



Rethinking Green Energy Mandates

Jonathan A. Lesser

In many US states and European countries, mandates providing large subsidies for preferred flavors of green energy have long been *de rigueur*, whether to reduce carbon emissions or spur moribund economies.

Of course, the subsidies have accomplished neither goal: in Europe, subsidies and carbon taxes have not changed the fact that carbon emissions continue to increase; in the United States, the amount of subsidized wind generation has grown so large that it is damaging the ability of unsubsidized generators to compete in wholesale electric markets, while adding to the costs of “firming” inherently volatile wind generation output. As for creating a robust new green economy, well, record-high European unemployment rates, record low labor participation rates in the United States, and moribund GDP growth on both sides of the Atlantic would seem to demonstrate that green energy’s economic promise is well hidden.

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Of course, proponents will point to a new solar cell factory here, a wind turbine blade factory there,

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and the jobs created building wind and solar farms as “proof” green energy mandates create economic growth and jobs. That is true, at least for those lucky enough to enjoy subsidized largesse. However, such reasoning ignores the source of that largesse: electric ratepayers and taxpayers at large. Anytime you perform a cost-benefit analysis on a policy and ignore the cost side, discovering that the “benefits” of the policy exceed the costs is easy . . . and meaningless.

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Quite simply, governments cannot subsidize their way to economic growth and well-being.

SUBSIDIES CREATE STRONG ECONOMIC INCENTIVES—TO SEEK OUT MORE SUBSIDIES

It is no secret that industries benefiting from renewable energy largesse have an incentive to keep those subsidies flowing.

The same can be said of most every other industry: unfettered market competition can be brutal; it’s so much easier to rely on subsidies to ease the pain. Economists call this “rent-seeking” behavior. And while all forms of energy have been subsidized to some degree, the subsidies provided to renewable energy and energy conservation far exceed any other form of generation.¹ Moreover, renewable energy and energy conservation programs stand apart: not only are they generously subsidized at both the state and federal levels, but

they are also the only types of energy resources for which states mandate minimum investment. No wonder their defenders are so ardent.

In the United States, the wind energy production tax credit (PTC) is the single-largest subsidy of all. In an April op-ed in the *Wall Street Journal*, Patrick Jenevein, CEO of wind developer Tang Energy, argued that the wind PTC should be repealed. He said the following:

If our communities can't reasonably afford to purchase and rely on the wind power we sell, it is difficult to make the moral case for our businesses, let alone an economic one. Yet as long as these subsidies and tax credits exist, clean-energy executives will likely spend most of their time pursuing advanced legal and accounting methods rather than investing in studies, innovation, new transmission technology, and turbine development. (Jenevein, P. [2013, April 1]. Wind subsidies: no thanks. *Wall Street Journal*. Retrieved from <http://online.wsj.com/article/SB10001424127887323501004578386501479255158.html>)

In other words, Jenevein stated an obvious but unspoken truth: the presence of subsidies drives wind developers to devote their efforts to continuing those subsidies, rather than improving the efficiency of their product.

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GREEN ENERGY MANDATES HAVE ZERO IMPACT ON CLIMATE CHANGE

The impact of green energy subsidies on carbon emissions is another example of windmill tilting.

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Thirty US states, plus the District of Columbia, have renewable portfolio standards, in part to “do something” about greenhouse gas emissions. The European Union has similarly enacted renewable

energy mandates and carbon taxes. Yet these individual actions have zero effect on the global climate. Rather, they simply raise the cost of energy paid by consumers and reduce their economic well-being.

For example, in an article in the (London) *Daily Telegraph*, Christopher Booker considered the adverse impacts on reliability of Britain's escalating carbon tax, which began in April 2013 at £16 a metric ton. The tax will increase to £30 a metric ton in 2020 and to £70 by 2030. As Booker states, those tax rates will make it “wholly uneconomical to generate any more electricity from the coal and gas-fired power stations that last week were still supplying two-thirds of our electricity.”² He adds that India plans “to build 455 new coal-fired power stations which will add more CO₂ to the atmosphere of the planet every week than Britain emits in a year.” Already, the new carbon tax is almost 500 percent higher than the carbon price in the EU's ill-fated carbon cap-and-trade scheme, for which prices have collapsed since it was first introduced in 2007.

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In the United States, as growing quantities of wind generation are injected onto the power grid, they are creating more concerns about overall system reliability. Integrating variable wind generation, which my own research has shown tends not to be available when it is most valuable,³ is both more costly than for conventional, schedulable generation, and increasingly difficult. The more wind generation to be integrated onto the system, the more impacts sudden changes in wind availability may have on the reliability of the system.

MORE-RATIONAL SOLUTIONS?

The most straightforward way to eliminate the economic harm caused by energy subsidies—of all types—is to eliminate energy subsidies. Of course, this is the author's version of windmill tilting, green or otherwise. It is only when the economic damage caused by green energy subsidies becomes so severe and so obvious that arguments for economic sanity may prevail. Until that time, however, US states could, if they are so inclined, take steps to at least mitigate the economic damage.

First, states can scale back their RPS targets. The drive to enact RPS mandates that lead the nation in the percentage of green energy—California comes to mind—is energy suicide. Making electricity cost-prohibitive may polish environmental credentials, but it will permanently tarnish the economic ones, driving business and jobs away to economically friendlier locales. Moreover, mandates raise the cost of electricity for those least able to afford it. How do green energy advocates justify policies that are both economically harmful *and* inequitable?

States can scale back their RPS targets.

If states kept their RPS targets where they are today, the economic damage would be contained. Additional rate increases could be minimized and the reliability of the electric system would not be jeopardized further. States would also do well to examine the real costs and benefits of their policies by examining both sides of the cost-benefit ledger. If policymakers wish to impose energy policies that cause more harm than good, on the belief that those policies will provide great benefits in the future, at least they should be honest about it. And they should be honest about what is and is not a “benefit.” Subsidized jobs are not.

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Second, the wind PTC, which is the most egregious green energy subsidy of all, should be eliminated. It was set to expire at the end of 2012. Only budget negotiations to avoid a government shutdown saved it for another year. With abundant natural gas supplies—in its latest long-term energy forecast, the US Energy Information Administration projects natural gas production to steadily increase through 2035—why not use the money lavished on PTC recipients on basic energy research instead? For example, if large-scale forms of energy storage can be developed, solar photovoltaics, which have the potential to become far more efficient, would become a far more useful and economic source of electricity. As for wind generation, its economies of scale appear to be exhausted. The largest wind turbines are almost

500 feet tall. How many of these behemoths do we want covering the landscape?

Third, in areas where there are well-run, competitive electric markets, let market forces drive innovation and improved efficiency, rather than additional subsidies, as Tang Energy CEO Jenevein recommends.

In areas where there are well-run, competitive electric markets, let market forces drive innovation.

Fourth, end the economic sword-falling exercises to reduce greenhouse gas emissions. Even if you believe climate change is responsible for everything from warmer temperatures and sullen polar bears to the cold snap that knackered your flower garden, efforts in the United States and Europe to reduce greenhouse gas emissions will be far outstripped by China’s and India’s expanding use of fossil fuels. Policymakers are deluding themselves if they believe the individual actions they take will have any impact whatsoever on the global climate. Raising energy prices and committing economic suicide will not help.

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Are any of these solutions possible? Yes. Will they be enacted? Probably not, at least not until, as the late Margaret Thatcher quipped about socialism, we run out of other people’s money. 🌐

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NOTES

1. See, e.g., US Energy Information Administration. (2011, July). Direct federal financial interventions and subsidies in energy in fiscal year 2010, Table ES-2. Retrieved from <http://www.eia.gov/analysis/requests/subsidy/pdf/subsidy.pdf>.
2. Booker, C. (2013, March 23). It’s payback time for our insane energy policy. *Daily Telegraph*. Retrieved from <http://www.telegraph.co.uk/earth/energy/windpower/9949571/Its-payback-time-for-our-insane-energy-policy.html>.
3. Lesser, J. (2013, Spring). The high cost of low value wind power. *Regulation*, pp. 22–27. Retrieved from <http://www.cato.org/sites/cato.org/files/serials/files/regulation/2013/3/v36n1-8.pdf>.