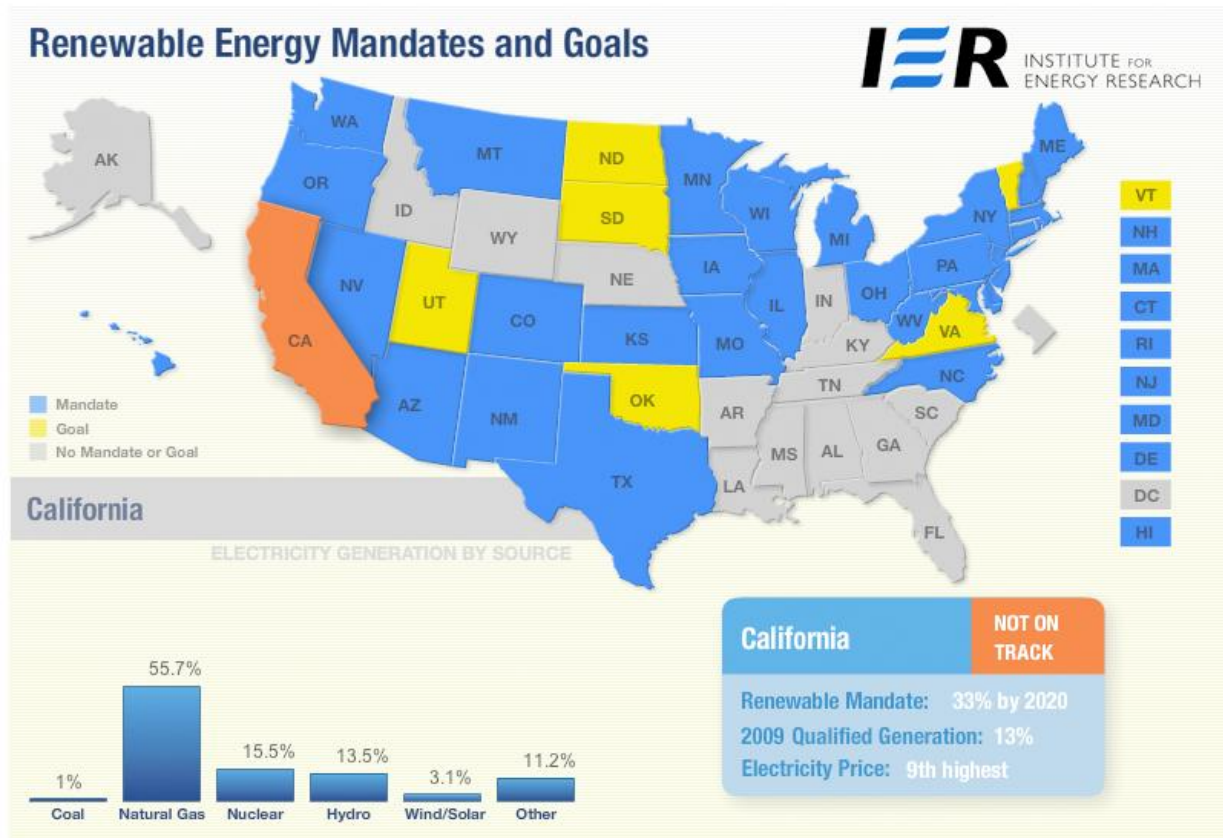


The Status of Renewable Electricity Mandates in the States

www.instituteforenergyresearch.org/renewable-mandates

Currently, 29 states have renewable electricity mandates (REM) and 7 states have renewable electricity goals. These mandates require utilities to sell or produce a certain percent of their electricity from sources defined as “renewable.” The majority of states are not on track to meet their mandates and states with these mandates have higher electricity prices.



Renewable Mandates Are Customized

The State mandates differ significantly from each other as well as from Federal-mandate proposals with respect to sources that count as “renewable” (for example, Pennsylvania’s mandate counts coalbed methane, New York’s counts automobile tires), timetables, and enforcement mechanisms (or lack thereof).

Renewable Mandates Cost Consumers Money

Electricity prices are already nearly 40 percent higher in States with an REM.¹ While the renewable mandates may not be the only reason electricity prices are higher in those States, these mandates likely contribute to higher prices and certainly are not helping to decrease the price because the mandates require the generation of electricity from more expensive sources.

Renewable Electricity Mandates Are an Expensive Way to Reduce CO₂ Emissions

REMs are a very expensive way to reduce carbon dioxide emissions. According to the California Air Resources Board, it costs \$133 per ton to reduce carbon emissions through a REM² and an internal Obama administration memo reached a similar conclusion.³ To put these numbers in perspective, it currently costs about \$15 a ton to purchase a certified carbon dioxide allowance traded on the European Climate Exchange.⁴

A Federal Renewable Electricity Mandate Would Be Costly

A Heritage Foundation study found that an REM could raise electricity prices 36% for households, reduce employment by more than 1 million jobs, and cut national income by \$5.2 trillion by 2035. An analysis by Credit Suisse found that a 20 percent REM would require \$750 billion in capital expenditure by 2020.

Renewable Mandates Are Not Being Met In the States

- Only 14 of 36 states are meeting or are on track to meet their renewable electricity mandates or goals;
- 18 states are not on track to meet their mandates or goals;
- 4 states have not implemented their mandate or do not yet have data.

Renewable Subsidies Kill Jobs

History and the experience in other countries show that renewable subsidies do not create a net increase in jobs. In Spain, for example, it is estimated that 2.2 jobs were lost as an opportunity cost of creating one expensive, subsidy- and set-aside-dependent job in the renewable sector.⁵ In Germany, per worker subsidies in the solar industry are as high as \$240,000 per worker.⁶

¹ See Appendix 1 in this report and Institute for Energy Research, *Energy Regulations in the States: A Wake-up Call*, <http://www.instituteforenergyresearch.org/pdf/statereport.pdf>.

² California Air Resources Board, *Climate Change Scoping Plan*, p. 84, http://climatechange.ca.gov/eaac/documents/state_reports/Adopted_Scoping_Plan.pdf.

³ Stephen Power, *U.S. Weighs Funding for Renewable Energy Projects*, WALL STREET JOURNAL, Nov. 3, 2010, <http://online.wsj.com/article/SB10001424052748703506904575592843603174132.html>.

⁴ IntercontinentalExchange Inc., *Emissions*, Nov. 22, 2010, <https://www.theice.com/productguide/ProductGroupHierarchy.shtml?groupDetail=&group.groupId=19>.

⁵ Gabriel Calzada Álvarez, *Study of the Effects on Employment of Public Aid to Renewable Energy Sources*, Mar. 2009, <http://www.juandemariana.org/pdf/090327-employment-public-aid-renewable.pdf>.

⁶ Manuel Frondel, Nolan Ritter, & Colin Vance, *Economic impacts from the promotion of renewable energies: The German experience*, Oct. 2009, http://www.instituteforenergyresearch.org/germany/Germany_Study_-_FINAL.pdf