Energy Loserville

By: Sterling Burnett **July 9, 2012**

"When government undertakes tasks for which it is ill equipped it squanders the authority necessary for carrying out its core responsibilities. Pervasive rent-seeking, bad for our economy and worse for our republic, should be discouraged instead of rewarded. If government becomes integral to securing every advantage and assuaging every grievance, then governance becomes impossible."

- Richard Voegeli, "Reclaiming Democratic Capitalism," *Claremont Review of Books*, Spring 2012, p. 46.

Governments around the world are having buyers' remorse with their bets that solar and wind could effectively diminish oil, gas, coal, and nuclear. So much cost, so little energy. So much cost, so little reliability, and so much need for backup power.

The story is the same for the U.S. Department of Energy. The Obama administration's rocky road with green-energy boosterism is no secret. With big names like Solyndra and Solar Trust of America, it's hard to lose sight of the administration's funding failures.

But what may come as a surprise is the overall amount of money being thrown away on these green companies that the administration has championed. *Of the $10.7 billion in green-energy commitments, detailed below, approximately $3.2 billion is to companies that are in bankruptcy, and another $7.1 billion is committed to teetering firms.*

The good news is that private developers are postponing (and probably canceling) projects that even with government subsidies are uneconomic. General Electric Co. just last week halted construction of what would have been the largest solar-panel factory in the U.S. Some 335 workers can now find *economic* employment.

Here's the breakdown of the "green" energy carnage to date:

Bankruptcies

- Abound Solar: Spent $70 million of its $400 million DOE loan.
- Beacon Power Corp: Received $43 million in federal loan guarantees in 2009 and also received $29 million in PA grants – Bankrupt in October 2011

- Ener1 (parent company of EnerDel): Received $118.5 million in federal loan guarantees — Bankrupt in January 2012 – has since exited bankruptcy
- Evergreen Solar: Received $58 million in MA loan guarantees (an undisclosed portion sourced from federal ARRA block grant) — Bankrupt in August 2011 with $485.6 million in debt
- Solyndra: Received $535 million in federal loan guarantees in 2009 and $25.1 million in CA tax credit — Bankrupt in August 2011
- SpectraWatt: Received $500,000 in federal loan guarantees in 2009 — Bankrupt in August 2011
- Babcock and Brown: Received $178 million in federal grants in December 2009 (4 months after it went bust) – Bankrupt in early 2009
- Mountain Plaza Inc.: Received $424,000 in federal grants through TN Department of Transportation in 2009 — Bankrupt in 2003 and again in June 2010
- Solar Trust of America (parent company: Solar Millennium): Received $2.1 billion loan guarantee in April 2011 – Bankrupt in April 2012

Troubled 'Green' Energy Companies

- A123: Received $300 million in federal grants and $135 million in MI grants — Declining orders have forced multiple layoffs
- Amonix, Inc.: Received $5.9 million in federal tax credits in 2009 through ARRA — Laid off 2/3 of work force
- First Solar: Received $3 billion in federal loan guarantees — Biggest S&P loser in 2011, CEO fired
- Fisker Automotive: $529 million in federal loan guarantees — Multiple 2012 sales prediction downgrades for first car release, delivery and cash flow troubles; Assembling cars in Finland
- Johnson Controls: Received $299 million in federal grants in 2009 — Low demand caused cancellation of a new factory, operating at half capacity
- Nevada Geothermal: Received $98.5 million in federal loan guarantees in 2009 — Defaulting on long-term debt obligations, 85% drop in stock value
- Sun Power: Received $1.2 billion in federal loan guarantees — Debt exceeds assets; French oil company took over last fall

- BrightSource Energy**:** $1.6 billion federal loan approved in April 2012 – loan obtained through political connections with the administration; absent the loan, Brightsource's solar power purchase would have fallen through.

Here is the total green of federal "green" energy bets.

In Bankruptcy:

o $2,975,424,000 – federal grants and loan guarantees

o $112,100,000 – state grants, loan guarantees, and tax credits

o $3,087,524,000 total

Dire Finances

o $7,432,400,000 – federal grants, loan guarantees, and tax credits

o $135,000,000 – state grants

o $7,567,400,000 total

Overall Commitments

o $10,407,824,000 federal dollars

o $247,100,000 state dollars

o $10,654,924,000 total

Backdoor Costs

As high as the losses are, these numbers undoubtedly understate the problem. Accounting for the true, total costs of these programs is difficult given that government funding for "green" energy projects come from multiple, often unexpected and disparate departments and programs.

For instance, In addition to the costs noted above, an additional $9 billion was sunk into solar and wind projects through the stimulus bill, according to a national renewable energy laboratory report, since fewer than 910 direct jobs and just 4,600 indirect jobs were created by that spending, the cost per job topped $1.63 million dollars each – and some of those jobs are temporary.[1]

In addition, green energy programs routinely have both ancillary and/or hidden costs and they result in unintended consequences that also have costs.

Why Hidden Costs?

Leaving aside libertarian concerns about the very legitimacy of government spending on and regulation of energy development, there are a number of purely economic reasons for believing that federal and state agencies routinely overstate the benefits of green energy spending and understate the costs.

First, the some of the justification regularly cites things like premature mortality or hospitalizations avoided as a significant benefit from subsidized green energy substitution for traditional fossil fuels. Yet, as I and others have pointed out, the harms attributed to various regulated pollutants (which supposedly justify replacing standard, reliable fossil-fuel-powered electrical plants with more costly, less reliable wind and solar plants) are routinely, grossly overstated.

For instance, when the EPA recently updated its ozone regulations, most of the purported benefits were to come from avoided hospitalizations and deaths from asthma; however, claims that ozone is causing a rise in asthma are simply not plausible. While the prevalence of asthma has risen about 75 percent during the last 25 years — and nearly doubled for children – during the same time period, ozone levels have fallen.

In addition, worldwide the lowest asthma rates are found in developing and ex-Soviet countries with substantial air pollution, while western countries with the world's cleanest air have the highest asthma rates. And, emergency room visits and hospitalizations for asthma in the U.S. are lowest during July and August, when ozone levels are highest.

***Wealth is Health*: The True Cost of Government Inefficiency**

By contrast, there is a well-established relationship between wealth and health. Lower household incomes associated with increased risk of premature death. By this measure, the health cost of tougher ozone standards is high.

Using U.S. Office of Management and Budget estimates that every $7.5 million to $12 million dollars in regulatory costs imposed on the economy results in a life lost and the EPA's cost estimate the new ozone regulations could result in 833 to 2,933 premature deaths. By the same token, replacing coal-fired power plants, with wind or solar plants, based purely on costs will result in thousands of premature deaths.

Concerning non-health based economic benefits, I would argue that these are usually overstated by the government as well. There is no question that subsidies produce benefits as well as costs. Unfortunately the benefits are usually concentrated–going to politically favored industries and businesses–while the costs are dispersed among both the industry (in this case the electric power and transportation industries) and the public as a whole.

Certainly subsidies that result in new domestic manufacturing and construction opportunities can create jobs – though many may be temporary jobs for those installing the equipment and those

merchants who benefit secondarily from their commerce (restaurants, hotels, etc.). But if, as has proven the case in Europe (where the subsides have resulted in an overall net loss of jobs) and in the United States (where, as the few instances above demonstrate), job production has been underwhelming), then the subsides amount to a net loss to the economy.

This loss only grows when one considers consumers, who will pay higher costs and/or suffer from unreliability of supply from the energy source replacing coal, will bear these costs for years to come — meaning that they collectively will have billions of dollars less each year in discretionary income which would have created jobs in industries chosen by consumers in the market place.

Government Subsidies Reconsidered

This latter point is perhaps the greatest weakness of any benefit/cost analysis of any government subsidies. These subsidies substitute the government's judgment about what the public should want for the public's own judgment as express through their choices in the marketplace.

There are huge opportunity costs to such government directed spending. The money spent developing and promoting a green energy industry (especially one that has subpar development results) is

**money not spent innovating, not available to entrepreneurs to discover the next big thing*(whether it be energy source or entertainment device),

* *jobs not created in other sectors of the economy*(and maybe in some industries that haven't been created yet),

**money not available for better education or health care,*or

* *money not available to reduce the annual deficit and overall debt*.

This, in my opinion, is the real economic loss.

More Bad Bets?

In the face of these multiple "successes," the Obama administration wants to double down and throw more good money after bad. It's never worked before, but hey, there's always a first time, Right?

Election season, and bad ideology, have put the sitting President at odds with reality.

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