Energy and the Environment



Green Is the New Red: The High **Cost of Green Jobs**

Jonathan A. Lesser

n addition to renewable energy's anointment as our environmental savior, some renewable energy advocates, including President Obama, have touted the millions of new "green" jobs that will be created as a result. Thus, we are promised, renewable energy, as well as energy efficiency, will provide a "two-fer": a lower greenhouse gas environment and a healthier economy.1 Who knows, they may even, Zen-like, raise our collective consciousness. The fundamental problem with such promises is that, like all things that are "too good to be true," they are, too. Not for the first time, proponents of renewable energy as economic and energy salvation are ignoring basic economics.

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WHAT'S IN A NAME?

One of the most fundamental problems with the entire green jobs mantra is that there is no single definition of what a "green job" is. Most

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of us would agree that installing solar panels, tightening wind turbine blades, or rolling out attic insulation are green jobs. That is fine. What about the government bureaucrat who oversees the environmental permitting process to build a wind farm, the attorney who files all the paperwork, and the attorneys who oppose permitting the plant?² How about the engineer who sits in the dispatch center of an electric utility and determines how to replace the wind generation when the wind suddenly stops blowing? All of these can be considered green jobs. The janitors, secretaries, accountants, and security guards working at the corporate headquarters of renewable energy companies also must be considered.

In fact, just about anyone connected in any way to renewable energy development and energy conservation can be considered to have a green job. That way, the number of green jobs can explode in the same way that economic "multipliers" are used to justify subsidizing new development of everything from solar to stadiums.

Ignoring the basic definitional issue of what a green job is, proponents fail to address the fundamental purpose of renewable generation development: to provide electricity whose value is greater than the cost of producing it. For example, most of us would agree that the purpose of building schools is to educate children. The politician who promoted a school-building policy as a way to hire hundreds of new school bus drivers would, one would hope, be loudly derided. Nevertheless, that is precisely how green jobs proponents are approaching renewable resource development.

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As students of introductory economics are taught, a firm will hire an employee when the value of what the employee produces exceeds the cost of hiring him. An employee's labor contributes to providing the ultimate goods and services that consumers value; the labor is not valuable in and of itself. As the economist John Maynard Keynes is (wrongly) attributed as remarking, we may as well hire individuals to dig holes and others to fill the holes back in.³

It boils down to the economic concept of opportunity cost: when money is spent to hire someone, that money is not available to be invested in anything else. Yet this basic economic premise has been lost in the cheerleading for green jobs. Instead, green jobs—however defined—are presumed to have intrinsic value in and of themselves. Even if one argues that the environmental benefits of renewable generation justify the higher direct cost, it is impossible to escape the economic consequences of opportunity cost.

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JOB ONE BECOMES JOB NONE

Investing in higher-cost generating resources because of their employment impacts without considering the offsetting economic impacts in all of the other sectors—business, industry, and consumers—that use electricity will wrongly find economic "benefits" when those resources have in fact caused economic losses.

In fact, this is what has happened in Spain, which invested heavily in wind generation. In a de-

tailed study of the Spanish wind industry, which was heavily promoted by the Spanish government, researchers at Spain's King Juan Carlos University found that investments in renewable generation destroyed more jobs than they created. Specifically, the authors found the following:

For every renewable energy job that the State manages to finance, Spain's experience cited by President Obama as a model reveals with high confidence, by two different methods, that the United States should expect a loss of at least 2.2 jobs on average, or about 9 jobs lost for every 4 created, to which we have to add those jobs that non-subsidized investments with the same resources would have created. (Álvarez, C. G., Jara, R. M., & Rallo Julián, J. R. [2009, March]. Study of the effects on employment of public aid to renewable energy sources, http://www.juandemariana.org/pdf/090327-employment-public-aid-renewable.pdf.)

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The authors concluded that the Spanish government's subsidies of green jobs were hardly cheap: "since 2000 Spain spent €571,138 to create each 'green job,' including subsidies of more than €1 million per wind industry job." At an exchange rate of \$1.40 per euro, that means each wind industry job costs \$1.4 million. If the person employed in that job has a salary of, say, \$50,000 per year, then the subsidy amounts to 26 years' salary. Are renewable energy jobs really worth that much?⁴

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The study authors also found that "each 'green' megawatt installed destroys 5.28 jobs on average

elsewhere in the economy: 8.99 by photovoltaics, 4.27 by wind energy, 5.05 by mini-hydro." If the Spanish experience holds true in the United States, then the 3 to 5 million green jobs the president has promised to create will cause more than twice as many job *losses* elsewhere in the economy. Whereas we may reduce greenhouse gas emissions, marginally, by building more renewable generating resources (ignoring the adverse impacts on wildlife that concern some environmentalists), the net result will be higher electric rates and fewer jobs. Why is that a good thing?

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Interestingly, the Spanish study has been criticized by some proponents of the Waxman-Markey bill, although their specific criticisms are unclear. For example, a March 30 post by Keith Johnson on the Wall Street Journal's Environmental Capital blog⁵ criticized the study for not identifying the specific jobs that would be lost. Moreover, Johnson said, "Spain's support for renewable energy came out of existing tax revenues—there were no special levies on corporate activity designed to underwrite clean energy."6 In other words, the author appears to believe that by levying higher corporate taxes so as to subsidize renewables, there will be net job creation. This is economic nonsense. Higher corporate tax rates ultimately will be paid by consumers in the form of higher costs for goods and services, including electricity. That will not lead to net job creation.

No doubt, the specific impacts on jobs in the United States would differ from that in Spain; the two countries' respective economies are clearly different, as are the subsidy amounts. Yet, it is difficult to see how subsidies have been net job destroyers in Spain but will somehow be net job creators in the United States. Such an outcome defies basic economics, which typically does not look favorably on subsidies, green, red, or otherwise.⁷

As the United States continues to debate climate-change legislation, whether the Waxman-

Markey bill that passed the House in late June but whose fate is uncertain in the Senate or other climate legislation and renewable portfolio standards that mandate minimum quantities of different types of renewable generation, perhaps legislators should be mindful of the potential economic costs. Instituting green jobs programs that will employ millions only to leave many more millions jobless as a result seems little better than digging holes and filling them back in.

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NOTES

- See Morriss, A., Bogart, W., Dorchak, A., & Meiners, R. (2009, June). 7 myths about green jobs. PERC Policy Series, No. 44, June 2009. Available at: www.perc.org. A longer version of this paper by the same authors is (2009, March 12). Green jobs myths, U Illinois Law & Economics Research Paper No. LE09-001; Case Legal Studies Research Paper No. 09-15. Available at SSRN: http://ssrn.com/abstract=1358423.
- 2. Perhaps worst of all, even economic consultants who work with renewable energy developers are also considered as green job holders. Whether authors who write columns about green jobs are themselves employed in a green job is still under debate.
- 3. In reality, Keynes wrote the following in Chapter 16 of his *General Theory of Employment, Interest, and Money*: "To dig holes in the ground, paid for out of savings, will increase, not only employment, but the real national dividend of useful goods and services. It is not reasonable, however, that a sensible community should be content to remain dependent on such fortuitous and often wasteful mitigations when once we understand the influences upon which effective demand depends." In other words, hiring people to dig holes, and perhaps ones to fill those holes back in, provides employment, but no useful goods and services.
- 4. Some environmentalists worry that by saving polar bears (CO_2) would be decreased by renewables), the owl population, for example, could be damaged (loss of the owls that get sucked up and shredded by windmills). The author does not know what is the going owls-per-polar-bear trade-off rate.
- http://blogs.wsj.com/environmentalcapital/2009/03/30/greenjobs-ole-is-the-spanish-clean-energy-push-a-cautionary-tale/.
- 6. Johnson also criticized the study via character assassination, noting that Calzeda is the founder of a libertarian think tank that has received funding from Exxon Mobil.
- 7. Interestingly, proponents of the Waxman-Markey bill, which passed the House in late June, focused increasingly on its green job-creating benefits and less on its ability to limit climate change. The bill will accomplish neither.