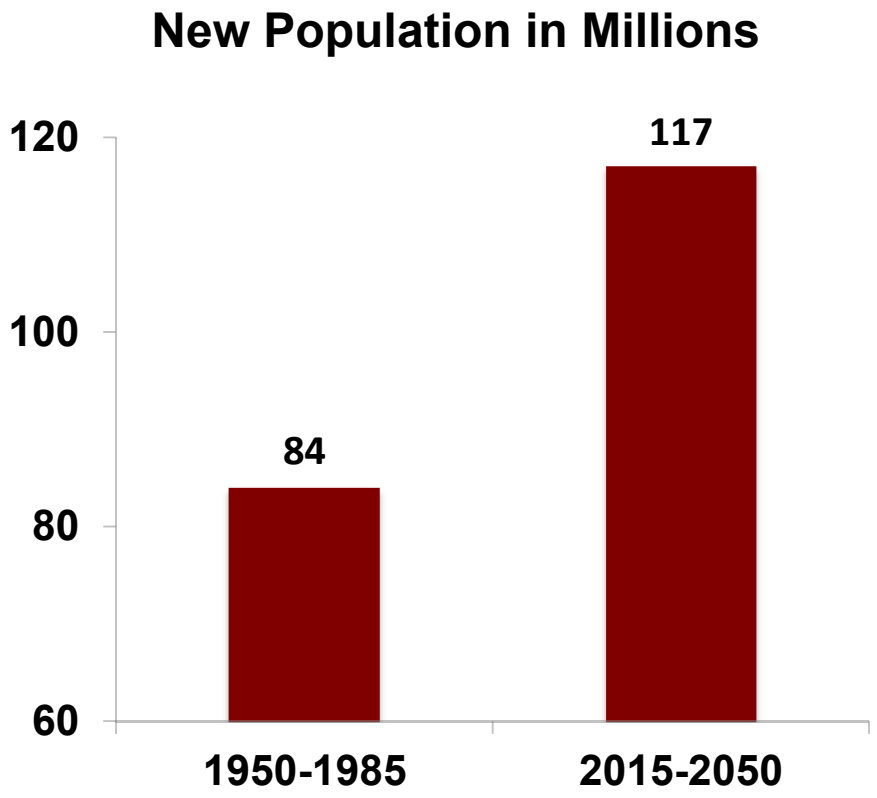
From 2010-2015, California LIHEAP funding will decline 44%.

Only about 10% of those Californians eligible actually get served.

Source:: LIHEAP Facts

The United States Is Still a Developing Nation and Will Need More Electricity, Not Less

- The "boom" is still ahead of the U.S. as more people will be added to the population in the next 35 years than were added in the same number of years after World War II.
- The U.S. is a developing nation and coal is the only fuel that can meet growing electricity demand affordably and at scale.



The "Boom" is Still Ahead of the U.S.

Source: U.S. Census Bureau, The Next Four Decades

- **EPA's Clean Power Program uses California's energy policy as a role model for the United States, especially in terms of increased dependence on natural gas, the fuel with the greatest price volatility.**
- **California's electricity policies have driven higher rates and eroded the industrial base – costing over 600,000 well paying manufacturing jobs**
- **California has been losing business at a 3:1 ratio, and 160 companies left the state in the first five months of 2014 alone**
- **California has 12% of the U.S. population but 34% of those on welfare – and more children in poverty than Nebraska has people**
- **The U.S. will continue to need more electricity as we grow – even as we become more efficient. America will add 115 million people by 2050.**
- **We need expanded generation from all sources of electricity, not policies that will reduce options and make supply more expensive.**
- **Clean Coal is the pathway to reliable, affordable power with significantly reduced emissions.**

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Frank Clemente is a Senior Member of the Graduate Faculty at Penn State and former Director of the University's Environmental Policy Center. He was a National Institutes of Health Post-Doctoral Fellow in Economic and Industrial Development at the University of Wisconsin. The Senior Class of 2007 voted him "Best Professor" at Penn State. Clemente's research specialization is the socioeconomic impact of energy policy, especially on families, minorities, business and communities. He has published more than 100 articles in energy related media including *Public Utilities Fortnightly, Electrical World, Nuclear News, World Oil, American Coal, Oil and Gas Journal and the Journal of Commerce.* His social science publications have appeared in such journals as *Farm Economics, Urban Studies, Journal of Black Studies, Growth and Change and Rural Sociology.* His research has been funded by the National Science Foundation, Rockefeller Foundation and Ford Foundation. Professor Clemente was first listed in the Social Science section of *American Men and Women of Science* in 1979. Clemente has a bachelor of art's degree in english from Indiana University and a doctorate in demography from the University of Tennessee. Co-Author, National Coal Council's, "The Urgency of Sustainable Coal"